Contemporary Art and New Media: Digital Divide or Hybrid Discourse?

Edward A. Shanken

DXARTS University of Washington, Washington-DC, United States eshanken@uw.edu

Since the mid-1990s, new media art (NMA) has become an important force for economic and cultural development internationally, establishing its own major institutions.¹ 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 biennial 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, it perhaps was inevitable that central

¹ This essay is forthcoming in Christiane Paul, ed. *A Companion to Digital Art*. London: Wiley-Blackwell. Portions were previously published in the following: "Contemporary Art and New Media: Outline for Developing a Hybrid Discourse" *ISEA2010 Proceedings*; "Alternative Nows and Thens To-Be" *Alternative Now* (online festival reader) Wroslaw: WRO2011 Biennial of Media Arts, 2011; reprinted in in *Repasando el Futuro* (English/Spanish) Barcelona: ArtFutura, 2011, 13-27; "Response to Domenico Quaranta's 'The Postmedia Perspective'" Rhizome.org 26 Jan 2011; and "Edward Shanken on 'Is New Media Accepted in the Artworld?'" Artfagcity, 6 Sep, 2011. The reader is also encouraged to see my online resource the topic, "Contemporary Art and New Media: Toward a Hybrid Discourse: http://hybridge.wordpress.com

discourses in MCA would employ, if not appropriate, key terms of digital culture, such as "interactivity," "participation," "programming," and "networks." However, 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 based on 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 also 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 sometimes display a weak 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. These are just a couple of reasons why it frequently fails to resonate in those contexts.

The perennial debate about the relationship between electronic art and mainstream art has occupied artists, curators, and theorists for many decades. Questions of legitimacy and self-ghettoization — the dynamics of which are often in tension with each other — have been central to those debates. In seeking legitimacy, NMA has not only tried to place its practices within the theoretical and exhibition contexts of MCA but also 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 market and 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 the canon of art history and into emerging art and cultural forms might be gleaned by such a rapprochement?

Artworlds

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 synchronous with the revolutionary youth culture of the time and the 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 recent popularity and collectability of video art demonstrates MCA's ability and desire to commodify relatively ephemeral art forms for which there previously was no market.

The pluralism that emerged in the 1960s has multiplied over the last half century, fueled by brisk market growth for the work of living artists (to wit, the prices commanded by Gerhard Richter and Damien Hurst) 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. Artists have opportunistically selected and combined the conceptual and formal inventions of various precursors to contest conventional notions of style, originality, and materiality. They have responded to emerging cultural transformations by exploring theoretical questions, social issues, and formal concerns particular to contemporary exigencies and cultural milieus, expanding the materials, contexts, and conceptual frames of art in the process. 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 im-

primatur to pursue noncommercial work. This is the scenario in which the notion of artistic research has taken a significant stronghold, spawning a growing number of 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 the critical recognition and museological acceptance of video, performance, installation, and other unconventional forms of artistic production, the contemporary art market — and especially the resale sector dominated by big auction houses — remains tightly tethered to more or less collectible objects, and the vast majority of works acquired are painted canvases and works on paper. 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.

Throughout this upheaval, 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 yet successfully expanded its market to include (or exploit) some of the key parallel artworlds, such as the discursive, socially engaged, and collaborative artworks theorized by the likes of Grant Kester (2004, 2012), Claire Bishop (2012a) and Tom Finkelpearl (2012) or the work of new media artists theorized by scholars, including the contributors to this volume. 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 today have their own extensive, self-perpetuating institutional infrastructures that are far more highly developed and funded than the loose formation of artists' collectives and alternative spaces of the 1960s and 1970s. In

other words, the MCA 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 a broader critical discourse because in that domain it is not the only (or most interesting) game in town. Indeed, the Google citation index of Lev Manovich's The Language of New Media (2001) exceeds that of all the works published throughout their careers by Rosalind Krauss, Hal Foster, and Nicholas Bourriaud combined!

Three decades ago, art critic John Perreault observed that, "the art system — composed of dealers, collectors, investors, curators, and artists — could continue without any good art at all" (Heartney, 2012). Noting that, "many artists use digital technology," Bishop's Artforum article "Digital Divide" (2012b) asked a provocative and insightful question: "how many really confront the question of what it means to think, see, and filter affect through the digital? How many thematize this, or reflect deeply on how we experience, and are altered by, the digitization of our existence?" Unfortunately, Bishop limited her discussion to "the mainstream art world" and dismissed the "sphere of 'new media' art" as a "specialized field of its own." As a result, she could only "count on one hand the works of art that do seem to undertake this task." When Bishop was called to task in print (Cornell and Droitcour 2012) for her exclusion of NMA, she rebutted that "new media or digital art" were "beyond the purview of my article and [...] my expertise" (2012c). Could a contemporary art historian / critic be taken seriously if s/he stated that performance or video or installation lay beyond their expertise? Bishop's admission of ignorance, made without a hint of embarrassment, is a double-edged sword: even as she acknowledges the presence of NMA, she self-righteously condones an account of contemporary art that ignores it, thereby reifying the gap between MCA and NMA that she ostensibly seeks to address. Indeed, such omissions from critical discourse are ideologically charged. As passive-aggressive forms of rhetorical violence, they strip that which is excluded of its authority and authenticity, ensuring its subaltern status. Bishop deserves credit for raising the issue in a mainstream context and for serving as a lightning rod for the ensuing polemic. However, art criticism this shallow and ill-informed — if not willfully ignorant and hegemonic — is destined for obsolescence or ignominy. It unwittingly demonstrates Perreault's contention that MCA can continue without any good art, or worse yet, in blissful ignorance of a whole area of artistic practice.

It must be recognized that the very notion of an "artworld" has been a problematic concept since Arthur Danto (1964) introduced the term. Sociologist Howard Becker (1982) challenged the notion of a univocal artworld, 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." 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, as Perreault recognized, 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 and especially in the last century, MCA collectors, curators, and institutions struggle to recognize NMA as a valid, much less valuable, contribution to the history of art. As Magdalena Sawon, co-founder/co-director of Postmasters 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." It is deemed uncollectible because, as Christie's contemporary art expert Amy Cappellazzo observes, "collectors get confused and concerned about things that plug in" (Thornton 2008, 21).

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

² Interview with the author, 13 April, 2010. Postmasters 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.

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 (e.g. Bishop), 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 (Shanken 2001; Murray 2007). At the same time, Jack Burnham, who championed art and technology in the 1960s, was critical of the "chic superficiality that surrounded so many of the kinetic performances and 'light events'" and noted that, "there was ... more than a little of the uptown discotheque" in much of such work (1975, 128-129). So it is not surprising that similar criticisms continue to be made by both NMA and MCA critics, though unfortunately the latter tend to throw out the wheat with the chafe. The uneasy relationship between art and technology and between MCA and NMA has a long and complex history. However, 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 frictions. Yet no other movement or tendency in the history of art since 1900 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 (mostly) 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, completed

a \$40 million expansion in 2009. This may pale in comparison to the \$429 million extension for the Tate Modern or the \$720 million budget for the new downtown branch of the Whitney Museum. However, given that the population of Linz is under 200,000, \$40 million represents a substantial and ongoing dedication of cultural resources to NMA. As suggested above, the number of scholarly citations for key works of MCA and NMA theory is also illuminating. Despite MCA's refusal to seriously reckon with NMA, NMA is, in a manner of speaking, an artworld force to be reckoned with.

Bridging the Gap: Implicit vs. Explicit Influence and Medium Injustice

In an effort to bridge the gap between the discourses of MCA and NMA, I convened a panel at Art Basel in June 2010 with Nicolas Bourriaud, Peter Weibel, and Michael Joaquin Grey, two curators who, respectively, represent MCA and NMA, and an artist whose career has moved very fluidly between both worlds.³ One obvious indication of the gap was demonstrated by the simple fact that Weibel, arguably the most powerful individual in the NMA world, and Bourriaud, one of the most influential MCA curators, 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, e.g. in non-technological works. As he wrote in his renowned book, 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" (2002, 67). On this basis, he further asserted that, "the main effects of the computer revolution are visible today among artists who do not use computers" (67).

³ Bourriaud, the MCA curator renowned for his theorization of "relational aesthetics," co-founded and co-directed the Palais de Tokyo in Paris, 1999-2005 and organized Altmodern, the fourth Tate Triennial in Spring 2009. Weibel directed Ars Electronica from 1986-99, when he became Chairman and CEO of the ZKM | Center for Art and Media, Karlsruhe, and served as Artistic Director of the Biennial of Seville (Biacs3) in 2008 and the Moscow Biennale in 2011. Grey received a Golden Nica award from Ars Electronica in 1994 and his work has entered the permanent collections of the Whitney Museum, MOMA, LA MOCA, Gemäldegalerie, and the Serpentine Gallery. Solo exhibitions include P.S. 1 MOMA, Barbara Gladstone Gallery, and Lisson Gallery.

A video recording of the event can be found at https://youtu.be/9p9VP1r2vc4

On one hand, 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 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 (West 2008). 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.

Regarding the reception of the "new media" of the nineteenth century, John Tagg (1993) has noted that 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. Ji-hoon Kim (2008) has further observed that despite the extraordinary assimilation of video by MCA, much experimental film and video, particularly the sort of material championed by Gene Youngblood in Expanded Cinema (1970) and its progeny, has been excluded

from mainstream museum shows while being celebrated in exhibitions held in new media contexts. 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. A proactive theorization of 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 seemingly inevitable 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 whose work influenced Muybridge, who conducted extensive research at University of Pennsylvania and collaborated with 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. 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 a subsequent influence on time-based art including NMA.

Bourriaud's comparison of photography during the Impressionist era with computers and computer networking since the mid-1990s is troubling for reasons related to historical incommensurabilities. The Eighth (and final) Impressionist Exhibition in 1886 predates the introduction of the 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 just four years to the appearance of an exhibition of net.art at Documenta X (1997) and five years prior to the original French publication of Relational Aesthetics in 1998 (the same year that E-mail became a Hollywood trope in You've Got Mail.) Most importantly, 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 image-centric discourses.) This is especially true since the advent of Web 2.0 in the mid-2000s, when new media tools and corresponding behaviors 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 (Keen 2007) or enabling powerful new forms of creativity (Shirky 2008).

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 and his discussions and exhibitions of contemporary art would be blind to medium. But that is not the case. Peter Weibel astutely picked up on Bourriaud's distinction between direct and indirect influences and pointed out the hypocrisy of valuing the indirect influence of technology while scorning the direct use of technology as an artistic medium in its own right. Weibel accurately and provocatively labels this "media injustice." As Christiane Paul has noted, "Bourriaud's distinction would be an absolute oddity in terms of art history, theory, and practice; the most important reflections on video unfolded in the medium of video art itself (not in painting), which is true for almost every medium." Indeed, the implicit / explicit dichotomy that Bourriaud constructs serves as a thinly veiled rhetorical device to elevate the former member of the pair — the lofty, theoretical ideal — at the expense of the latter – the quotidian, practical tool. This

ontology, predicated on 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 gap between MCA and NMA cannot be bridged until such binary oppositions are expunged from discourse, rather than recapitulated in the positions taken by Bourriaud, Bishop, and other like-minded MCA curators and critics.

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. Noting that Clement Greenberg saw the modernist avant-garde as the "singular defense against the corruption of taste by the spread of kitsch's 'simulacrum of genuine culture'" (2009, 141), Krauss argues that the artists she champions — Ed Ruscha, William Kentridge, Sophie Calle, Christian 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. Such contentions, tenuous at best, limit the interpretation of highly complex works and practices to a single aspect — just as Greenberg did — obscuring the complex layering of ideas, media, and technical supports that converge in them.

For example, 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 interaction with media demands recognition of the medium specificity and historical trajectories of the various practices he incorporates in his work, even as it embodies the post-medium condition's hybridization of media, which contests such specificity. 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 a work of NMA to any single "technical support," be it Roy Ascott's engagement with planetary consciousness (2003), Susan Kozel's exploration of embodiment and affect, or The Jogging's investigation of image and object economies, has the advantage of avoiding the discussion of technological media. But it does the same violence to the subtleties of the specific media — and media ecologies — that the artists employ in, and as part of, their work. It is, moreover, blind to 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 three-part essay "Art After Philosophy" (1969). The best NMA arguably exploits precisely this opening up of artistic inquiry beyond a myopic fixation on medium or support, as heralded by Kosuth and others over four decades ago. The obsession with media in NMA is more of a problem of MCA critics than it is for new media critics; the latter apply a broad range of methods, including media theory, media archaeology, and science and technology studies to wrestle with the particularities of the various media employed, while also engaging with the profound meanings and affective experiences elicited by the best works. Not content to contribute to in-bred modernist discourses (from which they have been excluded anyway on the basis of the superficial formal elements of their work), new media artists — like the artists engaged in 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 challenging the object-oriented obsession of the MCA artworld and the dynamics of its market-driven demand for collectible widgets. In accord with Bishop's criteria, they seriously investigate "what it means to think, see, and filter affect through the digital [...] and [...] reflect deeply on how we experience, and are altered by, the digitization of our existence" (2012c, 334). Indeed, as our existence becomes increasingly digitized, the material emblems of cultural capital that MCA persists in peddling seem increasingly out of place, or at least increasin-

⁴ For more on the work of Kozel and The Jogging, see http://affexity.se/ and http://thejogging.tum-blr.com respectively.

gly in tension with, the actual flow of ideas, images, and artworks via computer networks and online distribution channels. This tension is, in fact, as Artie Verkant (2010) argues, a central concern of so-called post-Internet artists (including Oliver Laric, Seth Price, and himself), for whom the artwork "lies equally in the version of the object one would encounter at a gallery or museum, the images and other representations disseminated through the Internet and print publications, bootleg images of the object or its representations, and variations on any of these as edited and recontextualized by any other author."

The gauntlet Krauss lays down to the post-medium "pretenders" might appear to apply to most new media (and post-Internet) 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, seem to occupy a hybrid stance, straddling medium-specificity and a range of non-specific tendencies, including intermedia, multimedia, participation, and convergence.

On one hand, new media practices and discourses embrace medium specificity, paralleling structural film practices. For example, the early work of Steina and Woody Vasulka 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 (2004) has argued for media-specific criticism; Fuller (2008), Manovich (2013), and others have developed the field of software studies and cultural analytics; Shanken (2007), Paul (2008), Quaranta (2011), Graham and Cook (2010), and others have argued for critical and curatorial methods specific to NMA; and other contemporary new media discourses talk about digitally born entities, digitally native objects, digital research methods, network cultures, and so on.

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, which he theorized in the 1970s as a "metamedium" (1977), and the recent expansion of that concept (Manovich 2013), further distance new media practices and discourses

from Greenbergian modernism. Contra Krauss, this affirmation of what might be called "postmedia multiplicity" should be embraced as a strategic questioning of the nature of media in artistic, technological, and social contexts. In other words, NMA's refusal to uphold the specter of modernism is anything but a failure; rather, it signals success in pursuing, if not achieving, its own goals. In this regard its convergence with the more general evolution of MCA toward a post-medium condition establishes grounds for forging a rapprochement between the two ostensibly independent discourses.

Krauss's retrograde claim that certain artists' use of "technical supports" represents 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 of the implicit and explicit effects of technology on artistic practice, Krauss's rhetorical crutch must be unhobbled and the system of values it serves to artificially prop up must be 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.

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. Unplugged examples of NMA may offer potentially useful perspectives on how NMA can be more successfully presented in exhibition contexts and may also provide examples that demonstrate parallels between implicit and explicit approaches to science and technology, catalyzing the formation of a hybrid discourse that joins both.

One of the frequently noted shortcomings of NMA is that it does not satisfy the formal aesthetic conventions 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 some cases it is difficult to justify displaying a work of net.art in an art museum or gallery. Doing so is arguably antithetical to what some NMA practitioners and critics take to be one of the conceptual and formal strengths of certain net.art and post-Internet art practices: creating work that need not be seen in any particular place, or in one particular form, much less on the high altar of traditional aesthetic values, but is designed to be seen, if not interacted with, reinterpreted, and recirculated, wherever there is a networked computer or mobile device, i.e. literally anywhere. What happens to net.art, and one's experience of it, when it is corralled into a traditional exhibition context? Is it still net.art or has it become a strangely neutered doppelganger? Expanding on David Joselit's (2012) categories of "image fundamentalists" and "image neoliberals" (which fix art in originary cultural contexts or global financial markets, respectively), Brad Troemel (2013) has proposed the category of "image anarchists," which reflects a "generational indifference toward intellectual property, regarding it as a bureaucratically regulated construct [...] Image anarchism is the path that leads art to exist outside the context of art." This is perhaps what MCA fears most.

Citing Inke Arns, Quaranta (2011) 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? The direction that this line of questioning proposes must itself be questioned. Violating taboos has played an important role in the history of art. A peripheral discourse like NMA occupies a clear vantage from which to reveal and contest the status quo. This position is enabled not just by the explicit use of technological media but by challenging the museum and gallery — or any specific locale — as the privileged site of exhibition and reception. The proliferation and increasing mainstream acceptance of socially engaged art practices that take place outside of museum contexts demonstrates that such challenges are far from unique to NMA. However, if NMA lies down and accepts assimilation on terms set by MCA, then much of its critical value will have been usurped.

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 So-

ciety of Independent Artists. 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 Glass Plates (1920) and later Rotoreliefs (key monuments in the history of NMA) are considered relatively inconsequential in MCA discourses. These works use electronic media in order to interrogate duration, subjectivity, affect, and perception. In so doing, they also contest conventional aesthetic values and demand a reconfiguration of both art and the experience of viewing it. 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 Duchamp and Kosuth proposed, and that are posed by the best NMA, should be celebrated as a great strength. Yet, I am compelled to agree with curator Catherine David's assertion that "Much of what today's artists produce with New Media is very boring" (quoted in Quaranta 2011). 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.

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, structural films and early video installations by Michael Snow, Anthony McCall, Bruce Nauman and Dan Graham in the 1960s and 1970s, the use of computer-controlled electric light in the work of James Turrell, Jenny Holzer, and Olafur Eliasson and the computer-manipulated video installations of Doug Aitken, Douglas Gordon, Christian Marclay, and Pipilotti Rist, spanning the 1980s-2000s, all comfortably fit within both NMA and MCA discourses. Hans Haacke's early technological and systems-oriented works, praised by Jack Burnham in the 1960s and later shunned by Benjamin (1988), have been reclaimed (Bijvoet 1997, Shanken

1998, Skrebowski 2008, Jones 2012), part of a larger reconsideration of "systems aesthetics" (Shanken 2010). 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. Robert Rauschenberg, best known as a pop artist, was also a central figure in the group Experiments in Art and Technology (E.A.T.), which he co-founded in 1966. Although this aspect of Rauschenberg's career is downplayed in MCA discourses, the artist famously promoted acting "in the gap between art and life," which for him clearly included using technology as a valid art medium. Further, his collaborations with engineer Billy Klüver demonstrate a conviction to bridge the gap between art and technology, as in Oracle (1962-65) and Soundings (1968).

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 ." The ongoing prejudice against the explicit use of technological media by Bourriaud and others recapitulates this parochial and conflicted attitude. But there is much to be gained by recognizing and exploiting continuities between implicit and explicit uses of technology in art. Joining Lewitt with the practices of NMA, several of the conceptual artist's wall drawings of the 1970s were interpreted by computer code in Casey Reas's Software Structures (2004). Commissioned for the Whitney Museum's artport web site, Reas asked several programmers to code Lewitt's instructions in various programming languages. The outcomes yielded multiple forms, suggesting strong 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 same ideas by programmers in virtual space.

Notwithstanding these parallels, MCA audiences and critics have trouble seeing the everyday appliances and vernaculars of computing (operating systems, applications, web sites, keyboards, monitors, printers) as aesthetic objects (Murray 2007). 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, in some cases,

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 that warrant merit on the basis MCA standards.

For the new media artist seeking to meet those standards, Jonas Lund's The Fear of Missing Out (2013) offers a novel approach. A computer algorithm sifts through a database of "top-ranking curators, works, galleries and artists," generating the title, materials, and instructions for the "ideal work to create at a given point in [the artist's] career, before she's thought of it herself" (Rao 2013). As in many conceptual and post-conceptual art practices, the actual objects are presumably less important than the underlying ideas but must nonetheless conform to MCA standards. Indeed, Lund observes he must "follow the instructions in a convincing way... [to] transform it into something viable" (Rao 2013). Here the idea includes an ironic meditation on (and mediation of) automated digital systems and big data, subjectively rendered aesthetic objects, and the MCA market.

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, interaction, and participation, such as Ascott's La Plissure du Texte (1983), can be seen as modeling social values and practices that subsequently emerged in tandem with the advent of Web 2.0 and participatory culture. A YouTube video like Daft Hands (2007) can delight and amaze over 50 million viewers, spawning its own subculture of celebrities, masterpieces, and remixers. If Lund's algorithm and database are any good and he open-sourced them, then in theory anyone with decent chops could make market -worthy MCA objects. In this context, what are the roles of the professional artist, curator, theorist, and critic? What do they have to offer that is special? 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?

Bourriaud's (2002) parameters for evaluating an exhibition offer some insight into these difficult questions:

... 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 [...] refers to values that can be transposed into society. [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.

Specialized artistic practices offer poetic and metaphorical approaches to challenging issues, shifting values, and social relations. These approaches are substantively different from other disciplinary methods in terms of how they contest existing forms of knowledge and construct alternative modes of understanding. The 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. But 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 in terms of 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, art research sets itself apart from popular culture by elaborating visionary, symbolic, and metacritical practices that respond to cultural exigencies. In this respect, 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. 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" (2004, 11-12).

The \$34.2 Million Question

In this spirit of imagining a better way to inhabit the world (and a better world to inhabit), I initiated a Facebook debate on May 10, 2013 that placed in tension two different sets of values: those of the commercial art market and those of telematic art. In my status update, I asked:

What would the world be like if Roy Ascott's La Plissure du Texte, 1983 (or your favorite work of net.art or proto-net.art) sold at auction for \$34.2 million instead of an abstract painting by Gerhard RIchter? In what sort of world (and artworld) would that be possible?

Perhaps the most insightful response came from Caroline Seck Langill who wrote, "And all that money would be distributed, like the artwork." This short, sharp prod shrewdly suggested an alternative economic model derived from Ascott's theory of "distributed authorship," whereby royalties from the resale of a telematic artwork would be shared among the project's geographically disparate participants.

And why not? There are cultural economies in which the creation and hording / multiplying of wealth for its own sake is not valued as highly as sharing, gifting, and ritual expending. Over half a century ago, Yves Klein's Zones of Immaterial Pictorial Sensitivity (1959) brilliantly challenged the MCA market by juxtaposing capitalist models of exchange with the incalculable value of art. The "authentic immaterial value" of the invisible work of art could be acquired only through an exchange of gold (half of which was thrown into the Seine by the artist), for which

the collector attained a receipt of ownership, which had to be burned to achieve full immaterialization.

The basic conventions of the art market, e.g. ease of exchange and signature, are not neutral qualities or formal characteristics. Rather, they embody deeply held ideological commitments, just as the basic conventions of Ascott's telematic art embody deeply held ideological commitments. So what are the implications if these worlds collide and MCA ends up valuing most highly (and putting its money where its mouth is) a work that challenges its traditional values? If, as Langill intimates, MCA were to embrace Ascott's La Plissure and its ideology of distributed authorship, it would be logically consistent for MCA actors to express those commitments by distributing the economic wealth generated by the sale of the work. What, after all, could generate more cultural capital in a gift economy than making a gift of the appreciation in value of an artwork that was a harbinger of participatory culture?

References

BECKER, Howard. Art Worlds. Berkeley: University of California Press, 1982.

BIJVOET, Marga. *Art as Inquiry: Toward New Collaborations Between Art*, Science, and Technology. Bern: Peter Lang, 1997.

BISHOP, Claire, 2012a. *Artificial Hells: Participatory Art and the Politics of Spectatorship.* London and Brooklyn: Verso, 2012.

BISHOP, Claire, 2012b. *Rejoinder to Cornell and Droitcour*. Artforum, 2012 (Jan): 38.

BISHOP, Claire, 2012c. *Digital Divide: Contemporary Art and New Media Artforum*, 2012 (Sept): 434-41.

BOURRIAUD, Nicolas. *Relational Aesthetics*. Trans. Simon Pleasance & Fronza Woods with Mathieu Copeland. Paris: Les presses du reel, 2002, c. 1998 (French). BUCHLOH, Benjamin. *Hans Haacke: Memory and Instrumental Reason Art in America*, 1988, 76:2 (February); 97-108, 157-59.

BURNHAM, Jack. Steps in the Formulation of Real-Time Political Art in Kaspar Koenig, ed., Hans Haacke: Framing and Being Framed, 7 Works 1970-75. Halifax: The Press of the Nova Scotia College of Art and Design, 1975.

CORNELL, Lauren and Brian Droitcour, 2013. *Technical Difficulties* (Reply to Claire Bishop, Digital Divide). Artforum (Jan): 36,38.

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

FULLER, Matthew. *Software Studies: A Lexicon*. Cambridge, MA: MIT Press, Ed. 2008.

GRAHAM, Beryl and Sarah Cook. *Rethinking Curating: Art after New Media*. Cambridge, MA: MIT Press, 2010.

HAYLES, N. Katherine. *Print is Flat, Code Is Deep: The Importance of Media-Spe-cific Analysis*. Poetics Today 25:1 (Spring): 67-90, 2004.

HEARTNEY, Eleanor, 2012. *The Incredible Shrinking Art Critic Brooklyn Rail* (Dec 10, 2012). http://www.brooklynrail.org/2012/12/artseen/the-incredible-shrinking -art-critic" Cited 28 Oct 2012.

HOROWITZ, Noah. *Art of the Deal: Contemporary Art in a Global Financial Market.* Princeton University Press, 2011.

JONES, Caroline. *Systems Symptoms: Jack Burnham's 'Systems Esthetics*. Artforum, 2012 51: 1 (September): 113-114, 116.

JOSELIT, David. Art After. Princeton: Princeton University Press, 2012.

KAY, Alan and Adele Goldberg. *Personal Dynamic Media Computer 10:3.* 1977 (March): 31-41.

KEEN, Andrew. *The Cult of the Amateur: How Today's Internet Is Killing Our Culture*. New York: Crown Business Publishing, 2007.

KESTER, Grant. *Conversation Pieces: Community and Communication in Modern Art.* Berkeley: University of California Press, 2004.

KESTER, Grant. *The One and the Many: Contemporary Collaboration in a Global Context*. Durham: Duke University Press, 2012.

KIM, Ji-Hoon. *The Postmedium Condition and the Explosion of Cinema*, Screen , 2009, 50:1: 114-23.

Kosuth, Joseph. *Art after Philosophy I, II, III Studio International*, CLXXVIII, 1969 (Oct, Nov, Dec): 134-37; 160-61: 212-13.

KRAUSS, Rosalind. *The Guarantee of the Medium*, Tiina Arppe, Timo Kaitaro and Kai Mikkonen, eds. Studies across Disciplines in the Humanities and Social Scien-

ces 5. Helsinki: Helsinki Collegium for Advanced Studies, 2009, 139-145.

MANOVICH, Lev. Software Takes Command. New York: Bloomsbury Academic, 2013.

MURRAY, Soraya. New Media Anxiety: Art History and the Problem of Modern Technology. Doctoral dissertation, Cornell University, 2007.

Paul, Christiane. New Media in the White Cube and Beyond: Curatorial Models for Digital Art. Berkeley: University of California Press, 2008.

QUARANTA, Domenico. The Postmedia Perspective, Rhizome, 2011 (Jan 12).

RAO, MALLIKA. Controversial New Project Uses Algorithm to Predict Art Huffington Post, 2013 (Nov 5).

SHANKEN, Edward A. Art in the Information Age: Technology and Conceptual Art, in SIGGRAPH 2001 Electronic Art and Animation Catalog, (New York: ACM SIGGRAPH): 8-15; expanded in Leonardo 35:4 (August, 2002): 433-38.

SHANKEN, Edward A. Historicizing Art and Technology: Forging a Method, Firing a Canon, in Oliver Grau, ed., Media Art Histories. Cambridge: MIT Press, 2007. p 43-70.

SHANKEN, Edward A. Reprogramming Systems Aesthetics: A Strategic Historiography. Simon Penny, et al, eds., Proceedings of the Digital Arts and Culture Conference 2009. Berkeley: University of California Press, 2009.

SHIRKEY, Clay. Here Comes Everybody: The Power of Organizing Without Organizations. New York: Penguin, 2008.

SKREBOWSKI, Luke. All Systems Go: Recovering Hans Haacke's Systems Art Grey Room 30, 2008 (Winter) 54-83.

TAGG, John. The Burden of Representation: Essays on Photographies and Histories. Minneapolis: University of Minnesota Press, 1993.

THORNTON, Sarah. Seven Days in the Art World. London: Granta, 2008.

TROEMEL, Brad. The Accidental Audience The New Inquiry, 2013 (March 14).

VIERKANT, Artie. The Image Object Post-Internet . 2010http://jstchillin.org/artie/vierkant.html Cited Dec 4, 2013.

WEST, Nina P. The \$900,000 Librarian, Forbes.com, 2008 (Oct 1). Cited 4 Nov 2013.

YOUNGBLOOD, Gene. Expanded Cinema. New York: P. Dutton Co., Inc, 1970.