CHAPTER

4

Art Practice as Research

This chapter is introduced by an image. It is an artwork by Mexican artist Damián Ortega titled *Cosmic Thing* (2001). In pulling apart his own Volkswagen (VW) Beetle, Ortega manages to unpack a considerable amount of form, and in doing so stacks together a considerable amount of content. His aesthetic sensibility is anything but suspended, as it becomes a vehicle for his wry political commentary. The disassembled bug is held in a space where inferences are readily revealed. This ubiquitous form of everyday travel from a not too distant past, the VW Beetle, carries traces of the post-industrial military complex as an original emblem of Nazi efficiency, hints of cultural re-purposing with the VW being manufactured in Mexico for a time, and for me, memories of a cheap get-around for art students.

Damián Ortega's installation is also a theoretical system where the structural analysis clearly describes how the vehicle can be taken apart and put back together again. What causes the car to work is partially explained by our knowledge of mechanics. However, the results—the thrill of driving—have to be experienced to be understood. Memories and prior knowledge of all kinds frame our responses as the visual impact of the floating VW Beetle takes hold.

As we can see from this brief encounter, visual experience invokes several creative and critical capacities. Yet neither the parts nor the whole of Damián Ortega's form in space loses their mystery under the glare of analysis. Instead, something else is added as explanations are revealed, connections are made, and new forms of understanding emerge. These kinds of visualizing processes are at the heart of what it is we do when we create and respond to art and serve as the basis upon which visual arts can be seen as a research practice. However, if an aesthetically grounded and theoretically robust approach is to emerge, then the methods of inquiry should be located within the domain of visual arts practice.

To continue to borrow research methods from other fields denies the intellectual maturity of art practice as a plausible basis for raising significant life questions and as a viable site for exploring important cultural and educational ideas. While results of quantitative research are based on the probable likelihood of occurrences, and findings from qualitative inquiries are assessed by the plausibility or relevance of outcomes, the prospect of imaginative insight remains an elusive goal of research. If a measure of the value of research is seen to be the capacity to create new knowledge and understanding

that is individually and culturally transformative, then criteria need to move beyond probability and plausibility to possibility.

BEYOND KNOWLEDGE TO UNDERSTANDING

The process of theorizing is a basic procedure of inquiry and hence a core element in research. We construct theories about how the world works all the time as we explain things and come to understand them. Some theories are based on how knowledge is applied to help solve problems. This kind of theorizing involves explanation, which is a logical process that identifies causes and predicts effects. Explanation therefore helps us to come to know different things.

In other situations, theories are based on experience, which helps us understand more complex things. This kind of theorizing involves understanding, which is an adaptive process of human thinking and acting that is informed by our experiences and encounters. It is also a cognitive process whereby what we know shapes our interactions and transforms our awareness. In these instances, our intuition and intellect draw on real-life circumstances that serve as an experiential base that shapes our understanding and allows us to see and do things differently. The capacity to create understanding and thereby critique knowledge is central to visual arts practice, and artists are actively involved in these kinds of thoughtful research processes.

Debates about whether the goal of inquiry is to explain or to understand human behavior goes back at least to the 18th century. For early researchers, the intention was to explain human activity by applying the same strategies used to explain the workings of the natural world. This contrasted to the belief among others that a more worthwhile research purpose was to understand human agency—the capacity to make choices and to act on them. This required quite a different, more naturalistic approach to research. Despite the development of qualitative approaches to inquiry in the 20th century that took place in natural, real-world settings, the need to construct theories that explain phenomena is still assumed by many to be the primary goal of research. The premise is powerful because if a theory explains some phenomenon, then there is a high probability that we know what causes something to happen and the effects that will occur. Therefore, a theoretically robust causal explanation means that we can make predictions and this can have significant implications.

Consider the impact of a theory of learning that explains this important human capacity—we would know what causes learning, and therefore be able to recreate the conditions and predict with some confidence that learning would take place. Many researchers have been trying to do this for a long time. Yet the use of reductive methods to try to examine and explain the complex mechanisms of human thought and action continue to prove to be inadequate. Even a seasoned educational researcher such as Jerome Bruner ceased to ask the causal question, *How do children learn?* because no experimental studies could ever reveal answers in unequivocal causal terms. Later in his long career, Bruner (1996) asked a better research question: *How do children make meanings?* It was this complex question that took him out of the clinical setting and into the real world in order to understand the culture of learning.

If a primary purpose of research is to increase awareness of ourselves and the world we live in, then it seems plausible to argue that understanding is a viable outcome of inquiry. The possibility of gaining new understanding involves investigating issues that have personal and public relevance. Research of this kind is imaginative, systematic, and inclusive and includes drawing on all kinds of knowledge, experience, and reasoning. If a goal of any inquiry is to be able to act on the knowledge gained, then it is reasonable to expect that understanding is as significant as explanation as an outcome of research. If this is accepted, then this quest for understanding means individual and social transformation is a worthy human enterprise, for *to know* means to be able to think and act and to thereby change things.

It can also be argued that the process of making art and interpreting art adds to our understanding as new ideas are presented that help us see in new ways. These creative insights have the potential to transform our understanding by expanding the various descriptive, explanatory, and immersive systems of knowledge that frame individual and community awareness. These forms of understanding are grounded in human experiences and interactions and yield outcomes that can be individually liberating and culturally enlightening.

My argument is that to appreciate how visual arts contributes to human understanding, there is a need to locate artistic research within the theories and practices that surround art making. It is from this central site of creative practice that other forms of inquiry emerge, such as critical and philosophical analysis, historical and cultural commentary, and educational experience. This notion is a far cry from the stereotype that sees art experience as a warm, fuzzy, and essentially private matter. Rather, it affirms that artistic thinking and making are cognitive processes, and this claim is taken up in more detail in Chapter 5. Furthermore, this asserts that the visual artist is not only adept at expression and communication but also plays a crucial role in cultural critique, historical inquiry, and educational development. Many artists these days do not confine their practice to a singular exploration of a signature style or particular focus on a recurrent theme, but they prefer to use their skill in methods and media to address broader questions of human and cultural concern. Anne Graham, for example, gives an indication of the issues artists take on when they locate aspects of their practice around creative investigations into historical and cultural themes.

Anne Graham's installation *Mark Twain's New Clothes* was part of a group show where the artists created work in response to a peculiar historical incident involving the celebrated American author and humorist, Mark Twain, which occurred in Newcastle on his visit to Australia in 1895. The artists involved in the exhibition, titled *New Adventures of Mark Twain: From Coalopolis to Metropolis*, were artist-scholars and authors who used an obscure historical moment as a pretext for critical reflection and creative interpretation. The imaginative and intellectual intensity of the ideas opened up by the artists in this exhibition cast a new light on art, culture, history, and the nature of research. I discuss this project in more detail in Chapter 8.

In her installation, Anne Graham takes on Twain (aka Samuel Clemens, aka Mr. Brown) and his many identities with a theoretical and imaginative relish. She strips him bare and hangs him out to dry. Graham lets us into Twain's world of fleeting finery and his witty world of multiple identities. She uses an ensemble of props that pose questions about his chameleon character, yet as she shows, these are relatively easy to see through. Graham constructs a visual analogy

about identity politics using the idea that clothing might cover things up, but in doing so it also reveals a truth. Analogies are a basic form of abstract representation that help viewers translate meaning by being shown an idea that is recognizable—in this case transparency—which is used to come to understand something that may be obscure—in Twain's case, the reinvention of his identity. In this sense, Graham is using her art practice to bring a new undertanding into play using a collection of related forms that are part of the imagery of Twain's own story, but they may not have been fashioned quite like this before.



Anne Graham. Mark Twain's New Clothes 1: The Suit: I prefer to be clean in the matter of rainment—clean in a dirty world

2: The Hat

3: The Photograph

4: The Suitcase

Dimensions variable. Reproduced courtesy of the artist.

For my work in the exhibition I made the transparent white suit because it seemed to me he was always wearing a costume but it was also like the Emperor's new clothes. He was always visible, and always on show. Then I found that beautiful photograph of him looking so wicked and wearing no clothes and you could see him as the humorous Twain. which is how he is mostly portrayed. In the later photographs you see the sadness as well, but my work is not really about that. It's about the performance of Mark Twain, and the packaging of Mark Twain. The hat is there, because he used to wear black bowler hats with white suits, and I love bowler hats. And the hat is positioned to be more or less where you would put a hat if you were naked, standing in front of an audience. (Anne Graham, cited in Hill, 2007)

Frameworks of Art Practice as Research

In thinking about the role of theory in art, a traditional response to the Mark Twain exhibition discussed earlier would be to interpret the work of Anne Graham and her fellow artists in terms of prevailing views of art criticism and perhaps art history—filtered through the aesthetic, sociocultural, or ideological eye of the artwriter, be he or she critic, historian, or philosopher. The exhibition was most certainly open to these lines of interpretation and critique. But there is another layer of theory in place for those interested in looking in another way. This was the role of theory in the way the artists went about part of their artistic investigations. These include theories of practice and theories of research, and the inquiry methods vary with each artist in their creative purpose, conceptual cues, historical strategies, and material processes. Yet the methods of research and artistic intent are both in service of an overriding goal of creating a powerful visual statement and an equally powerful aesthetic experience.

As discussed in Chapter 3, theorizing visual arts practice embraces a diversity of positions and perspectives. However, to propose a viable way to conceptualize art practice as research requires the construction of robust and defensible frameworks for considering the relationship between the theories and practices that inform how art can assume its potential as a creative and critical form of human inquiry, agency, and production. Such structures would be expected to cater for different theories of inquiry and practices in order to accommodate the range of content interests found in visual arts. A broad set of outlines would also serve as a reference for theory construction that is part of the research process as experiences, observations, and reflexive understandings are analyzed and interpreted. Consequently, there are several good reasons for constructing a framework for theorizing visual arts practice as research that describes this interdependency of interests, issues, and approaches:

- First, the identification of a range of theories and practices underscores the notion that visual arts is an eclectic and hybrid discipline that is firmly centered on art making and also involves the constituent practices of art writing.
- Second, the nature of art practice as research is that it is a creative and critical
 process that accepts that knowledge and understanding continually change,
 methods are flexible, and outcomes are often unanticipated, yet possibilities are
 opened up for revealing what we don't know as a means to challenge what we do
 know.
- Third, a flexible framework that can be adapted to suit different purposes, emphases, and scales, yet retain a dynamic relationship between the parts and the whole, will guard against the tendency to codify visual arts research practices.
- Fourth, such a framework serves as a forum that helps position debates in the field and related areas that inform visual arts research practices.
- Fifth, as new visual arts research is undertaken, it can be located and critiqued within dimensions of theory and domains of inquiry so as to ascertain how practice informs theory and theory informs practice.

- Sixth, as new research strategies emerge such as the use of visual methods across
 disciplines, multimodal investigations, postdisciplinary projects, and computerassisted research technologies, they can be assessed in relation to research
 practices in visual arts.
- Last, a framework for theorizing offers the possibility that visual arts practice can
 be readily translated into other forms of research language if the purpose
 demands it. In this way, the research culture remains grounded in the theories and
 practices of the visual arts, yet the outcomes can be communicated across
 disciplines.

A Visual Framework: Paradigms and Practices

Figure 4.1 shows a theoretical framework for identifying the research traditions that art practice draws upon when inquiry is undertaken. I describe methodological conditions that inform inquiry in general, and the creative and conceptual characteristics that infuse art practice as research, in particular. In later chapters, the focus changes to frameworks of visual arts knowing and visual arts contexts, and strategies for practice are described. It is important, however, to emphasize that this conception of visual arts research should be read in an analogical way, as there is no intention to try and prescribe any theory, model, or method. On the contrary, the position argued in these chapters is that the quest for theory as it is currently understood in research can restrict rather than release the potential for carrying out inquiry that is not only timely and well grounded but also innovative in purpose and design. The intent, then, is to offer a set of suggestions in visual and verbal form that present ideas about the important role of the arts as forms of research. This comes from a critical analysis of visual arts research practices and related areas that draw out similarities and differences with inquiry in the social sciences and humanities, as well as information drawn from research projects I have directed.

A further caveat is also relevant. There is a need to be cautious about describing any analytical framework that brings together related elements for the purpose of examining the relationship between theory and practice. Any systematic structure has the potential to usher in a new orthodoxy as preferred interests and methods function to normalize practices. To this end, the triangular boundaries shown in the diagrams are presented in the spirit of bridges, not barriers. The edges in the diagrams closely resemble the folds of postmodernism described by Stronach and MacLure (1997), as discussed in Chapter 2.

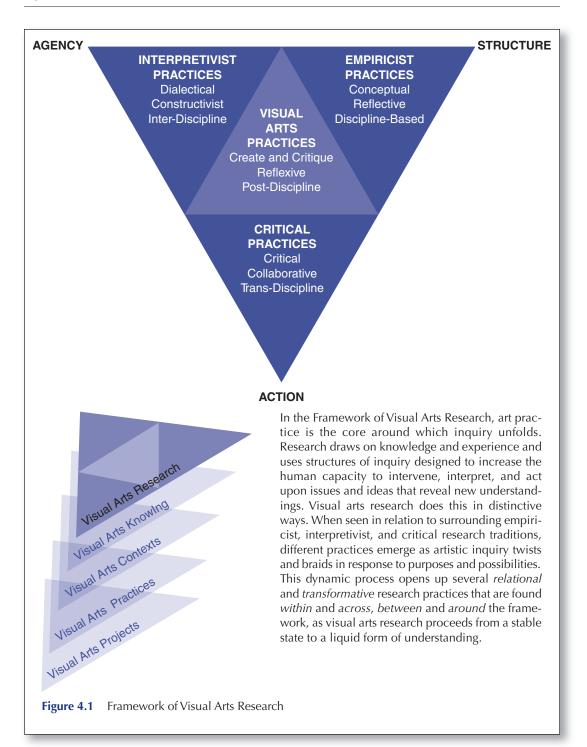
What is difficult to portray is the idea that although conceptual edges help to define areas of interest, they are permeable barriers that allow ideas to flow back and forth. This flexible condition is especially relevant to perceiving Figure 4.1, Framework of Visual Arts Research, as the components are shown neatly nested in a set of relationships. This association is also shown from a different perspective in Figures 4.4 and 4.5 where the framework is presented as a self-similar structure that is constantly unfolding in a braid-like manner during the research process. The frameworks described in these chapters therefore are flexible and evolving systems of interlocking and infolding inquiry, whose structures move from a stable or unstable state to a liquid form, as new possibilities emerge. Furthermore, within the context of research practices, visual and textual art forms are the most appropriate means of capturing these elusive understandings.

Figure 4.1 shows four interconnected areas of visual arts inquiry. Key features of research that I identify as Structure, Agency, and Action serve as the boundary focus areas. These encompass the idea of research. After all, research is a practice that uses knowledge, experience, and inquiry structures to increase the human capacity to intervene, interpret, and act on problems, issues, and questions that reveal new insights and understandings about who we are and what we do. The center strand in Figure 4.1 is Visual Arts Practices, which is the site where research problems, issues, and contexts originate. This reflects the reality that art practice as research is grounded in the studio experience, yet practitioners move eclectically across boundaries in their intellectual and imaginative quests. Although this is the core from which visual arts research is undertaken, when seen in relation to the surrounding research practices, different perspectives and practices may emerge as inquiry twists and braids into new positions in response to purposes and possibilities. The border areas labeled *Empiricist*, Interpretivist, and Critical describe different research traditions and methods and these paradigms are well documented in the research methods literature. Theses research perspectives owe a debt to Jürgen Habermas (1971). Drawing on his pragmatic interest, Habermas argued that inquiry is socially grounded and he drew attention to the need to broaden the scope of knowledge structures to include technical, contextual, and critical understanding. Raymond Morrow (1994) paraphrased Habermas's three-tier knowledge schema:

We seek to know in order to control social and natural realities (the empirical-analytic interest), to qualitatively interpret and understand such realities (the hermeneutic-historical interest), and to transform our individual and collective consciousness of reality in order to maximize the human potential for freedom and equality (the critical-emancipatory interest). (p. 146)

In Chapter 2, I discussed the mixed heritage of empiricism as a paradigm and its pervasive impact in regimes of research in the social and human sciences. Following Morrow (1994, p. 32), I make a distinction between *empiricist* and *empirical* in that the latter term is often mistakenly used to describe quantitative research only, as if areas of qualitative research are somehow not involved in empirical discovery and verification. The rapid growth of qualitative approaches that open up sense-based strategies to practical reasoning is a legacy to the methodological utility of empiricism. So I use empiricist to reflect a general focus on research that is mostly data-driven, where evidence is derived from experience of social reality and is collected in many forms and analyzed using a range of related methods and techniques.²

Another border strand is *interpretivist* traditions. In Chapter 2, I discussed some research conceptions that persist where perspectives and practices are seen in dualistic terms—objective and subjective realities being a case in point—and I want to restate my rejection of this binary thinking. My interpretivist perspective is informed but not restricted to the hermeneutic³ tradition of Habermas (1971) and Paul Ricoeur (1981) and the constructivist perspective of Egon Guba and Yvonna Lincoln (1998). Here the central role is experience as it is lived, felt, reconstructed, reinterpreted, and understood. Consequently, meanings are made rather than found as human knowing is transacted, mediated, and constructed in social contexts. These views indicate that research practice itself is a site for creating and constructing interpretations as meaning is made during the inquiry process.



From Ricoeur's (1981) notion of textual interpretation comes the idea that when a written text is read, it takes on its own meaning and "what the text signifies no longer coincides with what the author means" (p. 139). This serves visual arts well as it opens up the interpretive space among the artist, artwork, and the setting as relevant interests and perspectives may reveal multiple methods and meanings. These are further enlivened by exposure to interpretive communities of art writers and theorists. As Arthur Danto (1981) noted, "in art, every new interpretation is a Copernican revolution, in the sense that each interpretation constitutes a new work" (p. 125). However, he reminded us, "you can call a painting anything you choose, but you cannot interpret it any way you choose, not if the argument holds that the limits of knowledge are the limits of interpretation" (p. 131). Mat Alvesson and Kaj Sköldberg (2000) provided an account of the interpretive flexibility surrounding notions of understanding referred to in Figure 4.1:

Understanding constitutes a creative, re-productive act, in which the researcher appropriates the meaning of the object, rather than mechanically mirroring it. The researchers carry around their own frames of reference, and inevitably make their interpretations in accordance with these. This is also the reason why interpretation always possesses only a *relative* autonomy, never an absolute one. (p. 68, emphasis in original).

The final boundary component shown in Figure 4.1 is labeled *Critical*. This is a global term that draws its conceptual direction from the discussion of *Doubting Doctrines* given in Chapter 2. The broad purpose of critical forms of inquiry is the enactment of social and cultural change. Under the glare of a critical eye that breaks apart social structures that privilege those in control, the situation of groups marginalized by cultural characteristics such as race, gender, economics, or ethnic identity is examined. Using dialectical and deconstructive methods, the narratives and perspectives of groups mostly omitted from written histories, or who are denied access and voice within social structures, are revealed and represented. Opening up a dialectic aims to enlighten and empower individuals to challenge the circumstances that deny their entry so that "change is facilitated as individuals develop greater insight into the existing state of affairs (the nature and extent of their exploitation) and are stimulated to act on it" (Guba & Lincoln, 1998, p. 215).

Critical traditions of inquiry are, of course, a prominent feature of visual arts theory and practice, having been given a considerable boost by the revisionist perspectives of recent decades. In particular, the feminist critiques of art history and the critical analyses of gendered practices in contemporary cultural politics undertaken by artists as well as critics are especially revealing. These offer content direction and methodological cues for an expanded domain for visual arts research that looks to integrate critically engaged visual and verbal languages within the framework shown in Figure 4.1.

ART PRACTICE AS RELATIONAL RESEARCH

The regions of empiricist, interpretivist, and critical that surround visual arts practice describe research paradigms suitable for adaptation in inquiry in the visual arts. There are

several kinds of research practices inherent in Figure 4.1 that describe important relational features that are formed *within* and *across, between* and *around* visual arts research practices. Later in this chapter, the relational characteristic of artistic research is also shown to be a transformative practice. The structural process of self-similarity and braiding are used to explain the dynamic yet ordered volatility of art practice as research, because not only does the topic or subject of research undergo critical change, but the artist-researcher is also changed by the creative inquiry process.

Traditions of Practice Within and Across Research

The elements contained within the core component of visual arts practice and the surrounding research traditions include various aspects of theory and practice that play an important role in visual arts research. Interspersed throughout paradigms of research and practice are various theoretical orientations that have a direct bearing on the practices used to conduct inquiry, and these are used in visual arts practice. The features listed in the framework can be read in two ways: first, as discrete features contained within a research tradition, such as empiricist, interpretivist, and critical, that are adopted in visual arts research; second, as parallel features that cut across research traditions and can be adapted in different ways in research projects. For example, when read as local features of research, visual arts practice is characterized by its distinctive research capacity to create and critique phenomena using reflexive approaches that enact and embody responses that often take place within postdiscipline contexts.

On the other hand, when read laterally, the features identified across the research traditions can be seen as layers that reflect the research practice of integrating theory and practice. These correspond to three layers or levels of research strategy. At one level, research is theoretical and conceptual as issues, problems, and ideas are grappled with as research questions are identified, conceptualized, and defined. This process takes place at strategic places in a research project—in some situations it is necessary to define these issues at the outset to help determine focus and intent. In other situations it will occur later in the research process. For instance, in the visual arts practice example given earlier, create and critique can be seen as conceptual processes that in many cases take place after the research event as outcomes are compared, critiqued, and theorized against existing knowledge systems.

Another layer of research is the operational and methodological practices that occur in any research project. These are distinctive ways of translating and transforming ideas and issues into forms that can be investigated. In clinical research traditions, operationalizing concepts means defining them in a form that allows interventions to be designed and outcomes to be measured. In field-based settings, operational processes occur when information is gathered and strategies are developed to probe issues further as the process of inquiry becomes progressively focused. In the case of visual arts practice, the operational and methodological features are primarily reflexive, as forms that are created in a research project are critiqued within a responsive environment. Reflexive practices are performative by nature and are described in more detail in the following section, Art Practice as Transformative Research.

The final layer of research practice that cuts across research traditions describes the particular contexts and settings that are part of the various traditions of inquiry from which visual arts research draws. When context is a factor in research settings, the knowledge that

is produced by researchers enters into communities of users who apply new interpretations and understandings from different personal, educational, social, and cultural perspectives. For some research traditions such as the social sciences, these contexts are mostly located within the confines of discipline structures, while research contexts in the humanities might be best characterized as dealing with knowledge and understanding that is explored in interdisciplinary contexts. Critical traditions, on the other hand, tend to be strategic encounters that are context-specific and move back and forth across discipline boundaries in more of a transdisciplinary process. On the other hand, visual arts practice is presented in the framework as a postdiscipline practice, and this is explained in more detail in the section, Art Practice as Transformative Research.

From this strategy of identifying research processes that are found within traditions of inquiry that are method-specific, and other, more generic research practices that cut across these conventions, it can be seen that when visual arts practice is theorized as research, it embraces a complex array of theories, concepts, methods, and settings. Furthermore, it is not a mere eclectic sampling that takes place, but a distinctive approach responds to research demands in ways that other research traditions do not. Let me examine these features in more detail by looking at Figure 4.1 in other ways.

Dimensions of Practice Between Theory

A feature of "the visual" (Figure 4.1) is that there are various dimensions of theory embedded within the structure that help to further articulate how studio art practice can be integrated as part of the research process. As discussed in Chapter 2, a function of theory is to explain things. Proposing an explanatory thesis that explains why and how ideas, objects, or events might be related, or what effects certain things may have on each other, is one of the main purposes of research. Theories, therefore, are summaries of how we understand how the world works. Theories, however, come in many forms that are the outcomes of different research approaches.

Explanatory theories, for instance, try to answer the basic questions, why? or what is? and can give rise to causal explanations that can yield important predictive power. Descriptive theories, on the other hand, are analytical accounts that provide information to help answer the research question, what? by identifying relevant factors, components, or systems. Interpretive theories are more speculative as they draw together information into syntheses that help answer the research question, how? Philosophical or phenomenological theories are conjectural by nature and use deliberative methods to respond to the research question, what might be? Contextual theories, on the other hand, may serve historical, ideological, or political ends and address research questions such as what was? and what was not? Irrespective of the theoretical questions being addressed, there will be a range of research methodologies within which any research project can be positioned. As a research practice, visual arts has a broad theoretical scope and has the capacity to respond to research tasks that incorporate many dimensions of theory. For art practice to be accepted as research, artist-theorists need to engage directly with theoretical concerns that can be investigated in studio contexts as well as through other related forms and methods.

Figure 4.2, Dimensions of Practice *Between* Theory, isolates the relationships between aspects of theory and different research practices and helps reveal how art practice can relate to theory in a postdiscipline environment. Three such relationships are shown.

Figure 4.2a, Dimensions of Theory: Create-Critique, links visual arts practice and critical dimensions, as theoretical interests are investigated through a cycle of processes involving creating and critiquing, which involve envisioning ideas in response to particular issues and contexts. Theoretical issues surrounding visual arts practice and interpretivist dimensions can be explored by means of making meaning and seeking to communicate understandings on an individual and community level (see Figure 4.2b, Dimensions of Theory: Meaning-Making). On the other hand, the dimensions of theory that can be analyzed in the relationship between visual arts practice and empiricist segments (see Figure 4.2c, Dimensions of Theory: Problem-Finding) involve finding problems and related strategies when exploring and forming ideas in arts-based settings. The theorizing processes and practices described in Figure 4.2, Dimensions of Practice *Between* Theory, serve as guidelines, because different aspects of theory can be related in different ways in art practice, depending on the purpose of an inquiry.

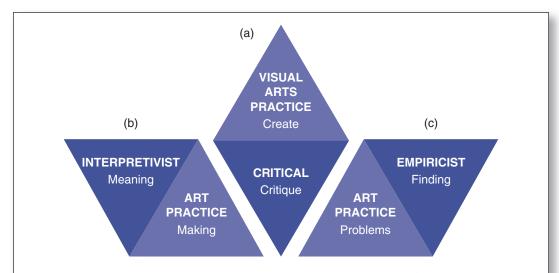


Figure 4.2 describes theoretical relationships *between* the practices of visual arts research. Theories help us understand how the world works. Theories are the outcomes of research and take many forms that explain, describe, interpret, and speculate on the ideas, issues, and events that shape our lives. Figure 4.2 identifies the relationships between theory and different research practices. Visual arts practice and critical components are linked (Figure 4.2a) as theoretical issues are investigated through creating and critiquing. Visual arts practice and interpretivist dimensions (Figure 4.2b) are explored using meaning-making process that seeks to communicate individual and community understandings. Researching visual arts practice and empiricist traditions (Figure 4.2c) involves finding problems and forming ideas in arts-based settings. The theorizing processes in Figure 4.2 describe how different aspects of theory relate differently in art practice, depending on the purpose and context of an inquiry.

Figure 4.2 Dimensions of Practice *Between* Theory

a) Dimensions of Theory: Create-Critiqueb) Dimensions of Theory: Meaning-Makingc) Dimensions of Theory: Problem-Finding

Domains of Practice Around Inquiry

There are also inquiry practices that describe methodological approaches contained in Figure 4.1. These are domains of inquiry and the general characteristics of these are outlined in the discussion in the section, A Visual Framework: Paradigms and Practices, which describes visual arts practices and empiricist, interpretivist, and critical research traditions. There are, however, more methodological implications that can be seen when related domains of inquiry are teased out. Figure 4.3, Domains of Practice *Around* Inquiry, describes

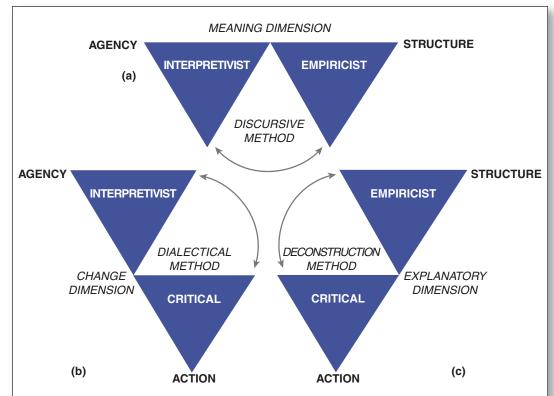


Figure 4.3 identifies domains of practice located around visual arts research. Figure 4.3a, describes discursive methods, which are conceptual techniques that identify patterns and consistencies in data. In studio settings, visual forms are used as data to investigate meanings, and as sources of data. Figure 4.3b describes dialectical methods that use language-based methods to assess the adequacy of arguments, claims and actions. In the studio, visual forms of language such as metaphor and analogy are used to challenge and change things. Figure 4.3c, describes deconstruction methods that critique areas of emphasis and omission in systems and structures. In studio contexts, visual and verbal methods are used to embody meanings that explain how things are and how they might be.

Figure 4.3 Domains of Practice *Around* Inquiry

a) Domains of Inquiry: Discursiveb) Domains of Inquiry: Dialecticalc) Domains of Inquiry: Deconstruction

approaches to research that bring together domains of practice by means of a method of inquiry. These wedges of inquiry are brought to bear on issues of art practice in the process of undertaking research.

For instance, Figure 4.3a, Domains of Inquiry: Discursive, incorporates the empiricist focus on structure and the interpretivist emphasis on agency through the use of discursive methods. These are conceptual and analytical techniques to identify patterns and consistencies in information. When applied in studio research settings, visual images and objects are used as a means to investigate meanings and as sources of meaning. No distinction is made between discursive and nondiscursive methods, because the research interest will determine how to make sense of visual images, representations, codes, and meanings from the visual data that are collected and created.

Similarly, Figure 4.3b, Domains of Inquiry: Dialectical, adapts the interpretivist sense of agency and the critical perspective of *action*, using dialectical methods. Dialectical methods use discourse and language-based strategies to assess the adequacy of arguments, claims, and actions that are part of a research project. Within the context of art practice as research, language forms such as metaphor and analogy are used in visual ways as agents that challenge and change things.

The third example, Figure 4.3c, Domains of Inquiry: Deconstruction, draws on the critical research tradition of action and the empiricist focus on structure, using methods of deconstruction. This method of critique examines areas of emphasis and omission in systems and structures during the research process. In studio contexts, visual and verbal methods are used to critique social and cultural issues that embody meanings and explain how things are and how they might be. For instance, visual strategies may incorporate the use of representational forms, symbolic approaches, collage and bricollage methods, and a range of visual and verbal textual devices. The crucial element in the use of deconstructive methods is that the creative process of giving form to critical responses ensures that constructive responses to problems and vexing issues become a distinctive part of the research process.

An artist whose practice moves seamlessly within and across, between and around practices of theory and inquiry is Rina Banerjee. Within the conscious theoretical questioning of historical myth making and cultural displacement, Banerjee fuses the science of systematic order and the art of contrast to produce rich narratives and cryptic cultural critiques. As a result, her installations and arrays of objects combine and contradict as familiar materials are put in unfamiliar settings and foreign forms are refashioned and released from their fictional past. Her installation, *Contagious Spaces, Preserving Pinkeye* (2003), shown in the Yankee Remix exhibition at the Massachusetts Museum of Contemporary Art (MASS MoCA), is a good example.⁴

In this exhibition, nine artists were invited to investigate cultural assumptions associated with the meaning given to historical artifacts and everyday collectibles. The artists were commissioned to create interpretive works dealing with issues of memory and meaning using artifacts from the extensive collection of the Society for the Preservation of New England Antiquities (SPNEA). Rina Banerjee's sprawling installation is full of specimens of shrink-wrapped mementoes where quixotic and exotic memories are shown to

be an infected vision. The discomfort is in the details as we are reminded how the things we surround ourselves with distort as they display. What is intriguing about the Yankee Remix show is the way the artist-theorists and curator-historians shared a goal in critiquing historical perceptions. And the artists did what they do best, and they created ensembles of visual research that offered arguments, inferences, and insights that invited further questioning.





Rina Banerjee. *Contagious Spaces, Preserving Pinkeye*. (2003). Installation of altar, Taj Mahal, and optical sculptures. Commissioned by Massachusetts Museum of Contemporary Art (MASS MoCA) for Yankee Remix. Reproduced courtesy of the artist and MASS MoCA.

Rina Banerjee's work explores specific colonial moments that reinvent place and identity as complex diasporic experiences. Their aesthetic and cultural beginnings suggest in particular how the many regional culture affects continue to stain our perceptions of home, the exotic, the foreign and domestic worlds. Her system of assemblage of colonial objects, souvenirs and decorative crafts makes the experience of seeing artifact and history in art making as an entangled process which reconfigure our boundaries and those trespasses that occur with increased mobility. (retrieved April 12, 2009, from http://www.rinabanerjee.net/index.html)

ART PRACTICE AS TRANSFORMATIVE RESEARCH

An important feature of the framework of visual arts research is that it is not only a set of relational approaches to research, but it is also a transformative research *practice*. This means that knowledge creation in visual arts is recursive and constantly undergoes change as new experiences "talk back" through the process and progress of making art in research settings. This transformative feature also applies to the artist-researcher, who is very much an embodied part of the research process as visual arts knowledge is framed, encountered, critiqued, and created, as insight is revealed and communicated. The transformative nature of art practice as research is best seen in its reflexivity and postdiscipline structure, and these are best represented in structures that are described as *braided* (Figure 4.4) and *self-similar* (Figure 4.5).

Reflexive Practices as Transformative Research

Reflexive practice is a kind of research activity that uses different methods to work against existing theories and practices and offers the possibility of seeing phenomena in new ways. Four reflexive practices are identified here.

First, within the visual arts, a *self-reflexive* practice describes an inquiry process that is directed by personal interest and creative insight, yet it is informed by discipline knowledge and research expertise. This requires a transparent understanding of the field, which means that an individual can see through existing data, texts, and contexts so as to be open to alternative conceptions and imaginative options.

Second, in responding to empirical understandings, an artist-researcher will *reflect* on information gathered so as to review conceptual strategies used and consider other approaches. This reflexive practice is meta-analytic and reveals new views, much in the same way a gallery curator does when reassembling a collection so as to present a different reading of artworks.

Third, the plausibility of an interpretation of research findings will be determined in part by the capacity of the reflexive researcher to openly *dialogue* with the information. This means that significance of meanings derived from a process of inquiry is subject to debate and discussion, initially within the research project itself, and eventually among the research community.

Fourth, a reflexive practitioner will *question* content and contexts as problematic situations are revealed within particular settings. Issues-driven inquiry of this kind not only identifies problems but also opens up areas whereby participants become responsive to potential change. This emancipatory interest offers opportunities for those most directly involved in a common cause to enact artistic, social, political, educational, or cultural change.

These versions of reflexive practice in visual arts draws on the notion of "reflexive interpretation" proposed by Mat Alvesson and Kaj Sköldberg (2000):

Reflexivity arises when the different elements or levels are played off against each other. It is in these relations and in the interfaces that reflexivity occurs.

This approach is based upon an assumption—and implies—that no element is totalized; that is, they are all taken with a degree of seriousness, but there is no suggestion that any one of them is the bearer of the Right or Most Important Insight. (p. 249)

The interaction among different reflexive practices that Alvesson and Sköldberg discuss is embedded within the reflexive construct listed in Figure 4.1. The prospect of conducting inquiry that is *self-reflexive*, *reflective*, *dialogic*, and *questioning*, so that each informs the other, has considerable appeal for visual arts researchers whose practice, in general, is investigative, multilayered, and inclusive of a diversity of theories and practices.

Postdiscipline Practices as Transformative Research

Postdiscipline practice describes the way visual arts research takes place within and beyond existing discipline boundaries as dimensions of theory are explored and domains of inquiry adapted. The discipline perspectives that surround art making reflect ways of engaging with theoretical issues and how appropriate methods might be used to meet research interests and needs. They also represent major inquiry practices and cover the prominent empiricist, interpretivist, and critical traditions.

In completing projects within the academic setting, the methods deployed by a studio-based researcher will center on art making and be surrounded by different discipline perspectives and practices. As shown in Figure 4.1, there is a *discipline-based* position that is embedded within the empiricist tradition of research. Within the interpretivist paradigm, it is through an *interdisciplinary* investigation that theories and practices are teased apart and meanings disclosed. Inquiry from the critical perspective, on the other hand, is more of an incursion as existing systems, structures, and practices are interrogated and changes enacted—this approach is described as *transdisciplinary*.

When planning and undertaking research, artists also make informed choices about imaginative and intellectual approaches just as they do when they create and respond to art. The process of making insightful decisions when carrying out visual arts research is not predicated on the assumption that there is a prescribed body of knowledge one learns and then applies. Notwithstanding the necessity of making use of prior knowledge, prevailing explanatory systems of knowledge are not the only point of reference within which new inquiries might be framed.

Various theories of human processes, communal practices, and cultural agencies obviously abound, and these serve as both a grounded set of conditions and an interpretive framework around which inquiry is referenced. This is as basic to creative inquiry as it is to scholarly research. However, making informed choices about creative purposes involves selecting, adapting, and constructing ways of working and ways of seeing, and to do this one has to construct the tools of inquiry from an array of practices.

When working from a base in contemporary art, the conceptions of the discipline are uncertain and the informing parameters are open-ended, yet the opportunity for inventive

inquiry is at hand. In these circumstances, the artist-researcher is seen to be participating in a *postdiscipline* practice. Here there is little reliance on a prescribed content base. Rather it is the use of a suitable methodological base that supports the questions being asked, which may take the researcher beyond existing content boundaries. Although the university setting exerts its own disciplinary authority, the challenge is how to be informed by these structures in a way that maintains a degree of integrity about the postdiscipline nature of visual arts research.

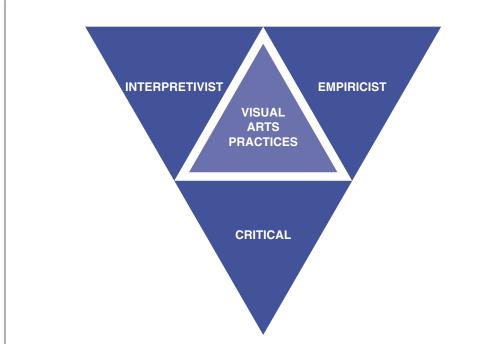


Figure 4.4 shows the Visual Arts Research Framework composed of a series of interlocking structures that can be separated and re-aligned (see Figure 4.5). An important way to theorize art practice as research is to visualize the relationships described in the various frameworks. The metaphor that best represents the idea presented here—that visual arts research is a simple and complex liquid structure with powerful generative potential for change—is the image of the braid. Metaphors help us to see things differently as we further our understanding of relationships and networks, influences and connections, and this can intrigue visual arts researchers. What is proposed is that the braid, with its infolding and unfurling form that disengages and reconnects with core themes while continually moving into new spaces, serves as a useful metaphor that captures the dynamic complexity and simplicity of art practice as research.

Figure 4.4 Visual Arts Research: Braided Relationships

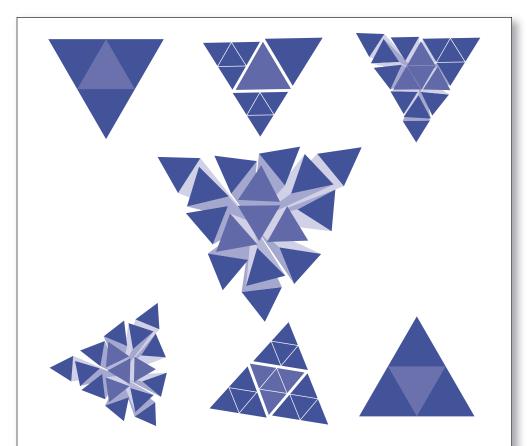


Figure 4.5 shows a sequence of images that track what happens when the visual arts research opens up during studio practice as something new is created. The structure is based on self-similarity because the triangular unit endlessly divides and builds upon itself. This reflects how visual arts research responds creatively and critically to issues, actions, and change at all levels of theory and practice. The self-similar feature of visual arts research means it is independent of scale and has a similar structure if undertaken in studios, communities, or cultures. Irrespective of where visual arts research happens, the structure has similar qualities—it is simple, complex, and dynamic all at the same time.

Figure 4.5 Visual Arts Research: Self-Similar Structures

Transformative Research as a Braided Metaphor

In order to appreciate the comprehensive yet flexible perspectives and methods involved in visual arts research, several approaches have been described. Each of these is identified in relation to particular emphasis on theory or inquiry and in relation to content conceptions and discipline connections. An important part of considering the conceptual ideas

being presented is to be able to visualize the relationships and structures described in the various frameworks and diagrams.⁵

The overarching metaphor that best captures the idea pursued here—that visual arts research is both a complex and a simple practice—is the image of the "braid" (Sullivan, 2002b; see Figure 4.4). This notion draws from several sources; however, the principal reference comes from Murray Gell-Man's (1994, 1995, 2003) conception of "plectics:"

My name for that subject [simplicity and complexity] is *plectics*, derived from the Greek word *plektós* for "twisted" or "braided," cognate with–*plexus* in Latin *complexus*, originally "braided together," from which the English word complexity is derived. The word *plektós* is also related, more distantly, to *plex* in Latin *simplex*, originally "once folded," which gave rise to the English word *simplicity*. The name *plectics* thus reflects the fact that we are dealing with both simplicity and complexity. (p. 47, emphasis in original)

The idea that contrasts such as simplicity and complexity could exist in useful tandem echoes the organic learning metaphors used by educators such as Froebel in the 19th century, who saw great merit in the concept of the unity of opposites. Similarly is the prevalence of the idea of oppositional balance in 20th-century formalist aesthetics. Another indirect reference is the connection the braided metaphor makes with the "field of metaphors" surrounding a clothes-body association of fabric and folds that Ian Stronach and Maggie MacLure (1997, pp. 27-30) used to describe limited images of postmodernism. In his cryptic text, Asphyxiating Culture and Other Writings (1988), Jean Dubuffet also used the notion of a braided relationship as an image to critique commentary about his art. He saw an artwork to be like strands of rope where content and form are at times intertwined, nested, connected, and tightly wound together. Critical response to an artwork, however, can be likened to unraveling the rope where form and content become separated and disconnected. The inference is that the same artwork can mean different things depending on the perspective of the viewer (or which part of the rope you are holding). Although Dubuffet saw this practice as a liability, it is also possible, of course, to see it as a context-dependent account that opens up the possibility of considering many perspectives.

There are two structural features of visual systems practices that can be connected to the metaphor of the braid. These are complex and dynamic systems and self-similar structures. Viewing visual arts practice as a complex, interactive system that is distributed throughout the various media, languages, situations, and cultural contexts is a plausible account and is at the heart of the arguments in this book. Similarly, if research, like art making, involves asking big questions, then inquiries will invariably deal with structures, phenomena, networks of relationships, passions, perspectives, and all manner of theories and practices that are part of our dynamic learning life. The belief that creative processes are complex associations of skill and agency that offer important insights into human understanding suggests that the research procedures used to investigate this potential need to be equally inventive yet suitably grounded in rigorous practices. Two constructs are discussed in this section that amplify the transformative structures that are part of visual arts research practice. These are the notions of complex systems and self-similarity.

Researchers who are studying complex systems are obtaining robust insights to suggest a need to rethink established canons as existing knowledge structures are unable to absorb or explain the new information that is emerging. Although an agreement of what "complexity theory" is remains elusive, Peter Coveney and Roger Highfield (1995) offered a rousing rendition:

Within science, complexity is a watchword for a new way of thinking about the *collective* behavior of many basic but interacting units, be they atoms, molecules, neurons, or bits within a computer. To be more precise, our definition is that *complexity is the study of the behavior of macroscopic collections of such units that* are endowed with the potential to evolve in time. Their interactions lead to coherent collective phenomena, so-called emergent properties that can be described only at higher levels than those of the individual units. In this sense, the whole is more than the sum of its components, just as a van Gogh painting is so much more than a collection of bold brushstrokes. This is as true for a human society as it is for a raging sea or the electrochemical firing patterns of neurons in a human brain. (p. 7, emphasis in original)

There are artists who share the enthusiasm of Coveney and Highfield.⁶ If we accept their definition as an exploration of changing relations among humans and their lifeworlds whereby small changes can bring unexpected outcomes in unusual ways, then we have a description of artistic inquiry into the human condition. Even more intriguing, however, is the prospect that an examination of these complex patterns and structures might not only reveal insights into the 20th-century theme of the human condition, but the 21st-century prospect of human design.⁷

As Raymond Eve, Sara Horsfall, and Mary Lee (1997) explained, complex systems exhibit particular organizing principles yet offer more extensive ways of configuring relationships among things. What is particularly attractive to visual arts researchers is the concept of scale-free networks in the sense that complex phenomena, no matter how big or how small, have some elements that have both unique and universal characteristics. This is quite different to normal distributions that reflect random occurrences and probability characteristics that are so much a part of traditional quantitative research. It is not that any radical theoretical insights from complexity theory or chaos theory (which is anything but "chaotic") will drastically change our conception of all the possible ways of investigating phenomena. However, the prospect that there are alternative conceptions that allow us to see things differently as we further our understanding of relationships and networks of connections, influences, and changes is intriguing for visual arts researchers to ponder. What is proposed here is that the characteristic of the braid as an infolding and unfurling form that disengages and reconnects with core themes while continually moving in new spaces serves as a useful metaphor that captures the complexity and simplicity of art practice as research.

Self-Similarity as a Complex, Transformative Structure

Self-similarity (Figure 4.5) is another feature generally associated with contemporary scientific research, but it has conceptual appeal in the visual arts as new ideas, structures, and

relationships are considered as part of the task of defining research frameworks. Let me explain what I mean by self-similarity. Reductionism and Euclidean notions of space are powerful systems that have a strong historical legacy in guiding inquiry in both the sciences and the arts. The assumption is that a change in scale reveals new information so that the more things can be reduced to their basic essence, the better the chance of figuring out how they work. But nature and humans resist such simplistic design. It is not so much an evolutionary move from simple to complex that holds promise, but rather it is the capacity to embrace both the simple and the complex at the same time. Self-similarity is a concept that has its origin in the mathematics of fractal geometry developed by Benoit Mandelbrot (1983). Fractal structures have become very influential in chaos theory and other fields and describe iterative patterns found in nature and human designs that appear both simple and complex, yet generally look regular, and possess the capacity for radical change over time. James Gleick (1988) explained as follows:

Self-similarity is symmetry across scale. It implies recursion, pattern inside of pattern . . . self similarity is an easily recognizable quality. Its images are everywhere in the culture: in the infinitely deep reflection of a person standing between two mirrors, or in the cartoon notion of a fish eating a smaller fish eating a smaller fish eating a smaller fish. (p. 103)

Therefore, if one ponders *Chartres Cathedral* in France, Antonio Gaudi's *Sagrada Familia* in Barcelona, or Frank Gehry's *Guggenheim Museum* in Bilboa, it is hard to identify a dominant structural form, because the scale of these buildings is not found in a simple geometric shape upon which more complex structures are built. Rather, the scale that represents the structure of these buildings is found in the smallest shape as well as the largest space. As Gleick (1988) would say, these buildings have "no scale" because they have "every scale" whereby "an observer seeing the building from any distance finds some detail that draws the eye [and] the composition changes as one approaches and new elements of the structure come into play" (p. 117). There is a self-similarity that is symmetrical across scale because when viewed up close or from afar, there are details that seem to draw the eye in ways simple shapes cannot. And for me, this similarity exists in all its simplicity and complexity at the microlevel in the meeting of minds and at a macrolevel in the meeting of cultures.

The concept of self-similarity shown in Figure 4.5 nicely captures the capacity of transformative visual arts to deal with issues and concerns at all levels of theory and practice. This characteristic means that visual arts research practice is independent of scale, which suggests that it has a similar structure if undertaken in the studio, in the community, or within the culture. The basic triangular unit within this structure exhibits the properties of self-similarity because there is no underlying structure upon which more detailed systems are built. Instead, no matter whether viewed at the microlevel or macrolevel, the structure has similar properties and characteristics—it is both simple and complex at the same time.

The claim I make here is that knowledge, understanding, beliefs, and values are aspects of human knowing that are independent of scale. Even though their inclusion within institutional structures conforms in general to hierarchical models, these are social constructions that can also limit the potential of looking afresh at how we create our knowledge systems. Being able to critique these structures is the first step in creating

other possibilities. This is what Alvesson and Sköldberg (2000) paraphrased as a cumbersome term they call "perspectivization:"

This involves seeing familiar phenomena as strange, trying to differentiate one's understanding of empirical fragments (conversations, body motions, artefacts) from the primary impressions acquired from participant observation, trying to see different kinds of pattern, switching between levels of thought, and trying to think in similes (metaphor). (p. 184)

The principles of art practice as research suggest that there is merit in also thinking about these institutional conditions as nonlinear and nonfoundational and capable of new, emergent possibilities. As such, opportunities for research can be seen to be both informed by existing knowledge structures but not to be a slave to them. This is the basis upon which the inquiry practice of create and critique is presented as a way to open up new ways of responding to pressing issues and to see the impact on existing information structures.

Thinking about the scale-free feature of self-similarity can help us understand the limitations of existing structural forms such as hierarchies, taxonomies, matrices, distributions, and the like. As conceptual organizers, these structures serve as reductive devices that allow us to represent information to assist with easy interpretation and are a key feature of research. Most methods of representing large-scale phenomena subscribe to a hierarchical principle whereby parts of a system are indexed under broader categories. Yet not all phenomena easily conform to such a structure; therefore, it is profitable to consider other forms of representation.

An example of art practice as transformative research is seen in the installation project dis-positiv created by the artist Richard Jochum. Dis-positiv originated as a multisite exhibition project under the patronage of the Austrian Commission for UNESCO and the University of Applied Arts in Vienna and was first presented at the Academy of Fine Arts Vienna (2000), moving on to Cologne (2000), Bregenz (2000), and Berlin (2003). In dispositiv, art critics, curators, and theorists are put on display as objects of art themselves in order to create a space that explores how the relationship between art practice and art theory is shaped by discourse about art. The elements of transformative research described earlier are evident in the roles Jochum has the artwriters take on and the disruptions these cause to the relationships among the artwork as a public form of communication, how theory might be constructed and who does it, the changing artists' role in cultural production, and questions that are asked of the viewer. In contemporary discussions about art and culture, art theory plays such a significant factor in the framing of art practice that Richard Jochum felt it is equally important to present discourse itself as the subject of display. It is no longer the object that is at the center, but the meta-object or "dis-positiv," as Jochum labeled it. The artist brings forth the work of art and the art writer positions it, but the dispositiv is governed by two equal, yet competing concepts: art as production and art as theory. By creating a physical space that exhibits those who educate us about art and by encouraging the public to participate in this process, dis-positiv challenges viewers to look at the many ways in which art and culture inform each other.

Another important development in contemporary art and a feature of art practice as transformative research is the fusion of different disciplines in a postdiscipline environment. Art

practice is increasingly being undertaken across art media, technologies, and creative spaces. Sculpture, for instance, used to be a discrete discipline involving the plastic arts. Now, however, sculpture is at the intersection of fine art traditions, performance art, and immersive practices that includes hybrid elements from disciplines as diverse as photography, painting, architecture, and digital media. Artists today are no longer limited to a particular material or traditionally defined fields of activity. Rather, an artist may need to master several traditional







Top/left: Richard Jochum. *dispositiv*. Berlin, Staatsbank, April 5, 2003. Discoursive picnic organized by Laura Schleussner and Dorothea Jendricke, Rocketshop and bgf_mitte outside of the dis-positiv structure.

Top/right: Bregenz, Magazin4, November 6, 2000. Public art manager of the city of Bludenz, Roland Jörg, ironing his shirts to demonstrate his desire to remain in the background as a person while creating a platform for the artist.

Bottom: Berlin, Staatsbank, April 5, 2003. Art critic Peter Funken develops, together with his colleague, an essay live on the idea of *dis-positiv*.

Dis-positiv is an installation created by the artist Richard Jochum that features a multimedia installation where

art critics, curators, and theorists are "put on display" as objects of art themselves in order to create a space that explores the relationship between art practice and art theory. A free-standing exhibition space consisting of 750 square feet of Plexiglass creates a "space within a space" separating the art writers from the viewers. Within this space, the artwriters construct an environment of their choosing to enable them to express their ideas about how they contribute to the future of art through the things they do as artwriters. The exhibition, which was deeply rooted in the region and its communities, lasted for one week each and benefited from a great deal of publicity. The multimedia and performance-based approach, panel discussions, streaming video on the Internet, and a multifaceted educational program made the exhibition accessible to a broad audience.

and nontraditional domains of inquiry. Similarly, when conducting art practice in a studio setting in a university environment, an artist-researcher will need to master other scholarly conventions so as to be able to move within and beyond them. As has always been the case, innovation in contemporary art is the outcome of an ongoing challenge to look anew at the way things are and how they might be imagined, and this creative purpose is also taken up by artist-researchers such as Richard Jochum.

CONCLUSION

Anyone interested in human engagement in a changing social, cultural, and global world brought into sharper focus by the critical cuts of postmodernism and the pervasive possibilities of technologies cannot help but be excited. Amid this uncertainty and creativity there are dilemmas as past convictions come under challenge. For instance, the reductive paradigm that served art and science so well for so long no longer reveals the elusive truths thought to reside within matter and motion. Scientists and artists who are really interested in finding order within chaos and who see the microworld and macroworld around us as the lab or the studio are looking deep into material processes and organizing patterns with surprising outcomes. And these investigations often get carried out in the spaces between disciplines and without the safety net of codified practices.

This chapter argues that understanding is a viable goal of research and explanatory theories of human beliefs and actions need to be supplemented with transformative theories of individual and cultural change. It is further contended that these theories can be found within the thoughts, ideas, and actions that result from making art in research contexts, for it is from a base in studio experience where the capacity to create and critique is given form. This posits the view that art practice can be claimed to be a legitimate form of research and that approaches to inquiry can be located within the studio experience.

Therefore, art practice needs to be seen as a valuable site for raising theoretically profound questions and exploring them using robust research methods. Further, there is an extensive range of modalities and methods that can be used to yield critically grounded and individually transforming outcomes. From this perspective, artistic practice can be seen to comprise a critical coalition of practices that involve an ongoing dialogue within and across, between and around the artist, artwork, and context, where each has a role to play in the pursuit of understanding. But to argue that art practice is a form of research in this way, there is a need to accept that the visual image is a source and site of knowledge and understanding. This is a plausible claim if we consider how images operate as texts, artifacts, and events that embody individual and cultural meanings. And within this layering of image structures, there are mediated processes and systems of production and exchange that further complicate and intensify the status of images as information sites and cultural codes.

Within this cultural regime, the artist-researcher takes on a larger responsibility. Old traditions that see visual arts as a human capacity that is produced and interpreted by a select few are no longer tenable as access and ownership of the creation and communication of images of all sorts is in the hands of the many. However, it is not this pervasive presence of a visual currency that demands the attention of artists but a necessity to lead the way.

The circumstances are such that new visions abound because ideas these days are less constrained by discipline rigidities. And the complement of surrounding theories continues to open up new possibilities for locating links among areas such as the sciences, the arts and humanities, and newer technologies. Consequently, it is no longer plausible to accept empty rhetoric such as the claim that the visual image is merely a way of saying what cannot effectively be said in words or numbers. Rather, based on the concepts and structures described in this chapter, it can be argued that a new era of visual arts research is possible for those who see studio art as a site for conducting transformative research that has individual and cultural relevance. Further, there is a degree of flexibility in how visual arts research might be formalized in order to meet the credibility demands of institutional practice, be it the goal of "good research" in the university or the quest for "good art" in the artworld.

Notes

- 1. For a broad overview of qualitative research issues and practices, see Denzin and Lincoln (1998) and May (2002), while the text by Alvesson and Sköldberg (2000) gives a good account of reflexive research practices that can be adapted in arts contexts.
- 2. For debates and discussions about the nature of qualitative evidence within different research perspectives, see, for example, Clifford and Marcus (1986), Coffey and Atkinson (1996), Jaeger (1997), May (2002), Reichardt and Rallis (1994), Silverman (2001), and Strauss and Corbin (1990).
- 3. The original purpose of *hermeneutics* was to critically examine obscure or contradictory texts from religious sources in order to achieve an authoritative interpretation. This was also known as an *exegesis* or an interpretation of a text (usually Biblical). Nowadays, hermeneutics is situated at the very heart of individual meaning making, and as is discussed in Chapter 8, exegesis is the term used in practice-based research to describe the textual documentation that is generally part of a doctoral study project.
- 4. The exhibition *Yankee Remix: Artists Take on New England* (Summer 2003–Spring 2004) was a collaboration between the Massachusetts Museum of Contemporary Art (MASS MoCA) and the Society for the Preservation of New England Antiquities (SPNEA). Participating artists were Rina Banerjee, Ann Hamilton, Martin Kersels, Zoe Leonard, Annette Messager, Manfred Pernice, Huang Yong Ping, Lorna Simpson, and Fred Violich.
- 5. Suggestions for visualizing, conceptualizing, and designing visual arts research that originates in studio practice are given in Chapter 7, "Visualizing Practices."
 - 6. See the anthology edited by Casti and Karlqvist (2003), Art and Complexity.
- 7. Reconceptualizing and visualizing the physical and emotional structures of what it is to be human was a common theme in the 2003 Venice Biennale, where genetic revision, human-animal mutation, and environmental surveillance were all part of the human remix. See the work of Daniel Lee (108 Windows), András Gálik and Bálint Havas (Little Warsaw), Patricia Piccinini (We are family), and Hannah Greely (Silencer). Piccinini's work is discussed in Chapter 7, and examples from the 2007 Venice Biennale are discussed within the context of research in Chapter 8.
- 8. The notion of self-similarity shown in Figure 4.5 is a self-similar structure based on the *Koch Snowflake* used to construct a Koch curve first described by the Swedish mathematician Helge von Koch in 1904. Self-similar structures of this kind define areas that are less than that of the original yet require lines that are progressively longer; therefore, an "infinitely long line surrounds a finite area" (Gleick, 1988, p. 99). In other words, the structure of a shape can appear to get infinitely smaller yet retain the same form, although it will require more and more detail to document it.