

Contemporary Art and New Media: Toward a Hybrid Discourse?

Please do not cite or quote without author's prior written permission

Edward A. Shanken

Since the mid-1990s, new media art (NMA) has become an important force for economic and cultural development internationally, establishing its own institutions. Collaborative, transdisciplinary research at the intersections of art, science, and technology also has gained esteem and institutional support with interdisciplinary Ph.D. programs proliferating around the world. During the same period, mainstream contemporary art (MCA) experienced dramatic growth in its market and popularity, propelled by economic prosperity and the propagation of international museums, art fairs and exhibitions. This dynamic environment has nurtured tremendous creativity and invention by artists, curators, theorists and pedagogues operating in both domains. Yet rarely does the mainstream artworld converge with the new media artworld. As a result, their discourses have become increasingly divergent.

MCA practice and writing are remarkably rich with ideas about the relationship between art and society. Indeed, they are frequently engaged with issues that pertain to global connectivity and sociability in digital, networked culture. Given the proliferation of computation and the Internet, perhaps it was inevitable that central discourses in MCA would employ, if not appropriate, key terms of digital culture, such as “interactivity,” “participation,” “programming,” and “networks.” But the use of these terms in MCA literature typically lacks a deep understanding of the scientific and technological mechanisms of new media, the critical discourses that theorize their implications, and the interdisciplinary artistic practices that are co-extensive with them. Similarly, mainstream discourses typically dismiss NMA on the basis of its technological form or immateriality, without fully appreciating its theoretical richness, or the conceptual parallels it shares with MCA.

New media not only offers expanded possibilities for art but offers valuable insights into the aesthetic applications and social implications of science and technology. At its best, it does so in a meta-critical way. In other words, it deploys technology in a manner that self-reflexively demonstrates how new media is deeply imbricated in modes of knowledge production, perception, and interaction, and is thus inextricable from corresponding epistemological and ontological transformations. To its detriment, NMA and its discourses often display an impoverished understanding of art history and recent aesthetic and theoretical developments in MCA. Due to the nature of NMA practice and theory, as a matter of principle, it often refuses to adopt the formal languages and material supports of MCA. This is one of many reasons why it frequently fails to resonate in those contexts.

The perennial debate about the relationship between art and technology and mainstream art has occupied artists, curators, and theorists for many decades. Central to these debates have been questions of legitimacy and self-ghettoization, the dynamics of which are often in tension with each other. In seeking legitimacy, NMA has not only tried to place its practices within the theoretical and exhibition contexts of MCA but has developed its own theoretical language and institutional contexts. The former attempts generally have been so fruitless and the latter so successful, that an autonomous and isolated NMA artworld emerged. It has expanded rapidly and internationally since the mid-1990s, and has all the amenities found in MCA, except, of course, the legitimacy of MCA.

This scenario raises many questions that establish a fertile ground for discussion and debate. What are the central points of convergence and divergence between MCA and NMA? Is it possible to construct a hybrid discourse that offers nuanced insights into each, while laying a foundation for greater mixing between them? How have new means of production and dissemination altered the role of the artist, curator, and museum? What insights into larger questions of emerging art and cultural forms might be gleaned by such a rapprochement?

Art Worlds

The extraordinary pluralism that characterizes contemporary art does not conform to conventional historical narratives that suggest a linear development, if not progression, of art. The multifaceted nature of avant-garde practices emerging in the 1960s, from minimalism and conceptual art to happenings, Fluxus, and performance to earth art, pop art, video, and art and technology, constitute a remarkable diversity of artistic exploration that was cosynchronous with a dramatic growth of the market for contemporary art. Although some of these tendencies either implicitly or explicitly shunned the art market/gallery system by failing to produce objects that corresponded to the traditional forms of collectible commodities, the market found ways of selling either physical objects or ephemera related to many of these practices.

The pluralism that emerged in the 1960s has expanded over the intervening decades. Artists have opportunistically selected and combined the conceptual and formal inventions of various precursor tendencies in the pastiche of postmodernism. At the same, they have responded to emerging cultural transformations by exploring theoretical questions, social issues, and formal concerns particular to contemporary exigencies, expanding the materials, contexts, and conceptual frame of art in the process. Current debates regarding the so-called “post-medium condition” represent the last gasp of the formalist essentialism of Greenbergian modernism. Indeed, few artists today would go on record in support of an exclusive commitment to a particular medium *qua* medium or “material support.” Later, I shall return to a more elaborated critique of the post-medium condition.

Despite the critical recognition and museological acceptance of video, performance, installation, and other expanded forms of artistic production, the contemporary art market remains tightly tethered to more or less collectible objects, and the vast majority of works acquired are painted canvases (proportion? check Christie’s/Sotheby’s auction records). It is no surprise that the flow of capital in the art market exerts tremendous influence on MCA discourses, through systemic interconnections between artists, galleries, journals, collectors, museums, biennials and art fairs, critics, and art schools. It is this particular

contemporary art system that is known as “the artworld,” both by its own denizens and by those whose work lies outside of it.

The extraordinary pluralism in contemporary art that began in the 1960s has expanded ever further over the last half century, fueled by the explosion of market for living artists in combination with globalization and the increasing professionalization of the field. Globalization has brought an influx of non-western artists, theorists, investors, and institutions, contributing great cultural variation and aesthetic innovation while simultaneously growing the market. Professionalization has resulted in a growing sector of artists who earn a living teaching at institutions of higher education and therefore have the freedom, resources, and intellectual imprimatur to pursue noncommercial work. It is in this context that the notion of artistic research has taken a significant stronghold, spawning practice-based Ph.D. programs, and in which interdisciplinary practices involving new media art and art-science collaborations, in particular, have flourished. As a result of these factors, there are a growing number of parallel artworlds. Each of these has its own generally agreed upon aesthetic values and criteria for excellence, historical/theoretical narratives, and internal support structures.

Despite this expanded pluralism and the many artworlds all competing for recognition, MCA has retained, if not amplified, its influence as the primary arbiter of artistic quality and value through its control of the market. Moreover, despite the artworld’s proven ability to commodify artworks that are not conventional objects, it has not successfully expanded its offerings to the production of some of the key parallel artworlds, such as the discursive, socially engaged public artworks theorized by scholars including Grant Kester or the work of new media artists theorized by various scholars.¹ This begs the question of how relevant MCA remains in terms of addressing contemporary exigencies. To what extent does it function as a vital discursive field for theoretical debates that have relevance beyond satisfying the demands of a self-perpetuating elitist system that brokers prestige in exchange for capital? This purposely provocative question is hardly new. The difference now is that parallel artworlds in 2000s have their own extensive self-perpetuating

¹ Eg. Kester, *Conversation Pieces*; Sean Cubitt, Anna Munster, Erkki Huhtamo, etc.

infrastructures – including sophisticated critical discourses - that are far more highly developed than the loose formation of artists’ collectives and alternative spaces of the 1960s and 1970s. In other words, the artworld in the 2000s and 2010s has much more serious competition than ever before. While it may retain authority regarding questions of market value, it has lost much of its authority with respect to critical discourse because in that domain it is not the only (or most interesting) game in town.

It must be recognized the very notion of an “artworld” has been a problematic concept since Arthur Danto introduced the term in 1964.² Howard Becker challenged the notion of a univocal artworld in 1982, claiming that there were multiple artworlds. According to Becker, each of the many artworlds consists of a “network of people whose cooperative activity, organized via their joint knowledge of conventional means of doing things, produce(s) the kind of art works that [particular] art world is noted for.”³ That said, and despite great pluralism and internal friction, there is arguably a more or less coherent network in contemporary art that dominates the most prestigious and powerful institutions. This is not to propose a conspiracy theory but to observe a dynamic, functioning system.

Further, it must be recognized that the mainstream contemporary artworld (MCA) does not need new media art (NMA); or at least it does not need NMA in order to justify its authority. Indeed, the domination of MCA is so absolute that the term “artworld” is synonymous with it. Despite the distinguished outcomes generated by the entwinement of art, science, and technology for hundreds of years, MCA collectors, curators, and institutions have difficulty in recognizing NMA as a valid, much less valuable, contribution to the history of art. As Magdalena Sawon, co-founder/co-director of Postmaster Gallery notes, NMA does not meet familiar expectations of what art should look like, feel like, and consist of based on “hundreds of years of painting and sculpture.”⁴ It is deemed uncollectible because, as Amy

² Arthur Danto, “The Artworld, *The Journal of Philosophy*, Vol. 61, No. 19, American Philosophical Association Eastern Division Sixty-First Annual Meeting. (Oct. 15, 1964): 571-584.

³ Becker, Howard S. *Art Worlds*. Berkeley: University of California Press, 1982.

⁴ Interview with the author, 13 April, 2010. Postmaster Gallery is one of the few galleries in New York that does not draw distinctions between New Media and Contemporary art, representing important artists associated with both art worlds.

Cappellazzo, a contemporary art expert at Christie's observes, "collectors get confused and concerned about things that plug in."⁵

The operational logic of the MCA – its job, so to speak – demands that it continually absorb and be energized by artistic innovation, while maintaining and expanding its own firmly entrenched structures of power in museums, fairs and biennials, art stars, collectors, galleries, auction houses, journals, canonical literature, and university departments. This is by no means a simple balancing act and each of these actors has a vested interest in minimizing volatility and reinforcing the status quo, while maximizing their own rewards in a highly competitive environment. Their power lies in their authoritative command of the history and current practices of MCA and in promoting consensus and confidence in the market that animates it. As such, their power, authority, financial investment, and influence are imperiled by perceived interlopers, such as NMA, which lie outside their expertise and which, in form and content, challenge many of MCA's foundations, including the structure of its commercial market. Witness, for example, the distress of the "big four" labels of the music recording industry over the incursion of new media into established channels of distribution. From this perspective, there are substantial reasons for the old guard to prevent the storming of the gates, or at least to bar the gates for as long as possible. Typical strategies include ignoring interlopers altogether or dismissing them on superficial grounds. NMA, if not ignored, is typically dismissed on the basis of its technological materiality but without recognition or understanding of its conceptual dimensions and its numerous parallels with the concerns of MCA. I elaborated some of these dynamics in my essay, "Art in the Information Age," which identified continuities between art and technology and conceptual art in the late 1960s. The uneasy relationship between art and technology and between MCA and NMA has a long and complex history. But the growing international stature of NMA and the seemingly irrepressible momentum it has gathered, make MCA's ongoing denial of it increasingly untenable.

For its part, NMA has achieved a level of self-sustaining autonomous independence from MCA that is perhaps unprecedented. Like MCA, NMA is marked by pluralism and internal

⁵ Quoted in Sarah Thornton, *Seven Days in the Art World* (London: Granta, 2008) p. 21.

frictions. Yet I can think of no other movement or tendency in the history of art since 1900 that has developed such an extensive infrastructure, including its own museums, fairs and biennials, journals, literature, and university departments that function independently but in parallel with MCA. In contrast to MCA, it lacks galleries, collectors, and a secondary market. But new media art institutions and practitioners have found financial support from diverse corporate, governmental, educational, and not-for-profit sources that are local, regional, national, and transnational. The Ars Electronica Center, in Linz, Austria, built in 1996, recently was the beneficiary of a €30 million expansion completed in 2009. This may pale in comparison to the £215 million extension planned for the Tate Modern or the \$430 million budget for a new downtown branch of the Whitney Museum. However, given that the population of Linz is under 200,000, €30 million represents a substantial dedication of cultural resources to NMA. In the domain of publishing and ideas, the number of scholarly citations for key works of MCA and NMA theory is also illuminating. According to Google Scholar, Nicolas Bourriaud's now classic book, *Relational Aesthetics*, has formidable citation indexes of 115 for the 1998 French version and 240 for the 2002 English translation. By comparison, Lev Manovich's *Language of New Media*, published in 2001, has a whopping citation index of 2271.⁶ Despite MCA's refusal to seriously reckon with NMA, NMA is, in a manner of speaking, an artworld force to be reckoned with.

Hybrid Discourses and Relational Aesthetics

My goal is to map the discourses of MCA and NMA onto each other to identify points of convergence and divergence. I contend that each can learn a great deal from the other. I also believe that the two are not as dissimilar as those parties bent on preserving the MCA status quo would suggest and that NMA should take a more prominent place in the canon of contemporary art history.

⁶ <http://scholar.google.com> Cited 11 April, 2010. This extraordinarily high citation index can be explained by a few factors. *Language* appeared at a time when there were few other theoretical texts on NMA, while *Relational Aesthetics* had more competition. Moreover, *Language* appeals not only to contemporary art audiences, but to general readers with an interest in new media.

The theoretical discourses of MCA and NMA are as pluralistic as the artistic practices that comprise these two artworlds. IN MCA, the political dimension of art was a key theme of Documenta 10, directed by curator Catherine David in 1997. Globalization also been a central topic, explored by curators including Okwui Enwezor, who directed Documenta 11 in 2002.⁷ For the purposes of my argument here, I will focus on one prominent MCA theory – curator Nicolas Bourriaud’s concept of “relational aesthetics” - and explore parallels between its discourses and those of NMA.⁸

Bourriaud came to prominence in the mid-1990s, organizing exhibitions at the Venice Biennale in 1990 and 1993. He coined the term “relational aesthetics” in the context of the exhibition, *Traffic*, which he guest-curated at CAPC Musée d’Art Contemporain de Bordeaux in 1996. Bourriaud co-founded and co-directed the Palais de Tokyo in Paris, 1999-2005, which he has described as “a sort of interdisciplinary kunstverein--more laboratory than museum.”⁹ In 2007, he was appointed Gulbenkian Curator of Contemporary Art at the Tate Britain, where he organized *Altmodern*, the fourth Tate Triennial in Spring 2009. Other publications include *Postproduction* (2002) and *The Radicant* (2009). He currently works for the French Ministry of Culture and Communication. In 2010 he took a position with the French Ministry of Culture and Communication.

Bourriaud states that he began writing *Relational Aesthetics* in 1995 “with the goal of finding a common point among the artists ... I had assembled in ... *Traffic*.”¹⁰ Artist Liam Gillick, whose work was included in the exhibition, further explains that the book came into

⁷ Enwezor’s publications include *Reading the Contemporary: African Art, from Theory to the Marketplace* (MIT and INIVA:), 'Mega-Exhibitions and the Antinomies of a Transnational Global Form', *MJ - Manifesta Journal*, no.2, Winter 2003/Spring 2004, pp.6-31., and *The Unhomely: Phantom Scenes in Global Society* (2006) He was Artistic Director of Documenta 11 and edited the multi-volume exhibition catalog, which addressed platforms including “Creolité and Creolization.”

⁸ Nicolas Bourriaud, *Relational Aesthetics*. Trans. Simon Pleasance & Fronza Woods with Mathieu Copeland. Paris: Les presses du reel, 2002, c. 1998 (French).

⁹ Bennett Simpson, “Public Relations - Nicolas Bourriaud – Interview.” *Artforum* (April, 2001) 47-8. Exhibitions included GNS (Global Navigation System, 2002), and *Playlist* (2003). Given Bourriaud’s discomfort with technology in art, it is more than slightly ironic that the Palais de Tokyo was originally built in 1937 for the International Exhibition of Arts and Technology.

¹⁰ Nicolas Bourriaud, *Postproduction - Culture as Screenplay: How Art Reprograms the World*, (New York: Lukas & Sternberg, 2002): 7.

being when misunderstandings between the artists, audience, curator, and institution put Bourriaud “in a complicated situation in which he was obliged to gather together and develop recent essays in order to articulate his position in relation to the artists.”¹¹ *Relational Aesthetics* is arguably the single most influential recent theory addressing contemporary art. It has been at “the center of both careful and critical elucidation since ... its publication”¹² in French in 1998, and even moreso since its English translation in 2002. Many of the artists championed in it, including Gillick, Vanessa Beecroft, Dominique Gonzalez-Foerster, Pierre Huyghe, Gabriel Orozco, Philippe Parreno, and Rirkrit Tiravanija, have become international art-stars. The term “relational” has propagated and spread as a generic term, often without apparent awareness of its source and the particular cultural and historic moment it originally attempted to frame.

Bourriaud is a subtle thinker and compelling writer. It is easy to oversimplify the complexity of his formulation of relational aesthetics, which, as he himself notes, has been lampooned as “artists-who-serve-soup-at-an-opening.”¹³ Also, because the theory is so general and lacks specific concrete examples, it is highly flexible and open to broad interpretation. At the core of *Relational Aesthetics* is the claim that, “... artistic practice is now focused upon the sphere of inter-human relations.... So the artist sets his sights more and more clearly on the relations that his work will create among his public, and on the invention of models of sociability.” (p. 28.) This concept is restated and elaborated in various ways, for example,

this generation of artists considers *inter-subjectivity and interaction* as the main informers of their activity. The space where their works are displayed is altogether the space of interaction, the space of openness that

¹¹ Liam Gillick, “Contingent Factors: A Response to Claire Bishop’s ‘Antagonism and Relational Aesthetics,’” *October* 115, Winter 2006, p. 97. One key issue, Gillick further explained, was that “the whole question of the curatorial model is not being examined in the same way that artists have been encouraged to look at the classical ideas of the author and the ego.... It is clear that you [Bourriaud] are willing to engage with different values of production that go beyond the substitution of auratic documentation or structures in place of the traditional auratic object, but you cannot operate effectively with these ideas when you keep coming up against organizational models that encourage the curator to act like an ultra-artist, even if he or she doesn’t want to.” Liam Gillick, private correspondence with Nicolas Bourriaud, November 1996, (fn 2, p 96).

¹² Ibid.

¹³ Bourriaud, *Postproduction*, p. 7.

ushers in all *dialogue*.... What they produce are relational space-time elements, inter-human experiences trying to rid themselves of the straitjacket of the ideology of mass communications, ... places where alternate forms of *sociability*, critical models and moments of *constructed conviviality* are worked out.” (Bourriaud, p. 44. My emphases)

As key examples of this sort of *inter-subjectivity and interaction, dialog, sociability, and constructed conviviality*, Bourriaud cites Tiravanija’s installation at Aperto 93 at the Venice Biennale, where, “Stacked against a wall are cardboard boxes, most of them open, containing Chinese soups which visitors are free to add ... boiling water [to] and eat.” (p. 25) His most extended and insightful discussion of any single artist focuses on Felix Gonzalez-Torres, whose work famously consists of stacks of prints or wrapped candies that the audience is welcome to help itself to. Philippe Parreno’s 1995 exhibition at Le Consortium in Dijon is described as “*occupying two hours of time rather than square metres of space,*’ [to] organiz[e] a party where all the ingredients ended up producing relational forms – clusters of individuals around art objects in situation.” (32).

Bridging the Gap

My intention is not to criticize relational aesthetics or the artists and artworks associated with it, per se, but rather to apply its theoretical frame to NMA. However, I cannot ignore the fact that while Bourriaud’s text is full of new media metaphors and references, new media art is all but absent from his analysis.¹⁴ He recognizes that “... technologies may allow the human spirit to recognize other types of ‘world forms’ still unknown: for example, computer science put forward the notion of program, that inflects the approach of some artists’ ways of working.” (20, grammar edited) At the same time, he advocates “low-tech against high tech” (p. 47) and generally opposes the use of digital technology as artistic media, while relying on it metaphorically and symbolically in his argument. With few

¹⁴ The two clearest examples of work mentioned by Bourriaud that comfortably fits in NMA fold are Julia Scher’s *Security by Julia* (1989-90) and Dan Graham’s *Present Continuous Past(s)* (1974), both of which are included in *Art and Electronic Media*, though Graham’s piece predates both “new media” and “relational aesthetics.”

exceptions, the work he considers does not use the materials and techniques of new media, despite the dramatic growth of the field in the 1990s.¹⁵ As a result, even with the most positive intentions, and with great respect for Bourriaud, my analysis is highly critical.

Bourriaud emphasizes the materiality of art and insists on the exhibition (whether that be in the consecrated spaces of the museum and gallery or in public spaces) as the privileged physical site for the sociability of relational art. These emphases are difficult to reconcile with certain discourses of NMA, such as net.art designed for web browsers, the heyday of which corresponds with the moment that *Relational Aesthetics* began being formulated in the mid-1990s. On the other hand, his writing is highly energized and marked by a subversive spirit that shares affinities with the avant-garde aspirations of NMA. As previously noted, his rhetoric incorporates terms and ideas, such as interactivity, dialogue, collaboration, computers, programming, and communication networks, that are drawn from the technological culture of new media. He seems to be fighting the same fight, and suggests tactics for art-making that share many similarities with NMA.

Relational Aesthetics begins with the claim that the historic avant-garde's aim to "prepare and announce a future world" and to "free humankind and help to usher in a better society," is being carried on by contemporary artists, but under "different philosophical, cultural and social presuppositions." He states that in "today's fight for modernity.... the role of artworks is no longer to form imaginary or utopian realities (sic) but to actually be ways of living and models of action within the existing real." In other words, the strategic goal of contemporary art consists of "*learning to inhabit the world in a better way*" (12-13, his italics).

¹⁵ In the chapter "Screen Relations" under the subheading, *Today's art and its technological model*, Bourriaud claims that one "major stumbling block" to art historians is "systematically deduc[ing] from any new technological apparatus a certain number of changes in ways of thinking." (66). While cautions against technologically deterministic interpretations are well heeded, many art historians and theorists of NMA are very sensitive to the dangers of simply inferring epistemological shifts on the basis of technological changes. The reverse problem, however, is the failure to recognize the profound ways in which technology is deeply imbricated in modes of knowledge production, perception, and interaction, and is thus inextricable from corresponding epistemological and ontological transformations.

Such sentiments are shared by many recent theorists and practitioners of NMA. For example, Roy Ascott's theories of telematic art of the 1980s, proposed a "utopian reality" in which computer networking provides "the very infrastructure for spiritual interchange that could lead to the harmonization and creative development of the whole planet."¹⁶ While such a lofty claim is at odds with the more grounded tone of relational aesthetics, Ascott's landmark telematic artwork, *La Plissure du Text* (1983), can be interpreted as instantiating Bourriaud's call for "ways of living and models of action within the existing real." A decade before the popularization of network culture on the Web, *La Plissure* used the "existing real" of computer networking to enable actual aesthetic encounters with new forms of collective social interaction and creative exchange among participants at remote locations. Ascott claimed that in telematic art, "... we do not think, see, or feel in isolation. Creativity is shared, authorship is distributed... pluralism and relativism shape the configurations of ideas - of image, music, and text - that circulate in the system."¹⁷ Similarly, Bourriaud writes that "each particular artwork is a proposal to live in a shared world, and the work of every artist is a bundle of every relations with the world, giving rise to other relations, and so on and so forth, ad infinitum." (p. 22). The curator's own words perfectly describe how Ascott's work "embarks on a dialogue ... in the invention of relations between consciousness[es]." (p. 22) Ascott's telematic art and theory actually functioned in the present as a testing ground for what Bourriaud describes as "learning to inhabit the world in a better way."

Similar claims can be made of the dovetailing of relational aesthetics with a wide range of artworks that use telecommunications and computer networking to produce alternative communication spaces. These "utopia[s]... " to use Bourriaud's words, are "lived on a subjective, everyday basis, in the real time of concrete and intentionally fragmented experiences.... [They constitute] ... a social interstice within which these experiments and these new 'life possibilities' appear to be possible." (p. 45) Some examples predating or

¹⁶ Roy Ascott, "Is There Love in the Telematic Embrace" *Art Journal* p. 247. For an expanded interpretation of Ascott's *oeuvre*, see my "From Cybernetics to Telematics: The Art, Pedagogy, and Theory of Roy Ascott," in Roy Ascott, *Telematic Embrace: Visionary Theories of Art, Technology, and Consciousness*, Edward A. Shanken, ed., (Berkeley: University of California Press, 2003): 1-94.

¹⁷ *Ibid.* p. 243.

concurrent with the formation of relational aesthetics include Kit Galloway and Sherrie Rabinowicz's *Hole in Space* (1980), Paul Sermon's *Telematic Dreaming* (1993), and Ken Goldberg et al's *Tele-Garden* (1995). More recent works include Raphael Lozano-Hemmer's *Vectorial Elevation: Relational Architecture 4* (1999-2000), Blast Theory's *Can You See Me Now?* (2001), and Graffiti Research Labs *Laser Tag* (2007). I argue that these works, even more so than those identified by Bourriaud himself, offer what the curator described as "methods of social exchanges, interactivity with the viewer within the aesthetic experience being offered him/her, and various communication processes, in their tangible dimension as tools serving to link individuals and human groups together." (p. 43)

Many artists who work with new media feel a strong sense of social responsibility regarding technology and ecology. Their artworks are deeply concerned with the physical environment and the material impact of industrialization and globalization, including the impact of the technologies employed in their own practices. Bourriaud's relational strategy of "learning to inhabit the world in a better way" has found extraordinary manifestations in Michael Mandiberg's *The Real Costs*, Natalie Jeremijenko's *Feral Robotic Dogs*, and Beatrice da Costa's *Pigeon Blog*, all of which create awareness of the effects of human civilization by giving immediate feedback about the results of our actions. Although Mandiberg's ephemeral work consists of a Firefox plugin, the works of Jeremijenko and da Costa are directly engaged with specific local environments and the former involves groups of individuals hacking consumer electronics, employing and developing open-source materials and DIY manuals, and undertaking citizen science experiments on toxicity levels.¹⁸

Bourriaud contrasts current avant-garde attitudes with the idealism of earlier eras. Indeed, the utopian rhetoric of some NMA discourses has been subject to critique for aestheticizing and becoming complicit with technoculture. Seen from the MCA perspective, "Working with new media turns the artists more or less automatically into useful idiots for hardware producers."¹⁹ But such critiques are just as common from within NMA discourses, which point out that in many cases interactive art "served the interests of industry by popularizing

¹⁸ For more information on these works see my *Art and Electronic Media*. London: Phaidon, 2009.

¹⁹ Tilman Baumgartel, "Mafia Versus Mafia" *Telepolis* (14 April, 1999)

its products and endorsing the ideology of interactivity and agency, which already had been co-opted by commercial concerns.”²⁰ For many years, artists have made important contributions to such critiques through works that use electronic media to challenge such rhetoric. These include Alan Kaprow’s *Hello* (1969), Peter D’Agostino’s *Proposal for QUBE* (1978), Lynn Hershman’s *Lorna* (1979-83), Necro Enema Amalgamated’s “Ode to Interactivity” (1993), Heath Bunting’s *Own, Be Owned or Remain Invisible* (1998) and the net.art works of JODI of the mid-1990s.²¹ Such work contest facile theorizations of how computers and communication networks empower users with new forms of agency, forcing critical reflection on corporate interests, surveillance, mythic rhetoric, and the invisible codes and structures of power and control underlying new media. Their edginess arguably has much to offer the discourses of MCA that address similar questions.

Given these parallels it is somewhat baffling to me why Bourriaud has not embraced new media art in his curatorial practice and theoretical writings. Ephemeral artworks using telecommunications as their media should be compatible with his claim that “an object is every bit as immaterial as a phone call. And a work that consists of a dinner around a soup is every bit as *material* as a statue.” (p. 47) Following this logic, would it not be fair to conclude that the aforementioned works of NMA are “every bit as material as a statue?” Do not such works create precisely what Bourriaud theorizes as “relational space-time elements,” and as “inter-human experiences trying to rid themselves of the straitjacket of the ideology of mass communications? Do they not produce “places where alternate forms of sociability, critical models and moments of constructed conviviality are worked out.”? Do they not accomplish this by hijacking “the ideology [and technology] of mass communication” by turning it in on itself?

Photography, Implicit vs. Explicit Influence, and Medium Injustice

At a panel I convened at Art Basel in June 2010 with Bourriaud, Peter Weibel, and Michael

²⁰ Kristine Stiles and Edward A. Shanken, “Missing in Action: Agency and Meaning in Interactive Art,” (2000) in *Context Providers: Conditions of Meaning in Media Arts*. Lovejoy, et al, eds. Intellect: 2011.

²¹ For more information on these works see my *Art and Electronic Media*. London: Phaidon, 2009.

Joaquin Grey, the gap between NMA and MCA became increasingly clear.²² One obvious indication of this gap was demonstrated by the simple fact that Weibel, arguably the most powerful individual in the NMA world, and Bourriaud, arguably the most influential MCA curator and theorist, had never met before. Citing the example of photography and Impressionism, Bourriaud argued that the influences of technological media on art are most insightfully and effectively presented *indirectly*, eg. in non-technological works. As he wrote in *Relational Aesthetics*, “The most fruitful thinking ... [explored] ... the possibilities offered by new tools, but without representing them as *techniques*. Degas and Monet thus produced a *photographic way of thinking* that went well beyond the shots of their contemporaries.” (p. 67). On this basis, he states that, “the main effects of the computer revolution are visible today among artists who do not use computers” (p. 67). On one hand, I agree that the metaphorical implications of technologies have important effects on perception, consciousness, and the construction of knowledge. But on the other hand, this position exemplifies the historical, ongoing resistance of mainstream contemporary art to recognize and accept emerging media.

Photography, initially shunned as a *bona fide* form of fine art practice, became a central aspect of mainstream contemporary art practice a century later. This occurred not simply because photography was relatively unaccomplished compared to painting during the heyday of Impressionism (1874-86) as Bourriaud suggests. Rather, the acceptance of photography was delayed primarily because of the rigid constrictions of the prevailing discourses of late 19th and early 20th century art, which were unable to see – literally and figuratively - beyond the mechanical procedures and chemical surfaces of the medium in order to recognize the valuable contributions it had to offer MCA of the time. Although the Museum of Modern Art in New York collected its first photograph in 1930 and launched the Department of Photography as an independent curatorial division in 1940, photography remained a poor relation in comparison to painting and sculpture for another half century. By the 1980s, changes in the discourses of MCA, collector attitudes and market conditions, and the practice of photography itself, resulted in the medium’s warm embrace by MCA (though not as photography per se, but as art that happened to be a photograph.) In the

²² A video recording of the event can be found on the Art Basel website. See <http://www.art.ch/go/id/mhv/>

2000s photography became highly collectible and expensive. Average auction prices rose in value 285% from 1994-2008, with works by contemporary artists Cindy Sherman and Andreas Gursky reaching auction highs of \$2.1 million and \$3.3 million respectively.²³ Video, equally shunned at the moment of its emergence in the 1960s and now the darling of MCA curators, reached a market peak of over \$700,000 for a work by Bill Viola in 2000.²⁴

As historian of photography John Tagg has noted of the reception of an earlier “new media,” the more experimental aspects of photography were not well-assimilated and the impact of the discourses of photography and contemporary art on each other was highly asymmetrical: the latter changed very little, while the former lost its edge in the process of fitting in.²⁵ Inevitably, new media and the longer history of electronic art will be recognized by MCA as well, once a potential market for it is developed and promoted.²⁶ Proactively theorizing the issues and stakes involved may play an important role in informing the ways in which that merger unfolds. Needless to say, many in the NMA community are wary of losing this critical edge in the process of assimilation...

Bourriaud’s argument authorizes a particular history of photography aligned with a conventional history of art, in which technological media remain absent from the canon. A history of art that accepts, if not valorizes, the explicit use of technological media, as in kinetic art and new media, will reconsider its precursors. In this scenario, one can imagine an alternative history of photography that celebrates the chronophotographic practices of Eadweard Muybridge, Etienne-Jules Marey, and Thomas Eakins concurrent with Impressionism. Such a revisionist history will recognize that such work consists not just of the images produced but of the complex and inextricable amalgam of theories, technologies and techniques devised in order to explore perception. It will recognize, as well, the substantial transit of ideas between art and science (Marey was a successful scientist,

²³ Nina P. West, “The \$900,000 Librarian,” *Forbes.com* (Oct 1, 2008)

²⁴ Noah Horowitz, *Art of the Deal: Contemporary Art in a Global Financial Market*. Princeton UP, 2011.

²⁵ See John Tagg, *The Burden of Representation: Essays on Photographies and Histories*. Minneapolis: University of Minnesota Press, 1993.

²⁶ This may demand institutional assurances regarding as-yet unresolved conservation issues. Though concerns regarding the longevity of experimental media are far from unique to new media, and are shared by work from Leonardo’s *Last Supper* to Eva Hesse’s latex sculptures, they remain a sticking point against NMA.

whose work influenced Muybridge, who conducted extensive research at University of Pennsylvania and later collaborated Eakins, both artists deeply concerned with biomechanics.) The important artistic, scientific, and hybrid art-science researches of these pioneers will be interpreted, moreover, as key monuments in and of themselves, not just as metaphorical inspirations for their contemporaries working with oil and canvas, as Bourriaud suggests. It took decades, in fact, for these chronophotographic discoveries (to say nothing of the advent of cinema) to penetrate painters' and sculptors' studios. And when they did, they infected art with both implied and explicit motion and duration, as in the work of Duchamp, Gabo, Wilfred, Boccioni, and Moholy-Nagy in the 1910s and 1920s, and subsequent influence on time-based art.

Bourriaud's comparison of photography during the Impressionist era with computers and computer networking since the mid-1990s is troubling for further reasons. The Eighth (and final) Impressionist Exhibition in 1886 predates the introduction of Kodak #1 camera (1888), prior to which the practice of photography was limited to professionals and elite amateurs. By contrast, new media started becoming a widespread, popular phenomenon by the mid-1990s, with the advent of the Web (1993) occurring five years prior to the publication of *Relational Aesthetics* in 1998 (the same year that E-mail became a Hollywood trope in *You've Got Mail*.) Moreover, since the 1880s, photography and its extensions in cinema and television radically altered visual culture, saturating it with images. The context of image production and consumption during the Impressionist era – and its impact on art – simply cannot be compared with how the image economy since the late 1990s has impacted art (to say nothing of how key artistic tendencies since the 1960s strategically shifted focus away from imagocentric discourses.) This is especially true since the advent of Web 2.0 in the mid-2000s, when new media tools and corresponding behaviors have transformed the landscape of cultural production and distribution: social media sites like Facebook, YouTube, and Twitter now compete with search engines like Google and Yahoo for popularity, “prosumer” is a marketing term, and critics debate whether the Internet is killing

culture or enabling powerful new forms of creativity.²⁷

Bourriaud's position is, moreover, at odds with the actuality of what he curates and writes about. For if he genuinely embraces the so-called "post-medium condition" as he suggested at Art Basel, then the exclusionary prejudice against the use of technological media in and as art would not exist. The curator would not favor indirect influences of technology on art. His discussions and exhibitions of contemporary art would be blind to medium, and there would be no reason for this paper. But that is not the case. Peter Weibel astutely picked up on Bourriaud's distinction between direct/indirect influences and pointed out the hypocrisy of valuing the indirect influence of technology while ignoring the direct use of technology as an artistic medium in its own right. Weibel accurately and provocatively labels this "media injustice." Indeed, the implicit/explicit dichotomy that Bourriaud constructs serves only as a rhetorical device to elevate the former member of the pair – the lofty, theoretical ideal – at the expense of the latter – the quotidian, practical tool. That epistemological logic of binary oppositions must be challenged and its artifice and ideological aims deconstructed, in order to recognize the inseparability of artists, artworks, tools, techniques, concepts and concretions as actors in a network of signification.

The Post-Medium Condition and Its Discontents

Far from embracing the "post-medium condition," Rosalind Krauss, who coined the term, considers it an alarming situation that must be resisted. In "The Guarantee of the Medium" (2009), Krauss directs her venomous assault on the post-medium condition at artists who, she claims, have succumbed to the "seductive pretense to displace the avant-garde's relation to modernism." (141). Modernism, for Krauss, is tantamount to critic Clement Greenberg's celebration of medium-specificity, the "irrefutable materiality of the individual medium – painting's as the flatness of the picture plane; sculpture's as the solidity of the free-standing volume" (140). Just as Greenberg saw the modernist avant-garde as the "singular defense against the corruption of taste by the spread of kitsch's 'simulacrum of

²⁷ See, for example, Andrew Keen, *The Cult of the Amateur: How Today's Internet Is Killing Our Culture*. Crown Business: 2007; and Clay Shirkey, *Here Comes Everybody: The Power of Organizing Without Organizations*. New York: Penguin, 2008.

genuine culture” (141), so Krauss argues that the artists she champions (Ruscha, Kentridge, Calle, Marclay) are “hold-outs against the ‘post-medium condition’” and “constitute the genuine avant-garde of our day in relation to which the post-medium practitioners are nothing but pretenders.” (142).

In place of traditional media, declared dead by postmodernism, these artists, she claims, have adopted alternative forms of “technical supports.” According to Krauss, Ruscha’s technical support is the automobile, Kentridge’s is animation, Calle’s investigative journalism, and Marclay’s synchronous sound. It is beside the point of this essay to pick apart such tenuous contentions, though it is important to point out that they limit the interpretation of highly complex works and practices to a single aspect – just as Greenberg did - obscuring the complex layering of ideas, media, technical supports that converge in them. By constricting Kentridge’s work to animation, Krauss misses the richness of the artist’s accomplishment in joining drawing, animation, performance, and storytelling. Kentridge’s direct, corporeal engagement with media demands recognition of the medium specificity of these practices and their histories, as well as with the post-medium condition of contemporary art production that questions their autonomy and hybridizes them. Moreover, to focus on such formal concerns completely obscures the social and political conditions of apartheid under which the artist lived in South Africa, the critique of which is central to his work, to say nothing of the gut-wrenching pathos of Kentridge’s existential reflections on the human condition.

Limiting works of new media art to any single “technical support,” whether it be Ascott’s engagement with planetary consciousness or Stelarc’s attempts to extend the obsolescent body, has the advantage of avoiding the discussion of technological media. But it does the same violence to the subtleties of the specific media that the artists employ in, and as part of, their work. It is, moreover, blind to its social, political, affective, and emotional qualities. The artist Krauss singles out as the primary culprit of post-mediality is Joseph Kosuth, whose offense appears to be a post-Duchampian theory and practice that is not limited to medium-specific concerns but demands a broader questioning of the nature of art itself, as articulated in his influential *Artforum* essay, “Art After Philosophy” (1969). I argue that the best NMA exploits precisely this opening up of artistic inquiry beyond a monotheistic fixation on medium or support, as heralded by Kosuth and others four decades ago. Not

content to participate in in-bred modernist discourses (from which they have been excluded anyway on the basis of the superficial formal elements their work), new media artists, like nearly every successive avant-garde practice before them – from cubist collage to performance art – have used unconventional materials and techniques to question the nature of art itself, often questioning the object-oriented obsession of the MCA artworld and the dynamics of its market-driven demand for collectible widgets.²⁸

The gauntlet Krauss lays down to the post-medium “pretenders” might appear to apply to most new media artists. But this gauntlet does not really make sense in the context of NMA. The theories and technologies at the core of the historical development of new media tools, together with the artistic and social practices associated with their application, seems to occupy a hybrid stance, straddling medium-specificity and a range of non-specific tendencies, including universality, intermedia, multimedia, and convergence. On one hand, new media practices and discourses embrace medium specificity. For example, the early work of Woody Vasulka and Steina explores the intrinsic material qualities of video as an electronic medium, including the relationship between audio and video, feedback, and real-time registration. Similarly, theorist Katherine Hayles has argued for media-specific criticism; Lev Manovich, Matthew Fuller and others have developed the field of software studies and cultural analytics; Christiane Paul, Domenico Quaranta and I have argued for art historical methods specific to NMA; and other contemporary new media discourses talk about digitally born entities, digitally native objects, digital research methods, and so on.²⁹ On the other hand, the foundational principle of digital computing theorized by Alan Turing conceives of the computer as a “universal machine,” one that can emulate the specific functions of any other dedicated device. This concept is distinctly at odds with medium-specificity. Technologist Alan Kay’s conception and development of the Dynabook, a multimedia personal computer, in the 1970s, and Manovich’s contemporary notion of the

²⁸ For more on the post-medium condition in relationship to the history of art and technology, see Peter Weibel, “The Postmedia Condition,” paper given at the Postmedia Condition exhibition, MediaLab Madrid, 7 Feb – 2 April 2006, <http://www.medialabmadrid.org/medialab/medialab.php?l=0&a=a&i=329>

²⁹ Christiane Paul, *Digital Art*; Domenico Quaranta, “The Postmedia Perspective,” Shanken, “Historicizing Art and Technology: Forging a Method and Firing a Canon.”

computer as metamedium, further distance new media practices and discourses from the medium-specificity of Greenbergian modernism. This distance is not to be condemned, as Krauss would have it. Rather, this affirmation of postmedia multiplicity should be embraced as a strategic questioning of the nature of media in artistic, technological, and social contexts. In other words, to denigrate NMA for failing to uphold the specter of modernism should be taken as a compliment, as recognition of its success in achieving its own goals. In this regard, its convergence with the more general tendency of MCA towards a post-medium condition establishes grounds for forging a rapprochement between the two ostensibly independent discourses.

Krauss's retrograde claim for medium specific practices as the "genuine avant-garde of our day" and her condemnation of post-medium practitioners as "pretenders" sets up an unnecessary binary opposition and an indefensible hierarchy of value. Like Bourriaud's opposition between the implicit and explicit effects of technology on artistic practice, the underlying logic of Krauss's assertions regarding the post-medium condition must be challenged and the artifice and ideological aims of the binary opposition deconstructed. Perhaps one of the most useful contributions that NMA can make to MCA discourses is an understanding of the relationship between materials, tools, and techniques that embraces both medium specificity and the post-medium condition.

It must be mentioned that in *Art Since 1900*, a canonical text on modern and contemporary art, Krauss and her co-authors are so ignorant of or antagonistic to any sort of art that happens to use technological media that even the most major monuments in the discourses of media art history, such as Billy Klüver and E.A.T., are ignored. It is in this context of systematic, categorical exclusionary prejudice - a blatant injustice, as Weibel notes - that strong countermeasures must be taken. Within NMA circles there has been a call to avoid using the term New Media and talk about "just art." Emblematic of this attitude, the subtitle of Graham and Cook's *Rethinking Curating*, aspires to an *Art After New Media*. Indeed, it may be detrimental to analyze art in terms of medium because doing so reinforces differences on the basis of formal materiality that can obscure more profound,

conceptual parallels between various practices.³⁰ At the same time, ignoring certain forms of art on that basis, as in the cases of Bourriaud and Krauss, is far more detrimental. The question of how to address a discursive debate based on media prejudice without calling attention to the medium as the basis for that prejudice remains a quandary. But as the histories of photography and video suggest, the representatives of new media assimilated by the mainstream are rarely the most innovative elements of those practices. As a result, the impact of those practices on mainstream discourses is minimized and the full potential of their critique is not fulfilled.

Further Provocations

Regarding Bourriaud's focus on implicit influences, it is worth exploring the idea that MCA that does not use new media may have something very valuable to add to the discourses of NMA. Along these lines, the curator suggests that "... art creates an awareness about production methods and human relationships produced by the technologies of its day.... [B]y shifting these, it makes them more visible, enabling us to see them right down to the consequences they have on day-to-day life." In other words, by appropriating the underlying logics of emerging technologies, taking them out of their native contexts, and embedding them in more or less traditional artistic media, their effects can be brought into greater relief. Bourriaud notes that the dizzyingly rapid development of interactive technologies in the 1990s was paralleled by artistic explorations of the "arcane mysteries of sociability and interaction." (70) Digital images, he unexpectedly suggests, "indirectly inspired" relational art, for just as their size and proportion may vary with the screen, which "renders virtualities material in x dimensions," so "today's artists have the same ambivalence of techniques..." and "...make up programmes... with variable outcomes, including "the possible transcoding into formats other than the one for which they have been designed." 71. Unfortunately, this proposal suggests a very limited conception of the potential of digital art and the author fails to substantiate it with concrete examples. Aside from a highly insightful chapter on Felix Gonzalez-Torres, *Relational Aesthetics* offers scant

³⁰ See my "Art in the Information Age: Technology and Conceptual Art," in *SIGGRAPH 2001 Electronic Art and Animation Catalog*, (New York: ACM SIGGRAPH, 2001): 8-15. Expanded and reprinted in *Leonardo* 35:4 (August, 2002): 433-38.

analysis of specific artists or artworks. This leaves one wondering to what extent Tiravanija and Parreno, et al, are latterday Degas and Monets, who, to up(date) the ante waged by Bourriaud, are producing a *computationally networked way of thinking* that goes well beyond the new media art of their contemporaries.³¹

More research on unplugged examples of NMA might offer significant insights into the implications of science and technology and into the relationship between human and non-human agents. Such work might also offer useful perspectives on how NMA can be more successfully rendered and presented in exhibition contexts. One of the frequently noted shortcomings of NMA is that it does not satisfy the formal aesthetic criteria of MCA. In part this failure can be explained, if not excused, on the basis of the nature of the media and the theoretical commitments of the artists working with them. For example, in many cases it is difficult to justify displaying net.art created for a computer monitor in an art museum or gallery. Doing so is arguably antithetical to what many NMA critics take to be one of the great conceptual and formal strengths of certain net.art practices: creating work that need not be seen in any particular place, much less in the high altar of traditional aesthetic values, but is designed to be seen, if not interacted with, anywhere there is a networked computer: at home, at work, in a café.

Citing Inke Arnes, Domenico Quaranta asks, How can we “underline New Media Art’s ‘specific form of contemporaneity’” in a way that does not “violate th[e] taboos” of MCA? I’m compelled to take issue with the tone of this query. Violating taboos has played an important role in the history of art. One of the key contributions NMA can make to art in general is in drawing attention to and contesting the status quo. This has a lot to do not just with the explicit use of technological media but with challenging the museum and gallery – or any specific locale – as the privileged site of exhibition and reception. If NMA lies down and accepts assimilation on the terms of MCA, then much of its critical value will have been usurped.

³¹ In this regard, the only work of this loosely affiliated group that is particularly relevant is *No Ghost Just a Shell*, initiated in 1999 (after the first publication of *Relational Aesthetics*) by Parreno and Huyghe, a collaborative project with contributions by Tiravanija, Gonzalez-Foerster, Gillick, and others. But the burden of proof falls on Bourriaud to provide an argument to justify why this work offers deeper insights into the aforementioned issues than works that explicitly use new media technologies to address similar questions.

One must recall that, on the basis of conventional aesthetic criteria, Duchamp's *Fountain* (1917) was rejected by the organizers of the 1917 exhibition of the Society of Independent Artists (Duchamp served on the board and submitted the work under the pseudonym R. Mutt). Just as the canonization of such readymades demanded an expanded conception of what constituted art, so the acceptance of NMA within mainstream discourses demands an expansion of aesthetic criteria. In comparison with these early conceptual interventions, Duchamp's kinetic, perceptual investigations, such as his *Rotary Demisphere* (1920), which are key monuments in the history of NMA, are considered relatively inconsequential in MCA discourses. Their use of electronic media in order to interrogate duration, subjectivity, affect, and perception contest conventional aesthetic values and demand a reconfiguration of both art and the experience of viewing it. For indeed, just as NMA demands a rewriting of the history of photography, so it demands a reconsideration of Duchamp's kinetic, perceptual work as key monuments in the archaeology of time-based art.

The sort of deep challenges to the nature of art that Kosuth proposes and that are posed by the best NMA should be celebrated as a great strength. Yet, I'm compelled to agree with Catherine David's assertion (quoted by Quaranta) that "Much of what today's artists produce with New Media is very boring." To be fair, however, one must add that much of what today's artists produce without new media is at least equally boring. Indeed, only a very small fraction of mainstream artists actually succeed in gaining recognition and acceptance of their work within the discourses of MCA. So it is not the case that NMA simply fails the litmus test of MCA, for most MCA fails too.

There are, as well, aspects of NMA that generate more or less conventional images, objects, installations, and performances, few of which compare favorably with the best MCA on its own terms and on its home-court. In this sense, mainstream rejection of NMA is understandable and justified and such work should be criticized within new media circles as well. More importantly, artists working with advanced ideas should not capitulate to conventional aesthetic norms or market demands for saleable objects whose formal embodiment adds nothing to the conceptual richness of their projects, or perhaps even detracts from it. In part, the greatness of artists such as Caravaggio, Courbet, and Duchamp

can be attributed to how their work combines idea and form in a mutually reinforcing way to contest the status quo.

Moreover, many works of art that employ the tools of new media and have gained mainstream acceptance generally are not acknowledged by MCA as works of NMA per se, just as the artists responsible for them often do not identify with the NMA artworld as their primary peer-group. Electronic works by Duchamp and Moholy-Nagy from the 1920s, early closed-loop video installations by artists including Bruce Nauman and Dan Graham from the 1960s and 1970s, the use of computerized electric light in the work James Turrell, Jenny Holzer, and Olafur Eliasson, the kinetic works of Rebecca Horn, and the computer-manipulated video installations of Doug Aitken, Douglas Gordon, and Pipilotti Rist, spanning the 1980s-2000s, all comfortably fit within both NMA and MCA discourses.³² Hans Haacke's early technological and systems-oriented works, praised by Jack Burnham in the 1960s were later shunned by Benjamin Buchloh, and more recently have been reclaimed by Luke Skrebowski.³³ The use of computers by Frank Stella, James Rosenquist, and Sol Lewitt in the design and fabrication process is well-known but hushed in MCA discourses. In "Paragraphs on Conceptual Art" (1967) Lewitt's uneasy relationship with technology is revealed by the tension between his metaphorical claim that "In conceptual art ... [t]he idea becomes a machine that makes the art" and his warning that "New materials are one of the great afflictions of contemporary art"

Joining Lewitt with the practices of NMA, several of the artist's wall drawings of the 1970s were interpreted in Casey Reas's *Software Structures* (2004) by computer code written by several programmers in various programming languages, yielding multiple forms and suggesting parallels between the analog interpretation of Lewitt's ideas by the assistants who executed the wall drawings in physical space and the digital interpretation of those

³² Indeed, one of the key strategies of my book, *Art and Electronic Media*, was to demonstrate this fluidity by seamlessly placing together works by blue-chip MCA artists like those mentioned above with works by less well-known artists whose reputation has been forged primarily within NMA circles.

³³ See my "Reprogramming Systems Aesthetics: A Strategic Historiography," in Simon Penny, et al, eds., *Proceedings of the Digital Arts and Culture Conference 2009*. CD-ROM and Online Electronic Archive and Print Edition (Berkeley: University of California Press, 2010).

same ideas by programmers in virtual space. The only two artists who appear to have gained substantial crossover success are Nam June Paik and Laurie Anderson. Though famous since the 1960s, the former pioneer of Fluxus, interactive art, video art, and robotic art, struggled financially for most of his illustrious career and the Anderson's crossover success came primarily as a popular music star in the 1980s, not as an art star in MCA.

Part of the hurdle to the mainstream acceptance of NMA is the difficulty that audiences have in seeing the everyday appliances and vernaculars of computing, including computers and their peripherals, such as operating systems, applications, websites, monitors, and drives, as aesthetic objects. Similar difficulties were faced by the visual banality of conceptual art, the ephemerality and objectlessness of performance art, and the remote contexts of earth art, yet these tendencies managed to overcome their hurdles, in part by the clever marketing of saleable objects by dealers, a practice that, as is the case with net.art, can be interpreted as antithetical to the conceptual underpinnings of the work. But even in cases where the production of art commodities might be logically consistent with NMA practice, few artists have succeeded in producing visual forms of merit and those who do typically have traditional artistic backgrounds and may not consider themselves new media artists, per se.

Some blame must be placed on the artists themselves, many of whom lack traditional art training and have cultivated little sensitivity to and experience with the materials and techniques of MCA installation and exhibition practices. Critics and historians have not focused enough attention to theorizing across borders. Curators are also culpable. NMA curators must master the conventions of MCA if they are to succeed in exhibiting NMA in that context and must be able to make connections between works made in both fields. By the same token, MCA curators who are unfamiliar with NMA and the technical and spatial considerations that it demands are ill-prepared to create compelling exhibitions. They must also familiarize themselves with the field and be able recognize and draw conceptual parallels between works that use conventional and new media.

Such curatorial challenges are not limited to NMA but, as noted by Graham and Cook and articulated by Kester and others, is shared by various forms of participatory art. One hopes

that as more specialized curatorial knowledge emerges in various fields, increasingly successful shows will be mounted and knowledge will be transferred across artworlds.³⁴ In this regard, Bourriaud offers some criteria for evaluating an exhibition. Though highly abstract, they may provide some guidance to NM artists and curators:

... this 'arena of exchange,' must be judged on the basis of aesthetic criteria, in other words, by analyzing the coherence of this form, and then the symbolic value of the 'world' it suggests to us, and of the image of human relations reflected by it.... All representation (though contemporary art *models* more than it represents, and fits into the social fabric more than it draws inspiration thereof) refers to values that can be transposed into society. (18, spelling corrected)

This general statement defines "aesthetic criteria" in terms of formal coherence, "symbolic value," "human relations," and the modeling of social values. As these terms are neutral with respect to medium and context, they offer the sort of openness that would enable the confluence of various artworlds.

We live in a global digital culture in which the materials and techniques of new media are widely available and accessible to a growing proportion of the population. Millions and millions of people around the world participate in social media, and have the ability to produce and share with millions and millions of other people their own texts, images, sound recordings, videos, GPS traces. In many ways early NMA works that enabled remote collaboration and interaction, such as Ascott's *La Plissure du Texte* and others mentioned above, can be seen as modeling social values and practices that have emerged in tandem with the advent of Web 2.0 and participatory culture. Now a YouTube video, like *Daft Hands*, can delight and amaze nearly 50 million viewers (March 2011), spawning its own subculture of celebrities, masterpieces, and remixers. In this context what are the roles of the artist, the curator, the theorist, and critic? What do they have to offer that is special,

³⁴ See, for example, Christiane Paul, *New Media in the White Cube and Beyond; Curatorial Strategies for New Media* (Berkeley: University of California Press, 2008) and Beryl Graham and Sarah Cook, *Rethinking Curating*, (Cambridge, MA and London: MIT Press, 2010).

that adds value and insight to this dynamic, collective, creative culture? Why care anymore about MCA or NMA, per se? What is at stake preserving these distinctions and in distinguishing such artistic practices from broader forms of popular cultural production and reception? Do such distinctions merely serve to protect MCA and NMA from interlopers by preserving a mythical status to their exclusive, lucrative and/or prestigious practices?

These questions shall be discussed in greater detail in subsequent chapters, which argue that specialized artistic practices offer poetic and metaphorical approaches to challenging ideas; approaches that are substantively different than other disciplinary methods in terms of how they contest existing forms of knowledge and construct new forms of understanding. These approaches themselves are challenging due to the complex and often paradoxical layering of aesthetic concepts and materials. Like high-level research in science and other disciplines, the outcomes are often not comprehensible to laypeople that are unfamiliar with the field's specialized disciplinary languages and methods. As such, they are unlikely to be popular on YouTube. YouTube popularity is no more valid as a criterion for judging such artistic research than it would be for judging scientific research. *Daft Hands* is an iconic manifestation of participatory culture and is highly successful by the criteria of that culture, i.e. YouTube popularity. For all of its appealing cleverness, virtuosity, and style, *Daft Hands* does not, as *La Plissure du Texte* did, create a working model of a possible future world, much less accurately anticipate some key features of that world (i.e. the world of participatory culture in which *Daft Hands* circulates). To use Bourriaud's aesthetic criteria, *Daft Hands*, does not, as *La Plissure du Texte* did, imbue "symbolic value" to "the 'world' it suggests to us and of the image of human relations reflected by it." Ultimately, what sets the art research apart from popular culture is its masterful use of metaphoric and poetic methods in the elaboration of visionary, symbolic, and metacritical practices that respond to cultural exigencies. Technological media may offer precisely the tools needed to reflect on the profound ways in which that very technology is deeply embedded in modes of knowledge production, perception, and interaction, and is thus inextricable from corresponding epistemological and ontological transformations. While unplugged approaches to media culture may offer valuable insights as well, this metacritical method may offer artists the most advantageous opportunities to comment on and participate in

the social transformations taking place in digital culture today, in order to, as Bourriaud implores, *“inhabit the world in a better way.”*