

On to the Next Level: Continuing the Conceptualization of the Bricolage

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The bricolage offers insight into new forms of rigor and complexity in social research. This article explores new forms of complex, multimethodological, multilogical forms of inquiry into the social, cultural, political, psychological, and educational domains. Picking up where his previous Qualitative Inquiry article on the bricolage left off, this article examines not only the epistemological but also the ontological dimensions of multimethodological/multitheoretical research. Focusing on webs of relationships instead of simply things-in-themselves, the bricoleur constructs the object of study in a more complex framework. In this process, attention is directed toward processes, relationships, and interconnections among phenomena. Such analysis leads bricoleurs to multiple dimensions of multilogicality. In this context, the article generates a variety of important categories in which multiple perspectives may be constructed: methodology, theory, interpretation, power relations, and narratology. 叙述学

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For the past several years, with the help of Norm Denzin and Yvonna Lincoln, I have been working on the extension of their concept of bricolage—a multimethod mode of research referenced by a variety of researchers but not developed in detail. On one level, the bricolage can be described as the process of getting down to the nuts and bolts of multidisciplinary research. Ethnography, textual analysis, semiotics, hermeneutics, psychoanalysis, phenomenology, historiography, discourse analysis combined with philosophical analysis, literary analysis, aesthetic criticism, and theatrical and dramatic ways of observing and making meaning constitute the methodological bricolage. In this way, bricoleurs move beyond the blinds of particular disciplines and peer through a conceptual window to a new world of research and knowledge production. This article is the second half of “Describing the Bricolage: Conceptualizing a New Rigor in Qualitative Research” (Kincheloe, 2001), which appeared in *Qualitative Inquiry*. In that issue, Yvonna Lincoln (2001), William Pinar (2001), and Peter McLaren (2001) offered valuable

responses/critiques of my thoughts on bricolage. I take their insights seriously in presenting the second part of my article.

In the first decade of the 21st century, bricolage is typically understood to involve the process of employing these methodological strategies as they are needed in the unfolding context of the research situation. Although this interdisciplinary feature is central to any notion of the bricolage, I propose that qualitative researchers go beyond this dynamic. Pushing to a new conceptual terrain, such an eclectic process raises numerous issues that researchers must deal with to maintain theoretical coherence and epistemological innovation. Such multidisciplinary demands a new level of research self-consciousness and awareness of the numerous contexts in which any researcher is operating. As one labors to expose the various structures that covertly shape one's own and other scholars' research narratives, the bricolage highlights the relationship between a researcher's ways of seeing and the social location of his or her personal history. Appreciating research as a power-driven act, the researcher-as-bricoleur abandons the quest for some naïve concept of realism, focusing instead on the clarification of his or her position in the web of reality and the social locations of other researchers and the ways they shape the production and interpretation of knowledge.

In this context, bricoleurs move into the domain of complexity. The bricolage exists out of respect for the complexity of the lived world. Indeed, it is grounded on an epistemology of complexity. One dimension of this complexity can be illustrated by the relationship between research and the domain of social theory. All observations of the world are shaped either consciously or unconsciously by social theory—such theory provides the framework that highlights or erases what might be observed. Theory in a modernist empiricist mode is a way of understanding that operates without variation in every context. Because theory is a cultural and linguistic artifact, its interpretation of the object of its observation is inseparable from the historical dynamics that have shaped it. The task of the bricoleur is to attack this complexity, uncovering the invisible artifacts of power and culture and documenting the nature of their influence not only on their own scholarship but also scholarship in general. In this process, bricoleurs act on the concept that theory is not an explanation of nature—it is more an explanation of our relation to nature.

AN ACTIVE VIEW OF RESEARCH METHODOLOGY

In its hard labors in the domain of complexity, the bricolage views research methods actively rather than passively, meaning that we actively construct our research methods from the tools at hand rather than passively receiving the "correct," universally applicable methodologies. Avoiding modes of reasoning that come from certified processes of logical analysis, bricoleurs also

steer clear of preexisting guidelines and checklists developed outside the specific demands of the inquiry at hand. In its embrace of complexity, the bricolage constructs a far more active role for humans both in shaping reality and in creating the research processes and narratives that represent it. Such an active agency rejects deterministic views of social reality that assume the effects of particular social, political, economic, and educational processes. At the same time and in the same conceptual context, this belief in active human agency refuses standardized modes of knowledge production (Dahlbom, 1998; McLeod, 2000; Selfe & Selfe, 1994; Young & Yarbrough, 1993).

In many ways there is a form of instrumental reason, of rational irrationality, in the use of passive, external, and monological research methods. In the active bricolage, we bring our understanding of the research context together with our previous experience with research methods. Using these knowledges, we *tinker* in the Lévi-Straussian sense with our research methods in field-based and interpretive contexts. This tinkering is a high-level cognitive process involving construction and reconstruction, contextual diagnosis, negotiation, and readjustment. Researchers' interaction with the objects of their inquiries, bricoleurs understand, are always complicated, mercurial, unpredictable and of course, complex. Such conditions negate the practice of planning research strategies in advance. In lieu of such rationalization of the process, bricoleurs enter into the research act as methodological negotiators. Always respecting the demands of the task at hand, the bricolage, as conceptualized here, resists its placement in concrete as it promotes its elasticity. In light of Lincoln's (2001) delineation of two types of bricoleurs, those who (a) are committed to research eclecticism allowing circumstance to shape methods employed and those who (b) want to engage in the genealogy/archeology of the disciplines with some grander purpose in mind, my purpose entails both of Lincoln's articulations of the role of the bricoleur.

Research method in the bricolage is a concept that receives more respect than in more rationalistic articulations of the term. The rationalistic articulation of method subverts the deconstruction of wide varieties of unanalyzed assumptions embedded in passive methods. Bricoleurs, in their appreciation of the complexity of the research process, view research method as involving far more than procedure. In this mode of analysis, bricoleurs come to understand research method as also a technology of justification, meaning a way of defending what we assert we know and the process by which we know it. Thus, the education of researchers demands that everyone take a step back from the process of learning research methods. Such a step back allows us a conceptual distance that produces a critical consciousness. Such a consciousness refuses the passive acceptance of externally imposed research methods that tacitly certify modes justifying knowledges that are decontextualized and reductionistic (Denzin & Lincoln, 2000; Foster, 1997; McLeod, 2000).

CHASING COMPLEXITY: AVOIDING MONOLOGICAL KNOWLEDGE IN THE BRICOLAGE

Avoiding the reductionistic knowledge of externally imposed methods, the bricolage continues its pursuit of complexity by sidestepping monological forms of knowledge. Monological knowledge is produced in the rationalistic quest for order and certainty. In such a trek, a solitary individual, abstracted from the cultural, discursive, ideological, and epistemological contexts that have shaped him or her and the research methods and interpretive strategies he or she employs, seeks an objective knowledge of unconnected things-in-themselves. Monological knowledge not only reduces human life to its objectifiable dimensions, that is, what can be expressed numerically, but also is incapable of moving beyond one individual's unilateral experience of the world. At its core the bricolage struggles to find and develop numerous strategies for getting beyond this one-dimensionality. In this monological context, thick descriptions are lost to the forces of order and certainty that are satisfied with right and wrong answers that preclude the need for other perspectives. Thus, monological knowledge is a smug knowledge that is content with quick resolutions to the problems that confront researchers (Madison, 1988; Thomas, 1998).

Bricoleurs understand a basic flaw within the nature and production of monological knowledge: Unilateral perspectives on the world fail to account for the complex relationship between material reality and human perception. When this relationship is ignored, knowledge producers have hell to pay. Such an expenditure includes the costs of not taking into account that what we perceive is shaped by a panoply of factors. Mistaking perception for truth not only reduces our ability to make sense of the world around us but also harms those with the least power to pronounce what is true (Karunaratne, 1997). In his initial speculations on the nature of the bricolage, Lévi-Strauss (1966) emphasized this point. A knowledge producer, Lévi-Strauss argued, never carries on a simple dialogue with the world but instead, interacts "with a particular relationship between nature and culture definable in terms of his particular period and civilization and the material means at his disposal" (p. 19).

Lévi-Strauss (1966), of course, was delineating bricolage's concern with and understanding of the dialectical relationship between knowledge and reality. In the decades since his pronouncements, social analysts have argued that in the complexity of this relationship, knowledge and reality change both continuously and interdependently. In the recognition of this complexity, many researchers have come to the conclusion that the description of what really exists may be far more difficult than originally thought. In this context, bricoleurs seek multiple perspectives not to provide the *truth* about reality but to avoid the monological knowledge that emerges from unquestioned

frames of reference and the dismissal of the numerous relationships and connections that link various forms of knowledge together.

Here rests a central epistemological and ontological assumption of the bricolage: The domains of the physical, the social, the cultural, the psychological, and the educational consist of the interplay of a wide variety of entities—thus, the complexity and the need for multiple ways of seeing advocated by bricoleurs. As part of a larger process that is ever changing, the reality that bricoleurs engage is not a fixed entity. In its impermanence, the lived world presents special problems for researchers that demand attention to the nature of its changes and the processes of its movements. In this dynamic context, bricoleurs work to avoid pronouncements of final truth. Because of the changing and impermanent nature of the world, bricoleurs propose compelling insights into their engagement with reality and the unresolved contradictions that characterize such interactions (Karunaratne, 1997; Lomax & Parker, 1996; Young & Yarbrough, 1993).

COMPLEXITY DEMANDS THE RIGOR OF THE BRICOLAGE

As bricoleurs plan their escape from the limitations of monological knowledge, they envision forms of research that transcend reductionism. In this context, they understand that complexity sets the stage for the need for the bricolage, the necessity of new ways to understand the complications of social, cultural, psychological, and educational life. Once again, the complexity principle gets in our face: Knowledge production is a far more complex process than we originally thought; there are more obstacles to the act of making sense of the world than researchers had anticipated. It was with these understandings in mind that Denzin and Lincoln (2000) issued their rigorous conception of the bricoleur as intellectually informed, widely read, and cognizant of diverse paradigms of interpretation. Realizing that the world is too complex to be revealed as an objective reality, Denzin and Lincoln sought multiple methods to provide richness and depth to a study.

Lévi-Strauss (1966), in his delineation of the bricolage, maintained that the concept originated in an understanding of the complexity and unpredictability of the cultural domain. Complexity in the context of cultural inquiry demands that the researcher develop a thick description that avoids the reductionism of describing the “functional role” of an individual. Such a “literacy of complexity” understands the intersecting roles and social locations of all human beings and the multiple layers of interpretations of self, contexts, and social actors involved in rigorous research (Dicks & Mason, 1998). Bricoleurs act on these understandings in the effort to address the complexity of everyday life. Such complexity is embedded in notions of

- *Explicate and implicate orders of reality*—the explicate order consists of simple patterns and invariants in time. These characteristics of the world, as theorized by physicist David Bohm, seem to repeat themselves in similar ways and possess recognizable locations in time and space. The implicate order is a much deeper structure of the world. It is the level at which ostensible separateness disappears and all things seem to become a part of a larger unified process. Implicate orders are marked by the simultaneous presence of a sequence of many levels of enfoldment with similar dissimilarities existing among them (Bohm & Peat, 1987). Bricoleurs who recognize complexity search for this implicate order as a process often hidden from social, cultural, psychological, and pedagogical researchers.
- *The questioning of universalism*—contextual specificities may interfere with a researcher's ability to generalize findings to a level of universal application. With the recognition of complexity, universal theories of intelligence, for example, might have to respect and, thus, account for the way individuals and groups in diverse social settings conceptualize the concept (Kincheloe, Steinberg, & Villaverde, 1999).
- *Polysemy*—interpretation is always a complex process and different words and phrases, depending on the context in which they are used, can mean different things to different individuals. Thus, the research process is always more complex than initially perceived.
- *The living process in which cultural entities are situated*—in the zone of complexity, processes may be more fundamental to understanding the sociocultural world than isolated entities. Knowledge in this process-oriented context has a past and a future; researchers have traditionally viewed a phenomenon in a particular stage of its development. Bricoleurs operating on a terrain of complexity understand that they must transcend this tendency and struggle to comprehend the process of which an object of study is a part.
- *The ontology of relationships and connections*—in complexity theory, the concept of relatedness is deemed to possess properties and influences that are just beginning to be understood. For example, complexity theorists argue that the self is less stable and essentialized than was previously thought. In this context, the relationship between self and culture becomes a central focus in particular forms of social, cognitive, and psychological research. Culture is not merely the context in which the self operates but also "in the self"—an inseparable portion of what we call the self. Who we are as human beings is dependent on the nature of such relationships and connections.
- *Intersecting contexts*—bricoleurs operating in the complexity zone understand that knowledge can never stand alone or be complete in and of itself. When researchers abstract, they take something away from its context. Of course, we all abstract, but researchers as bricoleurs refuse to lose sight of the contextual field—indeed, the intersecting contextual fields—that provide separate entities diverse meanings. Contextualization is always a complex act, as it exposes connections between what were assumed to be separate entities. In this activity, researchers come to see dimensions of an object of study never before noticed. When researchers realize that there are always multiple contexts in which to view phenomena, they come to understand that some reductionistic notion of a definitive

or final comprehension of an object of study is a reductionistic concept. There is always another context in which a phenomenon can be studied.

- *Multiple epistemologies*—depending on where observers stand in the multidimensional web of reality, they will come to see different phenomena in different ways. Bricoleurs understand that in this complex context, diverse epistemologies will develop in different historical and cultural locales. As opposed to European modes of knowledge production, diverse peoples of the planet have produced ways of knowing that often have come directly into conflict. In their appreciation of epistemological complexity, bricoleurs seek out diverse epistemologies for their unique insights and sophisticated modes of making meaning. In this search, they gain provocative insights into epistemological diversity on issues of the relationships between mind and body, Self and Other, spirit and matter, knower and known, things-in-themselves and relationships, logic and emotion, and so forth. These insights allow them to ask new questions of epistemology and the research act.
- *Intertextuality*—adding to the complexity of the bricoleur's understanding of the research act is the notion of intertextuality, defined simply as the complicated interrelationship connecting a text to other texts in the act of textual creation or interpretation. Central to the importance of intertextuality in the context of the bricolage and the effort to understand complexity involves the notion that all narratives obtain meaning not merely by their relationship to material reality but from their connection to other narratives. A research account in this context cannot be understood without historically situating it in relation to other research narratives. With this understanding of intertextuality, bricoleurs are always aware that the researcher, the consumer/reader of the research, and exterior research narratives always occupy points on intersecting intertextual axes. In this way, they are always influencing one another and any effort to make meaning of any research act.
- *Discursive construction*—all knowledge production is shaped tacitly or consciously by discursive rules and practices. Bricoleurs exploring the complexity of the research act are always exploring the discursive construction of research narratives. They work to uncover the hidden rules that define what a researcher can and cannot say, who possesses the power to speak/write about particular topics and who must listen/read, and whose constructions of reality are valid and whose are unlearned and unimportant. Bricoleurs understand Michel Foucault's (1980) assertion that fields of knowledge take their forms as a result of the power relations of discursive practices.
- *The interpretive aspect of all knowledge*—as argued throughout this description of the bricolage, interpretation is always at work in the act of knowledge production—the "facts" never speak for themselves. As inhabitants of the world, researchers are oriented to it in a manner that prevents them from grounding their findings outside of it. Thus, whether we like it or not, all researchers are destined to be interpreters who analyze the cosmos from within its boundaries and blinders. To research, we must interpret; indeed, to live, we must interpret.
- *The fictive dimension of research findings*—because in the zone of complexity no fact is self-evident and no representation is "pure," any knowledge worker who believes research narratives are simple truths is operating in a naïve domain. Thus, bricoleurs assert that there are fictive elements to all representations and

narratives. Such fictive dimensions may be influenced by a variety of forces, including linguistic factors, narrative emplotment strategies, and cultural prejudices.

- *The cultural assumptions within all research methods*—Western science as well as any form of knowledge production is constructed at a particular historical time and in a specific cultural place. These temporal and spatial dimensions always leave their mark on the nature of the research methods employed and the knowledges produced. As bricolage pursues complexity, it induces researchers to seek the specific ways these cultural assumptions shape knowledge production, their own research processes in particular. Researchers operating with a consciousness of these dynamics use the insights gleaned from it to seek more complex ways of producing knowledge that are conscious of the many tacit ways cultural assumptions wander unnoticed within the act of researching.
- *The relationship between power and knowledge*—power, like the research act itself, is more complex than we originally posited. Drawing on Foucault (1980), power can be a censor that excludes, blocks, and represses like a great superego. On the other hand, however, power is a great producer, creating knowledge and legitimate ways of seeing. As a censor in research, power serves to limit what constitutes a legitimate focus of research, excluding “dangerous” investigations. As a producer in the research context, power serves to reward particular ways of seeing and specific activities. For example, in higher education, researchers who desire success in their fields learn to follow particular research norms, allowing them the rewards of funded grants and promotions based on scholarly productivity. The way different research orientations draw boundaries between what is acceptable and what is not constitutes the ideological dimension of the act of inquiry. Here, bricoleurs understand, complexity abounds as power is at work promoting particular views of research rigor and validity and notions of “unscientific” or soft research unworthy of certification at any level. The ability to trace the footprints of power in the research domain is a central dimension in the bricoleur’s efforts to understand complexity and knowledge production.

Bricoleurs acting on the complexity principle understand that the identification of social structures is always problematic, always open to questions of contextual contingency. This recognition does not mean that we dismiss the notion of structures but that we view them in a different way. For example, the structure of patriarchy is not some universal, fixed, unchanging reality. Patriarchy might better be described as an interpretive concept that varies in relations to time and place, that is constantly mutating in relation to its connections to a plethora of historical, social, cultural, economic, political, psychological, and pedagogical forces. The effects of patriarchy on specific groups and individuals are real but always idiosyncratic and undetermined. Bricoleurs understand in this context that they cannot use a theory of patriarchy to tell them what has happened in a particular situation but must dig, scratch, and analyze from different angles and employ multiple research methods and interpretive strategies to examine different aspects of the situation.

Structural analysis is too messy, contradictory, and complex to offer a universally valid and essentialized description of any social structure. As the complexity-sensitive bricolage theorizes structure as an untidy process, it views it like a model in a "fashion shoot"—from a variety of angles, in numerous contexts and backdrops, and in relation to different moods and affects. Chaos theory has provided bricoleurs with a compelling means of dealing with structures in its concept of fractals. Like social structures viewed through the lenses of the complexity principle, fractals are involved in the analysis of *loosely* structured entities. These irregular shapes, where their parts reflect the whole of the entity, are similar to social structures such as patriarchy that are nonlinear, contextually specific, and irregular in their manifestation (Young & Yarbrough, 1993). The similarities between fractals in physical reality and these social dynamics are compelling. These fractal dynamics deserve more study later in this article.

CONSTRUCTING THE BRICOLAGE: DEVELOPING A SOCIAL, CULTURAL, PSYCHOLOGICAL, AND EDUCATIONAL SCIENCE OF COMPLEXITY

Some of the best work in the study of social complexity is now taking place in the qualitative inquiry of numerous fields from sociology, cultural studies, anthropology, literary studies, marketing, geography, media studies, informatics, library studies, women's studies, various ethnic studies, and education to nursing. Denzin and Lincoln (2000) are acutely aware of these dynamics and referred to them in the context of their delineation of the bricolage. Lincoln (2001), in her response to the first part of this expansion of the bricolage, maintained that the most important border work between disciplines is taking place in feminism and racial/ethnic studies. In his response, Pinar (2001) correctly pointed out that curriculum theory provides numerous examples of "radical forms of interdisciplinarity" similar to what I am describing as the bricolage. It is unfortunate that researchers in sociology, cultural studies, psychology, history, and other disciplines are not more familiar with curriculum theory.

In the move to transcend the objective certainty of positivism and the effort to avoid the nihilism of more radical modes of postmodernism, social and cultural analysis has migrated to a more undefined space where no particular paradigmatic view dominates. In this domain, an awareness of the complexity of knowledge production undermines efforts to fix the field of social research in a well-defined locale. The development of particular universal ways of operating as researchers is not so easy in a situation where more and more professional practitioners grasp the complexity of their task.

The bricolage does not enter into this paradigmatic situation as a knight on a white horse ready to "save" the field. Such bravado is not the point of con-

structing the bricolage. In light of the vicissitudes of the contemporary state of social, cultural, psychological, and educational research, the bricolage serves as a way of naming and organizing existing impulses. In this context, it serves to promote understanding and communication and create structures that allow for a better informed, more rigorous mode of knowledge production. Do not misread this humility: I strongly believe in the power of the bricolage to move the field in a positive direction; it is concurrently important, however, to understand its construction and limitations in the context of contemporary social research. The appreciation of the complexity of everyday life and the difficulty of understanding it brings with it demands humility on the part of researchers.

Indeed, a complex social, cultural, and educational analysis is aware that a specific set of variables does not lead to the same outcomes in some linear cause-and-effect manner. Scholars in such an analysis transcend reductionistic assumptions such as only one entity can inhabit the same locale at the same time. In a complex ontology, patriarchy can coexist in the same time and space with religion, socioeconomic class, gender, sexuality, geographic place, and a plethora of other social dynamics. In such a context, the notion of causality and the nature of social interconnections become far more complex concepts and processes to research. With this complexity in mind, T. R. Young and James Yarbrough (1993) argued that the way researchers discursively define a social phenomenon produces the form the notion takes.

Using class as an example, Young and Yarbrough (1993) argued that it is possible to define it as a lifestyle, a function of formal education, a manifestation of one's father's occupation, or one's relationship to the means of production. Class as a social structure looks very different depending on what definition we choose. A sociology or a cultural studies of complexity understands that there is no final source of authority to which researchers can appeal for a validated definition. Such uncertainty, bricoleurs recognize, is a key aspect of the human condition of being-in-the-world—a complex ontology. Operating in this situation, bricoleurs employ “any means necessary,” as many methods as possible to make their way through a world of diverse meanings—not to mention becoming researchers of such a world. These diverse meanings continuously circulate through language, common sense, worldviews, ideologies, and discourses, always operating to tacitly shape the act of meaning making.

Any social, cultural, psychological, or educational science of complexity takes these dynamics into account. No research act or interpretive task begins on virgin territory. Countless acts of meaning making have already shaped the terrain that researchers explore. In this context, bricoleurs need as much help as they can get to negotiate their way through such overwhelming complexity. This is why we develop the bricolage in the first place: Complexity demands a wider definition of *research* that would include modes of philo-

sophical inquiry that account for these epistemological and ontological dynamics.

On the landscape of complexity, I am lost as a researcher if I do not possess an epistemological and ontological map to help me understand the nature of the territory I am exploring. To produce research that provides thick description and a glimpse of what could be, I need epistemological and ontological insights that alert me to the multidimensional, socially constructed, polyvocal, ever-changing, fractal-based nature of the social world. Such insights hold profound implications for research methods (Bridges, 1997; Lutz, Jones, & Kendall, 1997; McLeod, 2000). In this complex context, it becomes even more obvious that learning the bricolage is a lifelong process.

AN ONTOLOGY OF COMPLEXITY: IMPLICATIONS FOR THE BRICOLAGE

I have alluded to a complex ontology in the description of the bricolage. Because of the importance of this concept, it is useful to specifically describe this notion before moving into new dimensions of the bricolage. As bricoleurs prepare to explore that which is not readily apparent to the ethnographic eye, that realm of complexity in knowledge production that insists on initiating a conversation about what it is that qualitative researchers are observing and interpreting in the world, this clarification of a complex ontology is needed. This conversation is especially important because it has not generally taken place. Bricoleurs maintain that this object of inquiry is ontologically complex in that it cannot be described as an encapsulated entity. In this more open view of the object of inquiry, it is always a part of many contexts and processes, it is culturally inscribed and historically situated. The complex view of the object of inquiry accounts for the historical efforts to interpret its meaning in the world and how such efforts continue to define its social, cultural, psychological, and educational effects.

In the domain of the qualitative research process, for example, this ontological complexity undermines traditional notions of triangulation. Because of its in-process (processual) nature, interresearcher reliability becomes far more difficult to achieve. Process-sensitive scholars watch the world flow by like a river, where the exact contents of the water are never the same. Because all observers view an object of inquiry from their own vantage points in the web of reality, no portrait of a social phenomenon is ever exactly the same as another. Because all physical, social, cultural, psychological, and educational dynamics are connected in a larger fabric, researchers will produce different descriptions of an object of inquiry depending on what part of the fabric they have focused—what part of the river they have seen. The more unaware observers are of this type of complexity, the more reductionistic the knowl-

edge they produce about it. Bricoleurs attempt to understand this fabric and the processes that shape it in as thick a way possible (Blommaert, 1997).

The design and methods used to analyze this social fabric cannot be separated from the way reality is construed. Thus, ontology and epistemology are inextricably linked in ways that shape the task of the researcher. The bricoleur must understand these features in the pursuit of rigor. A deep interdisciplinarity is justified by an understanding of the complexity of the object of inquiry and the demands such complications place on the research act. As parts of complex systems and intricate processes, objects of inquiry are far too mercurial to be viewed by a single way of seeing or as a snapshot of a particular phenomenon at a specific moment in time.

In social research the relationship between individuals and their contexts is a central dynamic to be investigated. This relationship is a key ontological and epistemological concern of the bricolage; it is a connection that shapes the identities of human beings and the nature of the complex social fabric. Thus, bricoleurs use multiple methods to analyze the multidimensionality of this type of connection. The ways bricoleurs engage in this process of putting together the pieces of the relationship may provide a different interpretation of its meaning and effects. Recognizing the complex ontological importance of relationships alters the basic foundations of the research act and knowledge production process. Thin reductionistic descriptions of isolated things-in-themselves are no longer sufficient (Foster, 1997; Zammito, 1996).

What the bricolage is dealing with in this context is a double ontology of complexity: first, the complexity of objects of inquiry and their being-in-the-world; second, the nature of the social construction of human subjectivity, the production of human "being." Such understanding opens a new era of social research where the process of becoming human agents is appreciated with a new level of sophistication. The complex feedback loop between an unstable social structure and the individual can be charted in a way that grants human beings insight into the means by which power operates and the democratic process is subverted. In this complex ontological view, bricoleurs understand that social structures do not *determine* individual subjectivity but *constrain* it in remarkably intricate ways. The bricolage is acutely interested in developing and employing a variety of strategies to help specify these ways subjectivity is shaped.

The recognitions that emerge from such a multiperspectival process get analysts beyond the determinism of reductionistic notions of macro-social structures. The intent of a usable social or educational research is subverted in this reductionistic context as human agency is erased by the "laws" of society. Structures do not simply "exist" as objective entities whose influence can be predicted or "not exist" with no influences over the cosmos of human affairs. Once again, fractals enter the stage with their loosely structured characteristics of irregular shape—fractal structures. Although not *determining* human behavior, for example, fractal structures possess sufficient order to affect

other systems and entities within their environment. Such structures are never stable or universally present in some uniform manifestation (Varenne, 1996; Young & Yarbrough, 1993). The more we study such dynamics, the more diversity of expression we find.

Taking this ontological and epistemological diversity into account, bricoleurs understand there are numerous dimensions to the bricolage (Denzin & Lincoln, 2000). As with all aspects of the bricolage, no description is fixed and final and all features of the bricolage come with an elastic clause. We can delineate with the help of Denzin and Lincoln (2000) five dimensions of the bricolage: methodological bricolage, theoretical bricolage, interpretive bricolage, political bricolage, and narrative bricolage:

- *Methodological bricolage*: employs numerous data-gathering strategies from the interviewing techniques of ethnography, historical research methods, discursive and rhetorical analysis of language, semiotic analysis of signs, phenomenological analysis of consciousness and intersubjectivity, psychoanalytical methods, and Pinarian *carrere* (Pinar, 1994) to textual analysis of documents.
- *Theoretical bricolage*: uses a wide knowledge of social theoretical positions from constructivism, critical constructivism, enactivism, feminism, Marxism, neo-Marxism, critical theory, postmodernism, poststructuralism, and cultural studies to queer theory to situate and determine the purposes, meanings, and uses of the research act.
- *Interpretive bricolage*: deploys a range of interpretive strategies that emerge from a detailed awareness of the field of hermeneutics and the ability to use the hermeneutic circle. In this context, bricoleurs work to discern their location in the web of reality in relation to intersecting axes of personal history, autobiography, race, socioeconomic class, gender, sexual orientation, ethnicity, religion, geographical place, and numerous other dynamics. These various perspectives are used to discern the role of self in the interpretive process. This process is combined with different perspectives offered by people located in diverse locations in the web to widen the hermeneutical circle and to appreciate the diversity of perspectives on a particular topic. These perspectives or interpretations are viewed in relation to one another and in relation to larger social, cultural, political, economic, psychological, and educational structures as well as the social theoretical positions previously referenced. In this way the complexity and multidimensionality of the interpretive process is comprehended by the bricoleur.
- *Political bricolage*: understands that all research processes hold political implications, are manifestations of power. No science, no mode of knowledge production is free from the inscriptions of power. In this context, bricoleurs study the information they collect and the knowledge they produce to discern the ways tacit forms of power have shaped them. In light of such awareness, bricoleurs attempt to document the effects of ideological power, hegemonic power, discursive power, disciplinary power, regulatory power, and coercive power. In this context, bricoleurs are informed by McLaren's (2001) response to my first delineation of the bricolage. In this political articulation of the concept, normative foundations are explored and questions of political economy, racism, sexism, and homophobia are seen as central concerns of the criticality of the bricolage. A power literacy

is sought that informs cultural workers of the ways oppressive power can be resisted.

- *Narrative bricolage*: appreciates the notion that all research knowledge is shaped by the types of stories inquirers tell about their topics. Such story types are not innocently constructed but reflect particular narratological traditions: comedy, tragedy, and irony. The bricoleur's knowledge of the frequently unconscious narrative formula at work in the representation of the research allows a greater degree of insight into the forces that shape the nature of knowledge production. Thus, more complex and sophisticated research emerges from the bricolage.

SPECIFYING THE IMPORTANCE OF PHILOSOPHICAL RESEARCH IN THE BRICOLAGE

I have frequently alluded in this article to the importance of philosophical research to the bricolage. I use the phrase *philosophical research* to denote the use of various philosophical tools to help clarify the process of inquiry and provide insight into the assumptions on which it conceptually rests. In this section, I focus on this dimension and in the process, specify a few of the benefits such a form of inquiry might bring to this project. Informed by philosophical research, bricoleurs become smarter, more self-reflective about their own role and the role of researchers in general in the knowledge-and reality-creating process. An appreciation of complexity, of course, demands such insights, as it insists on an understanding that conceptual categories are human constructions and posits that such categorization exerts a profound impact on modes of perception and human action itself. Little work has been undertaken on philosophy as research, not to mention its role in a research bricolage. The following offers a few ideas about how bricoleurs might begin to think through these dynamics in light of our previous contentions about the complexity of the bricolage.

The mode of philosophical consciousness advocated here helps bricoleurs bracket their own subjectivity as researchers in ways that force the intersection of notions such as researcher "invention" and researcher "discovery." The bricolage makes use of philosophical research into the boundary between the social world and the narrative representation of it. Such explorations provide profound and often unrecognized knowledge about what exactly is produced when researchers describe the social world. Rigor, I assert, is impossible without such knowledge and discernment. Exploring this complex, ever-shifting boundary between the social world and the narrative representation of it, philosophically informed bricoleurs begin to document the specific influences of life history, lived context, race, class, gender, and sexuality on researchers and the knowledge they produce (Denzin & Lincoln, 2000; McLeod, 2000; Zammito, 1996).

These aspects of philosophical research help the bricoleur to highlight the ethical, epistemological, ontological, and political features of the research

process and the knowledge it produces. Such tasks might be described as a form of research concerned with conceptual clarification. For example, what does it mean to exist in history? To live and operate as a social and historical subject? How do researchers begin the process of exploring such dynamics? How do the ways researchers conceptualize these features shape the research process and the knowledge it produces? How do social theoretical choices and assumptions affect these issues? All of these questions point to the role of science as first and foremost a cultural activity. Abstract and objective procedural and methodological protocols come to be viewed as the socially constructed entities that they are. Thus, bricoleurs are freed from reductionistic conventions in ways that facilitate their moves not to an anything-goes model of research but to a genuinely rigorous, informed multiperspectival way of exploring the lived world (Bridges, 1997; Foster, 1997; Morawski, 1997).

What bricoleurs are exploring in this philosophical mode of inquiry are the nature and effects of the social construction of knowledge, understanding, and human subjectivity. Realizing the dramatic limitations of so-called objectivist assumptions about the knowledge production process, bricoleurs struggle to specify the ways perspectives are shaped by social, cultural, political, ideological, discursive, and disciplinary forces. Understanding the specifics of this construction process helps multiperspectival researchers choose and develop the methodological, theoretical, and interpretive tools they need to address the depictions of the world that emerge from it. In the context of the philosophical inquiry as conceptual clarification, the bricolage understands that the objectivist view of knowledge assumes that meaning in the world exists separately from an individual's experience. In such an objectivist context, the research act simply involves identifying external objective reality and reflecting it in the research narrative. Such reductionism and its concurrent distortion is exactly what the bricolage seeks to avoid (Cronin, 1997; McLeod, 2000; Varenne, 1996).

PHILOSOPHICAL INQUIRY IN THE BRICOLAGE: CONSTRUCTIVISM AND HISTORICITY

As bricoleurs gain insight into the social construction of knowledge, understanding, and human subjectivity, they gain a consciousness of their own and other's historicity. What many researchers have referred to as the crisis of historicity is really nothing more than the development of this consciousness, this understanding of historical, social, cultural, ideological, and discursive construction of science and the research it produces. In this context, bricoleurs understand that the effort to distinguish between different social realities and different interpretations of researchers is more difficult than originally assumed. With such an understanding in mind, bricoleurs always have to deal with levels of complexity ignored by less informed

researchers. As bricoleurs negotiate their way between the constructed and discovered dimensions of knowledge work, they come to appreciate the blurred line between the historical and historiographical.

Naïveté is the result of dismissing these issues of constructivism and historicity. Philosophical inquiry in the bricolage moves us away from this lack of sophistication and rigor, as researchers gain insight into the existential grounds on which diverse approaches to research evolve. Such inquiry helps bricoleurs appreciate the principles and sources that fuel the production of knowledge by both self and others—a facility necessary for good research and good scholarship in general. Indeed, bricoleurs employ philosophical inquiry to explore the logic and psychology of the development of research strategies and their use in the larger effort to produce knowledge. Such logics and psychologies can be appreciated only in historical context, in terms of their historicity. The historicization of research allows bricoleurs to ask questions of knowledge production that have previously gone unasked and, thus, to gain insight into previously invisible processes shaping the ways we come to describe and act in the world. In this way, the work of the bricolage becomes thicker, more insightful, savvier, and more rigorous (Bridges, 1997; McCarthy, 1997; Zammito, 1996).

The understanding of constructivism and historicity in relation to research cannot be separated from the interpretive dimension of the bricolage and its grounding in hermeneutics. In this context a notion of critical hermeneutics is employed by the bricoleur to understand the historical and social ways that power operates to shape meaning and its lived consequences. Critical hermeneutics alerts us to the ways power helps construct the social, cultural, and economic conditions under which meaning is made and research processes are constructed. Not all parties or all advocates of particular marginalized lived experiences are allowed to sit at the table of official meaning making. The bricoleur's awareness of constructivism and historicity helps her or him point out these omissions and their effects on the knowledge production processes.

In this context, critical hermeneutics facilitates bricoleurs' attempts to identify socially oppressive forms of meaning making and research processes. Bricoleurs understand that constructivism and historicity can be relatively unhelpful concepts without a recognition of this critical dimension of power and its effects. As McLaren (2001) pointed out in his response to the first part of this description of the bricolage, merely focusing on the production of meanings may not lead to "resisting and transforming the existing conditions of exploitation" (p. 702). I take his admonition seriously and assert that in the critical hermeneutical dimension of the bricolage, the act of understanding power and its effects is merely one part—albeit an inseparable part—of counterhegemonic *action*. Critical hermeneutics understands that meaning does not "just happen"—we do not see bumper stickers proclaiming "meaning happens." Instead, meaning is imposed on the world, and if

researchers are not aware of such dynamics, they will unconsciously join in this imposition. Joining in the imposition is disguised by the assertion that meaning exists in the world independently and unconnected to the subjectivities of researchers and other "knowers." All objectivist researchers do, they innocently and reductionistically maintain, is discover this independent meaning and report it to their audience.

Power in this construction of knowledge, it is argued, plays no role in the process. Bricoleurs employing critical notions of historicity and constructivism know better. The objective knowledge and the validated research processes used by reductionists are always socially negotiated in a power-saturated context. Assertions that knowledge is permanent and universal are undermined and the stability of meaning is subverted. Forces of domination will often reject such historically conscious and power-literate insights, as such awareness undermines the unchallenged knowledge assertions of power wielders. Critical hermeneutics, bricoleurs come to understand, can be quite dangerous when deployed in the sacred temples of knowledge production. It is no surprise that this form of philosophical inquiry is typically excluded from the canon of official research (Cronin, 1997; Lutz et al., 1997). Again in reference to McLaren's (2001) concerns, the criticality of the bricolage is dedicated to engaging political action in a variety of social, political, economic, and academic venues.

EPISTEMOLOGICAL ANALYSIS IN THE BRICOLAGE: EXTENDING PHILOSOPHICAL RESEARCH

If epistemology involves the exploration of how researchers come to know about the phenomena they study, how this knowledge is structured, and the grounds on which these knowledge claims are tendered, then epistemological understandings are central to the rigor of the bricolage. In multimethod/interdisciplinary research, these epistemological understandings become even more important, as different orientations assume different views of knowledge. In this context, researchers learn from comparative epistemological insights, developing a profound understanding of knowledge theory and production in the process. The development of such epistemological insight is yet another dimension of the philosophical inquiry of the bricolage.

Aided by these epistemological understandings, bricoleurs are better equipped to perform subtle forms of knowledge work. As philosophical inquirers working in the epistemological domain, bricoleurs ask informed questions, develop complex concepts, construct alternate modes of reasoning, and provide unprecedented interpretations of the data they generate. All these dimensions of research involve making sophisticated epistemological decisions and are inseparable from the larger task of producing high-quality

research. With these epistemological insights in mind, bricoleurs are empowered to draw on their conceptual and methodological tool kits, depending on the nature of the research context and the phenomenon in question. They are emancipated from the tyranny of prespecified, intractable research procedures (Foster, 1997; Selfe & Selfe, 1994; Willinsky, 2001).

Mainstream research traditions have been reluctant to admit philosophical inquiry and its associated epistemological analysis into the pantheon of acceptable research methods. Bricoleurs embrace philosophical research for a number of reasons, one of the most fundamental involving its notion that at its most basic articulation, research involves asking and answering an unanswered question. Obviously, philosophical inquiry meets this criterion, as it seeks out answers to the most compelling questions of human life and the purposes of research:

- What is the nature of being? In this ontological domain, bricoleurs examine not only the nature of human being (subjectivity) and its relation to knowledge production but also the nature of the object of study. In the case of the latter, bricoleurs ask, Do we study the object as a thing-in-itself or as a part of larger processes and relationships?
- What is the nature of living a good life? In this ethical domain, bricoleurs question the ways their research contribute to the social good. How does this work influence the lives of the researcher, the community, the world?
- What knowledge is of most worth? Epistemological questions are profoundly important to the bricoleur. This question demands modes of judgment that move bricoleurs to think about the value of their research projects. What researchers are producing knowledge of worth? What researchers are not producing knowledge of worth? How do we make such a distinction?
- What is knowledge? This epistemological question demands that researchers clearly understand the different ways that different paradigms define *knowledge* and its production. The awareness that comes from understanding these competing versions provides bricoleurs with a more profound understanding of the forces that tacitly shape all knowledge claims.
- What does it mean to know something? This question forces bricoleurs to seek out the insights of cognitive theory in relation to their epistemological questions. The cognitive insights gained from, for example, the Santiago School of Enactivism and its notions of knowledge-in-action and the power of relationships informs epistemology in compelling ways. Such a synergy is yet another example of the benefits of the multiperspectivalism of the bricolage.
- How do we distinguish between worthy and unworthy knowledge? This question moves bricoleurs into the complex domain of validity. Here they can engage in the contemporary conversation about making judgments about research quality. Are the terms *external validity* and *internal validity* helpful in this context? What does knowledge produced about one context have to tell us about another context? Our philosophical grounding helps us formulate questions about the worth of research that might have never occurred to those without such insights. In this context, bricoleurs, with their philosophical grounding, seriously engage with

the purposes of research. In this process, they invent concepts such as catalytic validity, ironic validity, paralogical validity, rhizomatic validity, voluptuous validity (Lather, 1991, 1993), hermeneutic validity, cognitive validity, and pragmatic validity (Kincheloe, 2003).

- What is rigor in the research process? Here bricoleurs take the opportunity to move beyond traditional definitions of *rigor* as the degree of fidelity to the unquestioned steps in the research process and the degree to which the research accurately reflects "true reality." In this context, they study the socially constructed nature of what passes as rigor in research. Doing so, they move a step closer to the complexity of the act of knowledge production. Such proximity helps them redefine rigor in a way that involves developing numerous ways of recognizing and working with this complexity.

If answering such questions is not an act of research, then bricoleurs are not sure what research involves.

In examining these issues, I have encountered several situations in schools of education where excellent scholars who perform philosophical inquiry have been told by administrators and tenure committees that their work does not constitute "real research." Such scholars have been punished and traumatized by these narrow and uninformed viewpoints. Exploring the dynamics at work in these academic assaults on philosophical researchers, the issue that emerges at the root of the attack is epistemological in nature. The guardians of "research purity" proclaim a clear distinction between empirical (scientific knowledge production) and philosophical inquiry (unscientific knowledge production). In this context, the epistemological and ontological analysis of philosophical inquiry questions this empirical and philosophical bifurcation.

The deep interdisciplinarity of the bricolage transgresses the boundary between the two domains, illustrating in the process their interaction and inseparability. Bricoleurs are not aware of where the empirical ends and the philosophical begins because such epistemological features are always embedded in one another. Avoiding reductionistic and uninformed notions of research that are monological and exclusive, the bricolage works to embrace and learn from various modes of knowledge production, including philosophical inquiry as well as historical and literary modes of scholarship. Employing the unconscious epistemological criteria of the elitist excluders, historical and literary inquiry would not meet the criteria of real research (Bridges, 1997). Such exclusion masquerades as a form of rigor, confusing narrow-mindedness with high standards.

INTERPRETATION IN THE BRICOLAGE: THE CENTRALITY OF CRITICAL HERMENEUTICS

The research bricolage as articulated here is grounded in a critical notion of hermeneutics. Long concerned with the theory and practice of interpretation,

hermeneutics is a form a philosophical inquiry that focuses on the cultural, social, political, and historical nature of research. In this context, hermeneutics maintains that meaning making cannot be quarantined from where one stands or is placed in the web of social reality. Thus, in a hermeneutic context, interpretation is denaturalized in the sense that certain events and/or phenomena do not imply a particular interpretation of their meaning. Interpretation is far more complex than assumed, far more a product of social forces than admitted.

Thus, bricoleurs focus great attention on the act of interpretation in research, appreciating the distinction between describing a phenomenon and understanding it. In this context, bricoleurs informed by hermeneutics understand that any act of rigorous research involves

- connecting the object of inquiry to the many contexts in which it is embedded;
- appreciating the relationship between researcher and that being researched;
- connecting the making of meaning to human experience;
- making use of textual forms of analysis while not losing sight that living and breathing human beings are the entities around which and with which meaning is being made; and
- building a bridge between these forms of understanding and informed action.

Too often in mainstream forms of research, bricoleurs maintain, these interpretive understandings are deemed irrelevant.

The form of hermeneutics employed here is a critical hermeneutics—critical in the sense that it has engaged in a dialogue with the tradition of critical theory. Critical theory is always concerned with the ways power operates, the ways various institutions and interests deploy power in the effort to survive, shape behavior, gain dominance over others, or in a more productive vein, improve the human condition. Realizing that power is not simply one important force in the social process, critical theory understands that humans are the historical products of power. Men and women do not emerge outside the process of history. Human identities are shaped by entanglements in the webs that power weaves. Critical hermeneutics emerges in the dialogue between hermeneutics and critical theory's concern with power and social action (Jardine, 1998; Kincheloe, Steinberg, & Villaverde, 1999; McLaren, 2000; Smith, 1999).

In this hybrid context, critical hermeneutics pushes interpretation in research to new levels, moving beyond what is visible to the ethnographic eye to the exposure of concealed motives that move events and shape everyday life. As critical hermeneutics observes the intersection of power and omnipresent, prereflective cultural meanings, a sensitive and rigorous understanding of the social world begins to take shape. Critical hermeneutics takes the concept of historicity to a new conceptual level as it specifies the nature of the historicity that helps produce cultural meaning, the consciousness of the

researcher, the construction of the research process, and the formation of human subjectivity and transformative action. In this interpretive context, critical theoretical concerns with praxis-based notions of social change are more easily addressed, as social action informed by thick description and rigorous understanding of a social and political circumstance is made possible (Lutz et al., 1997; Zammito, 1996).

I WALK THE LINE: EMPOWERED SUBJECTS AND RIGOROUS ANALYSIS

In this critical hermeneutic context, bricoleurs are concerned with the empowerment of the subjects of research and the voice to the subjugated and the marginalized. Such efforts raise numerous questions about the research process. For example, do the acts of empowerment and giving voice involve simply highlighting the specific words of the research participants? Do they mean featuring the interactions of the participants and the researcher as the most important dimensions of the research narrative? Although in *no* way dismissing the importance of these dimensions of the empowerment process in the criticality of the bricolage, bricoleurs informed by critical hermeneutics worry that sometimes, in highlighting the specific words of participants and featuring research participant interaction, rigorous insights can be lost.

In the specifics of the process, interpretation emerging from the interaction of the particular with macrosocial configurations can be set aside in the focus on the personal. Concurrently, psychologistic representations of abstract individuals can crowd out the contextual concerns of the hermeneutically informed bricolage. In such cases, the rigor of complexity is displaced not by scientific reductionism but by an excessive fascination with unsituated personal experience. As Johnny Cash once put it, one must "walk the line"; in this case, the line separates the decontextualization of the idiosyncrasy of the personal from the unreflective, authoritarian voice of truth of the reductionistic researcher.

Bricoleurs operating in a critical hermeneutical framework work to record the voice of the subjugated but to expand its meaning by engaging in the hermeneutic circle of interpretation. Even subjugated voices are better understood when studied in relation to numerous social, cultural, political, economic, philosophical, historical, psychological, and pedagogical dynamics (Dicks & Mason, 1998). I attempted to walk this line in my recent book *The Sign of the Burger: McDonald's and the Culture of Power* (Kincheloe, 2002). As I highlight the voices of my ethnographic research participants, I always contextualize their perspectives within the frames of macrosocial, political, and economic concerns; the insights of social theory; and the discernment of critical hermeneutics. The rigorous demands of the bricolage insist that

researchers engage in these deliberations and struggle with their implications for every project they undertake.

Researchers in this struggle draw strength from the multiple perspectives of the bricolage. Such multiperspectivalism is enhanced by critical hermeneutics and the interpretive collisions it promotes in the hermeneutic circle—hermeneuts often refer to this dynamic as the fusion of horizons. Here we return to the very basis of bricolage, learning from the juxtaposition of divergent ideas and ways of seeing. Metaphors abound in this context as the work of the bricoleur is compared to that of a jazz musician, quilt maker, and the producer of pictorial montage. In all of these processes, different dynamics are brought together in ways that produce a synergistic interaction—the whole is greater than the sum of the parts. The hermeneutic fusion of horizons helps bricoleurs consider numerous representations of reality simultaneously. In this context, the concept of simultaneity is important, as it takes precedence over more traditional research concerns with sequence and linearity. As hermeneutically grounded bricoleurs watch these conceptual collisions, they adeptly sidestep the danger of liberal eclecticism. Here in the hermeneutic circle, they chart the ways that the divergent representations both inform and transform one another (Denzin & Lincoln, 2000; Kellner, 1995; Paulson, 1995; Pryse, 1998).

MOVING TO THE MARGINS: ALTERNATIVE MODES OF MEANING MAKING IN THE BRICOLAGE

In its critical concern for just social change, the bricolage seeks insight from the margins of Western societies and the knowledge and ways of knowing of non-Western peoples. Such insight helps bricoleurs reshape and sophisticate social theory, research methods, and interpretive strategies as they discern new topics to be researched. This confrontation with difference, so basic to the concept of the bricolage, enables researchers to produce new forms of knowledge that inform policy decisions and political action in general. In gaining this insight from the margins, bricoleurs display once again the blurred boundary between the hermeneutical search for understanding and the critical concern with social change for social justice. Responding yet again to McLaren's (2001) important concern, not only are the two orientations not in conflict but they are also synergistic (DeVault, 1996; Lutz et al., 1997; McLaren, Hammer, Reilly, & Sholle, 1995; Soto, 2000; Steinberg, 2001).

To contribute to social transformation, bricoleurs seek to better understand both the forces of domination that affect the lives of individuals from race, class, gender, sexual, ethnic, and religious backgrounds outside of dominant culture(s) and the worldviews of such diverse peoples. In this context, bricoleurs attempt to remove knowledge production and its benefits from the control of elite groups. Such control consistently operates to reinforce elite

privilege while pushing marginalized groups farther away from the center of dominant power. Rejecting this normalized state of affairs, bricoleurs commit their knowledge work to helping address the ideological and informational needs of marginalized groups and individuals. As detectives of subjugated insight, bricoleurs eagerly learn from labor struggles, women's marginalization, the "double consciousness" of the racially oppressed, and insurrections against colonialism (Kincheloe & Steinberg, 1993; Kincheloe, Steinberg, & Hinchey, 1999; Young & Yarbrough, 1993).

Thus, the bricolage is dedicated to a form of rigor that is conversant with numerous modes of meaning making and knowledge production—modes that originate in diverse social locations. These alternative modes of reasoning and researching always consider the relationships, the resonances, and the disjunctions between formal and rationalistic modes of Western epistemology and ontology and different cultural, philosophical, paradigmatic, and subjugated expressions. In these latter expressions, bricoleurs often uncover ways of accessing a concept without resorting to a conventional validated set of prespecified procedures that provide the distance of objectivity. This notion of distance fails to take into account the rigor of the hermeneutical understanding of the way meaning is preinscribed in the act of being-in-the-world, the research process, and objects of research. This absence of hermeneutical awareness undermines the researcher's quest for a thick description and contributes to the production of reduced understandings of the complexity of social life (Paulson, 1995; Selfe & Selfe, 1994).

Indeed, what bricoleurs are concerned with here is nothing less than the quality of the knowledge we produce about the world. In this context, they address both the reductionism of uninformed research methods and the quest for new ways of seeing. In the intersection of these concerns, they uncover new insights into research and knowledge production, new forms of reason that are directly connected to specific contexts, practical forms of analysis that are informed by social theory, and the concreteness of lived situations (Fischer, 1998). Understanding non-Western ways of knowing and the epistemologies of marginalized groups within Western societies, bricoleurs transcend regressive forms of reductionism. They see past reductionistic notions that researchers simply produce facts that correspond to external reality, information that is devoid of specific cultural values. With these understandings as valuable parts of their tool kits, bricoleurs expand the envelope of social research, of what we can understand about the world. They are empowered to produce knowledge that can change the world.

SHE'S NOT THERE: RIGOR IN THE ABSENCE

In their move to the margins and transcendence of reductionism, bricoleurs seek to identify what is absent in particular situations—a task ignored

by monological, objectivist modes of research. In this context, bricoleurs seek to cultivate a higher form of researcher creativity that leads them, like poets, to produce concepts and insights about the social world that previously did not exist. This rigor in the absence can be expressed in numerous ways, including the bricoleur's ability

- to imagine things that never were;
- to see the world as it could be;
- to develop alternatives to oppressive existing conditions;
- to discern what is lacking in a way that promotes the will to act; and
- to understand that there is far more to the world than what we can see.

As always, bricoleurs are struggling to transcend the traditional observational constraint on social researchers as they develop new ways and methods of exposing social, cultural, political, psychological, and educational forces not at first glance discernible. Pursuing rigor in the absence, bricoleurs document venues of meaning that transcend the words of interviewees or observations of particular behaviors (Dahlbom, 1998; Dicks & Mason, 1998).

Of course, a central feature of this rigorous effort to identify what is absent involves excavating what has been lost in the naïveté of monological disciplinary. As bricoleurs engaging in the boundary work of deep interdisciplinarity explore what has been dismissed, deleted, and covered up, they bring to the surface the ideological devices that have erased the lived worlds and perspectives of those living at the margins of power. In response to Lincoln's (2001) question about the use value of knowledge produced by the bricolage, I offer the following assertion: As researchers employ the methodological, theoretical, interpretive, political, and narrative dimensions of the bricolage, they make a variety of previously repressed features of the social world visible. Because they are describing dimensions of the sociocultural, political, economic, psychological, and pedagogical cosmos that have never previously existed, bricoleurs are engaging in what might be termed the fictive element of research.

The use of the term *fictive* as previously discussed should not be conflated with *unreal* in this context. Scientific inventors have engaged in a similar process when they have created design documents for the electric light, the rocket, the computer, or virtual reality. In these examples, individuals used a fictive imagination to produce something that did not yet exist. The bricoleur does the same thing in a different ontological and epistemological domain. Both the inventor and the bricoleur are future oriented as they explore the realm of possibility, a kinetic epistemology of the possible. In the process, the sophistication of knowledge work moves to a new cognitive level; the notion of rigor transmigrates to a new dimension. As in a 1950s sci-fi movie, bricoleurs enter the 4-D—the fourth dimension of research.

In this way, bricoleurs create a space for reassessing the nature of the knowledge that has been created about the social cosmos and the modes of research that have created it. In an era of information saturation and hegemony, this space for reassessing knowledge production and research methods becomes a necessity for democratic survival, the foundation of a pro-democracy movement and as Pinar (2001) correctly maintained, the "labor of educational scholarship in general" (p. 698). Overwhelmed by corporate-produced data and befuddled by the complex of the social issues that face us, individuals without access to the lenses of the bricolage often do not know how to deal with these debilitating conditions (Dahlbom, 1998; Denzin & Lincoln, 2000; DeVault, 1996). As the bricolage provides us new insights into the chaos of the contemporary, researchers become better equipped to imagine where we might go and what path we might take to get there through the jungle of information surrounding us. The bricolage is no panacea, but it does allow us new vantage points to survey the epistemological wilderness and the possibilities hidden in its underbrush.

CONCLUSION: THE BRICOLAGE AND HUMAN POSSIBILITY

Obviously, my concern with the bricolage in social research involves not only improving the quality of research but also enhancing the possibility of being human or human being. Thus, the bricolage is not only a dynamic of research but operates in the connected domains of cognition and pedagogy as well. In the epistemological and ontological deliberations of the bricolage, we gain insight into new modes of thinking, teaching, and learning. In all of these domains, research included, bricoleurs move from convergent to divergent forms of meaning making, abandoning the shortsightedness of prespecified, correct patterns of analysis in favor of more holistic, inclusive, and eclectic models. In this context, the "present awareness" of numerous cultural, historical, and philosophical traditions are explored for insights into new ways of thinking, seeing, being, and researching.

Laurel Richardson (2000) picked up on and expanded these ideas with her metaphor of the crystal. The bricolage, like a crystal, expands, mutates, and alters while at the same time reflecting and refracting the "light" of the social world. New patterns emerge and new shapes dance on the pages of the texts produced by the bricoleur—images unanticipated before the process took place. In this new textual domain, we trace the emergence of not only creative narratives but also new notions of humanness. In a humble context, bricoleurs maintain that there is a profound human drama playing out in this context. In their understanding of social complexity, they gain a larger perspective on post-Enlightenment Western history. Viewing the past 3½ centuries from a new multidimensional vantage point, bricoleurs understand that

Westerners built not only a system of knowledge production but also a world that could have been very different than what came to be. The questions they now ask of that system and that world are dramatic in their implications for the future.

The system of knowledge production, with its epistemological blinders that developed and expanded across the centuries, shackled human agency to the gospel of so-called natural law and scientific procedures. In the name of an ethnocentric notion of scientific progress, it attempted to keep individuals ignorant of their potentials and confused cultural difference with deficiency. This procedure-bound science did not do a very good job of addressing questions involving what it means to be human, what it might mean to live in a good and just society, and the worthiness of those who live in cultures and locales different from the West. This is why bricoleurs ascribe such importance to the critical and hermeneutic traditions and their concern with such human questions. Drawing on these traditions, combining them with forms of paradigmatic and textual analyses, bricoleurs struggle to connect the research act to the emotion and heart of lived human experience (Lutz et al., 1997; Pryse, 1998; Wexler, 2000). Understanding that research that fails to address the ontology of the human existential situation with all of its pain, suffering, joy, and desire is limited in its worth, bricoleurs search for better ways to connect with and illuminate this domain. In this context, much is possible.

REFERENCES

- Blommaert, J. (1997). *Workshopping: Notes on professional vision in discourse*. Retrieved from http://africana_rug.ac.be/texts/research-publications/publications_on-line/workshopping.htm
- Bohm, D., & Peat, F. (1987). *Science, order, and creativity*. New York: Bantam.
- Bridges, D. (1997). Philosophy and educational research: A reconsideration of epistemological boundaries. *Cambridge Journal of Education*, 27(2), 177-189.
- Cronin, P. (1997). *Learning and assessment of instruction*. Retrieved from <http://www.cogsci.ed.ac.uk/~paulus/work/vranded/litconsa.txt>
- Dahlbom, B. (1998). *Going to the future*. Retrieved from <http://www.viktoria.infomatik.gu.se/~max/bo/papers.html>
- Denzin, N., & Lincoln, Y. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- DeVault, M. (1996). Talking back to sociology: Distinctive contributions of feminist methodologies. *Annual Review of Sociology*, 22, 29-50.
- Dicks, B., & Mason, B. (1998). Hypermedia and ethnography: Reflections on the construction of a research approach. *Sociological Research Online*, 3(3).
- Fischer, F. (1998). Beyond empiricism: Policy inquiry in postpositivist perspective. *Policy Studies Journal*, 26(1), 129-146.

- Foster, R. (1997). Addressing epistemologic and practical issues in multimethod research: A procedure for conceptual triangulation. *Advances in Nursing Education*, 10(1), 1-12.
- Foucault, M. (1980). *Power/Knowledge: Selected interviews and other writings* (C. Gordon, Ed.). New York: Pantheon.
- Jardine, D. (1998). *To dwell with a boundless heart: Essays in curriculum theory, hermeneutics, and the ecological imagination*. New York: Peter Lang.
- Karunaratne, V. (1997). *Buddhism, science, and dialectics*. Retrieved from <http://humanism.org/opinions/articles.html>
- Kellner, D. (1995). *Media culture: Cultural studies, identity and politics between the modern and postmodern*. New York: Routledge.
- Kincheloe, J. (2001). Describing the bricolage: Conceptualizing a new rigor in qualitative research. *Qualitative Inquiry*, 7(6), 679-692.
- Kincheloe, J. (2002). *The sign of the burger: McDonald's and the culture of power*. Philadelphia: Temple University Press.
- Kincheloe, J. (2003). *Teachers as researchers: Qualitative inquiry as a path to empowerment* (2nd ed.). London: Falmer.
- Kincheloe, J., & Steinberg, S. (1993). A tentative description of post-formal thinking: The critical confrontation with cognitive theory. *Harvard Educational Review*, 63(3), 296-320.
- Kincheloe, J., Steinberg, S., & Hinchey, P. (1999). *The postformal reader: Cognition and education*. New York: Falmer.
- Kincheloe, J., Steinberg, S., & Villaverde, L. (1999). *Rethinking intelligence: Confronting psychological assumptions about teaching and learning*. New York: Routledge.
- Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern*. New York: Routledge.
- Lather, P. (1993). Fertile obsession: Validity after poststructuralism. *Sociological Quarterly*, 34, 673-693.
- Lévi-Strauss, C. (1966). *The savage mind*. Chicago: University of Chicago Press.
- Lincoln, Y. (2001). An emerging new bricoleur: Promises and possibilities—a reaction to Joe Kincheloe's "Describing the bricolage." *Qualitative Inquiry*, 7(6), 693-696.
- Lomax, P., & Parker, Z. (1996). *Representing a dialectical form of knowledge within a new epistemology for teaching and teacher education*. Paper presented at the American Educational Research Association, New York.
- Lutz, K., Jones, K., & Kendall, J. (1997). Expanding the praxis debate: Contributions to clinical inquiry. *Advances in Nursing Science*, 20(2), 23-31.
- Madison, G. (1988). *The hermeneutics of postmodernity: Figures and themes*. Bloomington: Indiana University Press.
- McCarthy, M. (1997). Pluralism, invariance, and conflict. *The Review of Metaphysics*, 51(1), 477-492.
- McLaren, P. (2000). *Che Guevara, Paulo Freire, and the pedagogy of revolution*. Lanham, MD: Rowman and Littlefield.
- McLaren, P. (2001). Bricklayers and bricoleurs: A Marxist addendum. *Qualitative Inquiry*, 7(6), 700-705.
- McLaren, P., Hammer, R., Reilly, S., & Sholle, D. (1995). *Rethinking media literacy: A critical pedagogy of representation*. New York: Peter Lang.
- McLeod, J. (2000). *Qualitative research as bricolage*. Paper presented at the Society for Psychotherapy Research Annual Conference, Chicago.

- Morawski, J. (1997). The science behind feminist research methods. *Journal of Social Issues*, 53(4), 667-682.
- Paulson, R. (1995). Mapping knowledge perspectives in studies of educational change. In P. Cookson Jr. & B. Schneider (Eds.), *Transforming schools* (pp. 137-180). New York: Garland.
- Pinar, W. (1994). *Autobiography, politics, and sexuality: Essays in curriculum theory, 1972-1992*. New York: Peter Lang.
- Pinar, W. (2001). The researcher as bricoleur: The teacher as public intellectual. *Qualitative Inquiry*, 7(6), 696-700.
- Pryse, M. (1998). Critical interdisciplinarity, womens studies, and cross-cultural insight. *NWSA Journal*, 10(1), 1-11.
- Richardson, L. (2000). Writing: A method of inquiry. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 923-948). Thousand Oaks, CA: Sage.
- Selfe, C., & Selfe, R. (1994). *The politics of the interface: Power and its exercise in electronic contact zones*. Retrieved from <http://www.hu.mtu.edu/cyselfe/texts/politics.html>
- Smith, D. (1999). *Pedagon: Interdisciplinary essays in the human sciences, pedagogy, and culture*. New York: Peter Lang.
- Soto, L. (Ed.). (2000). *The politics of early childhood education*. New York: Peter Lang.
- Steinberg, S. (Ed.). (2001). *Multi/intercultural conversations*. New York: Peter Lang.
- Thomas, G. (1998). The myth of rational research. *British Educational Research Journal*, 24(2), 141-161.
- Varenne, H. (1996). The social facting of education: Durkheim's legacy. *Journal of Curriculum Studies*, 27, 373-389.
- Wexler, P. (2000). *The mystical society: Revitalization in culture, theory, and education*. Boulder, CO: Westview.
- Willinsky, J. (2001). Raising the standards for democratic education: Research and evaluation as public knowledge. In J. Kincheloe & D. Weil (Eds.), *Standards and schooling in the U.S.: An encyclopedia* (pp. 609-621). Santa Barbara, CA: ABC-CLIO.
- Young, T., & Yarbrough, J. (1993). *Reinventing sociology: Mission and methods for post-modern sociologists* (Transforming Sociology Series, 154). Weidman, MI: Red Feather Institute.
- Zammito, J. (1996). *Historicism, metahistory, and historical practice: The historicization of the historical subject*. Retrieved from <http://home.cc.umanitoba.ca/sprague/zammito.htm>

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