

CHAPTER

1

Pigment to Pixel

Four historical conditions characterize the emergence of visual arts practice. The first is critical vision. Artists continue to inquire into issues of everyday life and to disrupt our perceptions through studio art practices. The second is reflexive action. This is characterized by the way artists and theorists influence, and are influenced by, the changing dynamics of experience and knowledge. The third is technological agency. This describes how studio art practices get absorbed into visual culture by the expansion of image-making technologies. The final historical theme is art instruction. Over the years, the cultural and educational basis upon which the visual arts is grounded shifted in response to ways that artist-teachers varied their pedagogical practices. As these conditions took effect, an ambivalent sense of art learning was set in place as new ideas clashed with the desire to forge a canon on which instructional programs could be built. Lines of authority were drawn as radical practices created in the studio competed with traditions crafted in the academy. Yet binding these uncertain practices was a passion that glorified the mind for its imaginative and intellectual power.

This chapter reviews some of the practices used by artists in modern times as they respond to the challenge of the “new.” These innovations are tracked alongside patterns of teaching in higher education as the training of the artist and the artist-educator became institutionalized. A range of models of practice evolved as history moved from the academy to the café, from the classroom to the studio, and into the virtual world. Particular periods changed ideas about the role of the artist. In the earlier years of the Enlightenment, the idea of the artist-as-analyst, or artist-as-technologist, flourished. By the middle of the 20th century, the artist-as-teacher was prominent and the vision and voice of the creative iconoclast held sway. Following the social upheavals of the 1960s, a generation of artists infused art schools with a new sense of openness and creative freedom. During the 1970s and 1980s, places like Goldsmiths’ College in London and CalArts in Los Angeles became hothouses of popular culture. Inspired by artists who saw teaching in art school as a social process, students were encouraged to freely explore the excitement of being an artist. Michael Craig-Martin, a long-time senior tutor at Goldsmiths’, captures the climate of the time:

It was the collapse of authority, of a sense of received ideas, when everything was under question. So naturally art education was part of that questioning. It became

possible in Britain to do certain things in education, because all the conventional constraints were put in doubt. And so if you wanted to just ignore them, or undo them, you could. (cited in Madoff, 2007, p. 76)

For some, however, such promise was short-lived. In his 1990s critique of postmodern cultural politics, Robert Hughes eviscerated his mates in art schools who promoted “theory over skill, therapy over apprenticeship, strategies over basics” (1993, p. 193).

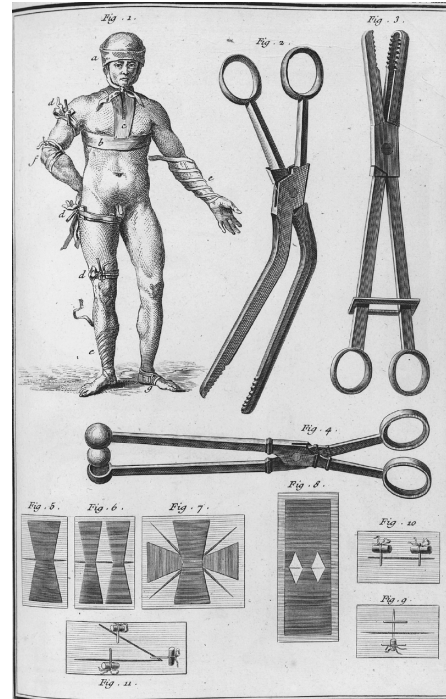
Whether the education of artists happens best in havens isolated from mainstream canons or in communities that actively embrace the theories and practices of cultural production remains a vexed question. Yet there is resilience as art practice continually adapts to the demands of the various *artworlds*, be it the artworld of contemporary art or the artworld of educational institutions.¹ There is also resistance as well as visual arts gives form to new ideas and images that question the aesthetics and politics of cultural practice. However, in the present global age where the demands of economic viability and innovative practices have created a cult of accountability that Marilyn Strathern describes as an “audit culture” (2000, p. 2), artists and scholars face new challenges that cannot be ignored.

Visual arts practices pursued in art schools and universities have often had to respond to questions of identity and purpose posed by internal and external sources. This is part of a rich historical legacy that can be traced through modernism, to postmodernism, and to the present “liquid times” that Zygmunt Bauman (2007) so eloquently describes. Artists are well equipped to deal with these uncertain times. The contemporary artist today is part theorist, performer, producer, installer, writer, entertainer, and shaman, who creates in material, matter, media, text, and time. And all this takes shape in real, simulated, and virtual worlds. These characteristics of art practice change the way we think about visual arts and this influences what we do in institutional settings. Art practice has long been a critical and creative means of inquiry that encourages new ways to think about what it is to be human within the uncertain worlds within which we live.

THE ENLIGHTENMENT AS A RESEARCH PROJECT

The ideas of the Enlightenment set in place a grand research project that sought to explain the workings of nature in ways that valued human thought and action. The new paradigm reflected a worldview that saw the emergence of rational philosophy, among other things, as a form of knowing that revolutionized theory and practice in all disciplines. Radical views in the natural sciences about empirical inquiry and logical reasoning challenged medieval conceptions of the mind. The need to *know* meant that the Enlightenment project became a collaborative enterprise where methods had to be invented in order to answer the questions then being asked, and this required the imaginative insight of both the thinker and the maker. And the legacy of this time meant that theory held sway and shaped the arc of practice.

The critical vision advanced by the philosophers of the 17th and 18th centuries touched almost all forms of human understanding. Radical dichotomies wrestled the mind and body apart and debates saw experience come to overshadow authority. These were elegantly



Denis Diderot (1713–1784) and Jean Le Rond d’Alembert. Entries from *Encyclopedia, or a Systematic Dictionary of Science, Arts, and the Trades*. Surgery (Chirurgie). Avery Architectural and Fine Arts Library, Columbia University in the City of New York. Courtesy of Columbia University.

Speculative and practical aspects of an art . . . it is evident that every art has its speculative and its practical aspect: the former consists in knowing the principles of an art, without their being applied, the latter in their habitual and unthinking application. (Diderot & d’Alembert, 1965, p. 713, emphasis in the original)

The question of “how” nature is designed and “who” is responsible has occupied the best philosophical, scientific, and artistic minds for a long time. Presenting his aesthetic and moral convictions in the 16th century, Vasari, for instance, was unequivocal in his explanation of the creative process. In the preface to *Lives of the Artists* (1993), his reality-based Renaissance documentary, Vasari describes artistic thought as an act of divine providence whereby artists had “nature for their guide, the purest intellects for their teachers, and the world as their beautiful model” (p. 9). The images artists created mirrored this world of godly design and gave full perspective to visual truth and idealized form. The approach to teaching revered the artist as the genius to emulate. By the next century, however, the task of imagining what surrounded us could not be adequately explained by theology, but by formalisms of encyclopedic scope.

As Diderot and d’Alembert (1965) show in the allegory at the beginning of the volume on surgery, to study the workings of nature and humans required the design of tools and techniques that helped to construct new systems of knowledge.

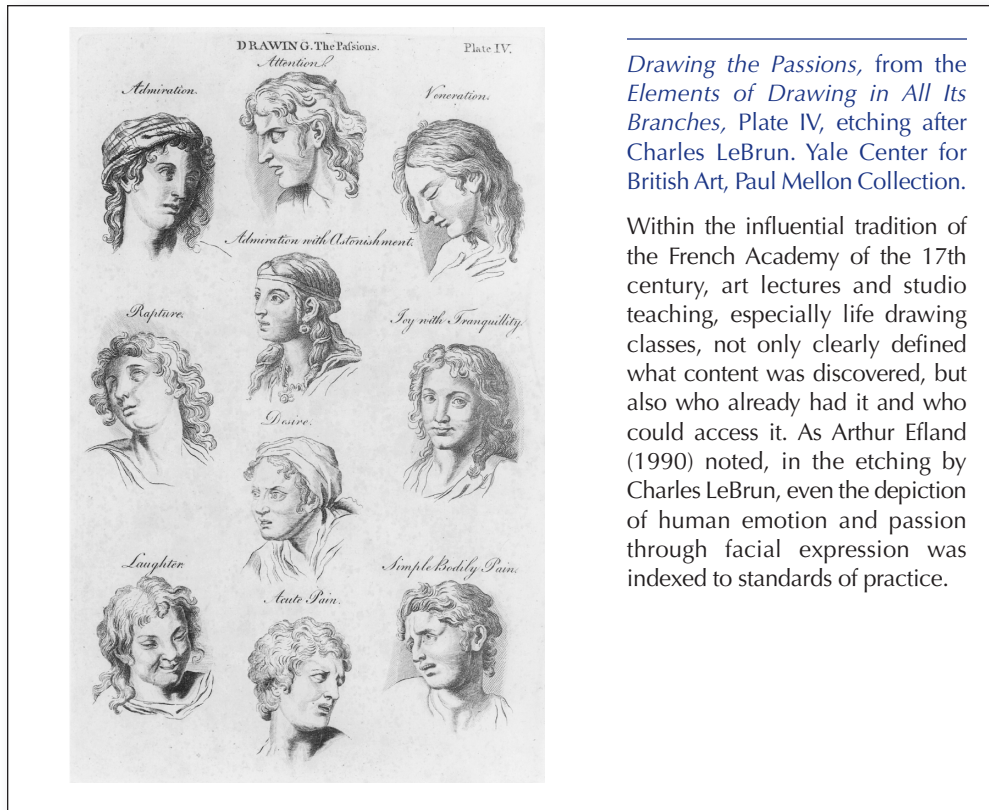
argued battles where skepticism challenged certainty as the basis for reasoning. The sense of doubt about truth and reality introduced by René Descartes was one of the most important insights to emerge at the time. The strategy of examining how something might be false, rather than trying to confirm it to be true, became a key tenet of both scientific inquiry and critical theorizing. And the implications were profound. The universe was within reach and truth could be found through the use of rational processes and empirical methods.² Not only was the natural world seen to be rule-governed, predictable, and able to be controlled, but also so were humans. And the same could be said for art, which was governed by its own rules. The template that described what it was to be human was drawn with mechanical precision, but the explanatory power of what it was like to feel, think, and act eluded complete capture.

The patterns of practice that emerged during the Enlightenment saw the scientist and the artist share a common purpose in wanting to understand how the world works. The scientist of the day saw an ordered universe rendered in fine representational detail of points, planes, and perspective. By using an approach to observing and inquiring that was familiar to others, scientists were able to build communities of like-minded practitioners. The artist, on the other hand, was not so comfortable seeing the world through the crosshairs of the new age. For many artists, the human condition could not be partitioned into life slices of reality neatly seen through a lens. Yet from this uncertainty came intense personal visions that did indeed help us understand the life and mind of the times.

Mindful Inquiry in Art and Science

New methods of inquiry meant that conceptual systems were best seen in dichotomous terms: Reality existed within a split world of objective and subjective states—between mind and body, idea and image, theory and practice. So by the time the research agenda of the Enlightenment was fully enacted, the way knowledge could be conceived, perceived, and visualized gave rise to a new religion of rationality. Artists and scientists sought to better understand nature and the place of humanity in it. In many instances, insight came from the individual who could create knowledge in many forms, and this gave the artist status and authority within the social order. The sophisticated new visual practices and image making technologies meant that art, like science, expanded its disciplinary scope as new forms of production, exhibition, and interpretation emerged.

The changing mindset of the European Enlightenment gave rise to different roles for the artist, especially in relation to technological advances and the institutionalization of knowledge. In this era of progress where individual liberty was constitutionally proclaimed, new social responsibilities and opportunities for art teaching arose. With access to education seen as a right for all citizens, at least in theory, this gave new importance to the arts as well as the sciences as agencies for human understanding. Patterns of art teaching continued to be built on the model of the academy. Efland (1990) describes this in its original conception as a setting “where knowledge of the theory and philosophy of artistic practice, based on the search for universal knowledge of the science of art, could be developed and shared by teachers and students working in concert” (p. 29). Formalized instruction in canonical art content meant that art knowledge was codified, and although it was based on nature, it was sifted through the theories of master teachers.



Drawing the Passions, from the Elements of Drawing in All Its Branches, Plate IV, etching after Charles LeBrun. Yale Center for British Art, Paul Mellon Collection.

Within the influential tradition of the French Academy of the 17th century, art lectures and studio teaching, especially life drawing classes, not only clearly defined what content was discovered, but also who already had it and who could access it. As Arthur Efland (1990) noted, in the etching by Charles LeBrun, even the depiction of human emotion and passion through facial expression was indexed to standards of practice.

The onset of the machine age saw the academy become more of a service agency for the new manufacturing industries where drawing became aligned with design skill. Art techniques, therefore, were much like writing and could be taught to everyone as a life skill and not seen as merely a cultural pursuit. This vocationalism saw artistic practice broaden considerably to embrace new roles such as the artist-as-technologist, analyst, illustrator, communicator, and researcher. As a visual recorder, the artist used new techniques such as engraving, aquatint, and printing to document and order the wonders of new discoveries as well as depictions of antiquities and mythic histories. These detailed dioramas described a way of thinking and helped others get a sense of the inductive world of newly classified things. In discussing the extraordinarily detailed etchings of Giambattista Piranesi, Barbara Stafford (1996) explains that

he [Piranesi] trained the observer, as he trained himself, in the fine art of probability, that skill in estimating the unknown by knowledgeably judging a maze of seemingly isolated and dispersed objects. The architect-etcher began by anatomizing, or visually separating, parts, and ended by organically synthesizing what he dismembered into a heroic span of views. (pp. 32–33)

Stafford (1996) makes similar connections in the way that artistic practice mirrored the mindful activity of these times. For instance, the study of anatomy saw the artist-as-analyst at work in much the same way as the rational philosopher where “dissection interrogated the inert body by violently laying it bare—much like the deductive dismembering of a coherent thought by a syllogism” (pp. 36–37). So art was a visual tool for reasoning. And as the range of artistic practice expanded, the relationship among the art object, artist, and the viewer also changed. Those in control of cultural production promoted the social and educational function of art whereby viewing, collecting, and contemplating art enjoyed a new status. As Stafford explains, “eighteenth century technology encouraged the privatization of pleasurable beholding” (p. 24). This belief in the cultural capital of art from the past held by the privileged class differed from the practices of the journeyman artisan who satisfied local utilitarian needs. As a result, the distinction between art as a scholarly study, and art as practical pursuit, widened.

The habits of mind that emerged during the Enlightenment became a distinctive icon of the times and radically changed the way we saw our place in the grand schema of things. The *procedural* mind became habit-forming yet constrained by the unerring belief in a rule-governed world. The *probing* mind, on the other hand, was sharpened by intellect and intuition and expanded the idea of what inquiry was all about. The *provincial* mind traveled and trekked around the globe but was mostly blind to the perspective of others. And while the *pious* mind sought refuge in the safe haven of moral certitude, its zealous cousin, the *polemical* mind, often confused argument with blind faith. Yet it was this diversity of dispositions that quickened the onset toward modernism. As a research project, however, the promise of the Enlightenment and the pursuit of universal truth based on methods of logical reasoning proved inadequate to the task. What some saw as impressive human progress, others mulled over as a loss of heart and soul.

PROMISE OF PROGRESS

By the 19th century, a legacy of cultural practices, institutional procedures, and individual passions created a confusing world of ideas, images, and ideologies. The excitement of modernity and the ambitious European pursuit of progress was muted by social upheaval and dispossession experienced by non-Western cultures on an unprecedented scale. The triumph of science was tempered by moral campaigns characterized by denial rather than debate. New alliances continued to be forged between scientific and artistic inquiry, yet these later became unstable when they became institutionalized educational practices. The evolving modern age of ideas therefore can be seen as a time of competing canons.³ Even within the visual arts, pivotal distinctions were apparent, as art was variously seen as an individual gift, a cultural collectible, a social nicety, a vocation, or a profession in need of a home.

Identity Crisis in Art and Culture

An insight into the uncertainty facing artists and social commentators in the mid-19th century can be discerned from the popular commentary of the time, as well as from textbook

descriptions that rationalized topical issues for general education. In the eastern states of America, small-scale newspapers such as *The Independent* and *The Christian Union* captured the dilemmas faced as modernism challenged beliefs previously seen to be immutable. Reflecting this breadth of discussion were educational texts of the time. *Paley's Moral and Political Philosophy* (Paley, 1838), for instance, was a standard theological text used in schools and colleges for classes in philosophy and civil debates where the authority of the Scriptures was used as the basis on which to guide reasoning. Of interest is the way philosophy was defined as a science based on logical reasoning, yet the principles of ethical human behavior were based on religious doctrines and integrated into laws of the land as systems guiding moral and political action.⁴

Debates about morality, society, education, and the impact on foundational knowledge as explained by science and represented by art were as deep as they were divisive. In discussing the moral nature of belief, *The Independent*⁵ newspaper (1875) editorializes that logical reasoning and skeptical inquiry were incapable of adequately defining the basis of truth. Argument was seen to have its place, but the resolution of doubts and debates could not be found in logical critiques, only in an appeal to the conscience. The Church took a leading role in exploring and explaining phenomena, whether scientific, philosophical, or spiritual, by claiming the moral high ground. The editor of *The Independent*, Henry C. Bowen, put it this way:

Speculatively, religion is in no worse plight than the most assured of the sciences; and if it prove itself powerful to cast out devils and reform the devilish it will need no other defense. And this it can never do by argument; but only by direct appeal to the moral nature, which is always on God's side. (December 30, 1875, p. 15)

This moral stance posed a dilemma because religion was both conservative in its obvious invocation of the past but also liberal in the necessity to deal with the realities of the new industrial age. But for some, it was not a problem at all. The Reverend Julius H. Ward of Massachusetts⁶ found fault, not with liberalism's aim of seeking truth, but the method he described as "free inquiry," which ignores the creeds and doctrines of the church and as such discounts the past as a way to inform the present and the future. The use of a moral imperative to support arguments about the role of the arts in coming to understand everyday life was, of course, a central theme of the times and loudly proclaimed by many. For instance, the impact of the views of leading advocates such as the Englishman John Ruskin is easy to underestimate. His particular passion and rhetoric traveled far, and while his advocacy for the moral function of art slowly ebbed under the iron weight of mechanization, his scrupulous faith in nature never did.⁷

Broader perspectives ushered in by an inquisitive middle class soon eclipsed the austerity and provincialism of Victorian views toward art. This was brought into focus in part by exhibitions of collections and other curiosities and the popularity of public lectures. The widespread availability of books, newspapers, and magazines also brought to prominence images to match the ideas and did much to unite and divide popular opinion on all sorts of topics. The role of artists as recorders of everyday events, champions of moral authority, or those pursuing artistic ends just for the sake of it, were all placed at the center of educational and cultural debates.

Although the model of the art academy popularized in Europe was only adapted in a few places in the young American republic, later industrialization and cultural seepage did prompt the development of formalized instruction. As Howard Singerman (1999) points out, the fine arts entered higher education in the form of art history and often in association with disciplines such as anthropology and classical studies.⁸ Even when drawing was introduced in elementary schools, it was mostly for instrumental reasons because it was hoped that better drawing skills would improve the design of manufactured goods.⁹ As the concept of higher education became more readily established within American society, the role of art became less clear amid the competing interests. Whether it was the ideals of a broad knowledge base provided by liberal arts colleges, the more technical and professional scope of state institutions, or the fundamental knowledge sought by the research-oriented private universities, artists and art educators could not quite decide what they should be doing.

The prevailing attitude around the mid- to late 19th century that had a tenacious hold, and generally still does, proclaims that artists cannot be made; therefore all that can be taught is method or other professional pursuits. As Nicholas Pevsner (1973) points out, this meant standardizing theory and practice in the academies. In other settings, the structure of formalized art history made it relatively easy to graft the study of art onto existing academic disciplines that focused on objects and cultures. Another view was to bring the art studio onto the campus based on the belief that art would broaden its relevance beyond the usual roles as a solitary pursuit, or a social nicety, or as a form of technical training.

At issue here is the question of how visual arts contributed to the cultural production of knowledge. The provisional status of knowledge was precisely what was worrying theorists at the time, whether in theology, science, technology, or art, and this meant that no discipline could ignore the relentless challenge to the most basic of assumptions. Daniel Dennett (1995) gives one such example with his reminder of the value of the systematic and rigorous search for alternative hypotheses, the classic being Charles Darwin. At the time of Darwin's musings over his collections, it was believed that only God could be responsible for such impressive design as that found in nature. But, as Dennett notes, by looking at the same data set, Darwin came up with a highly plausible, but distinctly different explanation: natural selection. Darwin's insight confirmed the ideas of like-minded scientific observers and the impact was dramatic. Cultural theorists took claim over this model of development whereby individual growth was believed to "recapitulate" that of the species, yet this gave rise to spurious views when linked to developmental profiles of races.¹⁰ Education also gained a sequential model of human development so that by the end of the 19th century, Herbert Spencer could state that educating children should proceed from the "simple to the complex . . . from the indefinite to the definite . . . from the particular to the general . . . from the concrete to the abstract . . . from the empirical to the rational" (cited in Egan, 1999, p. 86).¹¹

19th Century Artworld

Although the presence of influential advocates such as John Ruskin traveled far, the deft hand of authority was felt in many ways. The ubiquitous voice of Ruskin, for instance, was also used as a warranty to convince provincial minds of the importance of innovative cultural practices. Arthur Danto (2001a) describes how the Pre-Raphaelite Brotherhood, a small

group of American artists and supporting critics active around the 1860s, made expert use of Ruskin's ideology of moral and visual truth as a marketing strategy to advance its position as a group of innovative artists of the time. The group's actions set in place many of the practices that would later come to characterize the artworld. According to Danto, the Victorian artworld "more or less invented the idea of the hot artist, the art movement, the breakthrough, the press release, the manifesto, the buzz of sensational openings, and the idea that art must be set upon a new path" (p. xxii).

The idea of the art connoisseur as an artistic dilettante was not new, but the idea that an art critic not only had a review role but also could help direct trends was a modernist conception that endured well into the next century. The art reviews published in *The Nation* (Meyer, 2001), a weekly magazine that began publication in 1865 and is still being printed, maps how art struggled to define itself amid the onslaught of new forms and styles that appeared in the latter part of the 19th century. Once the yoke of the reactionary mindset was revoked, the task of addressing issues of value made it hard to assess what art was good and not so good. Not to be able to see beyond rather simplistic dichotomies persisted for a long time so that a critic, when confronting an unusual image or object, could only ever see it for its lack of skill rather than consider it, perhaps, in terms of innovation. A case in point is the way Rodin confounded the Paris critics in 1898 with the monumental simplicity of his sculpture of Balzac, which, for many, could only be seen for what it was not: a skillfully modeled representation.

Some critics, however, really did take a close look. In a review of a large exhibition of the French Impressionists shown in London in 1905, the critic "N. N.," which was a *nom de plume* for Elizabeth Robins Pennell, gave a sense of how the art of a new age might be considered. Seeing the work on view with the benefit of brief historical distance, she was able to reassess the innovative contribution of this loose group of artists in a way few other critics of the time could. In particular, she sought to dispel the myth that the Impressionists were incompetent artists. Elizabeth Pennell pointed out other, larger issues, and it is worth quoting her at length:

But the most defiant Impressionists, in their eagerness to see Nature for themselves, to avoid known types, to express their own personality—in their determination never to compose a picture, never to arrange Nature—rebelled against everything that had gone before, in theory at least. . . . To see Nature for themselves meant inevitably to record it for themselves in their own way, and the methods they evolved in the attempt to put upon canvas effects no one had before attempted, bewildered the critics, who could not look below the method, and the then starting results, to underlying principles. That was why Impressionism was denounced as a short cut, a labor-saving device for the artist who was too indolent or conceited to go through the usual training and apprenticeship as student. That such a reproach should have been made against it seems incredible, now that the excitement has calmed down. In an exhibition like the present, nothing strikes one so much as the fact that knowledge, experience, and technical skill are the solid foundation for the most daring experiments of the men who wanted to use their eyes for themselves, and to say what they had to say in their own fashion. (cited in Meyer, 2001, p. 82)

The knowledge, experience, and skill that Elizabeth Pennell identified could be an apt description of the innovative attributes of scientists at the time. In an article in *The New York Times* in 1999, Richard Panek nicely captures the mood when art and science seemed to be indistinguishable in their empirical explorations using the senses. Yet their methods differed, and “to the scientist fell the purely objective, the masses and motions that led to universal laws; to the artist, the purely subjective, the individual responses that spoke to universal truths” (p. 1). By the late 19th century, it seemed the inevitable deterministic conclusion was in sight: artists were focusing on irreducible elements such as Seurat’s pixels of paint, Mondrian’s primary elements, and a little later, Malevich’s squares and Kandinsky’s lines, points, and planes. In science, the microscope and telescope were tracking and cracking basic structures, and later, Ernest Rutherford’s splitting of the atom took us further than ever into the new world of pure form. This followed a pattern where “for hundreds of years, scientists had been investigating the natural world and artists interpreting those results on a human scale” (Panek, 1999, p. 39).

But knowledge was making uncertain progress. Physicists were trying to construct theories that would correspond to the increasingly uncertain observations of the natural world. This was a confusing world where

a wave could be a particle, mass was energy and space was time. Music lost its melody, literature its linearity, painting—once again providing the most revealing illustration—its perspective. . . . When scientists abandoned sense evidence for the pure ether of theory, they left the rest of us behind. (Panek, 1999, p. 39)

But artists didn’t give up on sensory experience and had a few things to teach the scientists. Many modernist painters viewed their surroundings in ways that so shocked common sense that the world would never be seen the same way again. The images they created upset the seemingly ordered universe of people, places, and events as they tested their visual intuitions against the logic of what could be observed. When Cezanne moved to capture a scene from multiple views, he anticipated what the physicists were scratching their heads about at the time: maybe space and time were not so inviolate after all. Cezanne saw that we lived in a dynamic world where space, time, and light could never be isolated or rendered motionless. He anticipated a world where light bends around forms, time varies with position, and space is neither flat nor far. Cezanne’s still life paintings are anything but still. Contrary to later views, it wasn’t a stable Euclidean structure of cylinders, spheres, and cones that he saw—rather it was a dynamic world of changing relationships. Scientists later realized that a combination of simple and complex solutions was necessary to understand the uncertain relationships surrounding human and physical structures and systems.¹²

FRACTURED REALITIES

The indecision about inquiry in the 19th century that shook faith in the old and saw uncertainty in the new was eclipsed by an aggressive confidence that sharpened the conceptual, creative, and cultural divides in the 20th century. Embedded in this was the unresolved role of the artist as a professional and an academic along with the uneasy relationship between

the artworld of commercial interests and the academic world of educational needs. Even at the beginning of the 20th century, those teaching in colleges and art schools were barely beginning to apply the insight about art expressed so eloquently by Ralph Waldo Emerson as early as 1841.

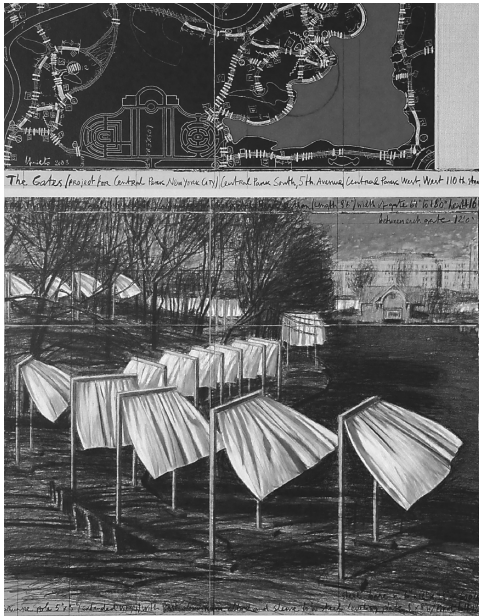
Because the soul is progressive, it never quite repeats itself, but in every act attempts the production of a new and fairer whole. . . . Thus in our fine arts, not imitation but creation is the aim. . . . The artist must employ the symbols in use in his day and nation to convey his enlarged sense to his fellow-men. Art is the need to create. . . . Art should exhilarate, and throw down the walls of circumstance on every side, awakening in the beholder the same sense of universal relation and power which the work evinced in the artist. (cited in Logan, 1955, p. 43)

An ongoing quest that shaped the way visual arts was formed into institutional regimes was the professionalization of the field during the 19th century. As had been the pattern observed in the past, the consolidation of views around agreed visions meant a nod in the direction of standardization of theory and practice. The early efforts at finding a space within higher education often meant visual arts was variously seen as a place to practice art history, a hamlet in the humanities, a technical vocation, or a cultural badge that carried with it moral authority. Even as a curriculum subject in schools, art education could never quite rid itself of its instrumental appeal as drawing became industrialized, pictures were believed to move morals, and art was an activity for the hand and not the mind. It was not until the innocence of vision found among the art of children and non-Western cultures was aligned with the need for artists to see the world anew that expression challenged impression as a favored educational philosophy.

Artists Are Found, Not Made

Debates among art factions in the early decades of the 20th century could not quite resolve how best to define art learning. For the art historians, art practice meant learning about art, while artists of course needed to make art. Lurking just below the surface, however, was the imponderable problem that remains in the minds of many: artists are *found*, not *made*. Consequently, any attempt to institutionalize art learning could at best offer technical and professional training, or offer a liberal sprinkling of art historical awareness, or open pathways seen as less creative such as art teaching. For professional organizations such as the College Art Association (CAA),¹⁵ the choice was clear: the educational future of visual arts study at the university level lay in the capacity to adapt art content to the conventions of scholarly practice. The survey course in art history became the signature imprint of what it was to study art. Training those who made art, on the other hand, was best left to art schools and liberal arts colleges.

Those who sought a more active role for artists within the burgeoning field of higher education believed they had the necessary expertise to cover content that bridged studio experience, art historical themes, and philosophical issues. This, after all, was what contemporary artists seriously thought about. It seemed reasonable to surround the artist-teacher with aspiring students who would benefit from serious exchanges on topics about



Christo. *The Gates Project for Central Park, New York City*. (2003). Collage. In two parts: 30.5 × 77.5 and 66.7 × 77.5 cm. Pencil, fabric, charcoal, wax crayon, pastel, enamel paint, hand drawn map, fabric sample, and tape. Photograph by Wolfgang Volz. © Christo, 2003. Reproduced courtesy of the artist. <http://www.christojeanneclaude.net>

In words that echo Ralph Waldo Emerson, who in 1841 said that “the artist must employ the symbols in use in his day and nation to convey his enlarged sense to his fellowmen. . . . Art should exhilarate and throw down the walls of circumstance on every side” (cited in Logan, 1955, p. 43), Christo and Jeanne-Claude (2000) offer their response in talking about their artworks:

The temporary quality of the projects is an AESTHETIC DECISION. In order

to endow the works of art with the feeling of urgency to be seen, and the tenderness brought by the fact that it will not last. Those feelings are usually reserved for other temporary things such as childhood and our own life, those are valued because we KNOW they will not last. These feelings of love and tenderness Christo and Jeanne-Claude want to offer to their works, as an added value, (dimension) as a new aesthetic quality. (p. 24)

There is an inherently educational experience located within the art practice of Christo and Jeanne-Claude. Like their art, personal meaning is negotiated through a process that is partly charged by immediate experience, but all the while built around ongoing growth and change (Sullivan & Hochtritt, 2001).

art and life. As such, curriculum content could not be specified in any formal way, and techniques could not be introduced as prerequisites for creativity: Teaching became conversation, and learning focused on individual aesthetic problem solving. This version of the expert-novice model relied on the image of the artist as a social outsider engaged in an intense pursuit of a personal vision. Consequently, the criteria for newness were not seen in relation to past or existing image banks or stylistic brands but by a measure of radical difference. The drive toward the illusion of “things never seen” reached mythical status that kept the social constructedness of art practice at bay, at least until the theoretical onslaught of postmodernism.

By the mid-20th century, the image of the artist-teacher was being battered on several fronts and yet the place of visual arts in higher education continued to expand, even if the studio spaces remained far removed from mainstream academic life. In the wake of regular reviews of the cultural and educational role of visual arts, the CAA saw the necessity to

control the professional profile of artists amid the rapid expansion of campus programs. The image was built on the basis that the artist was indeed an autonomous professional who possessed cultural capital that could be traded in educational settings. As Mick Wilson (2009) pointed out in his survey of the emergence of research as a central responsibility within the university tradition, part of the early role was to use research and the creation of new knowledge to consolidate the identity of disciplines. However, an unstated purpose was the more political task of conserving and reproducing fields of inquiry. Wilson explained as follows:

Educators, especially educators in self-proclaimed creative practices, are attracted to a vision of themselves as agents of dynamic change and critical renewal, as bearers of cultural values which are variously above the exchange system of the market place or connected to some humanizing propensity. However, it is important to register the essentially conservative force of institutionalized education: education is a key apparatus on social reproduction. (p. 64)

The CAA also monitored peer practices so as to maintain accreditation status and political patronage. Part of the stipulation governed the teaching qualifications of university bound artist-teachers whereby the Master of Fine Arts (MFA) was deemed the entry credential into university teaching, while any form of educational degree was a distinct liability. Even by the latter decades of the 20th century, it was still believed that artists were “found” in BA and MFA programs, but certainly not among the general art education crowd, because the role of teaching was irrelevant. To assume that teaching might be a requirement for viable institutional programs in visual arts was an anathema for many who saw the studio critique and the art of writing an artist statement as about as formal as instruction could get.¹⁴ In terms of inquiry, the student in this setting became a searcher seeking artistic identity, rather than, say, a researcher. Other theoretical, cultural, and political changes, however, later challenged these practices surrounding institutionalized art education.

Art Meanings Are Made, Not Found

Several metaphors characterize the patterns of change that occurred as visual arts responded to modernist moves and later to postmodern perspectives. These images chart the elusive impact of theory as new principles and practices were explored and discipline links were first secured and then separated. Three dominant themes related to conceptions of seeing, discourse about context, and notions of structure map how visual arts expanded as a profession, as a site for cultural production, and as a discipline.

From Seeing to Knowing

Seeing, of course, has always been central to the sensory-based traditions of visual arts and arguments about educational purpose. For instance, changing notions about seeing moves from ideas about the *innocent eye* to the *trained eye* to the *knowing eye*. This transition might be described as a move from a time when vision involved seeing things in new and fresh ways, to a period where the process of visualization could be reduced to its formal elements, and on to the present where it is necessary to know how vision is influenced by cultural

conventions. A detailed account of visual knowing is given in Chapter 4; however, it is useful here to consider changing conceptions of vision as a principal function of visual arts.

The notion that the eye was capable of capturing innocent visions that could be expressed in artistic abstractions took many versions. For some, childhood was a site of profound insight and symbolism as might be seen in the art of Marc Chagall, or a universal language as described by Wassily Kandinsky, or as an ideographic form as explored by Paul Klee, or later as a liberating creative process as modeled by Jean Dubuffet.¹⁵ Many of these conceptions, however, were as much a product of social attitudes of the time as they were believed to be radical ways of seeing. For instance, early interest in the naïve simplicity and exuberant essence of child art was linked to the expressive power of non-Western images and objects. Yet this convenient coupling merely satisfied the view that child art, like that produced by *primitive* cultures, was shaped by a compulsive urge to create in ways that were as innocent as they were imaginative. This version of ethnocentrism took its dubious moral warrant from recapitulationist theory that saw individual growth and development mirror that of the overall progress of the species. What this means is that the lifecycle of the individual follows the same pattern as humankind. As such, the innocence of childhood matched the simplicity of non-Western cultures and both were presumed to occupy the low end of a stage-like model of development and progress. And just as a child would grow up, *primitive* cultures would also eventually develop into full nationhood, which, at the time, was modeled on the West. The impact of such views on artistic mythology and educational practice cannot be underestimated and was felt well into the mid-20th century.¹⁶

The pervasive interest in all things visual that was part of historical, empirical, and artistic inquiry saw the emergence of the artist as a cultural lamplighter. In his text, *The Mirror and the Lamp*, Abrams (1971) describes the modernist artist as an innovative change agent whose imaginative practice illuminates so others can see things differently. This model of the visual artist was used to claim a new professional status that linked modern art to notions of innovation and progress and what Peter Gay described as the “lure of heresy and the crucial task of subjectivity” (2008, p. 501). Whereas the characteristic stance of those interested in the historical traditions of the fine arts involved looking back, those creating art amid the heady days of modernism saw things differently, often to the shock of others. Insights into the physiology of vision and the psychology of perception meant that the science of sight and the creativity of the eye were related, as were the practices of the scientist and the artist. Therefore, by aligning the process of artistic inquiry with the reductive methods of science, elements of the visual arts could be identified, structured, and formalized. This is clearly seen in the title of influential texts that described how *composition* (Dow, 1998) and *design and form* (Itten, 1964) came to constitute a *language of vision* (Kepes, 1944).

The linking of fine arts with art historical inquiry, and visual arts with studio practices, made it easier to maintain distinctions among institutional programs in universities, colleges, and art schools. Formalist aesthetics took hold in classrooms and studios and gave new impetus to theory and practice. Conceptualizing art as a language of forms meant that content could be defined and curriculum designed. What became internalized was a framework of art knowledge based on a formalist language of art that everyone could learn. Aesthetic principles were explicit. As professionals steeped in studio experience, the artist-teacher, working in studio classrooms, could engage students in visual explorations and problem solving. Teaching principles were also clear. The dual demands of formalist

inquiry and expressionist insight could be resolved in the studio classroom whereby the structure and language of form served as a vehicle for individual discovery. In a paradoxical way, it was asserted that principles and formalisms could be used to give voice to individual vision, as captured in Paul Klee's image of the artist as a natural creator of new forms in his simile of the artist as a tree.¹⁷

Paul Klee on Modern Art

May I use a simile, the simile of the tree? The artist has studied this world of variety and has, we may suppose, unobtrusively found his way in it. His sense of direction has brought order into the passing stream of image and experience. This sense of direction in nature and life, this branching and spreading array, I shall compare with the root of the tree.

From the root the sap flows to the artist, flows through him, flows to his eye.

Thus he stands as the trunk of the tree.

Battered and stirred by the strength of the flow, he moulds his vision into his work.

As, in full view of the world, the crown of the tree unfolds and spreads in time and space, so with his work.

Nobody would affirm that the tree grows its crown in the image of its root. Between above and below can be no mirrored reflection. It is obvious that different functions expanding in different elements must produce vital divergences.

But it is just the artist who at times is denied those departures from nature which his art demands. He has even been charged with incompetence and deliberate distortion.

And yet, standing at his appointed place, the trunk of the tree, he does nothing other than gather and pass on what comes to him from the depths. He neither serves or rules—he transmits.

His position is humble. And the beauty at the crown is not his own. He is merely a channel. . . . The creation of a work of art—the growth of the crown of the tree—must of necessity, as a result of entering into the specific dimensions of pictorial art, be accompanied by distortion of the natural form. For, therein is nature reborn. (Klee, 1969, pp. 13–19)

Vision and Language

The transition from a modernist view of visual *seeing* to a postmodernist idea of visual *knowing* that moved from notions of the innocent eye, to the interpretive eye, to the knowing eye, was confirmed by two different sources. Insights from literary discourse and cultural inquiry gave a more comprehensive understanding of how visual images were interpreted. Modernist interpretive practices tended to find meaning to be contained within the artwork, while for postmodernists the artist or author had no particular privilege over how an artwork, or text, could be read, and broader contextual factors were brought into the picture. While language theories were influential in framing how interpretations were made, in the early years of the 21st century, evidence from neuroscience and cognitive science is giving a fuller picture of the biology of vision, and this is raising as many dilemmas as it is new ways to consider how we make sense of images.

Around the middle of the 20th century in literary criticism and art criticism, it was argued that it was a fallacy to judge works of art according to the meaning intended by the artists, be they poets or painters. Described by New Critics¹⁸ and debated as the “intentional fallacy” (Wimsett & Beardsley, 1971), the views suggested that meaning resides within the form and structure of an artwork and can be revealed if the reader or viewer has the knowledge and perceptive skill to find it. Neither the artist’s intention or the reader and viewer’s response were relevant, nor were any contextual or cultural factors. From a close viewing or reading, knowledgeable critics could judge the merit of an artwork with an authoritative response: *It works!* But this instance of moving the interpretive focus away from the artist to the viewer remained mired amid privileged readings. It wasn’t until the formalist legacy was nudged aside that the full ensemble of meaning-making contexts came into full view.

By the latter half of the 20th century, the process of making and understanding visual images had taken a linguistic turn. Influenced by postmodern theories of interpretation, artworks were seen as texts whose meaning was shaped in part by their contexts and genres, as well as the prior knowledge the viewer brought to the artistic encounter. The principle at play is that meaning is negotiated as interpretations are formed. In other words, meanings are made, not found. To explain how we make judicious use of what we know to help make sense of what we see, literary and cultural theorists drew attention to the varying ways that meanings can be recognized in visual and verbal texts and the references and contexts that surround them. This reveals the interactive nature of the interpretive process.

This dynamic view of interpretation is based on the assumption that context influences the way meanings are made and these change according to the perspectives, connections, and settings surrounding the interpretation of artworks. MacLachlan and Reid (1994) invoke the popular metaphor of *framing* to explain this process. The concept relies on the assumption that the viewer or reader consistently infers meaning by drawing on knowledge and experience to fill the gaps of missing information. As a process of visualization, framing is similar to the way perceptual schemata and cognitive scripts help translate what we see into what we come to know. These are conceptual structures that help link and retrieve information so as to place it in contexts that make sense. Without this connection to other images and texts, the forms we encounter would lack identity, reference, and meaning. These interactive processes are not only grounded in culture and context but also in cognition, as is seen in the art of Huma Mulji and how it is viewed.

Huma Mulji, an artist who describes the “irony of living 300 years in the past and 30 years in the future concurrently” (2009, n.p.) characterizes how interpretations of culture, context, and cognition are held in creative tension. Drawing on the geography of visual culture that is part of her South Asian heritage, she opens up the politics of place with wry humor in her sculpture, *Arabian Delight*. The questions tumble out as the suitcase reveals the sly grin of an occupant who seems quite pleased to go along for the ride. But borderless traffic that transports images and icons as colonial markers also compresses cultures into preformed shapes so that what is ungainly, mobile, and distinctive has the stuffing knocked out of it. This is akin to emptying thoughts of their meaning by assuming that knowledge can only be imported from somewhere else.

Quite a different framing of Mulji's work is evident in the account of *Arabian Delight* by Razia Sadik, who draws on local knowledge and an insider's cultural perspective to discuss the politics of interpretation:

Although the suitcase and the camel suggest transience and transportation, Mulji's work is preoccupied at multiple levels with the role of these two in the creation of meaning. The mutability of meanings as they change through interpretations from varying audiences is considered by her to be a learning opportunity for an artist. Her practice in this sense becomes an evolving and flexible narrative. For instance, the idea that aesthetic judgement is lost in translation, as in misconceptions about how things look and whether or not they are well made, vary in different cultural locales. Mulji is specifically interested in these misaligned angles of viewing the same thing. The unfinished quality of the work, which she feels is typical of certain commercial manufacture and production economies, is strongly resonant also of the fragility and inconstancy of the paradoxes that exist in her local culture. The highly visible and absurd stitching of the camel skin is therefore important to her as it represents holding together the precarious edges of these inconsistencies.

This piece, which was made for the Art Dubai fair in 2008, was removed from that exhibit due to official disapproval of its content. While Mulji had intended the piece to create a dialogue about the relations between the United Arab Emirates and Pakistan, the removal ostensibly prevented this, as certain audiences for which the piece was intended were not able to see it. However the publicity that covered this unintended politicization of the work performed the same function, albeit in a different way. Although this incident sacrificed the experience of the presence of this sculpture, it allowed for a displacement of the original meaning by its removal from the exhibit. (personal communication, April 6, 2009)

The Visual Brain

Today the framing of the interpretation of art is also influenced by a biological turn that has given new impetus to the significance that visualization plays in the way we understand the complexity of human and social communication processes. Neuropsychological researchers of visual cognition now reject the concept of isomorphism, which maintains that images are perceived holistically as a *gestalt*. This principle influenced the way vision was seen as a process of perceptual organization, which for art teachers meant there were elements and principles that made up the language of vision and that the whole was more than the sum of the parts. However, it became obvious that it is the brain that sees, not the eyes. By the middle of the 20th century, those who studied connections among the senses, thoughts, and feelings realized that perception is a cognitive process of mindful meaning making.¹⁹ As Nelson Goodman (1978) reminds us, "conception without perception is merely *empty*, perception without conception is *blind*" (p. 6, emphasis in the original). Therefore, the world we see is given meaning by the world we know.



Huma Mulji. *Arabian Delight*. (2008). 41.5 × 57 × 61 inches. Rexine suitcase, taxidermy camel, metal rods, cotton wool, and fabric. Reproduced courtesy of the artist. <http://www.humamulji.com>

Huma Mulji uses the packaged camel as a pun on the relationship between Pakistan and the Gulf Arab countries, which for three decades have represented to Pakistanis the prosperous “other” paradise where lives and livelihood can be made. However, couched within this gold studded dream is a hierarchy of power relations marred by an acculturation of South Asian identity by an Arab identity transported from the Gulf and superimposed into South Asia. “It is forced. It’s kind of twisted, it doesn’t fit. So all of these things I thought a camel would do perfectly, because it’s this banal thing which is exoticized, yet it’s also pure” (Mulji, 2009, n.p.). She deems the camel as the best metaphor for representing the incongruity inherent in the displacement of local culture and identity by a foreign one. The camel, which is historically common to both the cultures of the Middle East and South Asia, bears in this suitcase with it this absurd twist of fate the burden that both precedes and follows it. (Razia Sadik, personal communication, April 16, 2009)

Scientists, who John Brockman (1995) defines as “third-culture thinkers” (p. 18),²⁰ describe the dynamic way information is processed that cuts across discipline boundaries. In most of Brockman’s conversations, the scientists could well be talking about visual arts. For instance, the computer scientist Roger Schank said that information processing is about surprises and it is from the unexpected that we learn. When Marvin Minsky and Seymour Papert were looking for images to conceptualize their ideas about artificial intelligence in the 1960s, they realized that there was no single structure on which they could model their smart machine. Their “society-of-mind” theory made use of multiple structures and variable resources. As Minsky said, “maybe you can’t understand anything unless you understand it in several different ways, and that the search for the single truth—the pure,

best way to represent knowledge—is wrongheaded” (cited in Brockman, 1995, p. 163). According to Minsky, it takes several different ways to represent something in order to understand it to apply it. Using mathematical examples, Ian Stewart’s book, *Nature’s Numbers* (1995), discusses how mathematics goes beyond “rigid laws” to embrace “flexible flux” (p. 47). The implication is that knowing laws and formulas about how something might work is not enough. As Stewart would say, “fix and flux” coexist. When knowing is viewed this way it aligns with how the philosopher Maxine Greene (2003) described imagination. She talked of the imagination as the place where the possible can happen, a place of “resisting fixities, seeking the openings,” where “we relish incompleteness, because that signifies that something still lies ahead” (pp. 22–23).

By the end of the 20th century, our understanding of the mind and brain had been reimagined because we could see more clearly the relationships between mental and physical states. No longer was it believed that visual forms were perceived as symbols whose meaning was decoded in a serial process in the brain. The visualization process is apparently much less rule governed and more dynamic as networks of potential meanings are sourced. Seen by some cognitive scientists as more “connectionist” in structure, visual interpretations are produced from a dizzying array of parallel neural activity as meanings are made.²¹ What began as an early understanding of the seeing brain, which was a site where visual information was perceived and processed, has been replaced by a realization of the mindful activity of the knowing brain. Imaging technologies that allow neuroscientists to look at the brain when it is working on tasks are yielding a picture of the brain as a complex, integrated, self-organizing, and distributed system. As a result, even more complex models of how the brain constructs knowledge are opening up new domains of inquiry. For example, Semir Zeki’s brain research on “neuroesthetics” (1999, 2009) is revealing tantalizing new insights about the visual experience. Visual cognition is playing an increasingly important role in neuroscience, which raises new controversies and challenges for artists, art educators, and researchers, and these issues are explored more fully in Chapter 4. However, the mindful feature of visual processes is acknowledged, as Robert Solso (1994) explained:

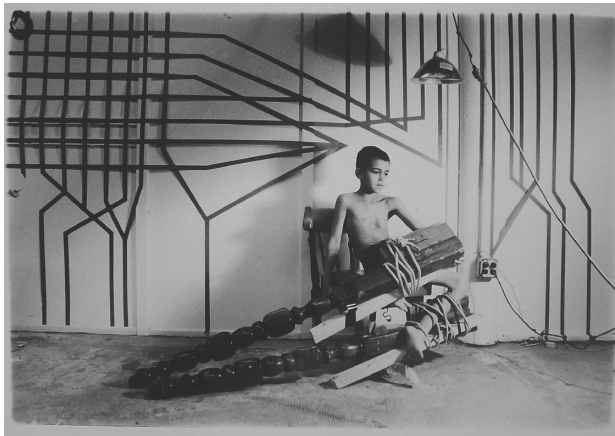
If our brain knows the external world—the world that exists outside of human cognition and imagination—through sensory experiences (among which vision is very important), then our impressions are funneled through the narrow band of electromagnetic energy to which the eye is sensitive . . . our cognitive life—the life that exists within the mind—is largely a composite of sensory experiences and the unique way those experiences are combined through the exchange of neurological signals by the brain. (p. 45)

Another example of a “composite of sensory experiences” can be found in the images of Tim Roda. The world that happens between the everyday existences we know as individuals and families and the space peopled by memories of all sorts is the reality that best describes the constructions that Roda photographs. Thoughtfully and intimately assembled as tableaux of remembered incidents rendered larger than life that the viewer cannot know, there are nonetheless enough provocative image bits to prompt enough connections to raise the discomfort level. Much in the way that what we know derives from what we see is a

mere sampling of what is around us, scanning a Tim Roda image and drawing inferences is a similar selective perceptual process of cognitive processing. As he explained, “the photographs capture moments of ambiguity that can be understood on several layers, both personal and universal. I strive to produce a sensation that makes people both familiar and uneasy about how incongruent our lives can be”²² (Roda, 2005).

Invented Realities

A similar distrust of the principle that contexts are static and meanings are found within a phenomenon and able to be retrieved by astute analysis is evident in cultural theory. How cultures are represented are constructions that rely as much on politics and poetics as they do on dispassionate descriptive accounts. The rationalist model of cultural inquiry, even when enlivened by the informed view of inside observers, is unable to maintain the myth of the insightful recorders who can see without themselves being seen. Instead, those who consider the field as a site for unequal encounters recognize “the centrality of the subjectivity of the researcher to the production and representation of ethnographic knowledge” (Pink, 2001, p. 19). A more inclusive goal is to give voice to who is being looked at and who is doing the looking and transform the participant “into a speaking subject, who sees as well as is seen, who evades, argues, probes back” (Clifford & Marcus, 1986, p. 14).



Tim Roda. *Untitled #167*. 16 × 23 inches. Black and white photograph. Reproduced courtesy of Greg Kucera Gallery. Artist is also represented by Art Agents, Hamburg; Angell Gallery, Toronto; Baer Ridgway Exhibitions, San Francisco.

I started using photography [because] it is the medium that best allows me to depict metaphors of family history that might find a resonance with the viewer. Although the final product is a photograph,

the work casually traverses aspects of installation, sculpture, photography, film and performance. A camera is used to record one moment in time that hovers between memories and constructed commentaries, yet is a documentation of “real time” events. . . . Every scene from this body of work begins as a theatrical and visual concept, which is then played out by my family. Although we are the immediate subjects, the work is filled with metaphorical reverberations of my own memories of childhood and family traditions. Hopefully, these metaphors are open-ended enough to the viewer to create personal associations with their own history. (Tim Roda, December 2005, retrieved March 22, 2009, from http://www.gregkucera.com/roda_statement.htm)

Conceptions of how inquiry needs to “speak back” are clearly evident in arguments presented by indigenous cultural theorists. Historically, those working with indigenous First Nations, Native Peoples, and Aboriginal cultures have been unable to free research from the specter of colonialism and imperialism. In asking the basic question, *whose research is it?* Indigenous cultural theorists have set in train a process of decolonizing Western research traditions in order to escape the gaze and to present an indigenous point of view. In doing so, the purpose is to take control of the survival of peoples, cultures, and languages. Linda Tuhiwai Smith (1999) explained as follows:

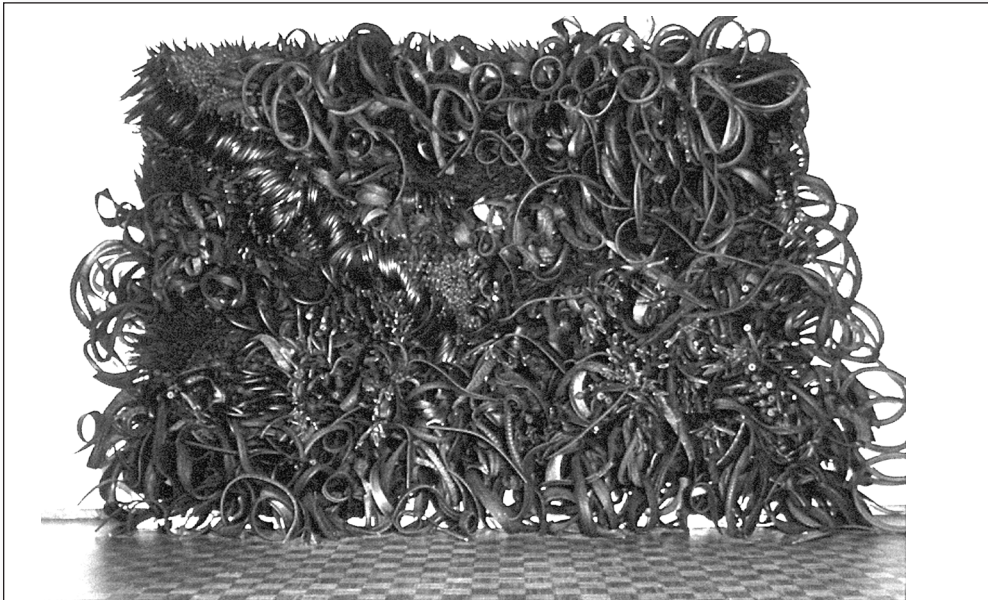
From an indigenous perspective Western research is more than just research that is located in a positivist tradition. It is research which brings to bear, on any study of indigenous peoples, a cultural orientation, a set of values, a different conceptualization of such things as time, space and subjectivity, different and competing theories of knowledge, highly specialized forms of language, and structures of power. (p. 42)

In reviewing an agenda of research projects undertaken by indigenous communities, Smith identified a pattern of practice that is action oriented, inclusive, and dynamic and combines elements of mainstream methodologies and indigenous practices. The themes investigated, however, are decidedly invested within indigenous perspectives and present with eloquent power conceptions that deal with claiming, naming, and remembering; negotiating, reframing, and restoring; discovering and envisioning; creating, representing, and narrating; gendering, democratizing, and protecting; and connecting and networking.

It is obvious that the way knowledge might be created and critiqued is now unable to be contained within the limits of rationalistic inquiry. The elusive scope of the digital landscape offers an intriguingly complex conceptual space that captures part of the metaphysical possibilities known to indigenous cultures and the new realities being opened up by new ideas in science and art. Within our “networked culture” (Taylor, 2001), many of the intriguing problems identified by postmodern theorists get played out, as for example, is the case with body politics, the de-centered self, cultural ruptures, and transdisciplinary journeys. *The New Yorker* cartoon of a dog sitting at a computer keyboard captures this well as he says to his dog companion, “on the computer nobody knows I’m a dog.” Digital technology is not so much a new tool to aid inquiry, but a place for rethinking things in ways never before imagined. This is just the kind of space where artists, scientists, researchers, cultural theorists, and community activists are speaking to each other in a fresh language of images and ideas.

The radical mix of cultural, political, technological, and economic change now influencing creative and critical practice is therefore challenging visual artists, art teachers, and students in higher education to look more closely at what they do. No longer can the methods of the past that see the art studio as an isolated place in the academy be maintained. While cultural critics such as Robert Hughes (1993) can rail against the damaging ascendancy of theory over skill in art schools, these domains cannot, of course, be seen as mutually exclusive. Those who work in the studios of universities and art schools can no longer remain oblivious to the challenges facing the visual arts and the possibilities opening up for rethinking the position of the artist in institutions and communities.

Artists such as Chakaia Booker wrestle figuratively and physically with visual forms that embrace cultural and situational contexts as readily as they project formal skill and imaginative zeal. For Booker, the painter's multicolored palette has an inherent energy, and she sees tires as her palette. "On my palette" she said, "instead of having colors, it's the texture of tires. These textures, whether from the treads of the tires or how the tires have been ripped or torn are my sources of energy to create my works of art" (personal correspondence, June 21, 2004). The idea that form could be content that goes beyond artistic ideas helps extend our understanding of the challenge of living in a world beyond cultural borders, between debates about social roles, and within expressive technological means.



Chakaia Booker. *It's So Hard to Be Green*. (2000). 150 × 252 × 288 inches. Rubber tires and wood. Exhibited: The Whitney Museum of Art Biennial 2000. Reproduced courtesy of the artist and Marlborough Gallery. Photograph by Nelson Tejada. <http://www.chakaiabooker.com>

Chakaia Booker uses old rubber tires to give form to social commentaries that address issues from black identity to urban ecology. . . . Booker, however, extracts an intense concentration of meanings from the tires. Their black color signifies African skin, while their patterned treads resemble tribal decorations and the welts of ritual scarification. The tires' resilience and versatility represent, to Booker, the "survival of Africans in the diaspora." . . . Booker engages in a resourceful act of recycling, transforming one of today's most indestructible waste products into things of furious beauty. (Anderson et al., 2000, p. 65)

CONCLUSION

The institutionalization of visual arts practice has a long and checkered history. In each era, the formal training of the artist and art educator invariably created a schism between those within institutions who saw a need to uphold a canon and those from without who challenged it. Many see recognition in the marketplace of the commercial artworld as the measure of success for the training of artists, with institutions being mostly responsible for technical training. Those who seek academic status for the profession invariably have to set creative practice on a more solid discipline foundation. As such, the university exerts its own agenda, and in doing so, creates an institutional artworld. The challenge is how to accommodate these demands yet also maintain integrity about what constitutes visual arts as a field of study. Yet questions surround the role of visual arts faculty members within the academy that reflect ambivalence about their identity as artists, teachers, and researchers. For many, this is a perennial issue that continues to shape arguments about the relevance of visual arts within institutions. The politics of what constitutes research in visual arts lies at the heart of these dilemmas. The uncertainty of these times and the questions being asked about how visual arts contributes to new ways of thinking about things suggest that there is no better time to act.

Economic globalization and political polarization continue to unify and disrupt patterns of cultural change. The impact of widespread economic rationalist policies is keenly felt at the local level where the microeconomic reform of past decades directly affects educational and social change. Whether through rationalization and accountability in higher education or standardization in public schools, the model of education as a marketplace of performance continues to dominate. If visions of education remain bereft of imagination, perhaps it is cultural areas rather than factory models or management structures that hold the potential for profound and equitable change.

So in what environment might it be possible to support an artistically challenging, socially relevant, economically viable, and culturally aware model of art education research? A review of current institutional and cultural systems yields several possibilities, and some of these are taken up later in this book. However, let me give two examples here. The Internet, of course, helped reinvent network communication that unleashed a flurry of “dot.com” activity as business ventures tried to capture the electronic marketplace. More recently it is the explosion of social media networks such as MySpace.com and YouTube.com that have capitalized on the human need to seek agency and structure in places that have personal meaning. In other words, the digital world offers individuals a means to exercise their right to choose how they want to communicate and what they want to say. But it is the use of the Internet for nefarious purposes such as zealotry that exploit the capacity of the digital environment to build self-supporting systems with considerable outreach and impact. Whereas the “McWorld” (Barber, 1996) of Western corporations maintains a hierarchical structure to carry its homogenized messages, the production of ideology takes place through an independent franchise that makes use of the rhizomatic nature of the Internet. And here the lure is emotional not economic, and it is an idea rather than an organization that carries the message. While not wanting to sanction the use of the Internet by extremists, there are many examples where the Web is used as an active

network for communities such as artists' and researchers' collectives whereby a non-hierarchical structure encourages conversation at the local and global level.²³

Another area where institutional and cultural practices are being reconceptualized in ways that offer promise for visual arts research is with curatorship in galleries and museums. Art curators, for instance, who seek to profile broad perspectives, see cultural and educational discourse as emanating from a multiplicity of centers where philosophical, economic, and political ideas form a basis for exchange, communication, and enactment. If theories and issues spark ideas, then there is a need to discuss them. On the other hand, the need to deconstruct them is also critical, for race, culture, gender, and class knowingly or unknowingly frame the perspectives we adopt. It is within this global context that curators offer new ways of dealing with the perception that the center, be it cultural capitals such as New York, is the assumed authority on art and cultural discourse. For instance, the curators of an exhibition exploring art and globalization explained that those who believe they occupy the center are culpable of "asymmetry of ignorance" (Sengupta, Dietz, Nadarajan, Bagchi, & Narula, 2003, p. 49).²⁴ They added, "we, on the fringes of the global space, know more about the global space than those who are at its core know about us" (Sengupta et al., 2003, p. 49). So being on the edge rather than in the center offers a better perspective. It is a conversation opened up by curators and artists who seek new ways to respond to issues that nowadays not only explore the human condition but also question the very design and function of the human body and mind in cultural and virtual space. This is moving visual arts to a more central place in our world of knowing.

In the introduction to her "essays-manifestos" that explore the significance of visual images within the cyber age of today, Barbara Stafford (1996, p. 9) issues a challenge to art educators, historians, and artists to recreate a creative and critical practice that is real and relevant. Dismissing language-based regimes that reveal difficulties and dilemmas through a process of critique and deconstruction, Stafford argued that a more constructive stance is needed in order to "forge an imaging field focused on transdisciplinary *problems* to which we bring a distinctive, irreducible, and highly visible expertise" (p. 10, emphasis in the original). Not to do so for Stafford means that our image-based discipline as we know it is in danger of disappearing, and "we confirm our irrelevance both within institutions of higher learning and in a decentralized electronic society" (p. 9). On the other hand, to act calls for some real risk-taking. Here Stafford issues her challenge:

It is one thing to embrace the agendas, definitions, and theories provided by other disciplines—themselves, ironically, in the throes of blurring or dissolving—and quite another to reconceptualize visuality historically, and in the light of that past lens culture to devise cross-cutting projects for the emergent cyberspace era. (pp. 9–10)

Barbara Stafford's challenge is even more urgent given her recent call (2007) for the arts and humanities to seize the moment to rethink the significance of visual forms and processes in light of what we now know about the brain and how images and objects help make the mind. I take up Stafford's challenge in the remaining chapters of this book. The agendas, definitions, and theories that inform research methodologies in the social sciences and human sciences are teased apart as important similarities and differences with visual

arts inquiry are contested and reconceptualized. This provides a basis for arguing that visual arts has an important contribution to make in the quest to know more but that the approach to this shared goal follows its own path.

NOTES

1. The concept of the *artworld* is used to describe the various factors that influence the cultural production of art, its presentation and preservation, and sale and promotion, through the gallery and museum systems. Originally informed by the institutional theory of Dickie (1974), the notion of the artworld has been a useful construct for understanding the contexts surrounding art and culture (Young, 2001). Less clear has been the educational consequences and implications of the influence of the artworld. I described a similar set of influence factors that are part of the “academic artworld” (Sullivan, 2005, p. 88) in the first edition of *Art Practice as Research* (2005). The parallels between the artworld of contemporary culture and the academic artworld of institutional culture are seen in particular with the introduction of studio art into debates about doctoral degrees in higher education. Here the direct and indirect influence of research communities and related institutional policies and practices are considered as new roles and responsibilities for artists in higher education are taken on. For a discussion of the academic artworld and the relationship with practice-based research, see Scrivener (2006).

2. A Monty Python skit from *Monty Python and the Holy Grail* captures the tentative beginnings of scientific rationality that was soon to displace the medieval mind. An early scene shows a rabble of rowdy peasants hell bent on burning a witch and they have the rationality of their actions questioned by Bedivere, a noble who later joined King Arthur on his trail for the grail. Bedivere asks the peasants, “How do you know she is a witch?” “Because she looks like one,” they yell. But the visual evidence is fake. “There are ways of telling whether she is a witch,” Bedivere explains. He asks, “What do you do with witches?” “Burn ‘em!” the crowd bellows. Bedivere persists: “What do you burn apart from witches?” to which they meekly reply, “. . . wood?” Therefore, they deduce that maybe witches burn because they’re made of wood. Bedivere asks how it might be determined if the witch is indeed made of wood. Various guesses are given before the peasants conclude that wood not only burns, but it also floats. And furthermore, a duck also floats. Therefore, they logically deduce that if the witch weighs the same as a duck, it means she is made from wood, and therefore she is a witch! Unfortunately for the young lady, when she is weighed alongside a duck, the scales don’t move and medieval logic prevails, so she is taken off to be burned. This incident says something about the logical problem of false premises giving rise to false consequences. As their Greek predecessors knew, even if the mindful peasants didn’t quite realize it at the time, rational thought can have irrational outcomes.

3. The need to communicate visually sometimes set in place myth and misconception as much as insight and imagination. Stephen Jay Gould (1991) provides a quirky example in his essay, *Petrus Camper’s Angle*. Petrus Camper was an 18th-century Dutch scientist whose career in anatomy saw him lauded as one of Europe’s foremost authorities. But he was also a part-time painter. His interests in science and art led him to question the widespread depiction of religious iconography such as the Black Magus with white European facial features. His annoyance with this visual inaccuracy led him to define specific guidelines for mapping the anatomical structure of the head of different races and nationalities. His primary indicator was the “facial angle” that represented a measure of the ratio of the differing flatness or extension of the profile of the forehead. What Gould also documents is the way that this cranial measure later became a quantitative index used for invidious purposes to depict inherent racial differences on a scale where the lowest facial angle was that of an ape, with mid angles being shown to be African, and the highest angle being a Grecian head. What was lost in historical

translation in this insidious use is the original intent of Petrus Camper—his motive was artistic and his painterly and scholarly task was the definition of beauty.

4. An example of how this curious mix of logical and moral thinking influenced ideas during a time of relentless colonial expansion is the view regarding the possession of land, considered to be “real” property due to the increasing resource potential and investment value. Those areas without documented details of ownership could be freely acquired for, “as God has provided the ground for all, he has given leave to any to take what he pleases, (if not previously possessed,) without any kind of consent from others” (Paley, 1838, p. 73). This enabled the principle of *terra nullius* to be enacted, which proclaimed that certain tracts of land were not owned by anyone. This had devastating consequences for indigenous cultures in particular, because, according to Paley’s (1838) tome, there were “no traces of property in land . . . amongst the savages of America or of Australia” (p. 71).

5. *The Independent* was a weekly newspaper published in New York City, 3 Park Place, by Henry C. Bowen, who was editor and proprietor. It had widespread circulation through yearly subscriptions and a regional agency in Chicago.

6. This is from a column titled “New England Liberalism,” which paraphrased a sermon by Rev. Julius H. Ward, rector of St. Michaels’ church, Marblehead, Massachusetts (see Ward, 1876).

7. John Ruskin enjoyed considerable influence on both sides of the Atlantic, as seen by an 1873 review of his small book on birds, *Love’s Meinie*, published in the New York newspaper, *The Independent*:

Eminent among recent books in interest is Mr. Ruskin’s latest pamphlet, which is an essay on birds—their structure, their names, their modes of flying, and their use in nature and in art . . . it is in everyway charming reading, and is full of that acute observation and quick sympathy which makes no small part of Mr. Ruskin’s genius. He has, more than other men, the gift of vision. He will pick up the commonest object, as here the robin’s wing-feather, and point out features in it which are new to almost all of us, and wholly new as topics of interest in literature. His power of minute observation recalls that open secret which we see daily in our mirrors without seeing it—that the pupils of our eyes are not in the center of the iris, but a little inside of it. Whatever can be seen is noticed by Mr. Ruskin, and he knows how to tell what he has seen in the most attractive style. That he does not fall in with the popular majorities in his thought is a reason why we should read him more, rather than less. His writings are an invaluable minority report upon Christian civilization. (Minor Notices, November 13, 1873, p. 1418)

8. See Howard Singerman (1999), *Art Subjects: Making Artists in the American University*, especially Chapter 1, “Writing Artists Onto Campuses (pp. 11–40).

9. For an account of the establishment of art as a subject in schools, see Arthur D. Efland (1990), *A History of Art Education*, especially Chapters 3 through 6. See also Don Soucy and Mary Stankiewicz (1990), *Framing the Past: Essays on Art Education*, and Peter Smith (1996), *The History of American Art Education*. For an account of historical trends in art and design education in the United Kingdom, see Mervyn Romans (2005), *Histories of Art and Design Education: Collected Essays*.

10. See Stephen J. Gould’s (1981) excellent text, *The Mismeasure of Man*, for a thorough account of the development of theories that build on unsound claims and the consequences they unleash.

11. There are alternatives to the dominant model of human development. In his delightfully titled book of essays, *Children’s Minds, Talking Rabbits & Clockwork Oranges*, Kieran Egan (1999) recounts his argument that development moves from the complex to the simple. He places great faith in the capacity of children to understand complex things. This view highlights the significance of negotiating meaning through “story, metaphor, rhyme and rhythm, binary structuring and mediation, image formation from words, affective abstraction and so on” (p. 92).

12. For an engaging account of the common interests of artists and scientists in interpreting and understanding the visible world, see Leonard Shlain’s *Art & Physics: Parallel Visions in Space, Time, and*

Light (2007). First published in 1993, Shlain infers that artists have often anticipated the discoveries of science.

13. The College Art Association (CAA) was established in 1912. For a brief history of its inception, see Howard Singerman (1999), *Art Subjects: Making Artists in the American University*.

14. See Lori Kent's doctoral dissertation, *The Case of Lucio Pozzi: An Artist/Teacher's Studio Critique* (2001), which is a case study of an artist-teacher's distinctive studio teaching style and especially his use of the studio critique.

15. See *The Innocent Eye* (1997) by Jonathan Fineberg. He traces parallels in the artistic practice of modern painters and the creative process of children by examining artists' collections of child art, related historical archives and accounts, and the innovative artworks of modernism.

16. The following quote from New South Wales Department of Education's (1952) *Curriculum for Primary Schools* is a good example of how child-centered theories of artistic development subscribed to G. Stanley Hall's dictum of "ontogeny follows phylogeny" whereby individual growth repeats the developmental pattern of the entire species. In this case, early childhood is seen to be an immature or "primitive" phase of development:

Primitive peoples, down the centuries, have achieved many fine examples of creative art. It is significant that this should have been done without the aid of formal teaching. The truth is that Art is more than culture; it is the expression, in particular in children and primitive people, of an otherwise inarticulate urge for self-expression. (p. 357)

17. In his introduction to the 1969 edition of Paul Klee's treatise, *On Modern Art*, Herbert Read notes that Klee's commentary was written in preparation for a lecture he gave in 1924. Read explains that "these notes are the product of his deep meditation upon the problems of art which the task of teaching had brought to a head" (Klee, 1969, p. 5). Read adds that Klee's explanation of his art and his defense of the artist to create "his own order of reality" also carried a social responsibility. This ideal was close to Read's heart and he applauds Klee's sense of community, which Read interprets as a realization that "individual effort is not sufficient. The final source of power in the artist is given by society, and that is precisely what is lacking in the modern artist" (Klee, 1969, p. 6).

18. The term *new criticism* takes its title from the book of the same name by John Crowe Ransom (1979) and was an influential literary and artistic movement in the mid-20th century. The basic tenets of new criticism was that the artistic merit of a work of art, be it visual or literary, was to be found in the form of the work itself. In this sense, the structural emphasis of new criticism is similar to the aesthetic tradition of formalism, which was advocated in the 1950s and 1960s by art critic Clement Greenberg.

19. See Rudolf Arnheim's important text, *Visual Thinking* (1969), and Israel Scheffler's (1991) philosophical argument about "cognitive emotions."

20. The title of John Brockman's book, *The Third Culture* (1995), was coined in response to C. P. Snow's publication, *The Two Cultures* (1959), that highlighted the cultural chasm between the humanities and the sciences that occurred during the early to mid-20th century as a clash between the *intellectuals* and the *boffins*. Brockman's publication chronicles a series of conversations among a highly regarded group of scientists. Brockman describes them as "third-culture thinkers" (p. 18) who seem to be filling the gap identified by C. P. Snow decades ago and who speak directly to an interested public.

21. See Bechtel & Abrahamsen's (1991) text on connectionism and parallel processing.

22. Retrieved March 22, 2009, from http://www.gregkucera.com/roda_statement.htm.

23. There are many artist-run Web-based cooperatives whose common interests revolve around ideas, research, social action, community development, and the like. Three sample sites are <http://www.sarai.net>, <http://www.rhizome.org>, and <http://www.creativityandcognition.com> (retrieved

February 11, 2009). Besides the more formal Web sites, there is another generation of sites emerging that is more community based. Urban artist Frank Shifreen explained as follows:

Local self-contained artist communities that drew artists into cities and artist colonies have given way to disparate individual artists connecting in cyberspace. Technical problems have largely been solved with the result being that large amounts of image and text can be readily stored on-line. I am part of a nonprofit group that has developed an artists' network website. The entire site, www.cultureinside.com, has a parallel structure in three languages, French, German and English, with Spanish soon to be added. An important development in artist online communications have been the "ning" networks created by Marc Andreessen and Gina Bianchini in 2005. Ning sites are social networks with many features that are free or available for a small fee and feature multiple groups, chats, messages as well as multimedia storage and presentation. There are now hundreds of Ning art groups with varying areas of interest, focus and professionalism. An important feature of Ning sites is language. Differences in languages has long been a barrier to effective communication and access to open knowledge. Language translation programs now have the capability to allow for substantial communication exchange and are getting better all the time. A sampling of Ning sites includes: Art Lab (240) English—India: <http://artlab.ning.com>; Art Education 2.0 (3555): <http://arted20.ning.com>; Visual Artists Forum (1555) English India: <http://visualartistsforum.ning.com/>; Art Network Directory (155): <http://artnetworks.ning.com/>; Artistic Research: <http://artisticresearch.ning.com>. (personal communication, March 6, 2009)

24. The exhibition was held at the Walker Art Center, Minneapolis, and was titled, *How Latitudes Become Forms: Art Across a Global Age*, February 9 to May 4, 2003. For archive information, see <http://www.walkerart.org/archive/B/AC7395A5CF7598E16164.htm>, retrieved June 26, 2009.