



Think Piece

Exploring Relational Politics in Social Learning: Dilemmas of standing too close to the fire

Paul Hart, University of Regina, Canada

Introduction

... a common theme amongst critics (of the dominant educational paradigm) is that problems with human–environment relationships (out there) are intimately linked to ‘inner’ problems, that is, our collective perception and thought processes are impeded by a lack of awareness of our ‘in here’ condition. (adapted from Sterling, 2003:118)

Sterling’s (2003) concern was that, because paradigms/worldviews/cultures/discourses function as ideologies that legitimise/justify courses of action, we need to learn how each of us is complicit politically in constructing subtexts by which our actions are judged to be reasonable. Such learning is not neutral and is contingent on processes of participation that engage people in thoughtful social action. One could say, as many environmental educators have for several decades, that at the core of environmental education is a relational view of learning. A purpose of this paper is to explore how such a view of learning is tied intimately to a person’s identity/subjectivity, that is, to explore how what happens ‘out there’ and ‘in here’ are mutually constitutive.

Recent incarnations of environmental education learning principles within forms of sustainability education, whilst flavoured to appeal to basic democratic values of justice and equity, continue to emphasise learning as action-oriented, community-based, participatory and perhaps even socially critical. As environmental educators know from experience, engaging such principles in school contexts can create tensions concerning fundamental educational processes. So, while environmental education can provide spaces for the articulation of different knowledge interests as socially acceptable forms of learning (i.e., educational experiences), resistances often occur when such practices extend educational responsibilities beyond traditional roles. How social movements for educational change are marginalised varies across jurisdictions but assessment devices and performance standards can work to silence innovation. Evaluation of student abilities in action-oriented field experiences, for example, situates evaluation outside conventional ‘measures’ of subject mastery or cognitive ability. In effect, a significant problem for implementation of environmental education or education for sustainable development has resulted from an hegemony of privilege of technical over practical ways of knowing and assessing at both institutional and teacher levels (see Moss, Girard & Haniford, 2006).

An epistemological/ontological distinction grounds the rhetoric-reality gap in environmental education/education for sustainable development (EE/ESD). Knowing what to do and how to do it can be viewed as a reflection of the interplay between teachers' personal practical theories (inside) and sociocultural contexts (outside). The idea that teachers have theoretical views that guide their practice (i.e., an interactionist view of theory/practice) permits some probing of those concepts, beliefs and assumptions in context. The epistemology is interactionist-relational: knowledge is what comes from interplay between teachers' subjective views and sociocultural contexts. Such an epistemological position implies a view of learning guided by social theory that recognises tensions and interconnections between lifeworld theories of social action (personal identity/agency) and systemic (i.e., social structures) aspects of people's experiences in the social world. Kemmis (1998) conceptualises this social matrix of lifeworlds in terms of meaning making (i.e., internalisation of values) and identity formation within knowing/learning as socially situated. His argument foregrounds the difficulty of securing any form of collective social identity/action within globalising social systems (e.g., steering media) designed to take the place of communities in regulating exchange and interaction. As a means to counter the power of such controlling discourses, he (re)asserts the value of local groups in constructing their own frames to explore the extent to which they can understand each other. He is not alone. Recent recastings of social theory represent attempts to find social understandings beyond the blindnesses of both objective realism and subjective relativism through interrelational processes that are grounded practically in critically reflexive sharing of personal practical theories.

Educational theorists have tended to neglect sociocultural theory that is influenced by wider cultural values. If educational theory is to emerge from its internecine disputes to address contemporary issues of major social significance, if ways of knowing/being can be conceived beyond universal prescriptive theories about 'what works' and 'what all teachers should do' then the focus on learning shifts to structures, practices and discourses that have contextual purchase. Learning is characterised as a complex process framed within individual and sociocultural discourses that reach into the micro-structure of both individual intellect and social interaction. Of central interest is to work out how relationships amongst learners' epistemic identities/subjectivities shape and are shaped by the epistemic milieu in which they find themselves (Claxton, 2002:27). This paper explores those spaces between personal identity and social dimensions of learning that are simultaneously 'deeply singular' and 'deeply social', as a basis for a pedagogy of environmental education that more actively engages relational and communicative competence and that values forms of social learning.

Exploring the Context of Social Dimensions of Learning as They Apply to EE/ESD

There seems little doubt in the minds of learning theorists of the need to explore relationships between culture and learning at many levels of social interaction (see Green & Luke, 2006). Putnam and Borko (2000) see this sociocultural shift in learning theory as more fundamental than the historical shift from behaviourist to cognitive learning theory (see Schuell, 1986). The research is replete with arguments that challenge assumptions about learning which

privilege individual cognition over more interactive and relational systems (see, for example, Brown, Collins & Duguid, 1989; Lave & Wenger, 1991; Greeno, Collins & Resnick, 1996; Greeno, 1997; Cobb & Bowers, 1999). The arguments are widely debated in the educational literature and as they apply to environmental education (see Hart, 2007; Reid, Jensen, Nikel & Simovska, 2007; Wals, 2007). The idea that interactions with people in one's environment are major determinants of both what is learned and how learning takes place recognises sociocultural in the learning process. The sociocentric view of knowledge holds that what we take as knowledge and how we think are the products of the interactions of groups of people over time (Soltis, 1981). These social groups act as discourse communities to provide cognitive tools (ideas, concepts, theories) that individuals appropriate to make sense of experiences. The process of learning in this sense is social – coming to know how to participate in the discourses and practices of particular communities (Resnick, 1991; Wertsch, 1991; Cobb, 1994). Beyond enculturation, the assumption is that, by participating, students will also learn to question and extend their own knowledge and thinking.

The implication for education is that schools must achieve better balance between the stress on individual competence and social competence to prepare students for successful participation in society (Resnick, 1987; Pea, 1993; Salomon & Perkins, 1998). Whilst the relative neglect of social learning in the academic literature now appears to have been corrected (Salomon & Perkins, 1998), this is not the case for educational practice (Ford & Forman, 2006) or environmental education (see Rickinson, 2001). Although environmental education (EE)/education for sustainable development (ESD) has always conceived of learning as a more balanced interrelationship of individual and social than has traditional schooling, there is a need to explore how social learning actually works through environmental education to contribute to the production of people more willing and able to participate in social/environmental action. This paper may be read as an interim report on my own face-to-face confrontation of this question of how social learning actually works.

A number of conceptual frameworks that conceptualise learning as an integration of social theories of action seem plausible. For example, theories of situated learning framed in the discursive paradigm (Foucault, 1972; Edwards & Potter, 1992; Harre & Gillett, 1995) and notions of distributed learning (Salomon, 1993) expand older behaviourist/cognitive psychological visions of learning in their epistemological/ontological foundations and in their views of how people come to associate themselves – that is, their 'self' – with thought and action. This paper attempts to go further, to explore how social learning works interactively to help individuals think and act socially/environmentally.

The idea that individual learning actually occurs within the context of participation in socially cultural practice is an epistemological claim with implications for educational practice. If learning can be conceived as a collective, participatory process of active knowledge construction emphasising context, interaction and situatedness, then it seems possible to imagine a moving inward of social functions to be internalised or appropriated as psychological (as well as sociological) functions. Participation, within 'activity systems' such as EE/ESD, involves both action and making sense in terms of the meanings (i.e., sustainability) it seeks to realise, the needs and motives it seeks to satisfy and the goals it seeks to achieve. Participation also implies

relational connection across boundaries/binaries of individual/environment in that each learns from the other in order to mutually constitute themselves (Tharp & Gallimore, 1988; Chaiklin & Lave, 1993; Cole, 1996; Wenger, 1998; Wertsch, 1998).

Exploring how concepts like sustainability survive and grow on the strength of the meanings invested in them, that is, in commitments based on personal meanings attached to actions taken on their behalf, seems to be a hinge-point in understanding thought and action that has its origins in our interests and emotions. Learning how to 'be' a participant in such explorations involves learning an action repertoire where social meanings can be investigated within participatory processes in relation to what that participation makes personally meaningful. This interplay between social and personal meaning is based on an epistemological understanding (i.e., social learning) that seems worthy as a starting point for clarifying how people come to act on their personal motives, that is, on how they can identify with 'what counts' within larger reference frames or globalising worldviews. This is the crucial point where personal identity/subjectivity and social learning can be seen as intricately connected. And this is the reason why educational research is turning its gaze toward subjectification (see the *British Journal of Sociology of Education*, 27(4), 2006).

The Socio-Spatial Imperative of Subjectivity/Identity in Learning in EE/ESD

As a dimension of learning, constructing identity – Probyn (2003) uses the term 'subjectivity' – involves conscious (re)examination of personal motives in terms of (or in critique of) social goals for education, sustainability and environment. Social involvement may make a person 'identifiable' with others (as well as to oneself) so that identity and actions mutually inform, rather than personally determine, what one actually is and does in sociocultural practices. Forming identity, as grounded in one's participation in socio/environmental practices, involves cognitive as well as affective dimensions (i.e., emotion, values) as registers of the quality of response to one's needs or motives. This integrated, complex and shifting postmodern notion of identity/subjectivity is temporal and spatial (i.e., situational), always in flux and evolving. Constructing identity/subjectivity within an educational frame that is environmentally caring will obviously inform and be informed by an epistemological/ontological frame concerning what counts as knowledge or knowing/learning.

Within an ontology that considers humans as both shaped by and shaping their environment, active participation in sociocultural practice is a fundamental educational provision. For example, the idea of school students working towards fuller (more extensive, more responsible, more cooperative) participation (that connects inner meanings with outer action) assumes a relational kind of knowing/being. This form of social theory grounds a theory of social learning that situates students' developing identity as representative of what one actually *does* in sociocultural/environmental praxis. Formation of identity (e.g., as environmentally conscious) is thus relational to active work on social/environmental meanings that people, in the process of their participation, transform into personal sense. Consistent forms or patterns of action make a person identifiable to others and to themselves. It is this relationship between action and meaning that actively locates learning at the intersection with identity formation (say as

environmental educators). If learning (within) is partly achieved in social space (without), then it seems reasonable to pursue the notion of learning as a relational construct within those arrays of possible educational spaces that locate identity/subjectivity as environmentally conscious. Of course, theorising a relational turn in learning necessitates being informed by issues associated with relation.

Popular conceptions of our 'selves' commonly place them somewhere deep within us, as somewhat bounded and contained (Probyn, 2003). However, recent research on the cultural nature of human development (Rogoff, 2003) raises crucial questions about the relations of power/ideology that permeate how identities/subjectivities are constructed and experienced. For example, feminist researchers argue that the body provides us with key knowledge about the working of our subjectivities. This embodied conception of subjectivity/identity, not as a contained identity but in constant contact with others, provides another base for considering subjectivity/identity as a relational matter. Probyn's (2003) idea that individuals are actively constituted through ideology raises other questions about whether we can recognise ourselves as embodied within the workings of ideology. Because ideology represents not a system of real relations but the imaginary relation of identity/subjectivities to the real embodied experience, environmentalism or sustainability might work through subjects who may or may not become more aware of the workings of these ideologies or discourses.

Environmental education can work to produce subjects that are at the same time inside and outside the ideology of education (as traditionally conceived). Educators who attempt such environment-related practice feel the tension or fragmentation that, Barrett (2007) argues, we cannot ignore. Being outside the frame, as De Lauretis (1988) says, in the 'space off' between ideology and reality, can become a play between dominant and self-representations. Viewing identity/subjectivity as a process and as a production within the spaces and places we choose to inhabit is relational. That is, how we choose to inhabit those spaces is interactive, embodied and contradictory. The idea of mobile, rather than multiple, subjectivities emphasises how they can get (re)configured across time and space (Ferguson, 1993). As Pratt (1998) says, it is in such spaces that we learn how to understand our ability to mobilise ourselves within notions of multiple subjectivities in order to disrupt them. It seems useful to think of subjectivities/identities in terms of how they are produced within particular circumstances and how they relate to questions of learning that 'space off' ways in which we can perform new modes of EE/ESD. Some clues to how this works may be found in research that is beginning to examine questions of how we learn to locate our narratives within various discursive practices of the social spaces we choose to inhabit.

Sfard and Prusak (2005) indicate that more conceptual work may be needed before the notion of identity can be used as an analytic lens for learning research. Their scrutiny of the 'old concept' of identity, associated with connotations of personality, character and nature, in terms of what they call the sociocultural turn in the human sciences, seems to provide openings into the deeper structural context of the cultural production of school failure that has remained largely unaddressed by educators, environmental educators included. By refocusing attention of what we actually *do* as humans and the mechanisms underlying our action, we can think of identity/subjectivity as a human construction constantly (re)created in interactions between

people or amongst people/society/environment (Bauman, 1996; Holland & Lave, 2001; Roth, 2004).

Understanding identity/subjectivity becomes pivotal in understanding why individuals, as active agents, play certain roles in shaping the dynamics of social life. Considerable work remains for researchers to clearly articulate how this may happen. Missing in the current discourse on identity is how it can serve as a more adequate conceptual bridge (than beliefs or attitudes) between learning and its sociocultural/environmental context. This paper is speculative/exploratory in the sense that assumptions such as the discourse-independent existence of beliefs/attitudes or the action/behaviour independence of prior intention are explored in terms of identity/subjectivity without knowing whether, in fact, identity/subjectivity is a missing piece in the individual-social bridge? Environmental education researchers, it seems to me, have been searching for clues in the language to more adequately conceptualise the process.

Research on learning in relation to identity/subjectivity now seems to provide a language that can help us to rethink our research in areas such as significant life experience (Palmer *et al.*, 1998; Palmer, Suggate, Robottom & Hart, 1999) and on teacher thinking (Hart, 2003). Thinking about significant life experiences in terms of a teacher's unique trajectory through discursive space (i.e., specific experiences within specific discourses) combined with the teacher's own narrativisation of it (see Mishler, 2000) as constitutive of (never fully forming and always potentially changing) core identity takes us beyond an essentialist vision of identity. Instead of being characterised as 'environmental educator', for example, a potentially less harmful, less reified version of subjectification foregrounds the teacher's own narratives as a link (however tenuous) to identity-making as a communicative practice. So, whilst identity can temporarily help to interpret the fluidity of change (globalising or local), the vision of 'identifying' as a discursive action (of doing) now seems more useful in characterising how teachers have come to be environmentally aware amongst other subjectivities.

Within this discursive space, identities defined in collections of stories about teachers that are reifying, endorsable and significant serve only as signifiers that may be contested in terms of credibility and generativity (see Juzwick, 2006; Sfard, 2006). Sfard and Prusak (2005) present an interesting ontological/epistemological dilemma as they attempt to clarify their vision of narrative-defined identity. The dilemma may be characterised as a debate between critical and post views of location/space. Would, for example, a critical realist perspective align with the position, following Wenger (1998), that identity/subjectivity is predominantly found in the action (the doing), the full lived experience of engagement in practice? Would a more poststructural positioning view identity/subjectivity as discursive counterparts of one's lived experiences? As Sfard and Prusak (2005) put it, it is our vision of our own and other people's experiences, not the experiences as such, that constitutes identities/subjectivities. Rather than viewing identities as entities residing in the world itself, their narrative definition presents them as discursive counterparts of one's lived experiences.

In positing a narrative theory of identity, designated identities, as stories that may have potential to become part of one's actual identity, are thought to give direction to one's potential actions and to influence deeds to a great extent, even in ways that may escape rationalisation. In fact, significant life stories may even make one feel as if one's whole identity has changed

(been transformed). These stories have power to contribute to the person's own narratives about themselves and others, although changing designated identities that have been formed in childhood is a particularly difficult task. Perhaps the research on significant life experiences should be revisited in light of the potential connections of identity to learning – that is, in terms of what counts in one's past or childhood experience, as critical to one's identity. Perhaps we would view learning more seriously in early childhood education in its sociocultural as well as its cognitive dimensions?

Whether identity/subjectivity is viewed in terms of direct action or as narratives mediated by action, the shift in thinking about applying identity as a conceptual 'tool' for understanding learning involves its emphasis on experiences (lived or discursive) and not some connotation of their traits (measurable, no doubt) as the focus of our inquiries. Sfard and Prusak (2005) theorise identity as a *relational* and dynamic process that changes on the basis of social learning as well as individual learning. This process-rich notion of identity/subjectivity provides a relational link for understanding social learning through individually constructed narratives. Identities/subjectivities, viewed as relational counterparts of one's lived experiences, can be used to define learning (i.e., as closing the gap between actual and designated/expected identity). Making this shift in thinking about social learning as relational in identity-forming, as well as meaning-driven and socially situated, is at the root, it seems to me, of what environmental educators have long been trying to express, without benefit of this new conceptual language about learning.

Re-Operationalising EE/ESD as Subjectivised Social Learning

Given the emergence of new discourses on learning (in terms of identity/subjectivity), it seems useful to (re)situate the theoretical/conceptual argument for the value of EE/ESD within a reconfiguring of education. That is, it seems necessary to locate learning (as identity-forming, meaning making and socially situated) within the landscape of possibility signified by a sociocultural approach to education. Given the proliferation of research focused on sociocultural traditions within the broad territory of sociology, cultural geography and anthropology, this is no small task. The focus here is limited to genealogical tracing of various theoretical frames/lineages that overlie sociocultural positions. Such tracing may provide some conceptual clarity for complex epistemological/ontological positionings that can be found in a deep working knowledge of those traditions from which one's work emerges (St. Pierre, 2000).

Assuming an alignment of many environmental educators with the trend in educational research away from simple correspondence theories of truth and reality, it is necessary to sort through various mixtures of mostly implicit epistemological/ontological theory deduced from actual use of methodology and method. Each of interpretivist, critical and poststructural worldviews problematise the relationship between reality and what we say about it, in their own way. Several educational philosophers and theorists have described these positionings that, according to Price (2007), are all based on the Habermasian (1972) theory of knowledge constitutive interests. Acknowledging their complexity, ambivalence, contradictions, and overlap, as well as the caution about reifying the categories, Price (2007) provides a possible categorisation of learning theories according to their assumptions of ontology and

epistemology (p.24). In recognising interpretive, critical and poststructural theories, she invokes Bhaskar (1989; 1993; 2002), Latour (1993; 1999), Haraway (1991; 1997; 2003; 2004) and others in positing tentative new 'relational' process theories based on a relativist epistemology but a qualified realist ontology. Her dissertation presents theoretical justification for this heuristic that reveals how educational theorists get around problems of philosophy using pragmatic arguments to justify their use of particular methodologies.

What is appealing about Price's (2007) positioning within critical realist ontology is the alignment with sociocultural views of learning as relational. Even more fundamental for environmental educators, particularly those with socially critical or postmodern skepticism, is how this alignment can help us think about the poststructural concern about environmental action as a willful contradiction (see McKenzie, 2004). By integrating a theory of action/participation to a relational politics of subjectivity, Price (2007) opens spaces where critical pedagogy intersects poststructuralism. Within such spaces in educational practice, teachers can mediate between individual and social constructions of the world in helping their students negotiate collective actions in areas such as social/environmental injustice, power imbalances within and amongst human (or nonhuman) interactions, and deconstruction of social structures that perpetuate hegemony. Although these approaches are meant to challenge received wisdom through reflexivity, participatory strategies and praxis (see Lather, 1991), they are less helpful concerning action/activism. To add a theory of action requires, according to Price (2007), an epistemological sleight of hand combined with a particular form of Peirce-like (1905/1998) pragmatism. An aporia created by this intersection of postcritical and pragmatic perspectives is that unequal power relations operate within participatory approaches.

Inspired by Bhaskar (critical realism), Peirce (pragmatism), Latour, Bourdieu, Haraway, and by O'Donoghue (1996), Price (2007) outlines a relational-processual theory that connects social learning theory to action/activism through Vygotsky's (1978) poststructural plurality, grounded in epistemological relativism (i.e., knowledge is relational-social and non-foundational). When combined with understanding the world as real – the ontological realism of Bhaskar (1989; 1993; 2002) – each of 'us' become embodied parts of it (Bateson, 1979; Beck, 1992; Plant, 2001) that can act intentionally on the world (Latour, 1993; 1999; Haraway, 1991; 1997; 2003; 2004). Subjectification is embedded in the tension of our ability to interpret, to embody, to live and to know as we experience the landscapes within discursive practices and one's positioning within them (Davies, 2000). Applied in practice, teachers and students together construct 'good enough' contextual meaning (truth) that can inform their actions acknowledging uncertainty and internalise (re-learning) something in the relational process that connects them, perhaps in transformative ways. Participatory action gives value to one's experience and identity/subjectivity (the social experience counts towards knowledge acquisition) yet recognises that our accounting of experience (e.g., in narrative) is fallible and requires intersubjective connections as well as reflectivity for validation. Thus, a relational approach to education grounds a relational approach to learning that searches for depth of understanding of social/environmental phenomena to inform action. Such an approach works through interrelationships and networks as the basis for action – as well as a processual 'be' (identity/ontology) coming through such learning processes to build knowledge.

While many people who think seriously about EE/ESD have poststructuralist as well as critical learnings, and can live with epistemological relativism when contemplating methodological action or social construction of knowledge (as relational), I suspect that they tend ontologically toward critical realism. As the argument goes, we do not expect to be able to act with absolute certainty but we feel that we must act to change a reality which does, in fact, exist beyond what our minds construct. Whilst acknowledging multiple perspectives where each representation can become reality, we also acknowledge the need to work against oppressions of various kinds through a praxis of willful contradiction (see McKenzie, 2004). Despite the work of several educators such as N. Gough (1991; 1994; 1999), A. Gough (1999), Bell and Russell (2000) and Morris (2002), as well as feminist poststructuralists (e.g., Weedon, 1987; Barron, 1995; Louseley, 1999; Britzman, 2000), it seems reasonable to suggest, with McKenzie (2004), that more explicit discussion is needed on how these post perspectives fit with the more activist agendas of much socio-ecological education. How environmental educators are meant to be dwelling in tensions created by such category contradictions at the intersection of poststructural and critical pedagogical frames remains a challenge.

Price (2007) suggests that relational-processual theory that networks pragmatism within qualified realist approaches to method, yet leaves methodology alone, may help to address such tensions. Forms of pragmatism, scrutinised as politically preferred constructions of the way forward, range from critical (e.g., Gough, 1997; Popkewitz & Brennan, 1998) to various consensualist forms (e.g., Sauvé, 1999; Chambers, 2004). Price's (2007) strategy is to illuminate 'preconditions' for each of these positionings within a relational politics of ontology/epistemology (related to questions about methodology). That is, we begin to realise that learning how we choose to frame and approach problems preconditions what we can learn. This kind of relationalist philosophy can be traced to holistic systems (Merchant, 2003) and to realist (but not positivist or empiricist) philosophy (Bhaskar, 1993).

As I interpret the argument, it is in the epistemological categories, rather than ontological distinctions, that we can interpret questions of pattern (Bateson, 1972). Such categories (knowledge constitutive interests) are preconditions for learning that is both individual and sociocultural. Such real but relational ontological groundings, joined to relational metaphors of learning (e.g., constellations, rhizomes, mycelia), invite us to see persons taking on agentic forms as identities/subjectivities within the flow of socioculturally shaped lives. Within such a philosophical frame, EE/ESD can be (re)viewed as naturally occurring within learning networks where experiences with significant others (Haraway, 2003) and significant life experiences are important as subjectivity-constituting processes.

Implications for EE/ESD

What remains is to encourage further thinking about social/relational processes of learning in EE/ESD implied by a relationalist philosophical perspective that works, as Haraway (1997) says, as a 'prophylaxis for both relativism and transcendence' (p.37). Such processes (as preconditions that undergird new learning theory) connect individual and social learning through meaning making, social situatedness and identity/subjectivity formation. Emphasis remains on identity/

subjectivity as means through which people come to care about and to care for what is going on around them (Holland, Lachicotte, Skinner & Cain, 1998). In 'becoming' environmentally 'savvy' citizens with agency, we reiterate and confirm those preconditions that made us – not determine us – in the reflexive and critical ways in which we actively (re)construct ourselves. We can be said to have agency in our critically reflexive ways of examining our conditions of possibility in which we both subvert and eclipse the discourse/practices that work to shape us as agents. These are active practices where the constituted character of the subject is the very precondition of its agency (Butler, 1995). They are 'models' that we (the subjective agent) find in our local culture/society and recognise as potentially determining but which can be disavowed as we learn to recognise our discursive dependencies.

Our work with teachers and students in the Canadian Youth Forum for Sustainability exemplifies one of many environment-related educational approaches where school action projects were studied as instances of social learning. In analysing their roles in interaction with students, both students and teachers experienced tensions in moving outside traditional passive roles and assuming responsibilities for local, community-based, social/environmental action. Analysis of interactions between secondary students and teachers illustrated how complex processes, on the take up and subversion of power, the disavowal of dependency and the accomplishment of a sense of autonomy from certain educational discourses, become obvious in changed circumstances. We begin what we think might be the kind of process that may allow participants and researchers to see how preconditions/framings work on learning processes within socially reconfigured practices (see Barrett, Hart, Nolan & Sammel, 2005). In attempting to understand how identities were re-inscribed in the struggle to (or recourse to) role-change from assumptions of 'good' teacher and student, we created conditions to encourage reflection on strategies used to escape traditional roles as a kind of double jeopardy. The process recognised that neither teacher nor student was powerless to change, but that some effort is required to recognise the dominant discourses at play. Agency may be found, it seems, within the spaces or silences within the taken-for-granted assumptions of discourse. Although role definitions existed prior to them, in the social 'outside', both teacher and student, on reflection, could choose to take up or submit to relations of power 'inside'. By creating different conditions, spaces were opened for the reworking of discourses such that identity/subjectivity could be confronted and agency questioned. The power that makes the social subject possible (in the first place) can be exposed in the will of the teacher or student to be the agent (of change). Is this the willful contradiction that faces environmental educators who, according to McKenzie (2004), can learn to recognise the political nature of their interpretation yet still feel the need to act?

Considering learning from a place of willful contradiction (i.e., standing close to the fire), as these teachers and students did, means dwelling in spaces of becoming more critically conscious and yet not disabled by such consciousness. It means learning to be political by realising that one's perspectives are biased yet, nevertheless, acting in the world, taking a stand (Lather, 1991: 25). It means recognising that the biased judgments (or theoretic fictions) that ground our actions exist as those little narratives (or discourses) about the world that are admittedly fictions rooted in local knowledge that is continually (re)formed and (re)fashioned depending on

shifting (fluid) circumstances and subjectivities. It means that subjectivity (identity) is continually reconstituted and that agency lies precisely within (enfolded) in its ongoing reconstitution. It means that we cannot ignore postcritical/poststructural discourses that work to identify those narratives through which we are constituted (Davies, 1993; 2000; 2003; 2006), and at the same time we cannot not act from a position of a moral epistemology of knowing people.

As Davies (2000) puts it, agency is recognised not as freedom from discursive constitution, but as the capacity to recognise that constitution for what it is, and to change the discourses themselves (p.67). In our Youth Forum work, our focus was centred on questioning the nature of the teacher–student relationship and in helping both to recognise their complicity to their own localised theoretic fictions by probing at the political conditions and circumstances within which they were constituted. Such disentangling of how we come to see and think may create conditions for seeing and thinking differently (i.e., questioning identity locations and understandings constructed in students’ and teachers’ everyday experiences at school). It may also help us to act more thoughtfully.

Just as being a teacher (or student) is a matter of being seen as such by ourselves and by others, being an environmental or education–for–sustainable–development educator is a matter of acquiring and (re)defining identity/subjectivity that is in some ways socially legitimated. If identity/subjectivity, as a complex system of meanings and representations which develops over time, is something people can use to justify, explain or make sense of themselves in relation to others and contexts, then we need to find ways to examine its shaping by social forms of power in order to find room for agency (Foucault, 1981a; 1981b; Bourdieu & Wacquant, 1992). Price’s (2007) characterisation of Wals’s (1993; cited in Wals & van der Leij, 1997) mixture of critical and phenomenological approach works to accommodate the problem of agency, as does McKenzie’s (2004) mixture of poststructural and critical pedagogy. However, as McKenzie states, to engage students in such experience, that is, to create and nurture conditions where teachers and students can, in Lather’s (2001) terms, locate their work in embodied, critical, cultural practices that encourage learners to become self-reflexive social critics capable of deconstructing the myths and meanings that dominate our own cultures (see Gough, 1991), is tough work. Taking up phenomenological or poststructural discourses that identify with narratives that constitute our subjectification (see Davies, 2000; 2006), that is, in ‘seeing what frames our seeing’ is but one of several difficulties surrounding the subjectivity of teachers, students, and environmental educators (see Ellsworth, 1989; Probyn, 2003).

Price’s (2007) idea of relational knowing, from a critical realist perspective (i.e., relativist epistemology and realist ontology), when combined with McKenzie’s poststructural idea of willful contradiction (i.e., feminist poststructural relativism), need not be viewed as inhibiting action as Price’s (2007) characterisation of the ‘posts’ appears to be. Recognising our judgments to action as necessary fictions, as best approximations to action, seems most promising when enacted as a form of critical/reflective practice situated in sociocultural practices that give the most (at the time) subjective purchase. If we view learning as mixtures of personal and social biography, that is, as relational, then environmental educators can make choices about what and how to teach by making distinctions more consciously – by affirming positionings and affiliations that constitute important aspects of their professional/personal identities. The

choices are not arbitrary but consciously patterned around sets of traditions (i.e., ways of knowing and being) (see McIntyre, 1981) that embody and are generated by ‘moral sources’. In many cases, the details of the traditions (ontology/epistemology) remain ‘lost in translation’ but they nevertheless work invisibly toward those understandings as they explore the narratives that produced them (as powers to open or constrain their choices). Such relations of power are the means by which teachers (environmental educators) construct/constitute our subjectivities/identities. We find a kind of agency in positioning ourselves in relation to other people who form the networks, rhizomes or mycelia of social learning communities.

If we view social learning within frames that implicate the wholeness of these philosophical yet practical traditions (in Bohm’s [1980] and Price’s [2007] terms, the whole becomes visible within each or any of the parts), such frames can become ontologically/epistemologically meaningful if they implicate us as subjectivities more conscious of our choices. It would be easier, for example, to see our practical decisions as educative – if we could articulate a participative worldview or perspective that could extend social dimensions of learning into ecological notions of sustainability (see Abram, 1996; Sterling, 2003). It would also be more productive of action because it reveals how we come to move from one way of construing learning to another, relative to the context and in relation to the perceived needs of students. Recognising a bias for participatory knowing (based on mutual participative awareness), for example, implies a kind of critical intersubjectivity that attends to grounding relations between social/relational forms of knowing/learning as well as action.

At what point, says Martin (2001), do we say we know something and act on it? What Torbert (2001) has described as ‘consciousness in the midst of action’ now goes beyond naïve subjective identity in actively seeking awareness. Such a reflexive stance of continually ‘reframing mind’ (Torbert, 2001) in narrative and community (self study and participation) is the means of divesting ourselves of our own presuppositions/preconditions. In Price’s (2007) terms, we can begin to (re)consider our preconditions for our action (whether methodological or not) within the constructed, shared perspective of community. If our knowing and learning is set within contexts, traditions, frames that accommodate linguistic-cultural and experiential-shared ways of being, then the possibility of critical consciousness through personal reflection and social dialogue and practical exchange of experience can lead to collaborative inquiry. Such a view of learning in EE/ESD seems to have potential to work across differences in ways that question as well as educate and support each other – to disentangle the mycelial web that may permit seeing differently. But such a view – relational knowing/learning as a moral epistemology of knowing subjects – places us close to the fire, in poorly understood territory.

Notes on the Contributor

Paul Hart is a professor of science and environmental education at the University of Regina, Canada, where he teaches both undergraduate and graduate students. He has published widely in the areas of science and environmental education. He is an executive editor of the *Journal of Environmental Education*. His research interests include the genealogical roots of teacher thinking and children’s ideas about the environment. Email: hartpa@uregina.ca.

References

- Abram, D. (1996). *The spell of the sensuous*. New York: Vintage Books.
- Barrett, M. (2007). If toads cannot speak: Researching with the animate earth. Unpublished doctoral thesis, University of Regina, Canada.
- Barrett, M., Hart, P., Nolan, K. & Sammel, A. (2005). Challenges in implementing action-oriented sustainability education. In Leal-Filho, W. (Ed.), *Handbook of sustainability research*. Frankfurt: Peter Lang. pp.505–534.
- Barron, D. (1995). Gendering environmental education reform: Identifying the constitutive power of environmental discourses. *Australian Journal of Environmental Education*, 11, 107–120.
- Bateson, G. (1972). *Steps to an ecology of mind*. Chicago: University of Chicago Press.
- Bateson, G. (1979). *Mind and nature: A necessary unity*. Toronto: Bantam Books.
- Bauman, Z. (1996). From pilgrim to tourist – Or a short history of identity. In Hall, S. & du Guy, P. (Eds), *Questions of cultural identity*. London: Sage. pp.18–36.
- Beck, U. (1992). *Risk society: Towards a new modernity*. Thousand Oaks, California: Sage.
- Bell, A. & Russell, C. (2000). Beyond human, beyond words: Anthropocentrism, critical pedagogy, and the poststructuralist turn. *Canadian Journal of Education*, 25(3), 188–203.
- Bhaskar, R. (1989). *Reclaiming reality: A critical introduction to contemporary philosophy*. London: Verso.
- Bhaskar, R. (1993). *Dialectic: The pulse of freedom*. London: Verso.
- Bhaskar, R. (2002). *Meta-reality: The philosophy of meta-reality (Vol. I: Creativity, love and freedom)*. London: Sage.
- Bohm, D. (1980). *Wholeness and the implicate order*. London: Routledge & Kegan Paul.
- Bourdieu, P. & Wacquant, L. (1992). *An invitation to reflexive sociology*. Cambridge: Polity Press.
- Britzman, D. (2000). ‘The question of belief’: Writing poststructural ethnography. In St. Pierre, E. & Pillow, W. (Eds), *Working the ruins: Feminist poststructural theory and methods in education*. New York: Routledge. pp.27–40.
- Brown, J., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42.
- Butler, J. (1995). Contingent foundations: Feminism and the question of ‘postmodernism.’ In Benhabib, S., Butler, J., Cornell, D. & Fraser, N. (Eds), *Feminist contentions: A philosophical exchange*. New York: Routledge. pp.127–143.
- Chaiklin, S. & Lave, J. (Eds). (1993). *Understanding practice: Perspectives on activity and context*. Cambridge: Cambridge University Press.
- Chambers, R. (2004). *Ideas for development: Reflecting forward*. IDS Working Paper 238. Brighton, UK: Institute of Development Studies.
- Claxton, G. (2002). Education for the learning age: A sociocultural approach to learning to learn. In Wells, G. & Claxton, G. (Eds), *Learning for life in the 21st century: Sociocultural perspectives on the future of education*. Oxford: Blackwell Publishers. pp.21–33.
- Cobb P. (1994). Where is the mind? Constructivist and sociocultural perspectives on mathematical development. *Educational Researchers*, 23(7), 13–19.

- Cobb, P. & Bowers, J. (1999). Cognitive and situated learning perspectives in theory and practice. *Educational Researcher*, 28(2), 4–15.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, Massachusetts: Harvard University Press.
- Davies, B. (1993). *Shards of glass: Children reading and writing beyond gendered identities*. Cresskill, New Jersey: Hampton Press.
- Davies, B. (2000). *A body of writing: 1990–1999*. Walnut Creek, California: Alta Mira.
- Davies, B. (2003). *Frogs and snails and feminist tales: Preschool children and gender* (2nd edn). Cresskill, New Jersey: Hampton Press.
- Davies, B. (2006). Subjectification: The relevance of Butler's analysis for education. *British Journal of Sociology of Education*, 27(4), 425–438.
- De Lauretis, T. (1988). *Technologies of gender: Essays on theory, film and fiction*. Bloomington: Indiana University Press.
- Edwards, D. & Potter, J. (1992). *Discursive psychology*. Newbury Park, California: Sage.
- Ellsworth, E. (1989). Why doesn't this feel empowering? Working through the repressive myths of critical pedagogy. *Harvard Educational Review*, 59(3), 297–325.
- Ferguson, K. (1993). *The man question: Visions of subjectivity in feminist theory*. Berkeley: University of California Press.
- Ford, M. & Forman, E. (2006). Redefining disciplinary learning in classroom contexts. *Review of Research in Education*, 30, 1–32.
- Foucault, M. (1972). *The archaeology of knowledge*. New York: Harper Colophon.
- Foucault, M. (1981a). *History of sexuality, Volume one: An introduction*. Harmondsworth: Pelican.
- Foucault, M. (1982b). *Power/knowledge: Selected interviews and other writings, 1972–1977* (C. Gordon, Ed.). New York: Pantheon.
- Gough, A. (1997). *Education and the environment: Policy, trends and the problems of marginalization*. Melbourne: Australian Council for Educational Research.
- Gough, A. (1999). Recognizing women in environmental education pedagogy and research: Toward an ecofeminist poststructuralist perspective. *Environmental Education Research*, 5(2), 143–161.
- Gough, N. (1991). Narrative and nature: Unsustainable fictions in environmental education. *Australian Journal of Environmental Education*, 7, 31–42.
- Gough, N. (1994). Playing at catastrophe: Ecopolitical education after poststructuralism. *Educational Theory*, 44(2), 189–210.
- Gough, N. (1999). Rethinking the subject: (De)constructing human agency in environmental education research. *Environmental Education Research*, 5(1), 35–48.
- Green, J. & Luke, A. (2006). Introduction: Rethinking learning: What counts as learning and what learning counts. *Review of Research in Education*, 30, xi–xiv.
- Greeno, J. (1997). On claims that answer the wrong question. *Educational Researcher*, 26(1), 5–17.
- Greeno, J., Collins, A. & Resnick, L. (1996). Cognition and learning. In Berliner, D. & Calfee, R. (Eds), *Handbook of educational psychology*. New York: Macmillan. pp.15–46.
- Habermas, J. (1972). *Knowledge and human interests* (translated by J. Shapiro). London: Heinemann.

- Haraway, D. (1991). *Simians, cyborgs and women: The reinvention of nature*. London: Free Association Books.
- Haraway, D. (1997). *Modest_Witness@Second_Millennium.FemaleMan[©]_Meets_OncoMouseTM*. New York: Routledge.
- Haraway, D. (2003). *The companion species manifesto: Dogs, people and significant otherness*. Chicago: Prickly Paradigm Press.
- Haraway, D. (2004). *The Haraway reader*. New York: Routledge.
- Harre, R. & Gillett, G. (1995). *The discursive mind*. Thousand Oaks, California: Sage.
- Hart, P. (2003). *Teachers' thinking in environmental education: Consciousness and responsibility*. New York: Peter Lang.
- Hart, P. (2007). Social learning as action inquiry: Exploring education for sustainable societies. In Wals, A.E.J. (Ed.), *Social learning towards a sustainable world*. Wageningen: Wageningen Academic Publishers. pp.313–330.
- Holland, D. & Lave, J. (Eds). (2001). *History in person: Enduring struggles, contentious practice, intimate identities*. Santa Fe, New Mexico: School of American Research Press; Oxford, UK: James Currey.
- Holland, D., Lachicotte Jr., W., Skinner, D. & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, Massachusetts: Harvard University Press.
- Juzwik, M. (2006). Situating narrative-minded research: A commentary on Anna Sfard and Anna Prusak's 'Telling Identities'. *Educational Researcher*, 35(9), 13–21.
- Kemmis, S. (1998). System and lifeworld and the conditions of learning in late modernity. *Curriculum Studies*, 6(3), 269–305.
- Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern*. New York: Routledge.
- Latour, B. (1993). *We have never been modern* (translated by Catherine Porter). Hertfordshire: Prentice/Hall/Harvester Wheatsheaf. (Original work published 1991).
- Latour, B. (1999). *Pandora's hope: Essays on the reality of science studies*. Cambridge, Massachusetts: Harvard University Press.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lousley, C. (1999). (De)politicizing the environment club: Environmental discourse and the culture of schooling. *Environmental Education Research*, 5(3), 293–304.
- MacIntyre, A. (1981). *After virtue*. New York: Macmillan.
- Martin, R. (2001). *Listening up: Reinventing ourselves as teachers and students*. Portsmouth, New Hampshire: Boyton/Cook.
- McKenzie, M. (2004). The 'willful contradiction' of poststructural socio-ecological education. *Canadian Journal of Environmental Education*, 9, 177–190.
- Merchant, C. (2003). *Reinventing Eden: The fate of nature in Western culture*. New York: Routledge.
- Mishler, E. (2000). *Storylines: Craftarists' narratives of identity*. Cambridge, Massachusetts: Harvard University Press.

- Morris, M. (2002). Ecological consciousness and curriculum. *Journal of Curriculum Studies*, 34(5), 571–587.
- Moss, P., Girard, B. & Haniford, L. (2006). Validity in educational assessment. *Review of Research in Education*, 30, 109–162.
- O'Donoghue, R. (1996). Detached harmonies: A study in/on developing social processes of environmental education in eastern southern Africa. Unpublished doctoral thesis, Rhodes University, South Africa.
- Palmer, J., Suggate, J., Bajd, B., Hart, P., Ho, R., Ofwono-Orecho, J. *et al.* (1998). Significant life experiences and formative influences on the development of adults' environmental awareness in nine countries. *Environmental Education Research*, 4(4), 445–464.
- Palmer, J., Suggate, J., Robottom, I. & Hart, P. (1999). Significant life experiences and formative influences on the development of adults' environmental awareness in the UK, Australia, and Canada. *Environmental Education Research*, 5(2), 181–200.
- Pea, R. (1993). Practices of distributed intelligence and designs for education. In Salomon, G. (Ed.), *Distributed cognitions: Psychological and educational considerations*. New York: Cambridge University Press. pp.47–87.
- Peirce, C. (1905/1998). What pragmatism is. In The Peirce Edition Project (Ed.), *The essential Peirce* (Vol. 2). Bloomington: Indiana University Press. pp.331–345.
- Plant, M. (2001). *A common sense philosophy for environmental education?* Paper prepared for the Annual Conference of the Association for Teacher Education in Europe. Stockholm, 2001. http://www.lhs.se/atee/papers/RDC_17.doc, visited 1 March 2007.
- Popkewitz, T. & Brennan, M. (Eds). (1998). *Foucault's challenge: Discourse, knowledge and power in education*. Columbia: Teachers College Press.
- Pratt, G. (1998). Grids of difference: Place and identity formation. In Fincher, R. & Jacobs, J. (Eds), *Cities of difference*. New York: Guilford. pp.28–48.
- Price, L. (2007). A transdisciplinary explanatory critique of environmental education (Volume 1): Business and industry. Unpublished doctoral thesis, Rhodes University, South Africa.
- Probyn, E. (2003). The spatial imperative of subjectivity. In Anderson, K., Domosh, M., Pile, S. & Thrift, N. (Eds), *Handbook of cultural geography*. London: Sage. pp.290–299.
- Putnam, R. & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4–15.
- Reid, A., Jensen, B.B., Nickel, J. & Simovska, V. (Eds). (2007). *Participation and learning: Perspectives on education and the environment, health and sustainability*. Dordrecht: Springer.
- Resnick, L. (1987). Learning in school and out. *Educational Researcher*, 16(9), 13–20.
- Resnick, L. (1991). Shared cognition: Thinking as social practice. In Resnick, L., Levine, J. & Teasley, S. (Eds), *Perspectives on socially shared cognition*. Washington, D.C.: American Psychological Association. pp.1–20.
- Rickinson, M. (2001). Learners and learning in environmental education: A critical review of evidence. *Environmental Education Research*, 7(3), Special Issue, 208–318.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.
- Roth, W-M. (2004). Identity as dialectic: Re/making self in urban school. *Mind, Culture, and Activity*, 1(1), 48–69.

- Salomon, G. (Ed.). (1993). *Distributed cognitions: Psychological and educational considerations*. Cambridge: Cambridge University Press.
- Salomon, G. & Perkins, D. (1998). Individual and social aspects of learning. *Review of Research in Education*, 23, 1–24.
- Sauvé, L. (1999). Environmental education between modernity and postmodernity: Searching for an integrating educational framework. *Canadian Journal of Environmental Education*, 4, 9–35.
- Sfard, A. (2006). Telling ideas by the company they keep: A response to the critique by Mary Juzwik. *Educational Researcher*, 35(9), 22–27.
- Sfard, A. & Prusak, A. (2005). Telling identities: In search of an analytic tool for investigating learning as a culturally shaped activity. *Educational Researcher*, 34(4), 14–22.
- Schuell, T. (1986). Cognitive conceptions of learning. *Review of Educational Research*, 56, 411–436.
- Soltis, J. (1981). Education and the concept of knowledge. In Soltis, J. (Ed.), *Philosophy and education*. Chicago: National Society for the Study of Education. pp.95–113.
- Sterling, S. (2003). Whole systems thinking as a basis for paradigm change in education: Explorations in the context of sustainability. Unpublished doctoral dissertation, Bath University, UK.
- St. Pierre, E. (2000). The call for intelligibility in postmodern educational research. *Educational Researcher*, 29(5), 25–28.
- Tharp, R. & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge: Cambridge University Press.
- Torbert, W. (2001). The practice of action inquiry. In Reason, P. & Bradbury, H. (Eds), *Handbook of action research: Participative inquiry and practice*. Thousand Oaks, California: Sage. pp.250–260.
- Vygotsky, L. (1978). *Mind and society: The development of higher mental processes*. Cambridge, Massachusetts: Harvard University Press.
- Wals, A.E.J. (1993). Critical phenomenology and environmental education research. In Mrazek, R. (Ed.), *Alternative paradigms in environmental education – Monographs in environmental education and environmental studies (Vol. VII)*. Troy, Ohio: North American Association for Environmental Education. pp.153–174.
- Wals, A.E.J. (Ed.). (2007). *Social learning towards a sustainable world*. Wageningen: Wageningen Academic Publishers.
- Wals, A.E.J. & van der Leij, T. (1997). Alternatives to national standards for environmental education: Process-based quality assessment. *Canadian Journal of Environmental Education*, 2, 7–27.
- Weedon, C. (1987). *Feminist practice and poststructuralist theory*. Oxford: Basil Blackwell.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Wertsch, J. (1991). *Voices of mind*. Cambridge, Massachusetts: Harvard University Press.
- Wertsch, J. (1998). *Mind as action*. New York: Oxford University Press.