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Leonardo Reviews Quarterly 1.04 | 2011

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ARTS, SCIENCES AND TECHNOLOGY

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Leonardo Reviews

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Curiosity, Innovation and Agency

Somewhere toward the end of her book-length essay on the changing form of curiosity in the late twentieth century, Helga Nowotny makes the following claim about the demands of innovation and its expressions and consequences:

They already manifest themselves in preliminary form – for example, in the artistic, creative professions. For people who work in these fields and who regard themselves as innovative and creative, this means repeatedly and voluntarily letting themselves in for the outstandingly staged forms of competition whose function is to maximise variation to carry out selection all the more rigorously. This proceeds under the sign of seeming transparence and in adherence to criteria shared by all, though these can be unjust and disputable in individual cases. (Nowotny, 2008, p. 141).

The argument of the book is that science and technology have produced an uncertainty about the future which represents a rupture from the mid 20th century belief in a unidirectional and causal link between innovation and invention. She accounts for this rupture in the changing relationship between research and the institutional expectations placed upon those individuals and teams undertaking it. The current drive toward the new as outcomes of scientific and technological research, she argues, has provoked uncertainty and plurality where there had once been consensus. In particular the vision of the future is so fractured that it no longer seems like a Donnish affectation to talk about possible futures. At root, the unflinching singular vision of the future that drives the market – profit and more of it – has impacted on the institutional frameworks that are necessary to support human curiosity to produce diversity, fragmentation and uncertainty. In themselves these tendencies are not without obvious merit, but the question her essay poses concerns the transformation of curiosity itself. Clearly its insatiability is instinctual but its expressions and consequences are contingent. Insisting that research has innovative outcomes, then, leads to a different kind of curiosity, which may or may not be better or worse but before we relinquish any determining influence it would be as well to consider what might be the impact on human curiosity of insisting on (research) 'impact'. What might be the consequences of a social or institutional structure in which the proliferation of innovation naturalises the belief in possible directions rather than a commitment to a singular and agreed direction?

Perhaps the most obvious consequence is a shared uncertainty, personal insecurity in the face of science and technology that are seemingly autonomous. Dystopian scenarios, cultural passivity and compensatory distractions are perhaps the most obvious. Take for example an article in London Review of Books discussing three recent books on Google by Daniel Soar, one of their editors.

… the stuff that Google makes publicly searchable, or 'universally accessible'. It's only a small fraction of the information it actually possesses. I know that Google knows, because I've looked it up, that on 30 April 2011 at 4.33 p.m. I was at Willesden Junction station, travelling west. It knows where I was, as it knows where I am now, because like many millions of others I have an Android-powered smart phone with Google's location service turned on. If you use the full range of its products, Google knows the identity of everyone you communicate with by email, instant messaging and phone, with a master list – accessible only by you, and by Google – of the people you contact most. If you use its products, Google knows the content of your emails and voicemail messages (a feature of Google Voice is that it transcribes messages and emails them to you, storing the text on Google servers indefinitely) (Soar, 2011, p. 3).

In this extract Google 'knows', in a way that is indistinguishable from human knowledge (I know that Google knows); elsewhere in the article Soar writes that Google can 'learn' and is 'clever'. This may be just journalistic expression; a snappy way of writing about a topic that might not be immediately appealing to a readership more used to literary appreciation. But expressions have consequences and Soar's willingness to invest an algorithm with cleverness contrasts with his view of real humans (presumably not the readers of LRB) who are apparently undiscriminating when they are in the thrall of technology.

Since there are more ordinary people in the world than there are businesses, and since there's nothing that ordinary people don't want or need, or can't be persuaded they want or need when it

flashes up alluringly on their screens, the money to be made from them is virtually limitless (Soar, 2011, p. 6).

Soar is not untypical of much of the loose rhetoric that surrounds new technology and certain scientific research. The reason, following Nowotny's argument, must be clear: the reification of innovation for market advantage has discouraged attention to the nature of invention; its inevitability, its insatiability, its material and poetic forms and its purpose in the human order of things as the apparent control of the future is weakened through innovation. What Nowotny may be describing could well be too entrenched in the institutional and state structures that support research to be reversed, but that is not the same as relinquishing agency in the expression of our curiosity.

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Nowotny, H. (2008). *Insatiable Curiosity: Innovation in a Fragile Future*. Cambridge, Mass.: The MIT Press.

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Editorial Roger F. Malina
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Curiosity, Borders of the Real and Multiple Futures

Michael Punt in his LIRIQ editorial raises some interesting issues: how is the future determined by the way that human curiosity drives us in some directions and not in others? And as a result much discussion of the contribution of science and technology to society is often framed in closed and convergent ways that preclude many possible desirable futures. When invention drives creativity towards solutions to pre-defined problems, usually within areas identified as current societal priorities, innovation opens up discovery space and multiple possible futures. He draws on Nowotny's book *Insatiable Curiosity: Innovation in a Fragile Future* [1] to state 'The argument of the book is that science and technology have produced an uncertainty about the future which represents a rupture from the mid 20th century belief in a unidirectional and causal link between innovation and invention.'

Punt then asks: 'What might be the consequences of a social or institutional structure in which the proliferation of innovation naturalizes the belief in possible directions rather than a commitment to a singular and agreed direction?' The innovation research community has been asking this question for a number of years with the realization that the 1970s 'linear model' from fundamental science to applied science to economic development has largely broken down and that the 'triple helix' of government, academia and industry no longer dominates the innovation landscape [2]. This uncertainty about a unidirectional future has provoked the establishment of a much more complex network of innovation actors, particularly when the arts and humanities enter the innovation networks.

The issue of the directionality of curiosity has been on my radar for a number of years since I read Sundar Sarukkai's essay 'Science and the Ethics of Curiosity' [3] where he challenges many of the tenets of the 'ethos' of science which disconnects the path that science takes from the fact that human curiosity is embodied, cultural, social, collective and enactive. He also points that curiosity can be motivated by any number of factors and that in some cultures doubt rather than curiosity can be fore-grounded. The question 'does matter exist' drives different agendas than 'what makes the colors of the rainbow' or 'how to replace oil as the dominant source of energy'. The embeddings of curiosity as a cultural value he emphasizes is illustrated by the way that curiosity evolved from a human sin at the time of Saint Augustine, to a virtue in twentieth century science. Even Francis Bacon denied being motivated by curiosity but rather by human charity.

One of the gedanken experiments I sometimes like to suggest is in the context of the search for intelligent intelligence (SETI) in the universe. The SETI community has been engaged in practical speculation for how to communicate with extra-terrestrial intelligence (CETI) for over 50 years. In collaboration with the SETI Institute, Leonardo organized a number of space and the arts workshops [4] in Paris which examined some of the issues and whether the arts and humanities could bring a new perspective to the thinking (almost all SETI and CETI activities have been carried out by scientists and engineers from a traditional positivist scientific perspective). Often inter-stellar message construction proposals rely on the assertion that scientific 'facts' are universal so that civilizations around other stars share underlying epistemology with our own; examples are that the structure of the hydrogen atom, the prime numbers. The conclusion is that the way to initiate conversation is to rely on these shared fundamental epistemological facts. Yet a cursory examination of the history of science gives pause. For two civilizations around two different stars to communicate, they must overlap in time (given light travel times) but the two civilizations may be in very different stages of their development. In our cultures recorded science is less than 3000 years old, and adequate communication technologies less than 100. What if we were communicating with a civilization whose science and technology had been developed for over a million years? What facts and methodologies would we really share? I could be convinced that we share the prime numbers, but what if their science does not make use of numbers? What if instead of developing technologies they cause the evolution of their own organisms? What if their 'reality' and ours don't overlap significantly? Is there only a single 'future' that can be taken by science in a given time frame? The answer is clearly: no.

The 'phase space' of what is knowable is huge, and what is known at a given time very contingent on the history of science; so is the phase space of creating predictive models. It is curiosity in our current science that drives discovery, but as

pointed out in detail by Nowotny [1] the societal context determines the routes that are enabled by institutions with their, generally, short term objectives. No government committee today, if we placed them in 1860, would in their right mind have funded research in electricity and magnetism at a time when improving the steam engine was a priority. The Nobel Prize in physics this year was just awarded to three astronomers who discovered that the expansion of the universe is accelerating due to what is currently called 'dark energy'. A Nobel Prize committee official made the error of stating: 'this discovery has no practical value' [5]. I suspect that he will be proved wrong, though I doubt dark energy will prove to be a solution to our terrestrial energy crisis.

Another way of looking at this is that we can only invent solutions for the 'real' world, but the borders of the 'real' world are fuzzy and evolving. Innovation expands the 'real'. Iwan Rhys Morus in his collected texts *Bodies/Machines* [6] states: 'we live in an age simultaneously fascinated and terrified by the boundaries surrounding the human body and what might happen there…' and goes on to assert that the variety of ways that such boundaries have been constructed, managed, resisted, sustained is a rapidly evolving one today. He points out that '[i]n the 19th century Victorian Futurism flourished because the borders of the real were so weak'. Victorian science was confronted with the realization that the 'real' world was other than they thought; electricity and magnetism revealed other fundamental forces at work in the world, photography and the expansion into spectral ranges such as X-Rays and Infrared profoundly altered the view of the 'real' that humans inhabited. At the turn of the century radioactivity, then relativity theory and quantum physics continued this process.

Linda Henderson in the new edition of *Fourth Dimension in Art and Science* [7] to be published by our Leonardo Books in 2012 looks at how the concepts of the fourth dimension was a driver of curiosity for both artists and scientists before the Second World War and how these ideas are seeing a resurgence today. The concept of cyberspace, as developed for instance in Michael Benedikt's 1993 [8] collection of essays, lays out the ways that the 'real' expands to include the virtual space created by on line constructions. Henderson argues that ideas embedded in string theory and modern cosmology re-inject vitality into those ideas. She notes: 'dark matter and dark energy offer a telling reminder of the relativity of our direct perception and the fluidity of the boundaries of the real'. She talks of a 'meta-reality' that draws on an expanded understanding of the physical world as the combination of the world accessible to the senses and senses tightly coupled to instruments.

Artists and Scientists have different curiosities in part because their cultural, socio-political, context is different but also because their objectives are different. Artists seek to create work that is accessible to human cognition, work that creates meaning and sense in the context of the individual exposed to the artwork. Scientists seek to create work that is independent of human cognition and has global if not universal meaning and sense within the system of science. Yet both artists and scientists work at moving the 'frontiers' or 'borders' of the 'real. By coupling artistic and scientific curiosity together one can imagine other routes that science might take. Physicist Alan Lightman [9] notes: 'By definition it is extremely difficult to imagine worlds outside our experience. For that we are as likely to receive guidance from our artists and philosophers as from our mathematicians and scientists.' Physicist Jean Marc Levy Leblond in his book *Science is not Art* [10] argues that one of the few values of artists' involvement with science is the potential to 're-thicken' understanding by seeking 'to re-establish the link between the concepts constructed by science and the reality from which they were abstracted'.

This brings us back to Michael Punt's argument. He states: 'The reason following Nowotny's argument must be clear: the reification of innovation for market advantage has discouraged attention to the nature of invention; its inevitability, its insatiability, its material and poetic forms and its purpose in the human order of things as the apparent control of the future is weakened through innovation. What Nowotny may be describing could well be too entrenched in institutional and State structures that support research to be reversed but that is not the same as relinquishing agency in the expression of our curiosity.'

We need both invention and innovation to both thicken the real and alter its borders. To mix my metaphors, where invention helps us survive in given 'niche' defined by a given future, innovation diversifies the niches and possible futures. How one translates this into governmental funding, or university hiring, priorities is the problem

that Nowotny seeks to address and is a hard problem. Evolution (and the economic market) are not 'clever', they discard genetic or technical innovations that don't improve survival in a given niche at a given time. Evolution and the market are short sighted. On the other hand as the niche changes, evolution draws on the underlying reservoir of genetic, or technical, variations. One would hope that governments, and universities, could be 'clever' and longsighted and enable curiosity-driven research for both invention and innovation to create this reservoir of variations that can lead to other possible desirable futures. Universities need to be a reservoir of possible variations that may prove crucial as human society mutates. I don't have a clue, however, how to convert this into 'metrics'.

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[1] Nowotny, H. (2008). *Insatiable Curiosity: Innovation in a Fragile Future*. Cambridge, Mass.: The MIT Press, p. 141.

[2] See for instance the work of Gerald Barnett on how the arts and humanities enter into the innovation networks: http://www.research.fsu.edu/techtransfer/documents/constraint.pdf

[3] Sundar Sarukkai, 'Science and the Ethics of Curiosity': http://www.ias.ac.in/currsci/sep252009/756.pdf

[4] OLATS Space and the Arts Workshops: http://www.olats.org/space/13avril/2000/mono_index.php/

[5] http://www.nobelprize.org/nobel_prizes/physics/laureates/2011/index.html

[6] Morus, I. R. (2011). *Bodies/Machines*. London: A & C Black Publishers Ltd. (ISBN13: 978185973691).

[7] Henderson; private communication.

[8] Benedikt, M. (ed.) (1991) *Cyberspace First Steps*. Cambridge, Mass.: The MIT Press.

[9] Alan Lightman (http://writing.mit.edu/people/faculty/homepage/lightman) quoted in: http://www.math.brown.edu/~banchoff/abbott/Flatland/Publications/1998penguin_intro.shtml

[10] Levy Leblond, J.-M. (2010). La Science n'est pas l'Art: Brèves Rencontres. Paris: Hermann Editeurs (ISBN 978-2705669409). For a discussion see my rebuttal: http://malina.diatrope.com/2011/04/17/is-art-science-hogwash-a-rebuttal-to-jean-marc-levy-leblond/

Beyond the Estuary Metaphor

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Introduction

In the two last issues of the *Leonardo Reviews Quarterly*, Michael Punt and Roger Malina initiated a discussion on the problems of "big data" and the definition of what constitutes trans-disciplinary research. While that debate on the definition of trans-disciplinary research is interesting in and of itself particularly in terms of the responses to it and how this is being variously pursued in doctorate and undergraduate programs as well as already practiced in the K-12 International Baccalaureate pedagogy, my purpose here is different.[1] Instead, I will explore how this debate, as advanced in Malina's last essay has a special relevance to the critique of the legacy of C. P. Snow's notion of "Two Cultures" as given in the Rede lecture at Cambridge in 1959. Returning to Snow and the incisive but somewhat forgotten critique that followed, this essay extends the Leavis and Yudkin Cambridge critique by highlighting the alternative legacies of Vladimir Nabokov, John Steinbeck and Stephen Jay Gould. Their lives and works are exemplary of the many artists, literary figures and scientists whose works defy Snow's simplistic dichotomy and arguably render it specious despite its apparent truth-value and obvious salience.

With the Charles Dickens' anniversary coming up in 2012, the C. P. Snow debate is it seems all the more timely a discussion. For instance, consider the introduction by Jane Jacobs in *Hard Times* where she wrote: "What alarmed Dickens was the divorce that he sensed was occurring between science and the realms of imagination, poetry, myth, and legend… He was identifying in its infancy the mutual alienation of science and the humanities, the alienation that C. P. Snow, for one, would deplore a century later as two separate cultures unable to understand or appreciate each other's information and values" (2001: xvii). A decade ago as Jacobs viewed it then, "cross-disciplinary studies and cooperative research projects and instruction remain[ed] spotty…" By this date however, the fields of inter-disciplinary and trans-disciplinary projects are established practiced in the International Baccalaureate system, and let us not forget that these concerns have always been a foundational norm in cultural anthropology and allied disciplines such as ethnomusicology. Moreover, these connections between the arts and sciences, media and technology have enormously expanded as we learn daily through the Yasmin network. This is so much the case that recently positions have even become available in "anti-disciplinary studies". I like to imagine how Dickens might have satirized this continuing creative ferment. But back to C. P. Snow.

To understand just how specious C. P. Snow's thesis was we need to return to the damning critiques by F. R. Leavis (then an eminent literary critic) and Michael Yudkin (then a young scientist) in *Two Cultures? The Significance of C. P. Snow* (1962). Before doing so, I should first provide a brief personal caveat with Dickens yet in mind. Educated in the British colonial educational system as one of Gradgrind's empty vessels, I chose science as my path at the mandatory early crossroad. I only turned to symbolic anthropology in graduate school when the allure of the arts and humanities became impossible to evade any longer considering the restrictions of "normal" science in that time and place.

Accordingly, I deeply appreciate the continuing relevance of Snow's sentiment and intentions despite the flaws of his thesis, which seems to have a tenacious ambiguous hold over our imaginations. For example, Amy Ione's introductory chapter in *Innovation and Visualization: Trajectories, Strategies, and Myths* (2005) reminds us of how relevant the critical debate of Snow is to issues of art, media and science. It is in fact titled "Two Cultures?" There Ione judges Snow's tight terminological boundary "unsettling" and shows how such distinctions "offer a misplaced concreteness that disallows for any real sense of how words, actions, images and ideas have subtly and systematically changed through time" (pp. 22). For those of us relatively new to the network, addressing the issue of Big Data prescient as regards the Two Cultures debate and the evolving discussion on the topic in the *Leonardo Quarterly Reviews*, Ione's chapter and the relevant on-line articles in the *Leonardo Electronic Almanac* are perhaps useful to return to so as to avoid reinventing the wheel.[2]

To begin with there is a fundamental difference between trans-disciplinary and inter-disciplinary research as Michael Punt deftly reminds us, the former productively crossing

and maintaining disciplinary boundaries and the later creating fusions between them.[3] First, he notes the need for periodic synthesis in order to keep up with the constant deluge of data. Second, he clarifies the difference between what constitutes trans-disciplinary from inter-disciplinary or multi-disciplinary research. He describes how the defining feature of trans-disciplinary research is to makes its results intelligible and relevant across the disciplines concerned rather than to create a synthesis. In contrast to Punt though, what follows is not a discussion about the challenges presented by networked e-culture upon which these Leonardo debates have centered. The context I am interested in is the classroom – university or otherwise, the seminar and workshop, both the studio and the laboratory, recognizing and participating in their enervating digital extensions and connectivity.[4] I ask: How is the Two Cultures debate relevant today? And how does it provide a productive challenge for those working across the arts/humanities and sciences? Both of those simple questions are interesting and problematic enough, never mind the challenges presented by new-networked media and doing cross-sector collaborative work.[5] In the end, as I conclude, we must rely on what I term Punt's Proof.

In LRQ 1.03, Roger Malina argued persuasively for an estuary metaphor for working across this broad disciplinary divide. But, more recently, in the lecture "Third Culture?: From the Arts to the Sciences and Back Again" he presented an auto-critique of the estuary metaphor.[6] There he argued rather differently that the notion of the banks of the river forming the estuary recapitulated a straw man problem introduced by C. P. Snow. Revisiting Malina's estuary metaphor and his subsequent auto-critique of the Two Cultures debate provides an opportunity or extending the current debate here in *Leonardo Reviews Quarterly* and in the *Transtechnology Research Reader* series. This debate over Snow's hypothesis has become pervasive in discussions of literature and science as evidenced in *The Routledge Companion to Literature and Science* (2011). There, to return to Ione's earlier critique and balanced defense, the estimation of Snow's legacy is not always positive. Indeed, as also noted above, Snow's idea of Two Cultures was soundly rejected at the outset at Cambridge by Leavis and Yudkin - though it seems their essays have been forgotten. Regardless, Snow's ideas have long since achieved enormous currency in the popular imagination and in American universities and have played an important role in promoting holistic approaches to science in an environment of ever intensifying disciplinary specialization.

Today, the debate is all over the place. Take for instance a peculiar instance, the "scientific" explanation for the gap in an online essay by Dan Dewey "C.P. Snow's Two Cultures: Hardware and Software, Discovery and Creation". There Dewey refers to E. O. Wilson's study *Consilience: The Unity of Knowledge*. Dewey argues that Snow's gap still exists "but that its very origin is unexplained".[7] Fortunately however, Amy Ione, in *Innovation and visualization* (2005) drawing on Sidney Ross's "Scientist: The Story of a Word" (1991) and Richard Yeo's *Defining Science: William Whewell, Natural Knowledge and Public Debate in Early Victorian Britain* (2003), deftly provides an overview of the nineteenth century origin of the term "scientist" as a Romantic reaction to rationalism and the Enlightenment as well as its antecedents in Bacon's 1620 *Novum Organum* (1965) and Platonic thought. Questions of origins aside, recently, John F. Egger in *The Huffington Post*, responding to an earlier article "Curriculum Designed to Unite Art and Science" published in the *New York Times* (May 27, 2008) by Natalie Angier. There Angier provided a useful list of then current initiatives specifically designed to overcome the "problem".[8]

One of those "exercises in fusion thinking" was the New Humanities Initiative at Binghamton University, a program that was appropriately conceived by a professor in biology and a professor of English. As Angier records it, George Levine's response (he being an emeritus English professor) to the NHI proposal was this: "I was struck by how it absolutely refused the simple dichotomy [of the humanities and sciences]". Later the article concludes with Levine exclaiming in a perfectly C. P. Snow-like voice, and not without some basis: "There is a kind of basic illiteracy on both sides . . . I find it a thrilling idea that people might be made to take pleasure in crossing the border." Indeed.

On the 50th anniversary of C. P. Snow's Rede lecture, *Seed Magazine* ran an article "Are We Beyond the Two Cultures?" (May 7, 2009). It describes how John Brockman of the Edge Foundation, took up Snow's proposal of a third culture in "The Two Cultures: A Second Look" (1963).[9] However unlike Snow, Brockman is not proposing that scientists and "literary intellectuals"

should communicate. Instead he points out that scientists are now communicating directly with an "intelligent reading public". Accordingly, to explore Snow's dichotomy and the idea of a Third Culture and Third Culture Intellectuals, Edge interviewed six thinkers in separate on-line discussions in *The Two Cultures Video Series*, namely E.O. Wilson, Janna Levin, Lazslo Barabasi, Steven Pinker, Marc Hauser and Rebecca Goldstein.[10] If that reflective on-line activity is not enough, and it is a very small sample, there is Chris Mooney and Sheril Kirshenbaum's *Unscientific America: How Scientific Illiteracy Affects Our Future* (2009). Then there is the most obvious and symbolic testament to the power of the Snow legacy, the prestigious C. P. Snow Lecture Series at Ithaca College that has been ongoing for 40 years.[11] With the unsettling statistic in mind that virtually half of all US and UK citizens are not only ignorant of the science of evolution but dead set against it as I have previously bemoaned, [12] coming out against C. P. Snow is in some ways counterproductive to the greater cause of trans and inter-disciplinary science education – but nonetheless necessary.

The Leavis and Yudkin Attack on C. P. Snow's Notion of Two Cultures

Snow's 1959 lecture has had a powerful impact on continuing discussions about the real and perceived rifts between the sciences and other disciplines and mutual illiteracy. In taking up on the evolution of Malina's thoughts on an estuary metaphor and going against the main current, consider the early rejection of Snow's argument by F. R. Leavis and Michael Yudkin in *Two Cultures?: The Significance of C. P. Snow*. The first part by Leavis was delivered as the Richmond Lecture at Cambridge in 1962. The second part by Yudkin was an additional essay from the perspective of a scientist.

In the context of a Malina Estuary debate in LIRIQ, it is important to return to Leavis and Yudkin's critique for two reasons. First, the evidence behind their scathing indictment of Snow's argument is incontestable. Second, their critiques have a direct bearing on discussions of the relation between the arts/humanities and sciences today and thus to the topic of trans-disciplinarity. Simply put, Leavis and Yudkin and all subsequent critics of Snow do not oppose his aim, that of the mutually enriching potential of all knowledge. What they oppose is his Philistine simplicity, the error of his argument and the nature or lack thereof of his evidence. Their criticisms are in fact so damning, that one wonders how it is that C. P. Snow is the one remembered while the Leavis and Yudkin critiques are lost to time except as campus legend at Cambridge.

As with Punt and Malina's essays, rather than recapitulate the Snow and Leavis essays in depth, my aim is to draw those interested in the debate back to the 1962 Richmond Lecture so as to consider it in its entirety. While the Leavis critique remains legendary in its rare personal criticism of Snow, the criticism of Snow's evidence and logic or lack thereof, Snow's rank ignorance of matters of history and literature, is insurmountable. As to the value of Snow's claims to eminence as a literary figure of merit and thus one with the self-proclaimed capacity authority to judge matters literary, Yudkin's critique is more rhetorically measured but no less devastating, perhaps even more so.

Leavis takes particular umbrage that Snow threw virtually the entire history of modern literature from Dickens and Ruskin, to Conrad and Lawrence and beyond out of the canon. That critique aside, no less the critique of Snow's unqualified notion of culture and the very nature of his argument, the merit of Snow's attenuated scientific work itself remains to be revisited. But before investigating that at some point, what we need to keep foremost in mind here was that Yudkin, himself was a practicing scientist at Cambridge. And as many scientists are, contrary to Snow's "statistical" impression, he was no stranger to literature and the arts and humanities. Yudkin was thus able to independently add a contemptuously precise critique of both the significance of Snow's literary work and his thesis of two separate and mutually unintelligible cultures.

To conclude, Leavis and Yudkin's combined critique (contrary to Snow's 1959 Rede Lecture) show all the hallmarks of the studied intellectual, the disciplined academic. For instance, they pay careful attention to how Snow uses terms such as the all important word "culture" with so much imprecision as to be meaningless. The Leavis Richmond Lecture and the accompanying essay by Yudkin systematically took apart the entire edifice and the very details of the Rede Lecture. If that light, the fact that Snow's lecture continues to have such a commanding presence in academia and especially in some literary circles owes more to the general importance of the problem

in that historical context, and today, than to the actual substance rather than ideology of the lecture itself. Let us fast-forward to 2011 and LIRIQ 1.03.

The Estuary Metaphor and the False Dichotomy

Roger Malina's thoughtful struggle in LRQ 1.03 moves from a Two Cultures discussion to an Estuary Metaphor. Subsequently, as noted above in the Shanghai lecture, he abandons both for the inherent binary tautologies involved. Malina's Estuary Metaphor has a wonderful built in sense of change and complexity in time. But as he himself calls attention to - it still depends on the separation of the banks. This is Malina's dilemma born of Snow's false divide.

Malina's engagement on the issue appears to have been inflamed by a radical antipathy to a recent minor treatise by Jean-Marc Levy-Leblond. Accordingly, perhaps it is best to provide a lengthy quote here of the problem. As Malina writes:

To avoid the trap of the false dichotomy that C.P Snow led many into, I would prefer to imagine a river delta. The river beds themselves move with time and silt can create new banks and territories. In a recent book, actually a pamphlet [*La Science n'Est pas L'Art*, 2010] of unusual vigor, Jean-Marc Levy-Leblond, has mounted an all out attack on some of the claims of the art-science field today… He decries the search for a new "syncretism" that would somehow help us create a "third culture" that melds the arts and sciences.

Building upon his earlier review Malina elaborates Levy-Leblond's view.[13] There "the arts and sciences are two different banks of a river as distinct and un-reconcilable as two ecologies that develop within different contexts, on un-mergeable continents, and have grown with differing survival mechanisms and goals.'' Moving on Malina adds that the co-editor Jacques Mandelbrojt, in that issue of LRQ, had also reviewed the book and pointed out that Levy-Leblond is in the final analysis calling for special types of art-science interaction.[14]

In the Shanghai lecture, Malina adds that for Levy-Leblond, artists as "others" can provide "creative friction" which can excite the scientific imagination. However, as he notes, ultimately what Levy-Leblond is arguing for is the re-establishment of the links between reality and scientific concepts, which were abstracted out of that reality. Malina's concern, and that of most *Leonardo* readers I would imagine, seems however to lie with networked e-cultures, digital realities. There, the issue at hand is how to highlight the value of translation studies for current synergies between the sciences and humanities. My concern is however far more archaic. I find it important to first revisit Snow while gazing over the horizon in this new century towards future art-science interactions but always keeping the likes of Plato, Leonardo Da Vinci, Rembrandt, John Ruskin and J.M.W Turner, never mind Joseph Conrad and Leo Tolstoy in the rear view mirror. Consider then Malina's conclusions: "the metaphor of our delta crossing begs the question of the nature and source of the river and the nature of the sea, and of the rain that feeds both the river and the land."

Extending this in a note, Malina cautions:

I am bothered by the river metaphor since it sets up a 'straw-man' dichotomy between the arts and sciences. I would prefer somehow to have a network of water streams to carry the idea of 'networked knowledge' rather than trans-disciplinary practice as argued by David Goldberg and Kathy Davidsen in the report *The Future of Learning Institutions in the Digital Age*.[15]

Malina, returning us to Punt, concludes that "We are just at the beginning of the 'translation' to networked culture" and that in this context art-science collaborations provide opportunities for current problems. Networked cultures aside, the following section adds further unease to the unqualified use of Snow's dichotomy through highlighting the work of authors who have wholly defied the distinction.

Steinbeck, Nabokov and Gould

If we turn to paradigmatic instances of mutual enrichment between science and the humanities, to the following illustrative instances in art and literature, we might gain a more nuanced and fertile view. This view is not concerned with governing metaphors for research or networked opportunities but with the nature of art, literature and science and their integrations. The case of Leonardo Da Vinci is so well known as to require no elaboration at all. In contrast, somewhat forgotten in modern times, is John Ruskin's relevant Victorian period observation that "the dreadful discovery that war is the foundation of all arts as well as the foundation of all the high virtues and faculties of man".[16] There are no shortages of minds that defy the Snow Divide. Two authors and

one scientist whose collected works are of special interest to my own work on the conjunction of the arts, humanities and sciences are John Steinbeck, Vladimir Nabokov and Stephen Jay Gould. Their works show that though the humanities and the sciences in many fundamental respects are separate domains, they can and do inform and enrich each other.

John Steinbeck is an interesting case because of the passion he had for marine biology and how this became integrated into some of his writing. Anyone reading *Cannery Row* with a careful eye, would have noticed that the description of Doc, the marine biologist, of Doc's laboratory and his collecting work in the tide pools must have been informed by a profound first hand knowledge. It was. Besides the all telling details, the richness captured there, one learns in Robert Demott's edited volume *John Steinbeck: Working Days: The Journals of the Grapes of Wrath, 1938-1941* (1989) that one of Steinbeck's most treasured goals was to write a guide to the marine ecology of the Bay littoral, the *San Francisco Bay Guidebook* (see note for Entry #106, pp. 172). The failure to do so was his greatest regret. He found himself simply unable to summon the discipline and rigor required. It was the darkest time of his life.

Steinbeck recorded this in his notebook on Thursday, January 4, 1940 with these perhaps prescient lines for some of us at *Leonardo* today. The dairy entry reads: "Came down here to try to work on the tide pool hand book. I discover that there are no easy books to write and that this may well be one of the hardest… I am attempting to find the foundation of some new discipline in this book" (ibid. p. 109-110). Instead, with Edward Ricketts (Doc), Steinbeck abandoned the project and went on to write *Sea of Cortez: A Leisurely Journal of Travel and Research - With A Scientific Appendix Comprising Materials for a Source Book on the Marine Animals of the Panamic Faunal Province* (1941). Whether or not *Sea of Cortez* constitutes a new discipline and the partial fulfillment of Steinbeck's desire to create it, it is a wonderful combination of biology and reflection. The best parts, for myself having "been there" as it were, are his descriptions of the visceral differences between laboratory and field science and the challenges of an expanded sense of science, consciousness and the imagination. Does not Steinbeck, as with Nabokov discussed briefly below, provide us with instances of trans-disciplinary work at its best? For that matter, does not Thomas Hardy's *Under the Greenwood Tree* do the same as a precursor to the combination of history, literature, anthropology and ethnomusicology?[17]

Vladimir Nabokov is similarly interesting because he was a relatively eminent scientist working on the taxonomy of Lepidoptera before he became an author. His autobiography *Speak Memory* (1947), originally titled *Speak Mnemosyne*, and all his other work is replete with symbolism relating to butterflies and moths as with observations about ecology and human nature. And while more people are aware of his path breaking literary study of the nymphet *Lolita* (1958), far fewer are aware of his contributions to taxonomy, specifically to the study and classification of the Lycaenidae through the meticulous observation of their sex organs. For reasons of space, rather than exploring Nabokov's symbolism relating to butterflies or commenting upon his scientific work, I simply draw the reader's attention to Joann Karges' *Nabokov's Lepidoptera: Genres and Genera* (1985) and to Kurt Johnson and Steve Coates' similarly compelling but far more expansive subsequent study *Nabokov's Blues: The Scientific Odyssey of a Literary Genius* (1999). To be acutely brief by way of enticement, consider Johnson and Coates analysis of the moment in a lepidopterist's life when one's imagination is seized by the passion for grasping the complexity of the butterfly itself, its ecology and this field of research (ibid. p. 40-41), that is Fyodor's secrets as given in *The Gift* (1963). For many of us with scientific interests who hunted butterflies as children and especially who have conducted field research in entomology, for anyone entranced by tide pools and the nature of shells, this rings profoundly true. Simply put then, an awareness of Steinbeck's and Nabokov's sustained and meticulous interests in science deeply enhances one's appreciation of their works and the significance of those works to both science and literature, never mind to our own lives and work. Yet it is true that some scientists I have worked with consider literature and philosophy, never mind art history and philology, even the philosophy of science, to be an errant waste of time, a complete irrelevance to their own work as well as to a graduate science education.

Fortunately Stephen Jay Gould presents a very different case. An extraordinary role model for would be scientists with lives enriched by the numinous, Gould was a pre-eminent biologist, one with a profound humanistic orientation and a great gift for writing. He was of-course by

no means alone but as a leading figure in the study of evolution is perhaps one of the better known biologists to have contributed to what we might term the trans-disciplinary quest. Take for instance his article with Richard Lewontin - "The Spandrels of San Maro and the Panglossian Paradigm: A Critique of the Adaptationist Programme" published in *The Proceedings of the Royal Society of London* (1979 vol. 205 no. 1161, pp. 581-598). As A. L. Houston later documented in "Are the spandrels of San Marco really panglossian pendentives?" in *Trends in Ecology and Evolution* (1997, vol. 12 no. 3, p. 125) it was an enormously influential article.

In part this success was due to the article's elegance, clarity, complexity and consequence for research and debate in evolutionary theory at the time. In other part, it was perhaps also due to the power of the organizing metaphor they chose and how they used it. Gould and Lewontin introduced the logic for their argument through discussing the structure of the roof of St Mark's Cathedral in Venice and the integration of the paintings within that structure. Their point was that the organizational constraints of the structure determine the elements and integration of the design. They used this as a metaphor for critiquing the logic of the trait centered adaptationist programme as advanced by Wallace and scientists subsequently advancing that line of reasoning. Simply put they proposed a more plural Darwinist explanation focusing on integration, development and constraint.

Putting aside the centuries of work on form and change particularly in shells and butterflies, and the recent resurgence of interest in Wallace and reaction to that, topics for big data and synthesis in another time and place, I have drawn attention to this specific article and author here for a particular reason. Gould and Lewontin show how art can be useful to science, if nothing else, for metaphorical and descriptive purposes. Theirs is a classic example just as Steinbeck's descriptions of the nature of Doc's work and tide ecology are in *Cannery Row* and just as is Nabokov's adaptation of experiences, landscapes and symbols into his work, especially in *Pale Fire* (1962) and "Butterfly Collecting in Wyoming, 1952" (*Lepidopterist News* 7, pp. 49-52). Any students with an interest in both science and art, latent or not, would be immeasurably enriched by the cultivation of such awareness rather than the Philistine narrowing of their horizons in the name of a Science divorced from artistic experience.

Reading across the disciplines can only enrich future research and writing by expanding horizons and sensitivities, critical acuity. It can only enhance the type of questions posed and technical processes used and enhanced whether in art or science. This is of-course what Snow proposed if in such an unfortunately flawed and crudely advanced manner. What Leavis and Yudkin make so abundantly clear is that discipline and complexity, rigor, logic and erudition, must be central. They also emphasize that the humanities and the sciences are neither internally cohesive, are certainly not unitary cultures, nor are as divided as in Snow's caricature. Revisiting this over 50 years later, the Leavis and Yurkin requirements are nowhere more wonderfully immanent than in a few scientific texts worth mentioning here for the sake of emphasizing what makes the best literature and science "great": *Rebels, Mavericks, and Heretics in Biology* edited by Oren Harman and Michael R. Dietrich with an epilogue by R. G. Lewontin (2008), *From Embryology to Evo-Devo: A History of Developmental Evolution* edited by Manfred D. Laubichler and Jane Maienschein (2007), and the blind biologist Geert Vermiej's *A Natural History of Shells* (1993). The list is endless.

No doubt the problem of specialization is a constant challenge as are the unique barriers to becoming scientifically literate and the importance thereof particularly for government policy making. Some scientists might well be "culturally" illiterate as regards "great" and other literature and most scholars in the humanities and social sciences, and especially citizens in the "public" sphere, are to varying degrees scientifically illiterate. Yet one likes to think I imagine that the cases of Steinbeck, Nabokov and Gould as extraordinary as they are stand out as beacons for trans-disciplinary work. With their work in mind, we might safely abandon but keep alert to the insidious reality of the Two Cultures debate. Finally, consider *The Age of Wonder: How the Romantic Generation Discovered the Beauty and Terror of Science* by Richard Holmes (2009) and *Knossos and The Prophets of Modernism* by Cathy Gere (2009), Donald Ault's *Visionary Physics: Blake's Response to Newton* (1974) and Page Stegner's *The Art of Vladimir Nabokov: Escape into Aesthetics* (1966) and those mentioned below. The list, across the disciplines and the centuries, is endless.

To return to Leonardo and Roger

Malina, proposing a Three Cultures approach is not a useful solution particularly because it recapitulates Snow's binary. And though Malina's Estuary Metaphor is indeed compelling, perhaps we do not need such models though they are certainly good for thinking through these issues. Nor do we perhaps then even need the term trans-disciplinary for that matter. What we need, at least in my own view, is for social scientists who aspire to making a living out of criticizing science for a non-science audience to study science and the specific topic at hand in sufficient depth, so as to be able to ultimately contribute to the advancement of science.[18] As Yudkin adds though, to truly appreciate and understand what science is so as to critique it, they will have to first do some. Finally, despite whatever reality the notion of two cultures might well have, Leavis and Yudkin also pointed out that you can hardly group together into one culture people who wouldn't be seen dead in the same room if they could help it – unless ofcourse it was a mandatory faculty meeting.

Northern California Dreaming: Current Events at Stanford

Before moving to a brief impressionistic account of some interesting things happening at Stanford, I should re-emphasize the above-mentioned closing point. While it is not uncommon for scientists to practice art, and while imagining science is aesthetically interesting in and of itself as illustrated in *Imagining Science: Art, Science and Social Change* edited by Sean Caulfield and Timothy Caulfield (2008), and while artists more and more are creatively collaborating with scientists, it is very much more difficult proposition for a non-scientist to contribute to science. As noted earlier, from the constant flow of notifications on-line YASMIN list serve about creative collaborations in the arts and sciences, this is a burgeoning field of interest. Science is sometimes advanced by art. Take for instance the case of how the film *Star Wars* inspired Ronald Raegan to transforming art into reality through the military-industrial complex, a two way ideas and technology imagination highway dating back to Jules Verne, Leonardo Davinci and the Cro-Magnon era. And don't birds and molluscs do it too, if more instinctively? Ever tried to build a nest or work out the mathematical equation generating a shell?

To return then to Punt's Proof - the ultimate challenge for those working in trans-technology is not participation in art-science collaboration as that is not such a difficult challenge. Take Eduardo Kac's glowing bunny applications for instance as given in Simone Osthoff's *Performing the Archives* (2007). The really serious work begins when the "outsider's" analysis of scientific research becomes of practical and theoretical use to that "other". To gauge a sense of how this might be, it will be interesting over time to gauge the reaction to Judith Roof's study *The Poetics of DNA* (2007) from within the scientific community, if indeed it has any significant impact on geneticists. Similarly, I often wonder what botanists might have concluded about Michael Pollan's *The Botany of Desire* (2001) in contrast to Jonathan Silverton's *An Orchard Invisible: A Natural History of Seeds* (2009).

Towards that kind of debate and ultimately practice, the upcoming series for Stanford's Continuing Studies program, "An Interdisciplinary Tour of the Human Condition in Three Stages: Time, Life and Mind" provides an interesting context for following this exciting experimental moment of convergences in the sciences and arts and humanities.[19] Perhaps the creative frictions produced through those events and the LASER and DASER contexts in the Bay Area, Los Angeles, New York and Washington D.C. as well as the many exciting cutting edge art science projects especially in Europe will generate innovative new scientific research. If so, it will be important to track, document and analyze the outcomes. Though one can assume that art projects will emerge as a matter of course, and while these upcoming lectures and events certainly provide a wonderful public forum for sharing new developments in the humanities and sciences, I am above all left wondering what might be the consequences for science in the coming years.

Take for instance a recent LASER event on August 3, 2011 in Stanford's old Geology Building, an artist and scientist, Cindy Stokes in a presentation titled "dynamic form" presented some of her photographic work and described the deeply embedded ethnographic contexts from which it emerged.[20] What struck me about the intensely classical quality of her prints was that she seemed to be transferring the rigor and discipline of her scientific laboratory experience into the development process and thus into the power of images. For biologists, this sense of wonder in the image and the process is quite common ofcourse to those working with microscopes, particularly electron microscopy.[21] In Stokes'

case, there is both a simple scientific chemical process and an ancient alchemical mystery at work in the almost magical emergence of the image in the development process and in the exercise of the artist's technical expertise and creative judgment. But my point is that while there is such great aesthetic pleasure to be had in the process and the product, what about the reverse equation? How might her work in the photographic lab and the ethnographic field ultimately inform and advance her science or her applications of science in the business sector? Now that is what I am really interested in for the purposes of any future relevance of this essay.

The long term results of projects such as the National Humanities Initiative and the current project underway in *The Senior Reflection: A New Program in Biology,* Bio 196 which began at Stanford in 2010-2011 present potential contexts for studying this possibility over time. In this new Stanford program, in a workshop context over the course of their final undergraduate year, students undertake a creative biology project of special personal interest. They are advised by one faculty member from the sciences and one from the humanities. Designed as a capstone experience, individual or group projects are equally allowed and students may work in any creative medium of their choice. At the end of each year, there is an exposition hosted by the Department of Biology and the art works are presented to the public be they performance, film, dance or what have you. In addition, students are required to produce a written reflection illustrating the value of the work to themselves personally as to the issues being tackled in biological science. As can be seen from the first Stanford projects posted on the web page, students find these programs attractive in that they allow for the personal development of the artist in the scientist and the scientist in the artist.[22] We can be sure that some meaningful and interesting art will result, that the experience will be the highlight of their undergraduate work and ideally influence the course of their lives, but what of the science? How might science be significantly enriched in the longer term through their projects?

Another question occurs to me. If one closely reads the description of Bio 196, even in the condensed description given above, it reads very much like something out of the International Baccalaureate (IB) program. It might well then be interesting to conduct basic research on the emergence of such trans- and inter-disciplinary programs. One would want to determine the sources of inspiration for such projects. Is there any direct connection between the Two Cultures debate and the Stanford Senior Reflection, or for that matter with the New Humanities Initiative at Binghamton University? Are they perhaps outcomes of the rapidly expanding use of the International Baccalaureate program in the United States and elsewhere? For that matter, is the IB intellectual history born of Snow's legacy? No doubt there must be any number of articles, books and dissertations on the subject!

No matter that there is the long term to consider for John Steinbeck's legacy. Should you visit Cannery Row in Monterrey near Salinas and spend some time at the extraordinary aquarium there, naturally with Steinbeck and Doc foremost in mind, you might be lucky enough to see the performance for children held in the outside auditorium overlooking the bay. There you will observe young highly professional actors brilliantly inspiring children to become eco-activists, future guardians and scientists of the littoral, their intense fascination already engaged through the stunning exhibits of live jelly fish slowly pulsing across the aquariums illuminated in the dark. Cannery Row, and Steinbeck's unrealized dream, thus turns out to have significant consequence to art and science, especially considering the marine research sponsored at the aquarium by Hewlett Packard.

Having had the good fortune to have recently spent some time at Stanford, it is it seems a particularly interesting context to consider all these issues for many reasons outside of the act that Steinbeck studied English Literature there though all campuses will have their own tale to tell. Consider for instance, that the Stanford anthropology program had to be physically divided by the former President into two separate departments as a consequence of the academic war in the 1980's and 1990's, a war which literally tore many a department down the middle including my own. I know the intensity of the animosities well having crossed that divide myself from physical to cultural anthropology at that time. And or those at Stanford who do not know this important piece of campus history, consider that Steinbeck lived in Encina Hall. There today one finds a tendency for political scientists within the Center on the Development of Democracy and the Rule of Law (CDDRL) to assume a scientific and economic rather than humanistic perspective on

gauging and stimulating international development and history. Imagine the potential relevance of Steinbeck's work for and in *The Grapes of Wrath* to that hall today. All universities have fascinating institutional histories too little written about or celebrated, sometimes of conflict and integration within and across the disciplines. Consider the conflict over Oscar Lewis and then his rightful memorial at the University of Illinois at Urbana-Champaign. Consider C.P. Snow at Cambridge! As for the Department of Transtechnology at the University of Plymouth. It is yet too young for any of this - but the bell doeth toll for us all!

Still at Stanford, consider the rare 16th through 19th century books in the Iris and B. Gerald Cantor Center for Visual Arts which illustrate the connections between the arts and sciences. Consider the fascinating collection of past art-science interactions as recorded in the student notebooks on exhibition there. Consider too the Rodin collection one of the most comprehensive collections in the world as elegantly presented in Bernard Barryte's edited and revised version of Albert Elsen's *Introduction to the Rodin Collection* (2003). Consider the value of this collection not only for art and art history students of all ages interested in process above all but for the medical students studying anatomy. As for the Burgers of Callais and other art works scattered across the campus, the relevance of these public art works to those interested in cross-disciplinary connections in history, art and engineering and religion, never mind biology, is endless. And as for dance and art and science, remember that for Renoir, Degas was the greatest sculptor of the 19th Century - not Rodin – and moreover, that Renoir saw dance as both art and science (Macauley 2011).[23]

Thus contrary to Snow's predictions, and despite the fiscal and/or intellectual crisis in higher education in recent decades depending on the context, there has been a great deal of opportunity for expanding art-science interactions and inter-disciplinary horizons. Past and ongoing wars within departments and disciplines since 1959 aside, and keeping in mind the long history of work across art and science in classical Greece and from the 17th century on, we are it seems in an age of renewed synthesis. Take for instance, the cross-disciplinary anthropological study of medicine and art by Phillip L. Walker and Travis Hudson in *Chumash Healing: Changing Health and Medical Practices in an American Indian Society* (1993). At the same time take the illustrative art of Haeckel and how Kate McGowan reminds us of how and why he erred in her article "Drawn to Life: The glories and failures of Ernst Haeckel" in the popular journal *Evolution* (2011). Similarly consider one recent other example of this long history, Ella Reitsma's *Maria Sybilla's Merion and Daughters* (2008) which details the earliest combined scientific and artistic study of the butterfly life cycle during the 17th Century. Keep in mind only a very few relevant publications such as these, no less the story of the neuroscientist Charcot and his students crossing the art and science divide, and you will find that the current synthesis has long since been in place. From tool making and cave painting to weaponized micro-drone technology adapting the study of the biomechanics of insect flight and nano art, cyberwar fare and The Stream on Al-Jazeera, you name it. The range and the potential of this experiential history of art-science-technology-media synthesis and the attendant reading list and the political and pedagogical dimensions are as endless as the stars in the sky - as potentially peaceful and whacky as the Grateful Dead's Micky Hart's musical interaction with Active Gallactic Nuclei and the fabric of the universe.

So to make the critique as blunt as possible, I have rarely met a scientist, a doctor or a physicist who did not have a profound interest in history and culture, art and music. In fact, the final question for extra credit in my undergraduate class on developmental biology was about the morals, or lack thereof, of the characters in the Italian opera Cosi fon Tuti. It appears to me that Dr. Freeman had a point to make that is directly pertinent to this discussion today though it was a mysterious one at the time. Perhaps then, if Snow's critique is taken for its intention rather than substance, what we really need then is for scientists and scientists in the making to be reading such works which might not have been traditionally considered in the science curriculum, never mind taking more humanities electives simply for the joy and unanticipated consequence. But as for how art and the humanities might inform science? Now that is the real challenge because it is the more difficult one.

Conclusion: Punt's Proof

To conclude, let us revisit how Michael Punt positions transdisciplinary study. For Punt, it is different to inter and multi-disciplinary studies in that the purpose is to accurately translate data and ideas such that

they can be transferred to and commented upon in other disciplines. In addition, he believes that the results of such analysis by the "other", the outsider, must prove to be of practical value to those working within the discipline being commented upon. Punt's proof then establishes an important condition. We can test the validity of those in the social sciences analyzing work in the sciences for instance, if the analysis makes sense there and has a recursive productive function. If the analysis is useful, adaptive as Gould would have it, then it should advance work on that subject in the sciences. Then the analysis would not be mere cultural chatter, rhetoric, ungrounded or too loosely grounded philosophical musing, but of scientific merit in its reproductive effect.

To do so however one first has to have a sound basis for working across the art/science divide when the Other is science. If not, one's interpretations will be unlikely to survive Punt's proof. Second, Punt's proof requires Malina's caution. If it is true that this is something new, then it is only over the longer term that we will know whether new forms of knowledge are indeed emerging that can play a productive role in the sciences. Simply put then - it is one thing for art and social science to comment upon and draw from science, it is quite another for them to influence science and to be able to document this taking place. Perhaps this is something new for Simone Osthoff in *Performing the Archive* (2009) notes that even within the realm of the arts, combining research, writing and art practice, itself a recent phenomenon, is only now becoming more common. But as of yet she writes: "The question of what constitutes research in the fine arts studio education and the role of academic writing in such pursuit is open for debate while it also points to new connections to be explored among previously unrelated fields" (p. 174).

Towards that end, we might keep in mind Punt's two-fold test for the definition of what constitutes transdisciplinary work. First, one's writing must be intelligible outside of one's own discipline. Two, it must have the capacity to produce new knowledge in the discipline being commented upon. Punt's point is elemental. If the outsider's analysis presents no new ideas or some form of productive value to internal debate and future research within the discipline and data being analyzed, then the analysis or art one creates is mere voyeurism. Otherwise we are merely recapitulating inter-disciplinary or multi-disciplinary studies or rather simply engaging in parasitology. It ends up being cultural critique for the sake of internal debate within the humanities and of no value to the sciences empirically speaking. In Punt's proofs, first we have to be able to translate, then rotate/reflect (as Malina would have it) and then transmit information worth considering on the other bank across the estuary.

Does this however ultimately entrap us in the two cultures metaphor and the associated inherent and insurmountable differences between the sciences and the humanities? Is there a problem at hand here? Or is it my imagination? And how might Punt's test affect the study of knowledge as water? Is Malina's aqueous hypothesis not too fluid? Don't we need the banks and is the journey between the many banks of the shifting sands of the estuary not that which fertilizes growth? Whatever the answers may be, sciences and the arts and humanities, and each discipline within, are diverse, changing and internally rifted, deeply conflicted. Yet within the humanities and within the sciences, all disciplines share practices and concerns. There scientists are often artists or at least interested in and inspired by art and some social scientists aspire to be more scientific than others whether or not they are successful. What is clear I think is that the scientists are at a great advantage in crossing over to work in the arts. It is very difficult to go the other way except for the most committed outsiders sufficiently capable and willing doing so. That being said more and more English majors have been finding their way into medical schools for many years now surely making a complete mockery out of Snow's hypothesis.

Finally this brings us back to the problem of big data. Contrary to the doomsayers, as far as I am concerned, the more data there is the better though as Mike Punt rightly points out again, the challenge is availability, synthesis and transmission, something all scholars, writers and scientists including artists are constantly engaged in. So let us return to models, not conceptual models but role models. In the end, despite his literary fame, Nabokov felt immense regret at not having written his book *The Lycaenidae of Northern Europe* or better yet, *The Lycaenidae of the World*. Yet in the long run he had a major impact on this scientific community and their methods. It was Nabokov who established the fundamental importance of studying butterfly genitalia in order to identify species particularly polymorphic forms. So what then would you prefer to

be known for - a study of desire for a nymphet or the study of a whole genus based on their sexual parts and habits? Frankly I suppose when all is said and done, I'd rather have done *Lolita*. But to be serious, let us end with Steinbeck.

Leaving aside his Nabokov-like failure to achieve one of his deepest desires, the scientific one, though East of Eden partially filled that niche, Steinbeck was a consummate historian and fieldworker, and more, one with a social conscience. He was an inveterate inter-disciplinary worker making films, writing speeches for President Roosevelt, horsing around with Charlie Chaplin, aspiring to convey the essence of his characters and their larger significance as archetypes - having been inspired by Carl Jung. I bet that most of you reading this who have a passing familiarity with Steinbeck, especially those who might read this at Stanford, did not know any of this, nor perhaps even that Steinbeck studied at Stanford and lived in Encina Hall - never mind the fact that Nabokov had been a scientist at Harvard while writing Lolita. Big data indeed – whatever the subject. In all this Steinbeck and Nabokov are iconic figures of split-desire, two passions, art/literature and science. I think there is a bit of that in most of us on both sides of the river of knowledge.

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Notes

1 See "Perspectives on Trans-Disciplinarity: Interim Report of INTR (International Network for Trans-disciplinary (post doctoral) Research" at http://trans-techresearch.net/research/intr. Also see the International Baccalaureate program at http:///www.ibo.org.

2 See Leonardo Electronic Almanac, vol. 13, no. 5 May 2005 at http://lea.mit.edu.

3 See LIRIQ 1.03, May 2011, http://www.leonardo.info/reviews/LRQ/LRQ%201.03.pdf.

4 See http://www.mypart.weebeley.com and http://www.mypenglish.weebleycom.

5 See Cathy Brickwood ed., (Un)common Ground: Creative Encounters across Sectors and Disciplines (2007) and Zilberg (2008) http://www.leonardo.info/reviews/feb2008/un_zilberg.html.

6 Lecture given at the SIVA Shanghai Institute of Visual Art on August 25, 2011. See http://www.siva.edu.cn/renda/node6813/english/index.html.

7 See: http://space.mit.edu/~dd/ECON/two_cultures.html.

8 See http://www.huffingtonpost.com/john-m-eger.

9 See http://www.edge.org/3rd_culture/.

10 See http://seedmagazine.com/twocultures/.

11 See http://www.ithaca.edu/hs/events/series/cpsnow/archivespeakers/.

12 See "Darwin's Ghost: The Darwin Exhibit at the American Museum of Natural History", Transtechnology Research Reader 2010, pp. 69-84, http://trans-techresearch.net/research/reader.

13 See: http://malina.diatrope.com/2011/04/17/is-art-science-hogwash-a-rebuttal-tojean-

14 See: http://www.leonardo.info/reviews/apr2011/levyleblond_mandelbrojt.php

15 See: http://mitpress.mit.edu/books/chapters/Future_of_Learning.pdf

16 John Ruskin. War. A lecture delivered at the Royal Military Academy, Woolwich, 1866.

17 While Hardy's novel is a wonderfully rich literary study of musical change in England in the late 19th Century today's ethnomusicology is deeply scientific, see for instance Feld (1982). See Nettle (2010) on the evolution of this inter-disciplinary field par-excellence. It seems to me that ethnomusicology has however an inherent trans-disciplinary rather than inter-disciplinary nature though the former term is currently not yet in use in anthropology as far as I know, never mind the new notion of "anti-disciplinarity".

18 See for instance my critique of Judith Roof's fascinating study The Poetics of DNA in Leonardo Reviews Quarterly 1.01 (2010, pp. 13-15). Available at: http://www.leonardo.info/reviews/LRQ/LRQ%201.01.pdf. Conversely, for a highly compelling instance of a scientist working across the disciplines of biochemistry and fashion, see the case of Anke Domaske's invention of Qmilche and the MCC fashion line (Eddy 2011).

19 See http://ww.continuingstudies.stanford.edu.

20 See http://www.cindystokes.com and http://www.scaruffi.com/stanford/tour2011.html.

21 See Rob Dunn in "How Plants Mate" with photographs of pollen by Martin Oegferell in National Geographic vol. 216, no. 6, pp. 120-133.

22 See http://www.stanford.edu/~suemcc/TSR/Reflections/Reflections.html.

23 See Alastair Macauley in "Dance, and a painter, at work", the International Herald Tribune, Friday September 2, 2011, pp. 10.

Arnheim for Film and Media Studies

by Scott Higgins (ed.)

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Is it safe yet to call Rudolf Arnheim a major media theorist, on par with Marshall McLuhan and Walter Benjamin? The question is important because Arnheim the film theorist can always be

historicized to "Weimar," "formalist," "formative," and the like. "Media theory" points to the future, to the larger role of technology in communication, to principles that are applicable to novel forms, not closed forms. The book under review, Routledge's *Arnheim for Film and Media* suggests so and presumably consistently that the only way we can do justice to Arnheim's film and radio theory is by opening up our horizon that he is really a media theorist and, furthermore, only when we admit this that we have an authentic Arnheim.

Although my general text of 2005 attempted to set the record straight about Arnheim's psychology of art, it did so as a partisan (Verstegen, 2005). Therefore, I think it is fair to say that this book is the most comprehensive writing on Arnheim in English to date. It is generally conspicuously contextualizing and questions very usefully the sole and loose reading of the 1957 edition of *Film as Art*. Many contributors make reference to other of Arnheim's works and develop reciprocally informed readings. In short, our theorist is interpreted with some charity, with the notion that he is a clear thinker and that if there is a meaning to get at there, an apparently unclear interpretation should be exchanged for one more in line with his larger pronouncements.

My review collects different chapters under four headings: 1) Arnheim's overall project, (2) Arnheim and Modernism, (3) *Film as Art* and (4) Media Theory. Some chapters directly address what Arnheim was about, others revise our understanding of his project and relation as a putative "Modernist," others deal primarily with issues surrounding *Film as Art* and other look around and forward to other media like avant-garde film, radio and television.

Arnheim's Project

Before any criticism can begin, we have to understand what Arnheim was trying to achieve. The book begins with an essay by David Bordwell, the godfather of formalist film writers: "Rudolf Arnheim: Clarity, Simplicity, Balance." Indeed, Bordwell's sane spirit pervades many of the chapters, as some of his students are contributors. Yet for years, Bordwell has preferred an inferential model of film comprehension, which he alludes to, and never directly modeled his work on Arnheim. But the fact is that they both seek to understand film first in its communicative role. Thus they share formalism as a methodological aim, if their mode of explanation is different. Although a web essay by Bordwell led to the conference and then book, the tone is light. More often than not, Arnheim is compared to Gombrich for both being interested in practice and constructive principles of art.

The real framing moment for the book comes, in my opinion, in Meraj Dhir's chapter, "A Gestalt Analysis to Film Analysis." It comes closest to outlining what we can expect from Arnheim. First, Arnheim is a psychologist. No matter how well he fit into the journalistic culture of Weimar, he is ultimately a psychologist – not an aesthetician and not an art or film historian. Thus Dhir urges that we look to Arnheim for an "open ended methodology and approach" (90). As a psychologist, he looks to works of art for their "intensified or concentrated form of the expressive properties inherent in all perceptual phenomena" (94). He is not disappointed by a movie as an aesthete, but because he is interested in how "expressive implication" either helps or fails an artistic message. Purity is also not an aesthetic category but one of expression. Dhir uses an analysis of *Harold and Maud* (1971), Hal Ashby's quirky comedy, to show the way in which shot design is used to "form both visual and semantic parallels" (101). If Arnheim's psychology of film is just based on human perception, there is little sense in carving up the pre-sound era to him and the post-sound to everyone else. If perception is relevant, then such principles will find application in all types of moving images.

Arnheim the Modernist

The art historian Wayne Andersen (2008) tells a story about Arnheim's good friend, the art educator Henry Schaefer-Simmern. Andersen admired a Dürer print in Schaefer-Simmern's Berkeley home but one day on a visit found it on the ground, about to swept up by the house keeper. "My God, Henry, why are you throwing out this Dürer??" Andersen inquired? "Oh," said Schaefer-Simmern, "It's a fake." Schaefer-Simmern was a modernist with a capital "M." Many interested in film, media and modern art would like to say the same thing about Arnheim. For example, Ara Merjian's (2003) essay, which is cited several times in this volume, follows this logic unmercifully. This is typical of a common ironic historicism that sees all elements of history as basically foreign. But does it work for Arnheim? At stake is not the lionization of Arnheim, although that is the effect of several essays here, but rather an accurate portrayal of what he was saying.

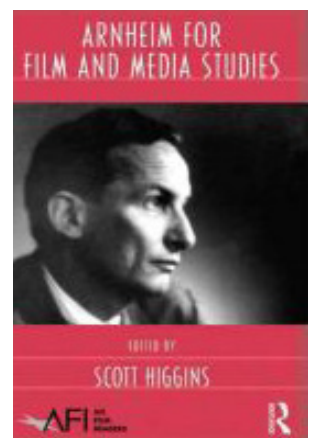
Here, and briefly, I want to address one point cited by Merjian and originally expressed by Margaret Olin (1996), which has the effect of making Arnheim's theories bizarre through the rhetorical strategy of ridicule. Discussing Arnheim's classic essay, "The Gestalt Theory of Expression" (1949/1966), published in the important *Psychological Review* and included in the 1962 volume edited by Mary Henle of the New School for Social Research, *Documents of Gestalt Psychology*, Olin remarked that Arnheim's universalism could instead be turned to exclude those as "deviant" who didn't conform to a standard, because it came:

…close on occasion to turning Gestalt into a new phrenology, suggesting that the external forms of 'criminals and homosexuals' were related to the internal molecular organization that made them 'deviants.' To bolster his call for an examination of the relation between the 'spirit' of national groups and the configuration of their gestures he cited a study of Jewish and Italian communities in Brooklyn (p. 469).

This statement, I believe, is based on a misunderstanding of his gestalt idea of isomorphism and the precise ways in which he makes his arguments. She correctly characterizes Arnheim's theory as postulating "a biophysical relationship between human response to form and internal molecular organization." This is the Gestalt doctrine of isomorphism, according to which there is hypothesized a structural similarity between brain events and the perceived qualities of forms. Arnheim, however, extends the meaning of isomorphism to include all levels of sameness (iso-morph) that can be observed.

This is where the confusion begins with Arnheim's mention of "homosexuals, sadistic murderers." First of all, the discussion occurs in a discussion of the methodological challenges to experiments that seek to correlate visual expression with a concept. The offending passage occurs in a footnote here where Arnheim mentions the Szondi test, a test involving photographs, which was used as a projective technique (like the Rorschach) to determine pathology. Interest in criminals and homosexuals was Szondi's, not Arnheim's. In fact, criminal/homosexual represents a projective pole in the test. All that Arnheim was saying (recall as a psychologist!) is that – given his prior methodological discussion of matching – one could only expect this test to work (1) if there were indeed correlations between the pathology and personality structures and (2) that the personality structures could be discerned in the photographs given. This is entirely consistent with his discussion of *experimental methodology*. There is no discussion here at all about "external form" except as a failure to demonstrate it would methodologically damn Szondi's test (which in fact happened, as it was unreliable).

As for the 'spirit' of the Jews and Italians, this is another misunderstanding. Olin explains that the author of the study (enthusiastically) cited by Arnheim, David Efron, was a South American Jew who under Franz Boas' tutelage sought to counter the Nazi science of race. True enough, but irrelevant to Arnheim's point. Essentially Arnheim saw this work as an ethnography, a store of data to reflect upon psychologically. Specifically, he predicted that, "comparison of these findings with the mental attitudes of the two groups would probably produce excellent illustrations of what is meant by the structural similarity of psychical and physical behavior" (70). Note, nothing is said here about bodies or their configuration. What Arnheim wants to do is to compare the structural similarities between the Jews' and Italians' *communicative* and *cognitive* style. Put this way, what interested him is hardly controversial. What he wanted to do was to bring the rigor of the study of gestures accomplished by Efron to the study of mental attitudes, and see structural similarities. It should be noted that Efron's point that gestures arise environmentally says nothing against Arnheim's approach, who shared it. What someone sympathetic to Arnheim's theory might say is that even if gestures can change in different environments, so too would cognitive styles.



Talk of phrenology is the kind of talk that turns Arnheim into a quack but actually falsifies the richness of ideas held by past writers. Malcolm Turvey's essay, "Arnheim and Modernism," is so refreshing, then, for dealing with this issue squarely. He seeks to revise his earlier view,

put forward in his *Doubting Vision: Film and the Revelationist Tradition* (2008), of Arnheim as a modernist simpliciter. If Arnheim's aesthetics is based on a suspicion of vision, he is more than a "formativist" (Dudley) or a "creationist" (Carroll). But on reflecting on Arnheim's larger theoretical commitments (i.e. psychology of art), Turvey concludes that art and vision are more allied in his writings, which is contrary to Modernism. Turvey notes Arnheim's alternation between art as radically different from vision and their similarity, and states he, "is not sure Arnheim ever fully resolves the tension" (38). Arnheim does walk a tightrope between vision as physical and phenomenological. I prefer to see the case for art as based on discontinuity to be an aesthetic starting point, akin to Roman Ingarden's definition of art as a derived intentionality. Otherwise, good art continually falsifies a physicalist definition of vision (metrics, perspective, etc.); art and phenomenal vision are similar.

There follows a nice comparison of Arnheim and American critic Clement Greenberg that questions the like-mindedness presumed between them by Merjian. While Greenberg is clearly a medium essentialist, Arnheim never stated in Turvey's words, "that an artist should investigate and foreground the properties specific to his medium *for the sake of purifying it*" (39, Turvey's italics). I would like to add that this clarification should be considered in light of the original claims made by Noel Carroll (1996), which Merjian cites. Furthermore, Turvey argues, the historical teleology that operates with Greenberg's medium essentialism does not exist in Arnheim; Pollock for example is the apex of western painting for Greenberg but disappointing for Arnheim. He fulfills painting's destiny for flatness for Greenberg but presents an undifferentiated message for Arnheim.

Film as Art

Turvey rightly suggests we refer directly to the first English translation of *Film as Kunst*, the *Film* of 1933, in order to better understand Arnheim, rather than the "condensed and rewritten" (32) version, *Film as Art*, of 1957. Similarly, Eric Rentschler calls the later book an "adaptation" (62), and endorses Sabine Hake's (1993) opinion that Arnheim removed, "traces of a political consciousness and deleted numerous contemporaneous references." Turvey notes when English language excerpts that survive from the 1933 *Film* to the 1957 *Film as Art* but it would be easy for the reader to be misled that Arnheim actually altered his texts because "condenses" and "rewritten" are ambiguous terms. It should be emphasized that although sections were cut, and English translations were improved, no new content was introduced into the original text or altered. Furthermore, apart from a couple sections retained, the book was nearly cut in half, the first part remaining almost intact (save for one section being abbreviated) in *Film as Art*. Much of the second part of the book is preoccupied with the controversy of the sound film and Arnheim rightly gave prominence to his newer "New Laocoon," which clarified all his arguments, otherwise only available then in Italian. To move away from the sinister tone of some of this discussion, it should be remembered that the 1933 book was of course still available in libraries and the new version was a convenient handbook of those parts that still held up as a companion to *Art and Visual Perception*, published just three years prior.

Eric Rentschler's essay, "Rudolf Arnheim's Early Passage between Social and Aesthetic Film Criticism," gives very rich context to Arnheim's Weimar milieu and further serves as a useful political context for the remainder of the book, contributing to the charity with which regard his further theoretical positions. Once the full intellectual weight of *Film als Kunst* is taken into account, as well as other journalistic writings, Arnheim's "early notices shared the impetus of the influential social critic [Siegfried Kracauer]" (55), revealing "the critic's marked sense of historical context and strong social engagement" (59). Arnheim's 'aestheticism' was born of skepticism of the already developed film industry and worry over political engagement. Rentschler therefore reads Kracauer's generally positive review of Arnheim's book, not as critical in its aestheticism and deviation from Kracauer's sociology, but actually as slightly "territorial" (61). This leads Rentschler to the interesting idea that Arnheim, a Jewish intellectual with leftist past, voluntarily sanitized his book in a way that Kracauer did too. Arnheim did not do this alone, with a weakness of resolve, but was one of a large number in McCarthy's America. This is a useful observation but in line with my prior comments, aren't necessary. Arnheim had just produced *Art and Visual Perception* for California and only the version he delivered could satisfy what readers had come to expect from him.

Ontology

Two chapters have as their pri-

mary or tacit concern the ontology of the film image: Patrick Keating's "Art, Accident, and the Interpretation of the Modern World" and Vincent Bohlinger's "Arnheim on the Ontology of the Photographic Image." Each sees more compatibility between Arnheim and the realist or causal tradition of Kracauer and Bazin. Keating departs again from the Kracauer-Arnheim opposition to question the incompatibility between the two by focusing on Arnheim's later post-World War II writings. Keating quotes Arnheim who noted that in his early theory he had defined film negatively for what it was not (i.e. mechanical reproduced reality) and only later recognized its "positive virtues." Noting Arnheim's affirmation that complexity is a necessity in all art, Keating shows that this "opens a space (admittedly, a rather limited space) for contingency in art. Used correctly, contingency creates complexity" (146). Arnheim is stringent in his criteria for art but Keating goes further to say that Arnheim is able to say interesting things about works of art that not only automatically capture contingency in their working, but also *thematize* that content. Keating departs from Arnheim's brief comments on De Sica's *Umberto D* to show the fruitfulness of such a distinction.

The elision of Arnheim and Bazin is accomplished by Bohlinger, who finds similarities between the two theorists. Arnheim, however, argues ironically that we need formative information to be authentic. If in *Film as Art* he argued that for a film to be art it had to supersede mechanical recording, he argues that for something to reflect reality it needs to also be formative in some senses. Brute mechanical recording will not guarantee authenticity. Thus in his discussion of the Rodney King video, Arnheim (1993) notes that too much formative influence – slow and stop motion before the jury – damaged the video as evidence. But Bohlinger also extends such an analysis to the care-free photos from the SS Hocker album, and the recent photos of Sabrina Harman from Abu Ghraib. In these two cases, we have "authentic" images that seem to be transparent, yet the Hocker photo, "Here there are blackberries," was shot just miles from Auschwitz on a day that over one hundred people were executed upon their arrival. Oppositely, Bohlinger considers Errol Morris' argument that the horrifying banality of the thumbs-up photos of the U. S. Army specialist masks their evidentiary role in exposing torture in the American-held prisons in Iraq. Each photo counsels us about the simplistic causal nature of a photograph: one isn't real enough and the other is too real to get their proper message across.

While Arnheim's ideas undoubtedly grew as a result of his friendship and exchange with Kracauer, I do not believe Arnheim's relationship to him or the theme of accident is "ambivalent" (Keating) or "slightly amends" (Bohlinger) his position. Yvan Tétreault (2008) has recently clarified mechanical reproduction in *Film as Art* by arguing that, "*although the camera is a mechanical recording device* it still can be used for artistic purposes." The film camera was *always* causal but not foregrounded in the early cinema. Rather than an insight gained over years, it was already there in the early theory. Here, I must draw attention to a couple points that do not seem to have been followed up (Verstegen, 1999). First, Arnheim recognized the role of changing technology – acknowledged in Galili's chapter (see below) – which made it more difficult to emphasize the formative element in film after around 1940 (e.g., Arnheim, 1939/40). The second is that while Arnheim was disappointed by most films as artistic statements, he clearly understood that they were vital to understanding modernity. Thus, he recommended Kracauer's *Caligari to Hitler* in a letter of 1948 to *Bianco e Nero*, writing that ideological analysis was essential at that historical moment (Arnheim, 1948). Bohlinger's essay is interesting in this sense because he shows how one isn't capable of judging a work of art's authenticity without outside knowledge. A formerly superb work is known so in light of its ideology and vice versa.

These movements away from ontology to "overarching aesthetic principles" (130) is in Jinhee Choi's chapter an almost complete break. In "Perfecting the Complete Cinema: Rudolf Arnheim and the Digital Intermediaries," Choi sets up a useful basis for any future expanded discussion of new media. She successfully notes that technological limitations at the writing of *Film as Art* – for example the poor quality of sound and color – caused Arnheim to occasionally conflate aesthetic principles of naturalism with ontological purity. Using the example of the digital manipulation of film (digital intermediary), she notes how a pure ontological principle does not hold. What at first looks like a violation of media – adding sound to film – turns out to be violating aesthetic principles, which "might be fulfilled by a variety of technological configurations" (133). Following Stephen Prince, she sees digital intermediaries as allow-

ing for aesthetically acceptable color *or* discordant black and white combinations. This is a good corrective that is universally applicable in discussions of Arnheim.

Sound, Color and Experimentation

With what has been said, it is easy to begin to contextualize some of the additions to film with an eye to new media but Nora Alter doesn't make it so easy. In her essay, "Screening Out Sound: Arnheim and Cinema's Silence," Alter flatly writes that, "Arnheim's early antagonism toward the sound film was clearly rooted in the modernist antipathy toward mass culture" (73), she takes the historicizing route and deconstructs Arnheim's gender and class biases. While these no doubt exist, there are obviously much happier hunting grounds for such material. Alter usefully does close readings but only to draw out apparent contradictions in Arnheim's position. She properly distinguishes between the sound film and the talking film but seems to muddy her position when in the final sections she writes simply of "sound." As she notes but neglects, Arnheim really objected to the talking film. Economical is his statement in the 1957 foreward to *Film as Art*: "The talking film is still a hybrid medium, which lives from whatever fragments of the visual language were salvageable and from the beauty of the creatures, things and thoughts it reproduces" (p. 5). Ultimately, I believe she doesn't really take seriously Arnheim's aesthetics argument, which is presented so well by Dhir and Choi.

Choi's assertion that medial arguments in Arnheim should be reduced to aesthetic ones is confirmed in Scott Higgins' chapter, "Deft Trajectories for the Eye: Bringing Arnheim to Vincente Minnelli's Color Design." Against the color film in *Film als Kunst*, Arnheim shortly thereafter reconsidered his position with the emergence of Technicolor. Higgins links Arnheim's later writing on color to film theory to show how in the case of Vincente Minnelli's work a "close, moment-by-moment analysis of detail" (117) is rewarding. Arnheim feared a color film could not be disciplined into an artistic statement but Higgins convincingly shows that Minnelli successfully used Arnheim's principles to group character and motivate the narrative. Higgins would probably admit that such effects are rare (and that in this case color is merely an organizing factor), but following the aestheticization of medial effects, exist they do.

As a conclusion to the discussion of classic film and theory it is useful to pass on to Maureen Turim's chapter on avant-garde and experimental filmmaking as a genre that breaks convention and plays with artistic effects. "In Visual Thinking of the Avant-Garde Film," Turim departs from Arnheim's interesting ties to the New York circle of art cinema, revealed in his essay on Maya Deren and the important "Art Today and the Cinema" (1966). Deren, Jonas Mikas and others precisely objected to the dominance of language and narrative in film theory and practice and so the visuality of film was most interesting to these avant-garde practitioners. Turim thus believes this was an avant garde that Arnheim perhaps "should have appreciated more than he was able in the late sixties, seventies, and eighties" (164). Although the work of later filmmakers like Stan Brakhage, Paul Sharits and Hollis Frampton can have a more "vexed" relationship to Arnheim, Turim finds that his later works "offer new connections to be made between visual thinking and film" and that – following his analysis of Picasso's *Nightfishing at Antibes* (1966) – "his visual thought would go precisey in different directions when the object he was addressing did as well" (174). Thus, in the same way that Arnheim leads into quasi-psychoanalytic meaning in his analysis of the Picasso, so too his theory might accommodate a contemporary filmmaker like Su Friedrich. In her *Damned if you Don't* (1987), "visual thinking should be so linked to the exploration of desire" (174). Being a formalist here does not mean only configurations are analyzed; rather formal means sensitivity to the differentiation of structure.

Media Theory

In "Arnheim on Radio: *Materialtheorie* and Beyond," Shawn Vancour discusses Arnheim's writings on radio from a similarly expansive perspective, which we can use to set up some general ideas on media. Vancour believes Arnheim's radio works have "continued relevance" (179) but also laments his later neglect of the "extra-formalist considerations" beyond radio he previously foregrounded. He gives an excellent survey of Arnheim's early writing on radio, from his book of 1936, *Rundfunk als Hörkunst*, to his work at Columbia with Paul Lazarsfeld. If indeed reconcilable, Vancour is eloquent about the power of combining the aesthetic and extra-aesthetic strands in Arnheim's thought. I wonder if such an 'expanded' formalism, however, is really an act of will or an artifact of Arnheim's career path. Beginning in 1943, just af-

ter leaving Columbia's research project, Arnheim began teaching. For thirty years thereafter he had to teach psychology both at Sarah Lawrence and the New School for Social Research. In addition, he turned his attention to fields – painting, sculpture and architecture – that had much less elaborate technical requirements to explain. On the other hand, what if the psychology of art took it upon itself to clarify embedding physical realities and practices surrounding works of art – this perhaps would be a useful addition to an Arnheimian approach of the kind of power Vancour suggests.

In a chapter on television, Doron Galili goes a great distance to firmly addressing the topicality of Arnheim to new media. Focusing on "A Forecast for Television," Galili notes that Arnheim refuses to treat television separately from film and also that he sees television as basically a combination of film and radio, in short, as *convergent*. Because radio and television are broadcast live, they have more in common with each other than film and television. As a consequence (and in conformity with Choi's essay), Galili notes that Arnheim's definition of a medium is here not rigid. Indeed, Galili endorses Mary Ann Doane's point that intermediality allows us to truly appreciate the characterisics of single media. Furthermore, the way that television begins as a means to transmit dramatic performance is already recognized by Arnheim as a kind of *remediation*. Arnheim considers the effects of television not so much for form but its instantaneity, which he assumes will have massive effects on modes of viewership.

It is in the last chapter that an author applies Arnheimian ideas to a medium which Arnheim never contemplated: comics. In "Arnheim and Comics," Greg Smith considers how a "neo-Arnheimian" theory might theorize a comic, a sequential art in which text is part of the image itself. Beginning with Arnheim's ground rules for the combination of media in "New Laocoon" (1938), and arguing as a "film cognitivist," Smith believes that the parts of Arnheim's theory that are aesthetically "prescriptive," like this essay, should be abandoned in favor or those that are more "processual," based on his experimental background. In this way, one can violate Arnheim's maxim that one medium must predominate in a composite work, and accept the solution found in most comics that text and image exist side by side, not unlike speech in the motion picture. Smith shows clearly how Arnheim's larger theory helps address the unique situation in comics, where one is interested in what is happening "within the panel, across panels on a page, and among pages in the entire work" (219). One interesting possibility afforded Smith springs from treatments in the rest of the book: if he gives up the idea that for Arnheim a medium is a "mythic transhistorical… 'essence'" (218), and if ontology can be converted to aesthetic effects, the prescriptive may turn out to be the processual after all.

Conclusion - Style

I choose to end with Colin Burnett's chapter "Arnheim on Style History" because it definitively moves us into very general territory where we can finally break away from the stereotype of Arnheim the rigid formalist. Burnett treats the concept of film style but I believe that what he says applies also to media themselves and is an especially fitting conclusion. For Burnett, Arnheim's essay, "Style as a Gestalt Problem" (1983/1986), solves two problems for film historians. First, it escapes the ambiguity between stylistic devices and style as historical classes, which are conflated according to Burnett, in Bordwell's popular *Film Art*. Invoking Arnheim's phenotype/genotype distinction, Burnett sees stylistic devices as phenotypic and a "guiding process" (240) as genotypic. Relying on the former causes us to expect too much homogeneity. A more stratified view of a style, however, avoids this and allows us to see deep structural affinities in a filmmaker like Robert Bresson, which would not be obvious otherwise.

Many of the contributions to this book favor viewing a medium itself as a kind of stratified "field of forces." If a medium cannot be reduced to its material base, or pure ontology, and we know its effects through its aesthetic working (Choi), is this not a dynamic view of a medium? If devices can be separated from the style, then why can't material substrates, use patterns, and the like? Ultimately, we have seen that Arnheim is not hung up on strict definition but describing accurately what Matthew Kirchenbaum (2008) has recently called the "procedural friction" of different media.

To summarize the viewpoint that I think this book provides:

- *Film as Art* remains a good summary of Arnheim's basic aesthetic positions but we should refer back to Film (or *Film als Kunst*) for the full Weimar context.

- Arnheim is not a die-hard formalist but always stresses the effect of mechanical reproduc-

tion; media evolve and are not stagnant.

- Arnheim's understanding of medium should be rethought; it is not 'essentialist' but it is realist.

- Arnheim understands a medium both as a conjuncture of aesthetic effects (Choi) and part of an economy (Galili).

- Arnheim's "New Laocoon" argument does restrict application to new media (Smith) yet interpreted more openly, the rules of combination of media are still useful.

The authors have enlightened their particular specialties with a sympathetic look at Arnheim's writings. To fully establish Arnheim as a "major media theorist" will require a connection of all his legitimate film and media writings with his larger theory to media theory as it is articulated today.

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Celluloid Symphonies. Texts and Contexts in Film Music History

by Julie Hubbert (ed.)

University of California Press, 2011

508 pp.

ISBN: 978-0520241022

Reviewed by Jan Baetens

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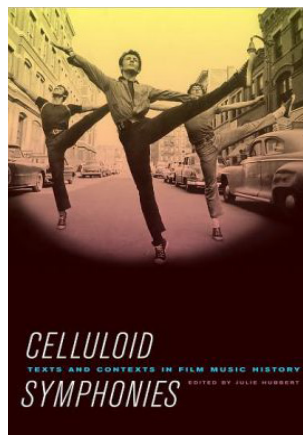
The study of sound in cinema has been, together with the rediscovery of the (falsely called silent) primitive cinema, one of the privileged channels of the great renewal of film studies since the late seventies. That we were still missing a comprehensive textbook on the history of the soundtrack within the broader frame of film history itself had become a historical anachronism, which this collection admirably rectifies.

Carefully and very didactically edited by Julie Hubbert, this book offers a combination of three lines of research that had been developed in relative isolation the last decades: first, the critical analysis of film music; second, the technical study of soundtrack; third, the examination of contextual of the introduction of sound technology. *Celluloid Symphonies* brings these three threads together, knitting them together with an excellent survey of the mutations of the filmic medium itself. Yet the qualities of this book cannot be reduced to its merger of already existing research tracks. Although the first ambition of Julie Hubbert is not to propose new close readings of specific works –her focus is as much on the contexts as on the texts–, her approach provides us with much more than just a new, yet

musically expanded version of Hollywood, adding music, dialogue and sound or noise to the already known shifts from before and after the great paradigm shift of the talkies. First of all, what her book offers is really a new history, and this new history is both broad and microscopic. Broad, because it encompasses the complete history of Hollywood cinema, as shaped and transformed by its relationship with sound; microscopic, because it refuses the traditional vision of film as a sequence of autonomous periods, each rapidly replacing and remediating a previous, technologically less performing era. True, in Julie Hubbert's meticulous account, the history of Hollywood cinema is nicely divided in five different eras, whose dominant features and respective frontiers will not come as a surprise as the global structure of the book seems to follow almost slavishly what we all know about the watershed moments of the American film business: 1895-1925: the silent film; 1926-1935: the early sound film; 1935-1959: the Hollywood score; 1960-1977: the soundtrack during the years of the studio system's crisis; 1978-present: the postmodern soundtrack in the New Hollywood era. But Hubbert's well-documented research and detailed introductions (each of the five parts has an editorial presentation of some 30 pages, which make a small book of themselves) succeeds in an exemplary manner to complexify this history without ever blurring the clear lines of the evolution. The complexification is twofold: on the one hand, Hubbert shows the amazing diversity that is at work within each of the great historical periods that she distinguishes; on the other hand, she demonstrates very persuasively that transition does not mean rupture, and that the study of historical change has to pay as much attention to continuity as to revolution. This is the program that she follows in each of the five parts, and which produces often-astonishing revisions of the often-overgeneralizing claims one finds in traditional textbooks or specialized case studies on film music. Good points in case for instance are the analysis of the gradual emergence of the score, which does not arrive overnight but can be seen as the technologically and contextually enabled continuation and transformation of the treatment of the motif structure during the silent era or, at the other end of the historical spectrum, the foregrounding of the increasing convergence between film music and music in the game industry.



The second great achievement of this book, besides its clever rewriting of Hollywood's history, is the perfect balance that it strikes between major and minor voices and names. Once again, Hubbert does respect the existing hierarchies: the great names of Hollywood film music as we know them (Steiner, Korngold, Goldsmith, Bernstein, Shore, Herrmann, Mancini, Williams, etc., and, inevitably, although in a different mode, Adorno and Eisler) are also the great names of this book. Yet their reading is always very keen to disclose the internal multilayeredness of the discourse as well as the practice of all these artists, and simultaneously Hubbert provides us also with an incredible wealth of other, often neglected voices and testimonies. Each part of her book is structured around tent to 15 historical documents, most of the times rather brief but very diverse and always extremely instructive or pleasant to read, which constitute the perfect historical background of the history. The great value of these documents is also that they are often borrowed from non-academic publications (professional magazines such as *Variety*, interviews on radio stations) while giving also the floor to a whole set of persons who are not frequently quoted at length in academic studies (such as highly commercial composers or anonymous reporters). Thanks to the intelligent editorial comments in Hubbert's introductions, these voices become part of a polyphonic tapestry that helps us better see manifold meanings of this new reading of film.

Lumo: One Woman's Struggle to Heal in a Nation Beset by War

by Bent-Jorgen Perlmutt and Nelson Walker III

The Goma Film Project, 2006

DVD, 72 min.

Distributor's website: http://www.gomafilmproject.org

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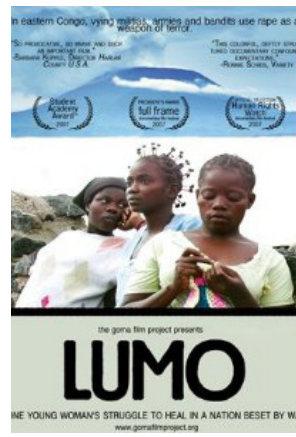
Lumo is the story of one victim's path to healing in the Democratic Republic of Congo, once King Leopold's Belgian Congo. It provides a single account of the consequences of rape as a weapon of war in the very Heart of Darkness. [1]

Lumo introduces us to the medical condition of non-obstetric traumatic fistula requiring surgical repair, the consequence of being torn apart internally through rape including the use of sharpened sticks and knives, guns discharged into the vagina. The film documents what is being done to help heal such victims and the emotional journey involved. To be brief, through this film, one gains a small window into that world. *Lumo*'s is an experience so traumatic that this review will not further comment upon the nature of these crimes against humanity themselves. Instead the review merely provides some background for the concerned. Above all it commends the film as an activist work designed to impel viewers to become involved in assisting the medical and humanitarian initiatives underway at the hospitals in Goma and Bukavu. [2]

Though the Lusaka Ceasefire Agreement of 1999 formally ended the First African World War, extricating the multiple African armies involved, a humanitarian catastrophe continued to plague the eastern DRC. [3] In that regional context, it was after the Rwandan genocide in 1994, when peace returned to Rwanda, that the conflict shifted to the Eastern DRC. There foreign armies and the Hutu rebels, known as the *genocidaires*, turned their attention to terrorizing the local population. They did so and continue to do so in order to compete in the international trade of blood minerals particularly coltan and cobalt. This history of resource extraction and extreme violence has its dark precedents in the reign of King Leopold II in the late 19th Century as so powerfully portrayed in Adam Hochschild's *King Leopold's Ghost: A Study of Greed, Terror and Heroism* (1998/2005). There today, in order to subjugate the population as before, and destabilize the state, rape is occurring on a scale and with a brutality never before seen in recorded human history. All groups including the national army are participating in these war crimes, something we learn of through the story of a girl called *Lumo*.



As a documentary film, *Lumo* is above all about courage and hope. An account of the remarkable work being done at the hospital in Goma, its aim is to galvanize international attention. Relating one victim's account to illustrate the plight of many, it will be especially useful for introducing high school and college students to the sexual violence being perpetrated in the region. The brutality and scale of the situation defies the imagination. Today these war crimes and rampant impunity continue despite the efforts of the UN, the ICC and multiple UN Security Council Resolutions. [4]

While relevant showcase war crimes trials continue at The Hague and recently in the DRC, there is no end in sight of the crimes against humanity being committed every day in the DRC. There, the largest UN militarized presence ever mounted at the cost of $1.35 billion a year, has been judged as "completely and utterly impotent". [5] In that unresolved and ever deteriorating context, *Lumo* will inspire awe as to how anyone can survive the physical and psychological trauma that the victims have endured.

Besides being a testament to the power of goodness and hope, to efforts underway to build The City of Joy for instance, it speaks on the other hand to the very heart of human darkness itself. For those interested in history, it may take you back to the use of rape as a weapon of war in Rwanda, Serbia and Nankin, to Doctor Mengele's crimes against humanity and to the extreme history of local colonial violence described in the Roger Casement Report as revisited by Michael Taussig in his timeless chapter "Culture of Terror-Space of Death" in *Shamanism, Colonialism and the Wild Man* (1987). Ultimately, the film *Lumo,* besides performing this inadvertent larger function for students of history and anthropology, is an unusual documentary film in that it serves as a medium for recruiting people to donate funds to the Goma Hospital. Therein, its ultimate purpose is to encourage people to become politically engaged in the HEAL Africa campaign.

Lumo thus does far more than merely bring awareness of the crisis in the DRC to a broader public. It stimulates activist participation. It may even come as a surprise to many to learn that

an African World War passed by largely unnoticed in the media, as was the massive carnage of the American war in Laos, but in that case deliberately kept secret. For those interested in the study of media and war, history and humanitarian aid as regards gender and violence, this film is thus of immense importance. It brings attention to the fact that the conflict in the DRC has by now claimed almost 6 million lives, displaced, maimed, enslaved and terrorized similarly large populations, and utterly ruined the lives of countless victims. There is no end in sight. As this movie asks then: What can or will you do about it?

Notes

[1] On the colonial history of violence in the DRC, see Adam Hochschild's *King Leopold's Ghost* (1998/2005) and Michael Taussig's *Shamanism, Colonialism and the Wildman: A Study in Terror and Healing* (1987). For the classic reference to colonial violence set in the Congo, see Joseph Conrad's *Heart of Darkness* (1902/1983) For Chinua Achebe's controversial accusation that Conrad was "a bloody racist", see "An Image of Africa: Racism in Conrad's Heart of Darkness", *Massachusetts Review* 18, 1977.

[2] For another film on the same subject as *Lumo*, see Lisa Jackson's HBO documentary film *The Greatest Silence: Rape in the Congo* (2007). For a film on fistula in Africa, see the PBS film by Mary Olive Smith *A Walk to Beautiful* (2007). For background information on Lumo's larger story, see Jonathan Zilberg "Combating Rape as Weapon of War in the Eastern Democratic Republic of Congo and the Campaign to End Fistula." in *Narrating War and Peace in Africa*, eds. Toyin Falola and Hetty ter Harr (2010), pp. 113-140. Especially see, Gerard Prunier's *Africa's World War: Congo, the Rwandan Genocide, and the Making of a Continental Catastrophe* (2009) and the report *The World at War, January 2000* at www.cdi.org/issues/World-at-War/wwar00.html.

[3] See "The Lusaka Ceasefire Agreement", *Peacekeeping in the DRC, MONUC and the Road to Peace* (2001) at www.iss.org/za/Pubs/Monographs/No66/Chap3.html.

[4] See Herve Barr "DRC mapping report: An inventory of atrocities at www.mg.co.za/article/2010-09-29-drc-mapping-report-an-inventory-of-atrocities. Recently the DRC army has begun to prosecute army personnel for such crimes, see "DR Congo: UN provides logistical support for rape trial of army general" at www.un.org/apps/news/story.asp?NewsID=3794&Cr=Democratic&Cr1=Congo. The point to be made here in regard to the film *Lumo* is that the number of victims continues to grow daily, the hospitals in Goma and Bukavu continue to struggle to cope with the need for surgical repair of fistula and post-operative care, impunity is the norm and the plight and future of civilians in the eastern DRC remains as desperate as ever, never mind the fact that the active volcano above the city of Goma with its population of over a million people is a ticking time bomb.

[5] See Hui Min Neo "UN: DRC mass rapes defy belief" at http://mg.co.za/article/2010-09-24-un-drc-mass-rapes-defy-belief.

Harnessed: How Language and Music Mimicked Nature and Transformed Ape to Man

by Mark Changizi

BenBella Books, 2011

242 pp.

ISBN: 978-1935618539

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The book's introduction opens with a snippet from Stephen Pinker's demonstration [1] of the amazing power of language, which is used to lay the groundwork for Mark Changizi's own thesis while briefly recapping his most recent earlier book, *The Vision Revolution* (2009). This allusion points out how much of the research into the hard wiring of the human brain reveals no "reading instinct", citing problems in attempts at developing software for handwriting recognition as an example. While the light-hearted reference to Homo-Turingipithecus might prompt some (Ray Kurzweil, et al.) to quibble, offering as rebuttal evidence the IBM [2] *Jeopardy!* Challenge (where Watson won handily in the three-day exhibition game against Ken Jennings and Brad Rutter) of an "upwardly ratcheting goalpost" in the Turing Test, especially after the rematch between Deep Blue and Kasparov well over a decade ago, the quirkiness of the incorrect answers by Watson shows conclusively that massive brute-force database searches are no substitute for cognition.

Dr. Changizi acknowledges that others have considered the matter of language and how written language in particular enables (in the case of deceased authors) a form of "spirit channeling" (although the recently released first volume of the *Autobiography of Mark Twain* amply makes obvious the potential "petard pitfall" [3]). The author also concedes that he is far from the first to think about the nature of music and its effects upon humans as well as how it developed (in terms of being a non-verbal form of expression, etc.) without delving too deeply into any of the history (from Pythagoras and his *Music of the Spheres* through the *Harvard Lecture Series* by Leonard Bernstein culminating in the discussion of musical ambiguities in the Debussy *Afternoon of a Faun* or Wagner's *Prelude to Tristan and Isolde*).

Having laid the groundwork for solid foundation, he tells us, "What *is* new here is that I am putting forth specific proposals for how culture actually goes about harnessing us. Saying that language and music might be shaped for the brain doesn't

take us very far in understanding the shape of language and music, because we don't have a good understanding of the brain." The next few pages spell out the process of "natural harnessing" and "cultural selection" in terms not unlike the "functional Darwinism" written about at length by Henry Petroski.

Some might argue that this new approach is little more than a slight twist on the age-old children's questions of whether the chicken or the egg came first. That, of course, is a gross oversimplification.

The bulk of the book affords a systematic means of understanding much of the sociological and anthropological ways language and music evolved. Replete with examples of the functions of the human mind in dealing with natural stimuli which, for all time, have been the (genetically pre-programmed) purpose of the brain (or "purp") as opposed to the quirks that often occasionally shape quantum leaps but, far more often, are dismissed by the mind's natural filtration system.

The "smoking gun" ("QED" or whatever term one might use) establishing the specific proposals spelled out at the beginning of the book is the Doppler effect and how it relates to the elements of music. The text seems geared to hypothetical great grandchildren of the author's own toddler daughter or infant son while explaining clearly the interrelationship between the development of language and music within the context of the physical world in a refreshing way with appropriate touches of humor.

The book's penultimate section, "Conclusion", summarizes the distinction between "harnessing" and natural evolution with a beautiful example reminiscent of the old adage that dogs "adopt you as family but with cats, well, you're just staff." We are not merely toilet-trained apes, we even design the very toilets upon which we sit.

Perhaps, for the sake of completeness, some attempt at review of the studies of dolphin communication or the so-called "songs of the great whales" might have been a nice addition even if nothing definitive were unearthed. Without harboring any trepidation over the prospect of dolphins supplanting humans however many billennia from now (and despite the clever subtitle of John McWhorter's 2003 book, *Doing Our Own Thing; The degradation of language and music and why we should, like, care*) such study might not be quite as outlandish as one might suppose in light of recent observations of interspecies friendships. In one instance, after a 2004 tsunami in Kenya, a baby hippo found a substitute mother in a 130-year-old tortoise. Amongst the most surprising findings was the development of a form of language [4] employed by the duo.

Back to humans, another possible line of interest might have been successive generations' views of (disgust with) "new" shifts in music and the language (including "body language"): Sinatra (and his effect on bobby-soxers), Elvis ("Pelvis Presley"), Beatles, Michael Jackson (crotch grab, etc.), Madonna, (from "Like a Virgin" to the *MTV Awards Show* kissing) Britney Spears and Lady Gaga?

While I would also have loved an examination of implications of the larger anthropological context of defining who, exactly, we are and where within some virtual proximity that "places" us on the spectrum of my favorite thumb-sucker:

"If Gutenberg made us all readers and the office copier started us down the road to becoming publishers, what will people fifty years from now say the 'net in general and the web in particular 'made' us?"

... answers to that and other such questions raised are the "meat" for grinding in sequels.

Notes

[1] Pinker, S., *The Language Instinct* (New York, NY, Morrow, 1994); pp. 1-2.

[2] http://www-03.ibm.com/innovation/us/watson/research-team/index.html and http://www-03.ibm.com/innovation/us/watson/research-team/dr-david-ferrucci.html.

[3] leonardo.info/reviews/feb2011/kade_smith.php [CTRL + F] petard.

[4] Holland, J., *Unlikely Friendships: 47 Remarkable Stories from the Animal Kingdom* (New York, NY, Workman Publishing 2011); pp. 191-193.

Destroy All Monsters Magazine 1976 - 1979

by Destroy All Monsters

Primary Information, 2011

225 pp.

ISBN: 978-0978869786

Reviewed by Mike Mosher, Saginaw Valley State University

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I teach my mid-Michigan painting students about Destroy All Monsters, the youthful art-gang consisting of Mike Kelley, Jim Shaw, Cary Loren and single-named Niagara, that met and

assembled in Ann Arbor in 1973. That was my own hometown, but since I had just left for college out of state, I missed the adventure. I received excited postcards from Ann Arbor friends who hung out with these creative hippie-punks, acted in their movies, played once or twice with their band, shared their recreational drugs. Kelley and Shaw attended the University of Michigan College of Art and Design, and Loren and Niagara lived together near the campus. When these four were about 20, they were productively and confidently making drawings, paintings, collages, installations, films and art-noise-music together. So in my classroom lectures, I drum home that students in our state should be doing the same too, now. It was fortunate that the new Destroy All Monsters Magazine collection, published by Primary Information in New York City, arrived right after this semester's lecture on the clique. Students peruse this kind of stuff intently.

I point out to today's students that both Kelley and Shaw have, since then, built notable international careers as artists upon motifs (psychological, sociological, and pop cultural) drawn from their Michigan boyhoods. As a teenager, Niagara <http://www.niagaradetroit.com> had pretty much already developed her graphic style depicting femme fatales; today she thrives in the metropolitan Detroit region as a painter and occasional accessories designer. Her nights are sometimes punctuated by musical performances (as in Australia, 2010), where she sings the old songs, and meets new fans who sport tattoos based on her artwork. Cary Loren celebrated his toothsome girlfriend in his Super-8 films and photographs for his photo-based collages, and has recently been exhibiting his collages in venues in New York and Europe, with some reissued as trading cards. He also sells DVDs of his old and new films from his store Book Beat <http://www.thebookbeat.com> in the Detroit suburb Oak Park.

The Destroy All Monsters magazine project was edited and published by Cary Loren 1975-79. It deserves recognition as a document of several histories, including the technological. While Kelley and Shaw had pulled prints in their UM classes, Loren's publication occupies a curious place straddling the borders between artists' books, zines, and fine art printmaking. In the 1970s, rebellious artists were fascinated by the copy machine, whose first use in that arena has been attributed to Sonia Sheridan, who taught at the School of the Art Institute of Chicago (an attribution that overshadowed, to her dismay, other aspects of her Generative Systems curriculum). Many pages feature the low-resolution degradation of the copy machine, flattening snapshots and photography, a look nearly universal in the Punk community of the 1970s and 1980s. Unlike Michigan radical poet John Sinclair's influential 1972 book *Guitar Army*, designed by "Minister of Propaganda" Gary Grimshaw, where different chapters are printed on different colors of paper (a metaphor for Sinclair's Rainbow Peoples' Party, formerly the White Panther Party), in Destroy All Monsters Magazine different colors of paper and inks appear unexpectedly, seemingly arbitrarily, throughout the magazine.

A few pages are reproduced on a Ditto machine (Banda machine in UK, and also called a spirit duplicator for the alcohol solvent used in the machine), a low-volume favorite of educational institutions in the 1960s to disseminate inter-departmental memos, student handouts and exams. Some use the older mimeograph process, and are then overprinted with photocopying in another color of ink. Others use a Canon machine, released as product in 1973 and appearing in American copy shops about five years later, which used an electrostatic process, which allowed for affordable color photocopies; this medium was explored of Rene Yañez and Bob Basile in San Francisco.

In an interview upon the book's publication in 2011, Loren told WDET radio <http://www.wdet.org/news/story/CaryDAMBook/> that, at a community college, he taught himself "offbeat printing: split fountains, messy, crazy things, screwing with the press...why it looks so sloppy, strange, different colors, psychedelicized". He would "get on the presses really fast, print over flyers stolen from record or flower shops as soon as I had 1,000", seeking a layered effect with three or four passes through the press, employing "every kind of printing that existed in 1975 or 1976." Loren takes pride in how "Things would get thick with ink, just not readable." At first this reader marveled how the

book, printed in Iceland, faithfully reproduced the Krylon spatter, including neon (then called day-glo) colors of monotype-like pages, as well as coffee stains. I then learned from the WDET interview that unique pages were inserted in each copy of this reprint of the magazines, an individual "three-second painting" inserted in as frontispiece to each issue. As the book project was taking shape, Loren fortuitously "found a stack of color paper fake-signed by strange celebrities", by whom—which of his prankster friends or arty bookstore employees—he doesn't know, upon which the hasty paintings were created by Loren and Jimbo Easter. So I may herewith describe some pages unique to my own copy.

Issue #1 contains an appropriately feverish (like all good ones—Futurist, Situationist etc.—in art history) Destroy All Monsters manifesto. "The main intention is not to produce music, but to be engaged in an activity that provides an instantaneous feedback of powerful cleansing noise...like poking an animal with a stick or crossing the threshold and setting off an alarm." They seek a "therapeutic" [sic] "emotion-deadening machine repetition that sets up rythm [sic] for you to live by more easily", comparable to "electroshock" while "like a factory", "a hard way of life". Recall that this was the era of Lou Reed's Metal Machine Music (1975), Iggy Pop's "Mass Production" (1977), and dissonant work by that track's producer David Bowie. A program of "black noise" would eradicate "any need for pop entertainment of any kind", and "wouldn't be anything—the total existance [sic] of comfort". Loren told WDET that there was a venal purpose behind the magazine's genesis, "to sell our tapes" Their first cassette release, of industrial noise music fortified with sound loops, was 1,000 copies, got 20 or 20 orders for the $2 cassette.

A rubber stamp saying Destroy All Monsters dances across pages. A Tinkerbelle drawn by Niagara cavorts amongst pills, a fishnet-stockinged leg, and TV announcer George Fenneman. There is much of Andy Warhol's world here: Nico, Jacqueline Kennedy, Marilyn Monroe (what looks like a Warhol painting shot off television, photographically printed then photocopied). Carol Doda, glamorous young Niagara, long haired Cary, an Op Art background. Imagery is mediated, multiple times if possible. Boo Boo Bear, shot off television; Roxy Music featured a similarly grainy television image on their Live album about this time.

A complex Jim Shaw drawing of sexy women, male nerds, Nazis, fragmented yet tightly super-realist in rendering, and a collage with 1950s imagery. There's also a notice requesting a "spare mud puddle" over red and blue mimeographed runes, perhaps proposed site of a Mike Kelley performance, with spray stencil over Ditto copy. There is what appears to be a real advertisement for a plant shop called Flora Heaven. One could imagine Loren approaching the owners: we've got a new magazine, we'll sell you an ad...but he said in the WDET radio interview that he would find discarded stacks of flyers in dumpsters, which he would then overprint. So evidently the florist and the young collagist never met.

We revel in, or puzzle to, the multiple passes: photocopy on color copy on mimeograph of cells, test patterns for copier line resolution, electronic schematics, and an image of Niagara with a knife. Pages sport rubber stamps, swimmers and spray paint. There's an "Acid Monsters" song, which might either be one of Loren's or perhaps from an early Day Is Done-like Mike Kelley performance. A poem "Sitting in Your Dorm Room at Midnight" did not read like the voice of any of the artists. The mystery of its origin was solved when Loren told WDET it was found sitting in dorm launderette, and that other items pulled out of garbage can.

There's a murky "Captain Spit" comic, reproduced twice yet largely obscured. Intentionally? Of course! A photo of dressed-up art students appears, and colonial-era skull and crossbones. A documentary photograph of Shaw, Niagara and friends meeting Andy Warhol at Centicore Bookshop in Ann Arbor was taken by the dutiful Warholian Loren, and, in its way, marks a passing of the Pop baton in Michigan, as a similar new generation of post-Pop artists was also emerging in New York. We see Nancy Sinatra in stripes, atop a background of striped Op Art; the puppet Topo Gigio, Monopoly game money, celebrities like Glenn Campbell, Mae West and Niagara. Dorothy from the Wizard of Oz, shot off TV. Niagara and Hitler-moustached Bobby Epstein. Niagara sprawled with knife and blood. Nixon with a bullet hole in his forehead, ecstatic woman repeated, faces from a school yearbook, a menacing shot of soap maker Dr. Bronner that appeared in a profile in Esquire magazine. Between this issue and the next is a page of spray paint spatter with "Busby Berkeley" written upon it. Loren told WDET he found his stack of pages had been autographed,

behind his back, by an unidentifiable prankster collaborator, but that was fine with him.

Issue #2 also has Oz-bound Dorothy off TV, an ornate frame, plus old English text. Everything is mediated, grainy from TV, degradation of copy-machine repetition. Here's Niagara and Bobby Epstein again, plus celebrities Jackie, Marilyn, Louise Brooks, and Ann Arbor "space" guitarist Larry Miller, playing with Destroy All Monsters. There are early-'60s photos of suburban kids, JFK and Marilyn, then a line from Ann Arbor psychedelic songwriter Paul Kazrin. Artist and occasional Loren model Francesca Palazzola is positioned near other attractive friends (is the blonde girl an earlier Loren girl friend?), Loren himself, and his childhood photos. Actress Joanne Worley, from Rowan and Martin's "Laugh In" and off-Broadway production "The Mad Show", grins circa 1969. Loren's photo of Michigan rockers Ron Asheton and Mike Davis is a portent of players who would have a major effect on his creative and personal life. Spray paint spatter pages are autographed "The Creeper" and "Felix the Cat", but maybe that's only in my copy. These pages are reminiscent of the poems on red construction paper that communist poet Jack Hirschman used to give away in San Francisco in the early 1980s, where a single scrawled name might invoke Che, Neruda or Sandino.

Issue #3 has a Niagara drawing on the cover, a woman with a scorpion tattoo, electric-spark lettering. Following pages are tattooed with Aubrey Beardsley, Op Art, JFK, Marilyn (the previous two saints in the church of Warhol, e.g., holy pictures). Sheena of the Jungle, ventriloquist Shari Lewis in hard color, Niagara with knife, underground filmmaker Jack Smith and his actor Mario Montez all seem to coexist logically. We are given an alternate magazine cover, Gomez and Morticia Addams over Op Art. Niagara with another knife appears over Larry or Ben Miller poetry, in pages reproduced directly from EMPOOL, a zine that Larry Miller was producing with Link Yaco (who acted in a notable Loren Super-8 movie). Yaco was a highly literate comic book collector who went on to write the Eros Comics series *Space Chix vs. the Businessmen, MetaCops* and a hardcover text *The Science of the X-Men*.

Superman is depicted kissing Little Dot's boot, and more collages include Little Dot, Shari Lewis, Op Art. Niagara's friend Ingrid Good holds a heart-shaped candy box and Loren has lettered the lyrics to the Doors' "Crystal Ship" around it. There follows a Mike Kelley grotesque and "What Men Have Built", apparently appropriated from a religious tract (Kelley and Shaw lived in a house with a sign on the porch, obtained from a roadside church, "God's Oasis"). A fat woman, more Op Art, childhood photos, actress Jennifer Jones off television, a solarized picture of Niagara. There's a collage by Jim Shaw that shows 1950s cars hovering over Christ in the Garden of Gesthemane. The magazine's credits are lettered upon an Aubrey Beardsley drawing by Loren, now residing in the Detroit suburb of Southfield. A collage with nuns and USAF fighter planes, Loren, Niagara, again with a knife. An alternate Destroy All Monsters cover or poster, with Op Art, computer-printout lettering, Topo Gigio A page from EMPOOL has the name "M. Kelley" pencilled atop it; does this mean it's his text, or reproduced from his personal, inscribed copy? The spray paint spatter page reads "Jack Gelbert".

Issue #4 is Gala Christmas Issue, dated December 1978, a time of winter melancholy in Michigan. Niagara's cover drawing shows the Evil Queen from Disney's "Sleeping Beauty", ice dripping off her cowl, ermine muff and sleigh. There's an image from the humor magazine circa 1900 called Life, Elsa Lanchester as Bride of Frankenstein, and Santa with a girl child (Niagara?). A rhythmic pattern of lipstick and fingernail polish samples decorates one page, followed by a Wally Wood-drawn monster novelty. Frames from the Zapruder footage of President Kennedy's shooting are overlaid with a comic book balloon "Kill him—or we're finished!", evoking Barbara Garson's "MacBird" and its conspiracy. The famous 1940s photo of filmmaker Maya Deren, mounted on a background Santa Claus wrapping paper, almost looks like Niagara gazing out a window into the Michigan winter gloom. Across the book's gutter is a Mike Kelley drawing of grotesques, emblazoned with labels "John Q. Public" "A Blanket of Ignorance and Death" "The Criminal", reminiscent of a Herblock political cartoon during the Cold War. Sean Connery, Bettie Page, Jean Harlow, Andy Warhol, an Utamaro geisha and, of course, Niagara all look elegant, while Santa Claus toasts a vampire with Coca-Cola.

Then among the photos we find a hand-lettered history of Destroy All Monsters. "A visit with Destroy All Monsters rock band...How did Destroy All Monsters get started anyhow? Hey, am I talking to myself?!?" Mile-

stones listed include the winter, 1974 gathering of the four central artists, when Mike Kelley played drums and squeeze toys. While many local musicians jammed with them, by summer 1976 Kelley and Shaw had departed for California Institute of the Arts in Valencia, California and the Miller brothers, Ann Arbor locals, had joined. "Phase 3 of the History" is when Loren met Ron Asheton, and with Mike Davis, he joined Destroy All Monsters in April 1976. Rob King, a competent rock drummer from a family that owned a music store, and whose sense of humor was described fondly, joined. In August 1977 Loren "once again lost his mind", giving up girlfriend, band and serenity. "Phase 4" of the band was, at the time of this writing, soldiering on without him, driven by Asheton and Larry Miller's guitars. Was this personal history a fearless moral inventory in a 12-step recovery? Is Loren's an apologia, in the Catholic sense? Exculpatory? With agonizing honesty, he accurately recounts his centrality to the entire project, an eye already on the historical record.

Kelley and Shaw departed for graduate school in southern California, musicians Ben and Larry Miller joined the band (their brother Roger, who was soon to form Mission of Burma in Boston, played with them on occasion too). Ron Asheton and Mike Davis, older veterans of important Michigan rock bands the Stooges and the MC5, joined. These musicians gave Loren and Niagara's songs both skilled avant-garde and tough rock n' roll edges. Loren "lost his mind" (his words) and "totally loco" was booted from the band. He lost Niagara to the Stooge Ron Asheton (videos of a late version of the band on YouTube feature these two), yet Loren gamely includes flyers for the band in his zine. Yet like cookie maker Famous Amos, Loren lost his brand. By the mid 1980s, Niagara and Asheton tired of the Destroy All Monsters name, and had a new band through much of the 1990s, Dark Carnival. One might have hoped that, like Steve Jobs' company Apple, Loren had won Destroy All Monsters back; in a sense, Mike Kelley gave it back to him in 1995, when Kelley and Shaw took renewed interest in the project, and secured both capital and international venues for their new exhibition and performance follies. Loren has since recorded original songs and music with Detroit collaborators under the name Monster Island.

Turn the magazine page to find 1960s women, plus a lettered text with "Nutty Professor" allusions to "Mr. Love" (actually Buddy Love), then debonair Sean Connery holding his liquor. There are humorous collages about photography using imagery from the 1920s to 1940s. Niagara is overlaid with a quote from Jonathan Swift about looking "with joy on what is past". Another young woman, perhaps another girlfriend of the artist-editor, pokes her head repeatedly above the tumult. As in previous issues, there follow fan magazine-type pictures of Asheton, King, Loren and Niagara interspersed with Marilyn, Judy Garland, Andy Warhol and soup, and Loren's own mother (Warhol's mother added hand lettering to her son's commercial illustrations—did Mrs. Loren contribute to her son's project?). A Niagara drawing shows a lady with sleeping pills. A fake 45 rpm record "Il Love You But You're Dead" is juxtaposed with that recurrent cellar shot of Niagara with knife and blood. A Destroy All Monsters song list is dutifully provided, with Loren's contribution to lyrics and music noted along with all others, for the historical record.

A page that announces Ben and Larry Miller's subsequent departure from the band—fresh news at press time—is leavened, or given barbs, with anecdotes of alcohol intake. Then there's a floppy "Have a Fun Vacation" cartoon, perhaps by Jim Shaw? Shaw's comment on Loren's enforced "vacation" from his band? A colophon notes that the magazine was printed at Wayne State University, which Loren attended at the time. Then harkening back to Destroy All Monsters' tortured history, as recounted in this "Gala" issue, a photo of Jim Shaw, Mike Kelley, and ex- Stooges guitarist Ron Asheton that had appeared in the magazine's first issue—at that time with the innocent spirit of Look! Here's Jim, Mike and a famous guy!—has been drawn over, repurposed into a poster for the present band, perhaps by Loren at his loneliest in a monument to departed friends and collaborators (though the gestural hand also resembles some 1980s Kelley drawings). The band was opening act for the Ramones, whose name (to the probable chagrin of the New York Punk rockers and their fans) appears in small print.

After a spray painted page labeled "Spaces", Issue #5 announces it's the Hollywood issue, dated January 1979 and assembled by Loren during a trip to California. It's dedicated to Eric Von Stroheim and his era, and boasts a 1938 Antonin Artaud text. One notes the recurrence of icy screen goddesses, usually Nordic and blonde, in Loren's work; they influenced how he photographed and filmed Niagara too. Detroit

and its region in the 1960s and 1960s were dominated by racial struggle, and this reviewer, a product of the region in that era, looks back on a lot of art by white kids as a conscious avoidance of it. A cartoon of a menacing black man by Kelley appeared in the Destroy All Monsters *Geisha This* collection, but the only blacks that appear in this book are in a single photo of a curious group of teenagers in the unpublished "lost issue", as if snapped by Loren as he passed a high school.

In this issue Loren takes pride in his "Color Xeroxes", noting with the attentiveness of an art historian how they were four months in production, from September 1978 to January 1979, and involved hand-developed E6 Ektachrome slides, hand-tinted photographs and "magazine-type collage". "Xerox printing done in North Hollywood, California."

These are playful off-register, overlaps, shuffling around Bobby Epstein as a Hitler-moustached lobster, a 1920s valentine, horror movie villain Albert Dekker, girly magazine torsos. Loren's layers, media imagery in and out of focus and resolution, veils of color and imagery from the past, a past imagined by fantasy illustrators or Hollywood cinema, or his personal past, from boyhood to his home with Niagara. The zine is a letter from the suburban Detroit Von Sternberg to his Dietrich, Niagara. And some of Loren's Ann Arbor friends were a lot like Peter Lorre.

Is Artaud's 1938 text taken from its first edition? Is it different from the version in the Grove Press paperback *The Theater and Its Double*, found on dorm room bookshelves since 1958? Loren notes Artaud's 1948 death date, coincidentally the birth year of Ron Asheton, who charmed Niagara away from Loren's bed. The mere title of "The Theater of Cruelty" evokes the Stooges' "Open Up and Bleed" and Iggy Pop's onstage masochism, Ron Asheton's Nazi regalia, as well as early Destroy All Monsters' loud assault of noise music and cinema. A stated goal is "To put an end to the subjugation of the Theater to the text", much as Loren freed imagery from associative, explanatory text in his magazine. Artaud's text is further illuminated by his student Loren, in marginalia of sexy underwear ads, Bela Lugosi, Santa Claus, and Elvis with Mamie Van Doren.

Aubrey Beardsley is juxtaposed with science fiction illustrator Virgil Finlay. A repurposed line of type says "Straight and Camp", which might sum up Loren's own aesthetic. Does he wear this motto as a tattoo? Sean Connery is back, pictured with James Bond's Aston-Martin DB5. Connery appears later in the issue, in an ad for Jim Beam whiskey. A song follows, presumably by Loren, "Blackout in the City". Baudelaire's "Hymn to Beauty is lettered in fancy decorated calligraphy upon silent film stars, grainy on bright green paper; it's contrasted with Loren's own obsessive poem "Sanctuary's All the Same". Theda Bara, Eric Von Stroheim, Bettie Page on Op Art field, all dance by our page-turning fingertips; today's reader might await a new Destroy All Monsters zine for the iPad. Then Loren's "Time Bomb" poem is written upon a Beardsley drawing. Like Walter Benjamin, Loren unpacks his library, of fine old illustrated editions to be then remixed and mashed up. The last page is a Mannerist- or Baroque-era print by Hendrik Goltzius of a dragon munching on beefy human corpses. The monstrous turns upon the man.

Issue #6 begins with a Virgil Finlay cover, with the note that Finlay died January 18, 1971; one suspects this was just about the time Loren began dating Niagara. This one, numbered Vol. II no. VI, 1979, is called "Special Hollywood Issue". In heavily embellished, fancy, fey lettering we are assured "As ever, you will find it obsessed with time, age, beauty, death and the maze of life", for it was "Concocted in the hallucinatory neighborhood of Hollywood, California by a Mr. Cary Loren of Detroit." Like Iggy Pop about five years before, recording the songs of "Kill City" with guitarist James Williamson while trying to score dope and a record deal, or perhaps novelist Thomas Mann a half-century before that, Loren celebrates his visit to Tinseltown, in brief exile from his quotidian rustbelt roots. We are promptly given Alfred Hitchcock off television, a similarly reassuring (yet untrustworthy?) narrator of strange tales. There is a stippled ink drawing, unsigned and uncredited, but resembling those by Larry Miller's past musical (and EMPOOL) collaborator Arnold Lellis. Plenty of stills, snapshots, pretty faces in sunglasses follow, like a midwesterner's cliché vision of Hollywood. There are images by Jack Smith from his 1963 "Flaming Creatures", whose showing was shut down in the 1960s by police in Ann Arbor, when Loren was still in middle school about thirty miles away. There follows a text by Jack Smith, and images by Smith or perhaps Kenneth Anger.

An ad clipped out of a newspaper announces a discussion of Patty Hearst on a Detroit talk show, a rare intrusion of

the revolutionary politics of the era (though Kelley, Loren and Shaw have all acknowledged elsewhere the influence of John Sinclair's White Panther Party rhetoric on their aesthetics). Images from the Michigan band SRC's album "Traveler's Tale" are relevant again, for the reunited band has just played in Detroit what was advertised as its first concert in 40 years.

A photo Loren shot at the Detroit State Fair of a sideshow exhibit boasting a living, headless woman. Collages featuring Joanne Worley, Bela Lugosi, Marilyn, Topo Gigio, Jim Shaw, bare-breasted pin ups and Loren's own movie stills. A Virgil Finlay illustration (gooped up by a short prose-poem or fantasy synopsis by Loren in flowery lettering), an aging Marlene Deitrich (the avowed obsession with "time, age, beauty"), and promotional material for the Japanese movie Destroy All Monsters. The movie features the giant monsters Godzilla, Manda, Mothra, and Rodan (no, not the sculptor). They occupy Ogsawara Island, Japan, perhaps comparable to garbage-pit Zug Island in the Detroit River, which Loren commemorated in the name of a later psychedelic-folk music ensemble. There's an image from another 1960s horror movie, "The Flesh Eaters", and one from the "Mars Attacks" bubblegum cards. An orientalist story is written upon actor Warner (as "Charlie Chan") Oland's face, where a "traitororus [sic] fiend was drownd [sic] by perfumed barbiturates found in shriek Gestapo terrapins" in atmosphere of "aquatic shrewism". Perhaps the shrew is a trope one might want to ferret out here; women are shown menaced by stranglers, hostage-takers (in one case the photo of a 1920s bride, with drawn babe in cradle, "The Whispering Master" menacing a woman behind her). There are binaries afoot, of grotesques/beauties, angels/aliens, culminating in the smile of a suave 1950s gentleman in a dinner jacket, flanked by two women. Veronica Lake, Albert Dekker and Lon Chaney all parade by. Loren's use of stills was akin to that of Forrest J. Ackerman, editor of Famous Monsters of Filmland magazine, an obvious influence on the young Detroiter's aesthetic. In 2011 one also can't help but ponder the persona and imagery of Lady Gaga, "Lady Monster" and her adoring "monsters" (fans), and how the Destroy All Monsters of 35 years ago might react to her. Defending her artistic integrity in May 2011, Detroit MetroTimes rock critic Bill Holdship asserted that Lady Gaga was "More Niagara than Madonna".

The face of a gauzy beauty gazes at us, Loren's "Winter on Skull Mountain" prose-poem lettered in the margins. More Finlay, Gustave Dore artwork along with the Metaluna Mutant from "This Island Earth", in an ad for "Blackout in the City", a song by a new band with Loren, the Miller twins and Rob King called Xanadu, recorded on his Black Hole Records label. Joanne Worley grins at us again, on a page of bright green, which also reprints Punk rock zine reviews of singles by Destroy All Monsters (unfavorable, "just a girl singer posing on a musical background of swirling metal jive") though mixed for Xanadu. More reviews of Destroy All Monsters follow, from CREEM, PUNK, Trouser Press, some reprinted illegibly. PUNK magazine's John Holmstrom, like Loren a practitioner of hand lettering in his publication, recounts how Loren came by their 10th Avenue office for an interview, "rambled incoherently and was considered by all to be a dangerous nut. He flipped—nervous breakdown" and left the group. A promotional text for Black Hole Records makes effusive Lester Bangs read like terse Hemingway or Stein: "got to have a ghost to get a ghost…a trance is coming… petolpeyotlispotent [sic]…the music sits like a vegetable sex organ all day long at night rotting a naked virus..." If there is a biographical subtext to be found here, it has grown increasingly hermetic. Loren told WDET that he was thinking the magazine "as a picture novel by the end, with its old Hollywood imagery, Creature Feature captions, promoting our new band Xanadu, running "anti-Punk" rants." Destroy All Monsters had, alas, became "just Punk" under its Asheton/Davis hegemony.

In the issue, science fiction illustrations by Virgil (credited "Virgal") Finlay appear, and a Gustave Klimt drawing. Nineteenth century imagery of photographers and printers affirm Loren's interest in craft, the issue "printed at Wayne State University in Detroit and Albert's [Copying] in Ann Arbor." Mike Kelley and Jim Shaw are thanked in the credits. Perhaps Loren's now-Californian friends took him to the Hollywood Bookstore and "Barthalamew's" Movie Store? The back cover says Destroy All Monsters in Art Nouveau type, and reprints an illustration from a Frank Baum Oz, novel circa 1900, with its caption "Good-Bye Ozma! Good-Bye, Dorothy!" Behind this curtain, to what is Loren bidding farewell? To his past art rock collaborators and their collaboration? Or to another mid-western girl, who skipped beside him on the perilous road to their personal Punk Oz, Niagara? One is tempted to complete the caricature, with Mike

Kelley as Tin Man, then-shaggy Jim Shaw as the Cowardly Lion, Loren as the Scarecrow. We're off to see the Warhol…

A spray painted piece of lined notebook paper is inscribed "Lily Tomlin". Cut-out ransom-note letters above a Virgil Finlay dragon inform us "This is the Lost Issue! of Destroy All Monsters Magazine". This unpublished seventh issue in 1979 included several pages of color copies; but are these "xeroxes" as described, or made upon a Canon electrostatic copier, distinguished—and utilized by artists like Loren and Yañez—by its separate passes for yellow, magenta, cyan and black? In these pages, Loren has shifted the image for off-register effects or its appearance only in a single color. Some faces from 1960s television shows "Leave It to Beaver" and "The Addams Family" are hand-colored with markers, pencils and pens. Laughing (near-hysterically) people in bathing suits are superimposed on girly playing cards; perhaps this is Mike Kelley's, for he recently wrote an appreciative introduction to a Taschen anthology of the 1960s humor magazine Sex to Sexty. The Metaluna Mutant from "This Island Earth" patrols a forest of palm trees on wallpaper, the seven-headed Great Beast of the Apocalypse is labeled "A Death-Defying Trio", and other monsters abound. Perhaps Niagara, by this time a Punk rock persona getting notice, feels like the woman she drew here, with multiple hands grasping at her body. An erotic story by Jack Smith is reminiscent of Aubrey Beardsley's story "Under the Hill". The swirly, paisley marker drawings may be by Link Yaco, and, while the spiky vampiress drawn on burned notebook paper is probably by Niagara, it resembles drawings by another Ann Arbor rock singer, Carolyn Moon. One collage using images from 1940s-1960s color magazines suggests Winston Smith's work. The blocky logo from the movie ZULU, and animal pelts, suggest a nascent interest in popular Africana. A couple contributions by Kelley and Shaw were either sent back to Michigan, or previously left with Loren; a lamb image from a Catholic children's catechism, and the double-entendre "He comes in a cloud", suggest Kelley's hand. New revels in layering, color copying technique, color applied to isolated images, all suggest this creative periodical could have kept going well into the 1980s, had Loren so chosen.

In 1995, Mike Kelley had a retrospective of his artwork at the Whitney Museum, and decided to bankroll the release old basement tapes of the foursome. Loren then published a collection of old and new work called Destroy All Monsters: Geisha This. The troupe reassembled for projects in Europe, Japan, and at the Seattle Contemporary Arts Center (2000) and the Detroit Institute of Art (2003). Niagara, however, had pretty much lost interest in the old arty boys.

Ars longa, vita brevis. Still, it's nice to see an artist in mid-life reaping appreciation for an inspired early burst. The contemporary reader appreciates Destroy All Monsters Magazine as a funky Cass Corridor upon a historical road, one that includes Wallace Berman's Semina magazine as an antecedent, and collage zines by D. Bolleri of San Carlos, California as a frisky descendant today. Cary Loren assembled these pages for the viewer to interpret, to decode, to (a motivation in the 1970s) look at stoned. It is imbued with messages of menace, its TV Eyes looking back at you in celebrity opacity, portentous, freighted with history. Like a good thumping, droning rock song, there is a rhythm to Loren's almost-reassuring repetition of imagery, familiar faces recurring in the crazy swirl of visual information.

Yet for all of Loren's ransacking of history, grasping for gorgeous or ghastly idols, to assemble on the page his own universally synchronic troupe of emblematic superstars, there remains the haunting presence of the singular muse. The same photo of Niagara, sprawled on a basement floor with a knife, is apparently from the Super-8 movie Cary and Niagara made (possibly prior to the coalescence of the initial art-gang band) for the song the duo wrote, "You Can't Kill Kill". The reader of the complete Destroy All Monsters Magazine, collected between covers, notes that the image appears in both issue #1 and in the long-unpublished #7. Perhaps even harder to kill than kill, is—in all its creativity, yearning, contradictions and heartbreak—love.

The Secret War Between Downloading and Uploading: Tales of the Computer as Culture Machine

by Peter Lunenfeld
The MIT Press, 2011
144 pp.
ISBN: 978-0262015479

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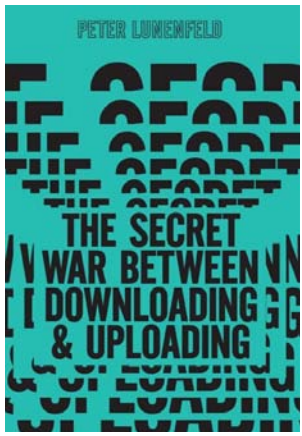
In this essay, which expands in a more systematic way on some

of the ideas already defended in his previous book USERInfoTechnoDemo (2005), Peter Lunenfeld puts the stakes very high. Well known as one of the best analysts of digital culture, he opens here a certain number of historical, cultural, political, and ideological questions that make this book a real must-read for all those looking for new answers to the problems that modern technoculture has been facing since the end of what he calls 89/11 ("eighty-nine eleven", the years of transition between the fall of the Wall of Berlin to the Twin Tower attacks).



Despite the author's modesty, who emphasizes throughout participative and collaborative action and thinking, *The Secret War Between Downloading and Uploading* is a book whose political importance can be compared to that of McLuhan (readers of this book, which proposes an inspiring blend of metaphorical short-cuts and more classic argumentation, may intuitively remember *The Medium is the Massage*), Adorno (given the highly personal tone of Lunenfeld's style one will think here of *Minima Moralia*, as much as of the texts on the culture industry), and Dewey (and behind him the American pragmatist tradition of critical inquiry –as far as I am concerned the revival of Dewey in this context is one of the many good surprises of the book).

The title of the book is a perfect synthesis of what it is all about. Lunenfeld does not only argue that our culture is a technoculture (culture and machine have become exchangeable terms), and that this culture has now become a digital culture (the machine of our age is the computer), but also that the currently dominating device, the personal computer, is far from a simple continuation or remediation of previous machines. It is radically different from the machines that created and structured the previous periods of our culture (photography in the second half of the 19th century, cinema in the first half of the 20th century, and television in its second half), or at least *virtually* different. The problem with the computer is, indeed, that it allows for two possible uses, *downloading* (reception, consumption) and *uploading* (creation, participation) whose necessary balance is now dramatically disturbed to the sole profit of the former. We use the computer mainly as a downloading device, thus continuing and exacerbating what Lunenfeld considers the major failure of television culture: its exclusive focus on dissemination and on passive reception by its users, who suffer in various degrees a disease coined "cultural diabetes". In the television age, 24/7 quantity has wiped out the search of quality, and the cultural and ideological consequences of this tendency are utterly deleterious: on the one hand, the reduction of culture to entertainment; on the other hand, the incapacity to invent new and hopeful answers to the problems and threats coming from all those, both from the left and the right, who challenge the heritage of Enlightenment's secular and optimistic culture. From the left: Lunenfeld is targeting the negative self-criticism of modernist culture, its refusal to counter the anti-universalist stances of contemporary obscurantism, its refusal to recognize the deleterious effects of the vanishing of high culture, and its difficulty in finding positive models for future action and creation. From the right: here the author gives a thorough critique of all forms of, mostly theocratically inspired, anti-pluralism, outside the West but also within our Western technoculture.

At the same time, *The Secret War Between Downloading and Uploading* takes very seriously the radical condemnation of modern civilization as a purely market-driven and amusement-oriented zombie or potato couch culture. Yet the answer he suggests is not a return to a mythical past, to a unified, patriarchal and theocratic society, but an attempt to rethink the openness, complexity, creativity, and collective dimension of secular, technologically enhanced Enlightenment. This attempt, which Lunenfeld does not present as a set of tailor-made answers, is very critical of some movements that have tried to bring cultural uploading to the fore: The author admits that avant-garde has proven perfectly compatible with the lowest and most despicable forms of the culture industry, just as he is aware of the limits of the "prosumer" culture (which does not always escape the only alternative of modern interactivity: either "buy now" or "buy later").

Lunenfeld's book is a cry for freedom––freedom from the market, which forces us to download and prevents us from uploading, but also freedom from

all the reactionary forces whose hidden or overt agenda goes even much further. It does so by making four claims. First, the necessity to face the reality of technoculture, and to face it as something positive (the machine is not a devil, but part of our humanity). Second, the belief that these positive aspects have to do with the possibility of inventing (without the invention of a new future there is the risk of repeating the errors of the television era, which infamously continues to destroy our culture). Third, the urgency of doing so (after 9/11 we live in a culture of fear, which is crippling us). Fourth, the craving for a collective, that is collaborative and shared use of the possibilities of the computer, which is more than a "personal" or individual tool (hence for instance Lunenfeld's insistence on Creative Commons and the aesthetics of "unfinishing").

The Secret War Between Downloading and Uploading is a deeply committed book by a man who is a no less a passionate lover of modern, i.e. both man- and machine-made culture, than a critical voice eager to make a plea for values that are heavily under attack: pluralism, high culture, gift economy. Its highly appealing style and healthy sense of polemic and provocation should make it a hotly debated work in the years to come.

Perpetual Motion Machine: The Story of an Invention

by Paul Scheerbart

Andrew Joron, Translator

Wakefield Press, 2011

112 pp.

ISBN: 978-0984115549

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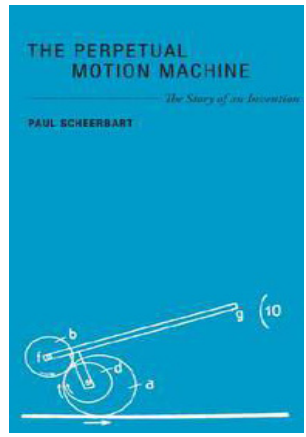
Paul Scheerbart, born in Berlin, is described as a novelist, playwright., poet, newspaper critic, a draughtsman visionary proponent of glass architecture, and inventor of the perpetual motion machine. The book, translated from German to English by Andrew Joron, is forbidden to be reproduced in any form of electronic communication. Apparently after having inventing many things, Scheerbart does not have any official products listed. The book reads like personal opinion told through a collection of notes and drawings over the time. The reader, perhaps, is tasked with animating the mechanisms in order to animate the movement. The author is depicted as hardly a wise clown: he does not look like that in a book that seems to be about how to create perpetual movement using a variety of pulleys––a very a good idea since movement is for some physics or a source of energy like lanterns that are not a light sabre. All the mechanism seems to be kinetic or designed for movement. I found the mechanisms very serious and hard to construct or difficult to articulate with people untrained in the topic. These seem to be central parts of mechanism already existing in toys designed to be funny, like Archivaldo that as I know them today does not seem to have enough sensors for the current about two kilograms strength. It is enough to scare even a furry dog but probably not small children that might find it and not be aware that it can really hurt them. It seems to have only two touch sensors. The problem is as old in philosophy as the question about what is the difference between live things, plagues and objects. It almost as a full human scale machine for small kids. [1] Despite being furry, Archivaldo is able of squeeze adult people if they think is soft and do not know that it has motors inside.



The first mechanism of the book looks like a draft with for a mechanisma based in cogs or at least they are not described in the number of steps in the surface of the wheel or their ratio equivalences. Although the idea is to create a machine for excavation and construction, Figure 1 and 2 look like a strange draft for an animatronic mechanism for the eyes of Mickey Mouse and with the user weight. This mechanism can be incorporated in the imagination of the reader for her or his own creativity. People born already terrified by the existence of wars will understand the growth of disorder during the time if it is not contra-arrested with electrodomestic machines that we wish lasted more than their warranty period. There is no information about the weight loads of the machine that are expressed as kilograms.

Nobody is exempt to carry a weight either by their natural body and the extra weight of the tools that we use daily.

As translations may not happen

often, although for me they are already a very useful tool if you have the time and are not terrified or scared to talk in another languages knowing that the possibility of error is possibly bigger. The interpretations of this text or the comment of the book can be as long of the book itself––83 pages depending on the reader's knowledge. The pocket size book is a condensed small book with a lot of hand made drawings of mechanisms, perhaps, clear for Scheerbart but ambiguous and some of them rather dangerous to use with out proper instruction manuals or holding body cases for the mechanisms. Judging from my quick look at the dates, it can be the starting points of many machines not mentioned that that we use in the world today: cars, toys, clocks, machines for cutting paper, metro train, gyms and electronic sewing machines. The graphic design of the book is very simple and can be improved in second editions by the publisher. Another reference not mentioned but useful for the topic of perpetual machines is the sculpture at BWM museum in Munich, Germany. [2] It is a good work of kinetic sculptures that seem over glass. This mechanism looks good and seems to be similar to the one described in Figure 4. You can also find in the text more ideas of mechanisms constructed by pulleys, such as the ones used for cutting grass, opening tin cans with food or threading yarn. The structure looks like it was dated from notes ranging from 7 of June of 1908 to 16 of June of 1910. The author claims to be disappointed by dull labor.

References

[1] http://www.youtube.com/watch?v=o4x-VW_rCSE. http://www.youtube.com/watch?v=QxafIhYFOr0

[2] http://www.youtube.com/watch?v=hlx-M53dC7M

The Horizon: A History of Our Infinite Longing

by Didier Maleuvre

California University Press, 2011

392 pp.

ISBN: 978-0520267435

Reviewed by Jan Baetens

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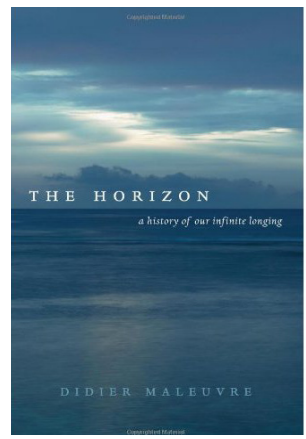
This is not, as the author modestly acknowledges in the very beginning of his book, a timely publication. This work on the cultural meaning of the "horizon" does not propose, indeed, the fashionable mix of empirical research and critical critique that attracts today's PhD students. Neither does it reject the almost encyclopaedic and semi-abstract of the books that were so typical of immediate academic writing till the 1950s (as far as I am concerned, I could not stop thinking of Auerbach's Mimesis, for instance). Moreover, it embraces and links subjects that modern specialization tends to keep apart: philosophy, religion, art, mostly. Finally, it accepts to limit its research to the Western, more specifically Greek and Jewish inspired traditions of the phenomenon under scrutiny. Yet despite all these (apparent) restrictions, The Horizon is a great book, and one that should be read also as a defence of the kind of broad cultural studies that can be highly profitable to contemporary humanities and even more to their perception by a broader audience (for the ideal reader of Maleuvre is the interested layman, not the disciplinary specialist).

The Horizon turns around two simple questions: what is the horizon?, and what does it mean? For Didier Maleuvre, the horizon is much more than the line where the land or the sea meets the sky. The horizon is the place of encounter between immanency and transcendentalism, and therefore one of life's aspects or elements that are most open to all the fundamental questions that Man has been struggling with since the very dawn of civilization: What is the world that I am living in? Is there something beyond the horizon? Is there a God? Who am I? Eternal questions, perhaps, but not questions that travel through time without changes. Maleuvre explains very well how the notion of horizon has permanently been reshaped, and how our interpretation of its meaning cannot be separated from the way in which we define the horizon as such.



This enquiry takes mainly two forms. First of all, Maleuvre describes in large brushstrokes the various types of (once again: Western) civilizations that have one after another tried to cope with the problem of the horizon: the archaic age (Egypt, Ancient Greece and the invention of life as a journey, translating space in temporal terms, Israel's exile in the Desert), the philosophical age (centred on classic Greek philosophy), the theological age

(from the first Christendom and Augustine till the Gothic culture and the discovery of perspective), the scientific age (Renaissance and baroque), the scientific age (Enlightenment), the subjective age (Romanticism and beyond, with a great emphasis on the confusion of man and God in American religions such as Mormonism, which Maleuvre paradoxically identifies as a religion of atheism), and finally the mathematical age (our science-dominated times, which tend to "solve" the problem of the horizon by declaring it irrelevant). In each period, he foregrounds a certain paradigm, or a set of paradigms, that establishes a certain relationship between man and what is beyond man's understanding. Each period, moreover, is described as an answer to the problems and difficulties raised in the previous one. And even if the author refrains from suggesting that the history of the horizon obeys a certain teleological path, he demonstrates that the transformations of the frontier between the immanent and the transcendent do follow a certain line: our Western culture tends to "reason away" the problem of the horizon. Yet although it is perfectly thinkable that one day our culture will have evacuated or forgotten the question of the horizon, this question remains still open today, and there is no reason to think that we will live tomorrow in a purely immanent culture.

Second, Maleuvre succeeds very well in putting some meat on these abstract bones by linking philosophical and cultural issues with illuminating cultural analyses. The metaphysical interrogations that lead humanity from one answer and one era to another are always connected with the major cultural productions of that period, and this back and forth movement between cultural artefacts and highly abstract questions is, undoubtedly, one of the great forces of the book (the other qualities being, besides the great originality of the approach, the admirable clarity of the style and the incredible depth and breadth of information selected, summarized and remastered by the author). None of these analyses may be entirely new, but the overall story certainly is, as is the rhetorical tour de force of Didier Maleuvre who manages to show the both eternal and permanently shifting nature of questions that we may have become afraid to discuss so openly and directly as he does.

The History of Jungle Gardens

by Lisa B. Osborn, Shane K. Bernard, and Scott Carroll (eds.)

Jungle Gardens, Inc., 2010

120 pp.

ISBN: 978-061532117

Reviewed by Allan Graubard

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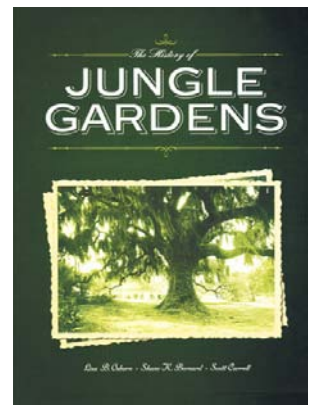
In 1850 E. A. Poe wrote "The Domain of Arnheim," a startling tale as much for its sense of beauty through the medium of the landscape garden as for its description of that very place "seeming the phantom handiwork… of the Sylphs, of the Fairies, of the Genii and of the Gnomes." In literature, I do not believe that anything equal to the domain of Arnheim has since appeared with the kind of élan that Poe was able to bring to it. This tale, poetic in setting, with its flowers, bushes, trees, water, sky and their inhabitants, however unintentional it might seem to us now, 161 years later, is an apt frame by which to view an actual place, which I have had the pleasure to visit many times.

Three miles from the Gulf of Mexico in SW Louisiana, fringed by Bayou Petite Anse, atop a deep salt dome left by the ancient sea and an ever more archaic volcano, is Avery Island with its marvelous Jungle Gardens. If the name of the island seems familiar, I can only tell you that perhaps you have used its most renowned product on your food. For this is where Edmund McIlhenny first created Tabasco sauce to spice up, as historians tell us, the bland fare then available in the Reconstruction South. Decades after its first commercial release in 1868, the sauce would bring to the McIlhenny's the kind of largess that would facilitate the creation of Jungle Gardens by the founder's second son, E. Avery McIlhenny.



First opened to the public in 1935, Jungle Gardens is with us today, much as originally laid out, ever drawing tourists and locals. There time returns to its natural cycles, the moss hangs low and thick from old oaks, alligators and turtles warm themselves in the sun, frogs, insects and butterflies abound, and birds are plentiful. Characteristically, the first intrusion into

the natural landscape by E. Avery McIlhenny (previously noted as an arctic biologist then as naturalist and conservationist) came in response to the open slaughter of the Louisiana egret in the early 20th century; the delightfully frail white plumes used as a popular decoration for women's hats. And thus Bird City was born, a protected area for nesting egrets in a small pond, enlarged precisely for that purpose, from whence the gardens evolved, along with the restoration of the state's egret population.

The oaks, the Camellia garden with its 218 varieties (18 of which originated there), the odd Sunken gardens, the Bamboo grove, the 800 year-old Buddha sitting in its glassed-in pavilion overlooking a quiet reflecting pool where dragonflies hover and skim, the welcoming Wisteria arch with its cooling shade, and other passages and vistas leave little doubt that in this 170-acre reserve we can regain something of what we have lost to our hectic compulsions.

Recently Lisa B. Osborn, the great granddaughter of E. Avery McIlhenny, a sculptor and former visiting lecturer at Harvard University, Shane K. Bernard, official historian for the McIlhenny Company, and graphic designer Scott Carroll have authored an overview of the Jungle Gardens, replete with archival and new photos, many taken by E. Avery McIlhenny. Their brief, if precise, commentary captures the gardens' past, its present allure, and its value into the future.

It is the kind of book that can revive precious moments we have spent in the gardens, or that can draw us there whenever we are visiting the area. And it is the kind of book that can offer a view of what one man did from his love and respect for the land, knowledge of the life burgeoning around him, and care for a red pepper, measured for ripeness against a red stick le Baton rouge, which appears transformed in restaurants and on grocery shelves worldwide.

There is every reason to get to know E. Avery McIlhenny again and to experience his legacy of enchantment, ecology and commerce at any time in every season, from the sweltering July heat and humidity to crisper autumn days, just after another torrential downpour or when the sun has burned too high for too long.

Don't worry: Jungle Gardens and Avery Island itself, as Poe's domain of Arnheim, will quickly work their magic.

And that is enough, for me at least, to keep on coming back.

And so, *The History of Jungle Gardens*…

U-n-f-o-l-d: A Cultural Response to Climate Change

Museum of Contemporary Photography and Glass Curtain Gallery, Chicago, IL

February 2011 – April 2011

Exhibit website: http://www.mocp.org/exhibitions/2011/03/unfold.php

Reviewed by Elizabeth Straughan, Deborah Dixon and Harriet Hawkins, Aberystwyth University

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U-n-f-o-l-d is a touring exhibition that showcases the work of 25 artists who, alongside other creative practitioners, scientists, and communicators, have participated in expeditions organised by Cape Farewell to landscapes considered to be particularly 'fragile' in the face of global climate change. Travelling to the High Arctic in 2007 and 2008, and to the Andes in 2009, artists have produced a wide range of creative responses to this environmental crisis, some of which are on show in Chicago.

Founded in 2001, Cape Farewell's remit is to allow for both artists and scientists, as part of a small, intimate group, to see first-hand the landscapes that are undergoing transformation via changing average temperatures, shifting ocean currents, loss of biodiversity and so on. And as such its expeditions inevitably recall the placement of 'travelling artists' on board ships from the mid eighteenth century onwards, as the Enlightenment impulse to inventory became married with the colonial enterprise. These artists set out to fill the gap left by scientific language, to more accurately convey complex scenes, and to evoke a sense of wonder that stretched, confused and ultimately fleshed out the West's geographical imagination.

Today, under the auspices of Cape Farewell, we see something of the same 'coming together' around shared sites of study and common fields of interest. There also appears to be a critical reflection upon these

previous travelling endeavours, though, and their striving to appropriate the secrets of distant places – a *curiositas mirabilium* that has long been suspect, from Plutarch onwards, as shameless audacity. Instead, the creative responses on display seem to harken towards the traveller as the 'devout pilgrim,' whose encounter with other peoples and places helps them to map out their own place in the world.

And so we find in *U-n-f-o-l-d* that it is often the passage of the journey itself – metaphorical and embodied -- that becomes the catalyst for creative practices. These include, for example, works that consider the movement of the ship, as in Tracey Rowledge's (2008) *Arctic Drawing,* which presents the bold points and fine lines of a pen, constructed as a pendulum, marking the passage of the ship with its sway. We find an attentiveness to the embodied and emotional responses to the journey in Amrije de Hass's (2010) piece *Wellness Over Time,* which notes the crew's physical reactions to the climatic extremes encountered. An emphasis upon the journey is also manifest in the travelling form of the exhibition itself, flat-packed in Sam Collins' (2010) eco-friendly, biodegradable crates *cum* art works.

Unsurprisingly, an emphasis upon the unfolding of key issues from the *minutiae* of life is also central to the works on display. Daro Montag's (2009) *Leafcutter Ant Drawing*, for example, considers the passage of marching ants when confronted with a think black line of oily carbon, a piece that ask questions about both ant and human behaviour when presented with a carbon problem: points of departure and arrival are folded together, opening out the worldly consequences of domestic behaviours. In Ackroyd and Harvey's (2009) *Polar Diamond,* a polar bear bone is cremated and reduced to carbon graphite before its transformation into a diamond; this is a piece that asks the audience to consider the environmental cost of carbon intensive lifestyles. In other works it is the embodied senses that become the *modus operendi* for exploring the landscape; the play of light as it is absorbed, reflected and refracted through and by ice is a central facet in works such as David Buckland's *Ice Texts* (2008), for example, where messages are transposed by video projector onto ice bergs, and Chris Wainwright's *Red Ice- White Ice* (2009), which presents the differing visual effects of white and red flash photography, as well as in *Lateral Moraine Meets Fjord* (2008), Nathan Gallager's photographic work.

As a collection, *U-n-f-o-l-d* has taken Cape Farewell's cultural responses to climate change on a transatlantic journey, presenting to its various audiences works that explore the expeditions and their destinations through a number of materials -- unfired clay, photographic plates, Lenticular print, carbon and oil on paper, ink on paper -- and creative forms, such as performance, installation, film, poetry and music. Eschewing any overt political manifesto, the emphasis is firmly upon bringing the supposedly 'far away' – in time as well as space – into the 'here and now,' such that audiences can, hopefully, begin to map out their own place in the world as a prelude to undertaking their own devout pilgrimage through its dips and troughs, weaves and folds.

ArtScience: A Journey Through Creativity - permanent exhibition

17 February 2011

The ArtScience Museum

Singapore, SG

Travelling the Silk Road exhibition

19 February - 27 March 2011

The ArtScience MuseumSingapore, SG

Museum website: http://www.marinabaysands.com/singapore-entertainment/activities/art-science-museum/

Reviewed by Stella Veciana, Research Arts Institute

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The first ArtScience Museum of the world recently opened in Singapore. It has evoked strong public curiosity but also controversy. The museum is comprised of an exhibition space of over 4,600 square meters distributed among 21 galleries over four floors. The symbolic framework of the museum is embedded in an architectural form reminiscent of a lotus flower. It is intended to represent "The Welcoming Hand of Singapore". The corresponding 10 "fingertips" of the welcoming hand are open windows to the skylight. Natural light illuminates the impressive curved interior walls if the curtains are not closed, as during the inaugural shows. However, Moshe Safdie also knows how to integrate his innovative principles of sustainable design into the

original symbolic forms of the museum's architecture. For example, the central atrium at the roof of the building allows rainwater to channel into a reflecting pool and, in this way, recycle it for use in the building's restrooms.

Within this environmentally friendly space the museum aspires to become "the heart of the growing ArtScience movement," as announced in the visitors' guide. A permanent exhibition "ArtScience: A Journey Through Creativity" presents the core philosophy of the museum. Furthermore, three renowned international touring exhibits illustrate the corresponding key concepts. The main idea of the permanent exhibition focuses on the "power of creativity" of the ArtScience field to be subdivided into three galleries: Curiosity, Inspiration and Expression. The "journey through creativity" starts along a staircase where some general questions are projected on the wall: "Are the artistic and scientific processes so different? What possibilities arise from the merging of the two?". Once upstairs the main foyer is dedicated to the "Curiosity" area where a few drafts drawn by Safdie, the museum's model, and some public feed-back monitors are placed: "Where do great works of art or science begin? Do they originate from a common source, or do they spring from distinct places on the landscape of mind?".

Turning right to the "Inspiration" gallery, the visitor encounters big kinetic inventions hanging from the ceiling as the MIT developed robotic fish that perhaps will help one day to inspect pipelines. On several touch screen monitors, short descriptions of "great ArtScience ideas" from a few almost too well known "ArtScientists" as Leonardo or Einstein can be searched for. Once selected, the information on the monitor gets projected on a curved 60-meter high wall to be shared with other visitors. More interactive touch screens should inspire the visitors to create and send by Internet "their own work of ArtScience", as email postcards to be made out of some preset forms. Finally, the Expression gallery presents a six-minute long promotional video as an "emotional and impassioned demonstration" of how artists and scientists have made their ideas real and how common themes have emerged out of their practices. An example is the "Curiosity" about the "machinery of nature" that becomes it's "expression" in a mechanical horse and cart created by Lu Ban, a photographic technique to study movement developed by Eadweard Muybridge or a walking sculpture build by Theo Jansen.

Besides the permanent show, the first three "temporal blockbuster shows" that have been on display simultaneously are "Travelling the Silk Road," "Shipwrecked: Tang Treasures and Monsoon Winds," and "Genghis Khan: The Exhibition." All three exhibits were intended to evidence the idea of "cross-roads" by visualizing the contrasting parameters of east - west, past - present and art - science. For instance, the Silk Road show organized by the American Museum of Natural History in collaboration with many other international museums started with some stuffed camels inviting the visitor to follow the trading route of east - west exchange. The showcases were also conventionally arranged as in almost any Folklore or Ethnography Museum. The dark illumination in the galleries accentuated fancy but trivial floor projections and sadly enough ended up dissolving in its shadows any hint of architectural reciprocity with the show. Probably more than in any other standard interactive media driven exhibit design, here the high tech approach is focused on simulating the integration of the exotic or unknown in an all encasing experience. It becomes evident by the way the metaphor of the "cross-roads" of exchange or mutual learning gets loaded emotionally and how this historical antecedent proposes an enthusiastic view over the main theme of the museum: "the fusion of art and science."

Briefly, the Silk Road exhibit constitutes a collectively well-known unique cultural heritage theme. In fact, it is not the actual content, but the emotional experience of this travel, that is reinforced. And this emotional experience is based on a common interpretation ground of symbols that plays within an always contrasting conceptual framework, as east - west. The contrast is actually increased by restoring a past, distant, exotic, foreign human activity to a present, proximate, close and almost touchable all encasing experience. In conclusion, we can assume that the much acclaimed new parameters to define an innovative ArtScience Museum are actually borrowed from the modern theme parks design. Sure enough, these key characteristics have already been developed in the 19th century for envisioning the first World's Fairs. Its strategy embraces a universal theme as a playground to combine amusement and emotional involvement with international trade, cultural exchange and technical fascination. All three temporal shows follow these parameters in a

similar way.

Not that this should come as any surprise, considering the museum's location within the Marina Bay Sands business-oriented resort. As the first Art-Science museum of the world, it becomes an anchor and part of the entertainment program for the large-scale gambling and shopping area. The exhibits need to be as appealing as cultural magnets as they can probably be. Repeat visitors, from teens to whole families, in sum mainly non-experts, is the target group. Therefore, the exhibits need to be as easily understandable as possible. Summing up, the critical press talks about "lots of museum, not so much ArtScience". Anything highbrow will not attract enough clients. Hence, the question that needs to be confronted by the contemporary practicing "Art-Science" community is related to how the parameters of "nascent ArtScience museums" are going to be set, whether inside or outside any resort context. And another unsolved problem underlying this issue is how a general public concern and genuine interest about the complex issues emerging out of the field of "ArtScience" can be actually created.

Water, Place, & Equity

by John M. Whiteley, Helen Ingram & Richard Warren Perry (eds.)

The MIT Press, 2008

318 pp.

ISBN: 978-0262731911

Reviewed by Zainub Verjee

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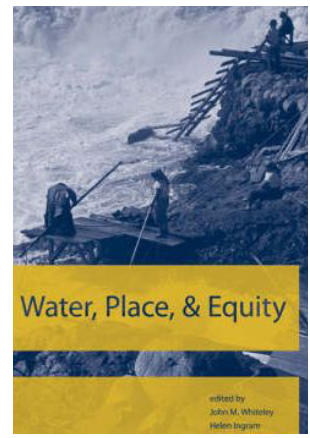
Water, Place, & Equity grew out of the 2004 National Academy of Sciences' conference, Challenges of a Transboundary World, honoring Helen Ingram, professor emerita at University of California, Irvine whose life long work has been on water politics and water equity.

The book states "water will dominate world natural resource politics by the end of the twenty-first century much as oil dominated the late twentieth century" (p.1). State, society, and individual require new ways of thinking of global water resource allocation and management given the rising population, the continuing threat of climate change and current practices policy and governance. The central question it poses: "What are the respective - and possibly divergent roles - of markets and political institutions in contributing to, and overcoming, inequities in the allocation, distribution, and governance of water?" (p.302).

The main thrust of the argument is that the efficiency and market approaches should be balanced with fair consideration of multiple values of water, including broader ethical, moral, and community values, and placing equity as a condition for a fair and just society. Both fairness in process and fairness in distribution is a theme that is explored throughout the book. The editors conclude that a normative approach is needed to get beyond the utilitarian and policies based on rational self-interest. Acknowledging that achieving equity is a challenging prospect, the editors suggest that further research is required regarding the implementation of equity practices.

Connecting place and water, eight substantive case studies examine water issues in specific regions and point to the complexities of what equity might involve. Ranging from abundant urban areas to poor rural areas in the Americas, the book examines how social groups and communities lack the political or legal power to influence water decisions that may be detrimental to their way of life. Thus, it highlights that context and place are important in water resource decision-making and that success may not be portable.



The studies range in scope and analysis covering topics of transborder and shared river conflicts between the USA and Mexico, ethical issues in storm water policy in Southern California, the inequities arising from imposed neoliberal policies and privatization imposed on Latin America and South America with cases in Mexico and Bolivia. For instance, one case study explores the transboundary rivers of the Pacific Northwest regions of the USA and Canada, comparing the approaches to hydropower development and fisheries management. Due to differences, environmental policies between the two countries have seen very different outcomes. As a result, in Canada there has been a return of salmon to the Fraser River. On the other hand, the Columbia River has lost much

of its fish resource.

It is pertinent to note that the drive for wealth derived from mega hydropower damming continue to take precedence over issues of changing fish migration patterns, harm to the local fisheries, and, hence, food security as is evident of the current decision being made to go ahead with Xayaburi Damn in Laos on the Mekong River.

This volume is a timely contribution to the environmental issues and policy concerning water resources, place, and equity. As a policy maker working with equity issues, I find this book is a valuable resource for academics, policy makers, and anyone interested in the environment and, in particular, water issues.

The Filming of Modern Life. European Avant-Garde Film of the 1920s

by Malcolm Turvey

The MIT Press, 2011

170 pp.

ISBN: 978-0262015189

Reviewed by Jan Baetens

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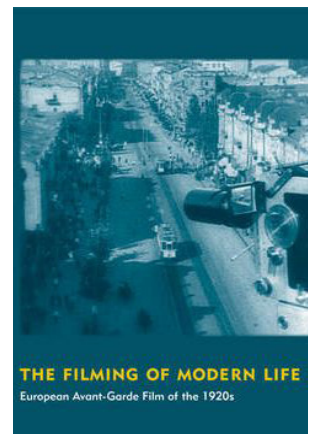
For the robustly avant-garde and definitely modernist series ("October Books") in which it is published, Malcolm Turvey's book has an astonishing argument. Through a close-reading of five major avant-garde movies of the 1920s, the author challenges indeed the standard vision of European avant-garde, while criticizing at the same time the so-called "modernity thesis" of film as borrowed from the work by Benjamin and Kracauer. The former idea claims that avant-garde can only be understood as a violent attack of bourgeois, rational, industrial modernity, avant-garde being the radical side of aesthetic modernism that is in no way compatible with the economic, technological and bureaucratic understanding of modernity as imposed by the gradual spread of global capitalism. The latter idea states that the filmic medium, no matter which kind of cinema it represents, illustrates a radical shift in human perception summarized by the notion of distraction, the viewing of a film being structurally homogeneous with the sensory overload and the subsequent impossibility to focus on one single subject that define urban life in the modern metropolis. Both views, the standard vision of avant-garde as well as the modernity thesis of cinema, belong to the survival kit of what one needs to know and to accept in order to be accepted as a participant in the ongoing debates on modernity and avant-garde, and it is therefore a welcome surprise to see this kind of (stereotyped) idea questioned in what is, for many people, a beacon of radical and critical art history. The times they are a'changin', even in October circles.

Yet what does Turvey try to demonstrate in this very clear, even didactic book? Roughly speaking simply this: First, that none of the five films under scrutiny (*Rhythm 21* (Hans Richter, 1921), *Ballet mecanique* (Dudley Murphy and Fernand Léger, 1924), *Entr'acte* (Francis Picabia and René Clair, 1924), *Un chien Andalou* (Salvador Dali and Luis Buñuel, 1929), and *Man with a Movie Camera* (Dziga Vertov, 1929)) enables the critic to confirm the *a priori*, quasi-anarchist rejection of (bourgeois) modernity that our standard visions of avant-garde continue to highlight and emphasize. Instead, the careful reading of these works displays much more ambivalent and subtle attitudes towards modernity. In certain cases, this ambivalence goes so far that certain films can be read as much as a critique of avant-garde de(con)struction than as a defense of anti-bourgeois values. Second, that modern critical thinking has too uncritically embraced certain intuitions of Benjamin, perhaps because it has not had to courage to question one of its own masters.



For either of the two points he proposes to make Turvey has good arguments. At a general level, he is right to state that avant-gardism was in the very first place a critique of bourgeois modernity from within, so that it is not astounding that many avant-gardists actually share the same values and strategies as their despised enemies. The unconditional praise of individual freedom and the often-ruthless individualism of the creator is the most blatant example of it. At a more concrete level, Turvey can also drive home the point that most avant-garde films display several aspects and preoccupations of classic, bourgeois modernity. Each of the five great analyses that compose

the book tend, thus, to disclose the hidden contradictions of the canonical avant-garde movies: Vertov insists on machinism, yet his city symphony reveals also a profound sympathy for the premodern conception of community life as organism; Picabia and Clair construct a film that seems to abolish all known features one could expect from a movie, yet their work is also an homage to the popular entertainment of the chase films à la Mack Sennett, etc. Corollarily, Turvey confronts Benjamin's radical ideas on distraction with the more down-to-earth analysis by, among others, Rudolf Arnheim, who insists instead on the nondisruptive effects of movie going in order to make a sharp distinction between narrative and visual disruption on the one hand and perceptive disruption on the other hand. Turvey states that the standard view of film as a modern, if not essentially avant-garde medium, is wrong in inferring the latter from the former and defends a much more selective approach of perceptive distraction that he limits to certain aspects of the avant-garde films that he is reinterpreting.

Although convincing in themselves, the readings of Turvey suffer from, however, from a double flaw. They rely too overtly on author's intentions: The films are read through the lens of the filmmakers' comments (in certain cases even unpublished notes) and the use of this contextual information tends too easily to downsize the revolutionary impact of the movies themselves. It may be true that Clair did not really agree with Dada's iconoclasm, but *Entr'Acte* remains until today a film that comes close to what one can reasonably expect from an iconoclast film. Moreover, Turvey is, I think, mistaken when he presents the "standard view" as a monolithical and uncritically dominating approach of what avant-garde means today. Since at least a decade, scholars have been strongly criticizing the oversimplifying dichotomy of reactionary bourgeois modernism and radical avant-garde modernity. It may suffice here to mention the detailed and dramatically influential studies by William Marx (on the paradoxical relationships of avant-garde and arrière-garde) or by Antoine Compagnon (on the ubiquity of antimodern tendencies within modernism), to make clear that the enemy that Turvey is attacking is just a straw man, nothing more and nothing less. In that sense, his surprising thesis will not come as a surprise for all those who have been following these debates. Turvey is an excellent reader, but the very stakes of his analysis are partly ill defined.

Lab Coats in Hollywood: Science, Scientists and Cinema

by David A. Kirby

The MIT Press, 2011

264 pp.

ISBN: 978-0-262-01478-6

From IBM to MGM: Cinema at the Dawn of the Digital Age

by Andrew Utterson

British Film Institute, 2011

192 pp.

ISBN: 978-1844573233

Reviewed by Mike Leggett, University of Technology Sydney

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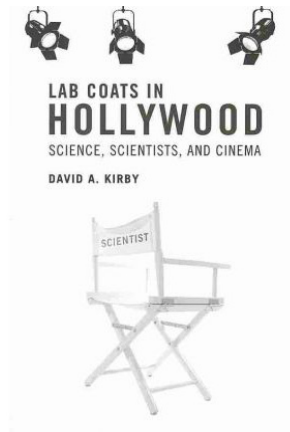
These two Cinema titles have intriguing areas of overlap; the first examines how science in general including computing is represented within the dream machine; and the second, how computers are both represented and used for the manufacture of predominantly popular entertainment. They both contain the tensions and anxieties of the areas of focus and in the approach taken to communicating such issues to a reading audience.



Lab Coats in Hollywood initially captured my attention - Was this a long overdue analysis of the part played by chemists in the perfection of the image on the silver screen? (Or as one chemist has put it, "The alchemist makes entertainment out of silver!") However no, this is another story, slotting into the media studies shelf and examining the vicissitudes of the representation of science, aided and abetted by scientists cloaked as consultants. The iconic, the indexical, and the symbolic are not to be found here as the author, instead, using mostly field research into the protagonists activities, deconstructs what is 'real' about both the subtle and the bombastic presence of scientists in front of and be-

hind the camera. The mission for engaging with Hollywood is clearly stated: "Any time a scientist discusses or portrays, scientific information, it is an act of persuasive communication and as such it can have an impact on scientific practice."

Practice here means ability to practice not methodology. The ethics of idea placement are not so much discussed as instanced within recent cinema history. When science teams promote their projects in the public eye through exposure in the cinema, they gain advantage with politicians and investors and, thus, funding outcomes. Though Stanley Kubrick's *2001: A Space Odyssey* (1968) established the idea of PanAm as an airline of the future, it made no difference to their eventual demise but helped enormously to emphasis the corporate success enjoyed by NASA in the promotional stakes at the point of landing a man on the moon. Production anecdotes abound, for the most part, recalling events in scripting, pre-production, and the studio floor, including moments in front of the camera as a line of dialogue is finalised. Amongst the more engaging nuggets, NASA spacesuit engineers learned a lot from film production designers engaged in inventing the look and feel of the actors' costumes, their style and appearance, the very definitions of the dream factories' appeal. Product designers' theories of form-into-function, for all the engineers' pioneering attitudes, lay well outside their remit for inventing cutting edge space travel. The science accuracy in *Deep Impact* (1998) was apparently good enough for the name to be used by NASA for an actual funded research mission completed in 2005 related to the film's theme. The author's background as an evolutionary biologist shines through during many visits in his account to the set and the events behind the makings of the *Jurassic Park* series (1993 onwards).

In *From IBM to MGM: Cinema at the Dawn of the Digital Age* Utterson's account of IBM's and NASA's involvement with Kubrick's *2001* are based on careful reading of the literature, (and thereby a very complete Bibliography), and the ramifications of the film's messages viewed from theoretical perspectives developed over the years since its making in the mid-1960s; Kubrick posed some anxieties of the time about the computer and the musings of Marvin Minsky on Artificial Intelligence. The author, thereby, advances to discussions on evolutionary and ecological trajectories posed by less visible systems and not simply lumps of interface hardware decorating the sets. On this basis Utterson's preference is to discuss the latter sections of the film, (using earlier discussions of Godard's 1965 *Alphaville* from which to launch them), rather than the opening sections where the credibility of 'folk science' is in play at the core of the audience experience.

He also gives voice to non-mainstream artists and the considerable experimentation taking place without significant budgets, often in collaboration with scientists working in commercial and government laboratories; outcomes ranged from abstract cinema to complex installations searching for expanded forms and interactivity, bringing us to contemporary thoughts about 'future cinema'.

"Cinema's power as a virtual witnessing technology" is the term applied to the cinematic experience of being immersed in the images and the information contained in features such as *The Day After Tomorrow* (2003). Kirby reports that it was the subject of audience studies to understand what kind of communication occurs when a topic like global warming is discussed on the big screen. Contrary to the studio approach of sneak previews and market research, this contemporary approach employed ethnographic methodologies to gather data sets useful for a range of purposes, such as determining if public attitudes to climate change are affected. Though the studies provided conflicting evidence, the film was promoted by Green groups and, later, shots from it were used in Al Gore's, *An Inconvenient Truth* (2006); actuality and simulation are interchangeable when it comes to contemporary anxieties colliding with the physical world.

Kirby's book is no carefully prepared and arid academic tome. In fact, it is the only one of the titles listed by *LDR* to garner a one-paragraph review, with cover image, in the *Sydney Morning Herald* weekend edition. The author is credentialed on the staff of the Centre for History of Science, Technology and Media at the University of Manchester.

The film buff will enjoy this immersion in Hollywood gossip, and it will be useful in the media studies classroom as a means of combining an understanding of pervasive stereotypes with the attractive and fashionable wackiness of much of the Hollywood entertainment masquerading as, or straining to become informed scientific discourse.

For those pursuing a critical approach to cinema and with some interest in the continuing theoretical discourse, Utterson's book employs Conclusions at the end of each chapter and a final chapter so named, (also with a Conclusion), to assist the reader with navigating 'this particular cartography,' bringing focus for some to the historical discussions that precede. (Focusing on the grey 8pt typeface is a greater challenge in an otherwise well laid out book.) References to the futurist Marshall McLuhan throughout should for many rehabilitate him as 'the man of integral awareness', graphically showing the way with the image of Noah's Ark, the vessel adopted by Utterson to 'illuminate the screen culture' of today as it sails into tomorrow.

Bauhaus Dream-house - Modernity and Globalization

by Katerina Rüedi Ray

Routledge, 2010

228 pp.

ISBN: 978-0415475822

Reviewed by Florence Martellini

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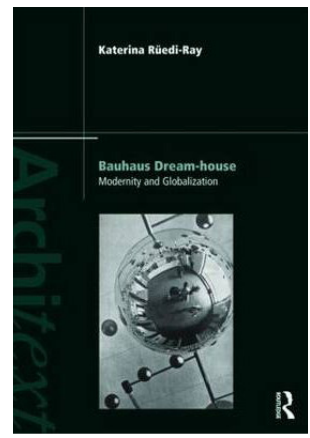
The field of research around the Bauhaus has mainly emphasized art-historical scholarship based on formal and empirical approaches. *Bauhaus Dream-house* is the first book on the Bauhaus that presents the institution through the fascinating lens of a critical social theory. The author examines its institutional formation and the spread and influence of its ideas worldwide. Putting the Bauhaus into its daily context allows the reader to de-mystify it by realising the extent of its challenges and the impressive tenacity and creativity of its leaders to keep the school open and to disseminate its ideas. It was both an education establishment and a business of which development strategy is very familiar to us today even though initiated almost 100 years ago. The book starts by contextualising the birth of the Bauhaus. It, then, focuses on the life of the Bauhaus itself, explaining how social, economic and political pressures have influenced its original ideals and how it responded to the former. The last chapter traces its legacy, looking at the dissemination of its curriculum and the impact of its thinking on cultural identity and modernity.

The first part of the book *Histories and Theories* relates the history of architecture, design, and art education that led to the creation of the Bauhaus. Starting with the medieval guild to the late eighteenth century when new institutions were created in opposition to the expensive and 'out-of-touch' classical learning. In Germany, the Werbund tried to integrate art and industry, romanticising the guild model of uniting imagination and production. It aimed to ennoble products with art on the principle that mass-production can lead to quality product and that quality of industrial goods improves when designed by artists. Commodity design at the Bauhaus emerged from this history.

For those interested, chapter two focuses on the theoretical framework that informs the historical narration. Interestingly, the author explains that change is brought through fantasy, which helps construct new objects and practices. This often occurs during periods of drama (eco crisis, war). Fantasy is essential in capitalism because it gives 'meaning' to mass-produced commodities. And the Bauhaus did harness fantasy to represent socio-cultural change. It is heralded not only as a beacon of artistic, design and architectural modernism but also as the epitome of modernity. Hence, its history is also synonymous of that of the Weimar Republic as it became part of identity experiments by the new nation-state.



Part two *Weimar Republic* gives the reader an insight into the life of the school and its challenges. Founded in 1919 by Walter Gropius, who fused the Weimar Academy of Fine Arts and the Arts and Craft School, it was located in the provincial cities of Weimar (1919-1924), Dessau (1925-1932) and Berlin (1933) and had three consecutive directors Walter Gropius, Hans Meyer and Mies van der Rohe. Being on open admission, its Basic Course was the

gatekeeper that offered formal and technical education but no history. The Bauhaus tried to straddle academy, technical and craft education, adopting during its first period medieval ideals to integrate them.

The First World War led to a rejection of history and the creation of a collective identity - space where people acquire embodied cultural capital, the *habitus*. The latter became the focus of critique and playful transformation. Gropius recognised the local political consequences of the Bauhaus' initial rejection of social and gender traditions and gradually re-established social conformity. As economic stability returned in 1924 the Bauhaus increasingly embraced a more conventional corporeal identity with its growing focus on standardisation, mass production and collaboration with industry. In addition, design being seen as key to the appeal of German products to compete internationally, the Bauhaus was doubly under pressure as an educational institution in regional and local systems without money and as a design school with national economic potential. It forced a stronger focus on marketing Bauhaus work. By 1924, workshops were working at full capacity but after the 1924 election the new right-wing Thurigian government questioned the school's future. The attempt to fight politics with economics by making the school less dependent on state funding was in Weimar ultimately unsuccessful - politics supervened. In 1925 the state terminated the contract with the school. Gropius foresaw the crisis and had the school moved to Dessau.

The second Bauhaus director, Hans Meyer, further strengthened business initiatives but had a different idea of the Bauhaus market - popular necessities came before elitist luxuries. He rationalised and restructured the workshops to improve productivity through standardisation. He disliked marketing. In collaboration with Rasch, a wallpaper company, wallpaper sales became central to the school's economy. The school's growing economic success as well as its collectivization of production formed a greater threat to the state than its economic problems. It was this rather than Meyer's Communist sympathies that allegedly became one of the reasons he had to resign in 1930.

Unlike Gropius or Meyer, the third director, Mies van der Rohe, felt no urge to create designs for mass consumers. When the Communist cell rebelled against his leadership, he called the army, ending the 'proletarianization' of the Bauhaus. He attempted to escape political conflict by denying a political role for the school. But when in 1933 the National Socialists, amongst other pressures, demanded him to remove several masters for their ideology, Mies van der Rohe closed the school.

Part three *Europe and Beyond* explains how the Bauhaus achieved such a global presence. When the school closed in 1933, its products were being bought or licensed mostly by German businesses. However, the Bauhaus images, writings and pedagogies had already acquired international presence and impact during the early days of the Weimar Bauhaus. To achieve such a global presence, corporeal and corporate identities, extensive networking and publicity were at the heart of its management. These communication efforts, which occurred through both personal networks and mass media, transformed the Bauhaus into an international phenomenon. Political and financial problems finally closed the Bauhaus, but the school dispersed across the globe, in particular, the USA, the former USSR, Mexico and Czechoslovakia where some of its leaders and students established themselves. The last chapter focuses on how the Bauhaus ideals continued to spread globally with its tools used differently in different contexts. However, the author does not really explain why neither the school's identity experiments nor its business models were adopted in its offspring's institutions.

Overall, the book praises the Bauhaus for its un-disputable pivotal role in the twentieth century modernity and globalisation. Freed from 'dead conventions,' it became a sort of commodity itself by uniquely unifying design education, commodity production, marketing and sales. The author argues that it made visible "dangerous knowledge" [1] and challenged social norms. The Bauhaus' androgyny and a-historicism suited private, public and corporate interests of industry, colonialism and globalisation, distancing social issues from visual and spatial practice. The institution remained silent on social relations discourse and, instead, became a commodity brand, allowing bourgeois exploitation, control of resources and alienation of workers to continue. However, the author admits that the Bauhaus failed to fulfil its potential because it could not and was not permitted to continue experimenting to adjust to "realpolitik". It lived and died in extreme economic and social conditions.

This critical approach, which takes the Bauhaus as a case study, shows how ideas about education impact institutional culture, how educational programs are interlinked with regional, national and international policy and how institutions connect to cultural networks and flows of ideas. Hence, this book can appeal to an extensive readership not only in the field of visual arts education but also in history, pedagogy and even business. Anyone who is curious about the phenomenon of the Bauhaus will also find this book fascinating.

References

[1] Knowledge safeguarded by professionals to ensure monopoly and control.

A Women's Berlin: Building the Modern City

by Despina Stratigakos

University of Minnesota Press, 2008

264 pp.

ISBN: 978-0816653232

Reviewed by Zainub Verjee

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The Cover of *A Woman's Berlin* portrays an intriguing image of a photographer, a woman with camera in hand, perched on a high crane overlooking the city. Clearly, her clothing bespeaks of another era and time. It is this "modern" woman and the city below; that is the subject of the author, Despina Stratigakos, who argues that architectural history has forgotten the role women played in shaping the urban built environment at the turn of the twentieth century in Wilhelmine, Germany.

The book, addressed to a wide range of audiences — especially those interested in gender, urban, architecture studies — uncovers this obscurity and focuses on the role middle class women played, in spite of their social limitation, in shaping the urban narrative, through self-determination.

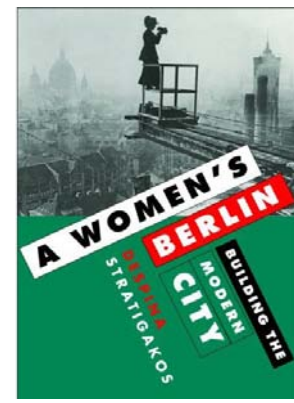
Two texts that inform the trajectory of this book are Henri Lefebvre's work on the production of space and the 1913 guidebook, *What a Woman Must Know about Berlin*.

Following in the tradition of Henri Lefebvre, the book examines the spatial dimensions and architectural practices of women as they claimed space in the social, economic, and political terrain, thus creating the modern female identity.

The 1913 guidebook, *What a Woman Must Know about Berlin*, was written for and by women. The guidebook provided women with an alternative way to imagine themselves by providing insight into current issues, such as the struggle for a new all female orchestra or a look at fashion and capitalism. With the descriptive and detailed rendition of the contents of the guidebook and the role it played in depicting women as productive actors in the city, the author lays the groundwork in the first chapter for the remainder of the book.

As women gained entrance to universities at the beginning of the twentieth century, an increasing population of women made career choices over married and domestic life. This shift called for suitable housing for university students and unmarried professionals.

Wealthy women patrons aided with funding; designers and architects came together to build highly successful residences for women. Included in the examples are the all Women's *Lyceum Club*, *Victoria Studienhaus*, the dormitory for women and the retirement dwelling *Haus in Der Sonne.* These residencies enabled women to continue their studies and live with other career-focused women and have a *Home of One's Own.* Stratikagos argues that it was women who responded to the emergent needs of women and provides an insightful account of how middle class women interjected themselves into the built environment.



It is worthy to note that the author brings to light Emily Winklemann, the architect responsible for building these spaces, and the first woman to open an architectural firm in Germany in 1907. She collaborated with other designers, architects, and patrons, all women, and became well established gaining numerous commissions.

The other chapters are dedicated to the substantial role women played in creating spaces for themselves, both in the built environment as well in social, economic, and political sphere.

One chapter is dedicated to *Die Frau in Haus und Beruf,*

the highly successful 1912 exhibition, portraying women' labour. Split into the two themes of luxury and mechanization, the exhibition featured a vast range of women's work from architecture, fashion, collectibles, fruit and vegetable markets, sewing and hairdressing among other things. This successful exhibition placed women as the subject and not the object. However, in the exhibition, working class women were conspicuous by absence.

One sub-text across chapters delineates the tensions between traditional spaces held by men and those held by women. Another recurring theme in this new found portrayal of middle class women was a challenge to the moral compass of the times: being perceived as prostitutes, deviants, and a danger to social moral fabric of the society.

The book, which received the prestigious 2009 Book Prize from the DAAD, is very well researched and illustrated. The author achieves what she sets out to argue, offering a conceptualization and imagination of a city through the lens of women. It shows the force of middle class women and demonstrates how a small group of women made lasting spatial interventions and became a socio-political precursor to the making of Weimar republic. However the author points out a paradox in the epilogue: "Berlin in the Weimar years was identified in the popular imagination more than ever with female modernity, but the idea of *the city as woman* differed vastly from the notion of *a women's city,* which had found architectural expression in the imperial period (p. 175)."

Grafik Dynamo

by Kate Armstrong and Michael Tippett, with essay by Joseph Tabbi

The Prairie Gallery, Alberta, Canada, 2010

48 pp.

ISBN: 978-0978064624

Reviewed by Dene Grigar, Washington State University

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Superman, *Batman*, *Spiderman*, *The Legion of Superheroes*, *Archie*––as a child I was a lover of them all and held on to my vast collection of comics until it was sold without my permission at a family garage sale while I was away at college. (For a long time I harbored a grudge for my brother for selling my original Batman comic at that sale.) Now, *The League of Extraordinary Gentlemen*, *Watchmen*, *Fables* keeps me faithful to graphically enhanced books, whether they be comics or graphic novels. Aficionados like me liken Scott McCloud to a god for legitimizing comics in the lofty world of academic scholarship and believe the women behind New Radio and Performing Arts should be canonized for promoting the art form with this commission for *Grafik Dynamo* by Kate Armstrong and Michael Tippett.

First, a few words about the project from which the "book" under review originates: In 2005 New Radio and Performing Arts, under the direction of Jo-Anne Green and Helen Thorington, commissioned Canadian artists Kate Armstrong and Michael Tippett to produce a work for its *Turbulence* website. [1] Their work, *Grafik Dynamo*, experiments with social media, dynamic systems, and storytelling in a way that challenges our general assumptions about narrativity. Specifically, for three years Armstrong and Tippett took live images from *LiveJournal* and combined them with "narrative fragments…dynamically loaded into speech and thought bubbles and randomly displayed," and produced what some have erroneously called a "random comic strip generator."[2] Actually, it is more, which I will get to in a moment, but the term does help to explain the process in a very simplistic way. The work is still available but, now, draws its images from Flickr.

In preparing for this review, I revisited the site and watched as the triptych of panels randomly changed one at a time or, sometimes, two in close succession. A black and white close up of a man with short cropped hair and glasses' temple curling around his ear, for example, had the caption: "He had taken a horrified interest in the doings of the court." The panel to its left showed a collage of food and stoves with the bubble stating, "Surely it is the problem of faith!" and its caption below telling us "but the prostitute had some startling news." The panel to the right was black with no image, the bubble announcing, "The Earth's splitting!" Watching the work long enough reveals that the words produced by Armstrong remain stable, finding their way as captions or bubbles while the images them-

selves constantly change. Thus, the challenge in "reading" this dynamic graphic novel lies in making sense of the three panels together and individually as they shift words with random images. Where is the story?, one may be fooled into asking.

Here is where Joseph Tabbi's essay, "Graphic Sublime: On the Art and Designwriting of Kate Armstrong and Michael Tippett," provides some guidance. This essay and examples from the work comprise the book––in reality, an exhibit catalog––published by The Prairie Gallery, the gallery where the work was shown from April 1-June 30, 2008. Tabbi, in discussing the "habits of attention" we use when engaging with digital works (10), reminds us of our inability to avoid coherence, and "the sense of a narrative, the impression of history in the making, [that] persists in what we see" (12). Alluding to Thomas Pynchon, Tabbi tells us that "[t]echnology and information, in the worlds of *Gravity's Rainbow* and *Grafik Dynamo*, each can inflict its own violence on the texture of everyday life, but each is also capable of evolving… [Comics, graphic novels, the "Funnies"] are ways that people learn to live with technological violence" (15). Clarifying this statement further, he says:

"Now that technologies facilitate the viewing of atrocities, deaths, events that occur at every instant worldwide, the call of narrative is no longer to locate such events in our own lives. What is required, rather, is a space where events can be written, not as commentary or analysis, but as affective outbursts, capable of combining but only randomly, never through authorial purpose or intention." (22)

Thus, the shift *from* reflecting upon the world *to* reflecting on our feelings about a world overly exposed to human misery lies at the heart of what *Grafik Dynamo* addresses about narrativity, according to Tabbi. The "sublime" referred to in the essay's title showed up twice in Armstrong's captions and bubbles when Tabbi examined the work. This repetition led him to see it not in the way suggested by Romantic poets as the "presence of nature," but rather in the context of violence and techno-culture as the absence of "what is *not said*" (author's emphasis, 24), what perhaps we do not want to face. "McCloud's work is not criticism, and Armstrong/Tippett's work… is not narrative," he says, "[b]ut these works have the virtue of letting us know, sensually, what it is we're missing––in an era that systematically denies the development of critical and narrative experience" (27).

For those of us invested in media art, visual rhetoric, and digital storytelling, the book, funded by the Andy Warhol Foundation for the Visual Arts, is well worth hunting down for the essay and full-color reproduction of 16 pages of panels from the live site. Its comic book style presentation and unique way of referencing sources make it a lively and informative take on this area of media art. It is also a compelling invitation to visit the original work, which, mentioned earlier, is still available for viewing.

References

[1] Armstrong, K. and M. Tippett. *Grafik Dynamo. Turbulence*. http://www.turbulence.org/Works/dynamo/ (Accessed May 26, 2011).

[2] "Grafik Dynamo." *Poor Mojo Newswire*. http://www.poormojo.org/pmjadaily/archives/002836.php. (Accessed May 29, 2011).

Design Thinking: Understanding How Designers Think and Work

by Nigel Cross

Berg Publishers, 2011

192 pp.

ISBN: 978-1847886361

Reviewed by Dene Grigar, Washington State University

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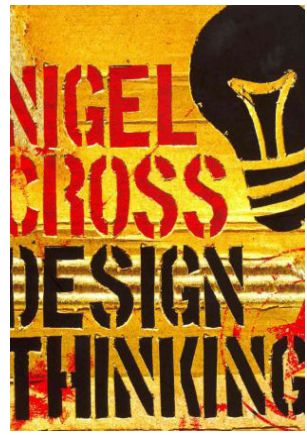
Nigel Cross, Emeritus Professor of Design Studies at The Open University, has written *Design Thinking: Understanding How Designers Think and Work*, a brilliant little book that contains a large amount of information. *Little* is not meant to be a pejorative comment about the quality of the book but rather descriptive of its actual size: a mere 6.25 in. x 7.5 in x .5 in. But the information Prof. Cross manages to pack into that small space speaks to the very skills he discusses about great design: Extremely well-organized and compellingly written and argued, *Design Thinking* makes for good reading and will be useful for teaching, particularly those "interested… develop[ing] their understanding of how designers think and work" (1).

The book is divided into eight chapters, each with a subsection all noted and numbered in the Table of Contents, making them easy to find. Cross, an expert in design methodology and epistemology, is interested in "reveal[ing] and articulat[ing] the apparently mysterious… cognitive and creative abilities of designers" (1). To that end he employs interview- and experiment-based research methods and an interdisciplinary ap-

proach to design to arrive at his findings.

Chapter 1, "Design Ability," by far the lengthiest chapter of the book, lays out underlying principles about design thinking and details the methods by which he approaches his research in the area. While artists may not be surprised that design is described as an "exploratory process" (8) that uses "abductive" reasoning (10) and "aspects of emergence" (11) or that it requires "external representation" in order to design (12), or that "successful designers are optimists" in the way they can "turn an event from a crisis to an opportunity" (13), it may surprise the engineering students I teach each semester that all design is a "social process of interaction and negotiation" (20) and "proceeds as 'a reflective conversation with the situation,'"––and that they share these qualities of design thinking with my multimedia design students. Of interest to artists is the idea that research into design thinking has resulted in the "growth of respect for the inherent, natural intelligence that is manifested in design ability" that is grounded in "technical rationality" (29).

The next two chapters follow through on the interview-based research approach promised in the first chapter. The first, "Designing to Win," with the Formula One racing car designer Gordon Murray and the second, "Designing to Please," with product designer (of sewing machines as well as the front bodywork of the High Speed Train for British Rail), Kenneth Grange. Chapter 4 provides an analysis of the design thinking found in the Chapters 2 and 3, looking at the common features shared by the two men. We see that both Murray and Grange, for example, take "a broad 'systems' approach to the problem," "fram[ed] the problem in a distinctive and…personal way," and "design[ed] from first principles" (75).



Chapter 5, "Designing to Use," introduces experiment-based research methods, looking specifically at "design thinking in action" (79). This method asks subjects to work through a design and provide a "verbal account . . . of their own cognitive activities" (80). Here Cross follows Victor Scheinman as the engineer designs a device that will allow a backpack to be carried on a mountain bike. Chapter 6, "Designing Together," continues with this method, this time with a team of three as they take on the same design problem as Scheinman was given. Chapter 7 follows the organizational strategy introduced previously by comparing the design thinking utilized by the designers featured in Chapters 5 and 6. What emerges from his findings is a recapitulation of the notion of the "creative leap" (127). Cross sees it, instead, as an "accumulat[ion of] a lot of prior concepts, examples and discussion," a "formulation of an 'apposite' proposal" that is, then, "explored and possibly reframed" and resulting in "a resolution between the design requirements and the design structure of a potential new product." For Cross, a creative leap is actually "more like building a 'creative bridge' between the problem space and the solution space" (129) than a leap across two unknown territories.

Chapter 8, "Design Expertise," concludes with a summary of Cross's findings: that design thinking consists of "multifaceted cognitive skills" and is a "form of natural intelligence in its own right." It is more than problem solving, he says; rather, it requires "intense, reflective interaction with representations of problems and solutions" and "an ability to shift easily and rapidly between . . . doing and thinking" (135-6). Cross also shows that "education is not only about the development of knowledge but also about developing ways of thinking and acting" (140). We learn that mastery takes "sustained involvement" as well as "motivation, concentration, and willingness of work hard" (141).

"Everyone is capable of designing," Cross tells us (1). For that reason––and the fact that the book provides insights into design and is enjoyable to read––I recommend it for everyone. I, for one, will be using it in my undergraduate multimedia design course in the fall and add it as a resource for my faculty.

Interface Criticism: Aesthetics Beyond Buttons

by Christian Ulrik Andersen & Soren Pold (eds.)

Aarhus University Press, 2011

295 pp.

ISBN: 978-8779345041

Reviewed by Ellen Pearlman

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Interface Criticism is a well-researched, timely collection of essays on the theoretical underpinnings of our attraction to, use of, and reliance on digital technologies and their interfaces. Heavy on European philosophy, the book is divided into five overlapping sections of exploration. The inherent meaning and function of signal and code is dissected and scratched back to ancient Greek definitions of familiar terms used (aesthetics, technology, haptics), and pushed forward to contemporary theories concerning code software criticism and media archeology. Section One examines the ‚historical development of a screen mediated public sphere, including video art and installations. How we perceive the world through input and output forms the basis of the Section Two, and contains the collections most powerful contribution. Grappling with the issue of the mediated senses, Lone Koefoed Hansen's essay, "Interface of the Skin," examines wearable computers as the ideal communication conduit. It examines the belief in ultimate scientific methodology as secretly masking a yearning for the numeric to function as a covert wish-fulfilling telepathy. Soren Pold's piece examining cybernetic memory highlights the insightful critiques written in the 1930s by Walter Benjamin. Benjamin's words still resonate stating, "the mode of human perception changes historically." Because we live in such a remediated world of images and sounds, this reasoning leads one to contemplate complex theories of simulacra, power, control, fantasy and cognition.

A chapter is devoted to the interface and aesthetics of beautiful transparency, investigating these ideas as a classical Kantian dichotomy of the beautiful and the sublime. The very topical and relevant idea of software as artistic material and programming as an artistic act is discussed by Morten Breinbjerg in terms of music composition and performance. Live coding is highlighted as a liberating, radical act. In one sense this is true. In another sense unless you are a musician adept at programming you can share the liberation.

In the chapter on software and codes a ‚hermeneutics of suspicion, prevails, looking at how interfaces function, and what they ultimately hide. The final chapter, "Culture and Politics" relies heavily on social and political theory. Though these theories are a necessary aspect of software analysis and criticism, the deeply pedagogical tone and forced analogies make this chapter a tedious read, in contrast to the other, more upbeat ones. The analysis I sorely missed seeing was of gender and class in accessing these advanced technologies, and the issue of first vs. fourth world aesthetics.

Digital Practices: Aesthetic and Neuroesthetic Approaches to Performance and Technology

by Susan Broadhurst

Palgrave Macmillan, 2011

232 pp.

ISBN: 978-0230293649

Reviewed by Rob Harle

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This book is an excellent addition to the rather sparse scholarly literature concerning digital technology as used in conjunction with performance art. Broadhurst analyses digital performance from both pragmatic and theoretical perspectives. A detailed discussion of a number of "case studies" helps her explain clearly her premise of the importance of "the exploration and investigation into the physical/virtual interface so prevalent within the digital" (p. 186).

This *interface* between the physical and virtual is the critical phase space for Broadhurst, and it underpins her analysis throughout the book. "It is my belief that technology's most important contribution to art is the enhancement and reconfiguration of an aesthetic creative potential that consists of interacting with and reacting to a physical body. For, it is within these tension-filled (liminal) spaces of physical and virtual interface that opportunities arise for new experimental forms and practice" (p.194).

The book has a smattering of black & white photographs, mainly to help the reader visualize the performances Broadhurst is discussing. There are eight chapters, together with an excellent Index and Bibliography.

Chapter 1 – *The Digital: A Preliminary View* gives a brief, useful introduction to digital performance and the issues involved.

Chapter 2 – *Selective Aesthetic Approaches* discusses very briefly, and somewhat superficially, the theoretical views of various philosophers including Merleau-Ponty, Lyotard, Derrida and Deleuze. This chapter left me completely underwhelmed and did not, in my opinion, add

much to the rest of the book.

Chapter 3 – *Neuroesthetics*, though necessarily brief, is an excellent introduction into this nascent discipline. And a good starting off place for those with great enthusiasm and little knowledge of this subject.

Chapter 4 – *Live Performance and the Digital* discusses, in detail, three fairly well known art pieces: The Jeremiah Project, *Blue Bloodshot Flowers*. Cunningham's *Biped*. Stelarc's, *Obsolete Body*.

Chapter 5 – *Digital Sound, New Media and Interactive Performance* analyses and describes three main pieces: *Optik* (Contact, impulse and electro-acoustic sound). *Palindrome* (Intermedia, col.laboration and interaction). *Troika Ranch's* (An electronic disturbance).

Chapter 6 – *Digital Film* looks in some detail at *The Matrix Trilogy* and the various *Star Wars* prequels. Broadhurst reveals some fascinating, not commonly known facts about these films, their creators and the technology involved in their creation.

Chapter 7 – *Bioart,* again three works are analysed in fascinating detail. *Kac's* Transgenic Art. *Critical Art Ensemble's* recombinant theatre. *De Meneze's* Aestheticizing of Evolution. Even though I was familiar with Kac's work, Broadhurst's analysis of his radical science-art transgenic creations broadened my understanding considerably.

Chapter 8 – *Conclusion: Digital Practices* is more or less a summary of the preceding chapters.

This book goes a long way in helping us better understand the process of experimental, digitally underpinned, performance and interactive art. "It is my belief that digital practices, as experimental artworks and performances, both serve as critique and have an indirect effect on the social and political..." "In this sense, the digital does what all avant-garde does; it is an experimental extension of the socio-political and cultural of an epoch" (p. 185), Herein lies the importance of these contemporary art practices.

As I mentioned earlier, chapter two does not, in my opinion, add a great deal to the rest of the book. The first edition of *Digital Practices: Aesthetic and Neuroesthetic Approaches to Performance and Technology* was published in 2007 in hardback and, now, this soft-cover edition published in 2011 is available. A lot of electrons have flowed under the digital bridge since 2007, and we are now, according to many, into the post-digital era and certainly the post postmodern. I would have liked to have seen in this edition, chapter three expanded considerably, and chapter two deleted. Neuroesthetics is a fledgling field of enquiry and promises to answer many previously unanswered questions concerning the making and appreciation of art. I have often wondered why representational and narrative style artwork stand the test of time and are still so popular world wide, cross-culturally. I believe Broadhurst answers this question in her neuroesthetic investigations. These show that many more areas of the brain are activated when we experience these works than in more abstract or conceptual works: "Non representational works of art activate fewer areas of the brain than representational and narrative art" (pp. 116-117). Perhaps there is a lesson to be learnt here, regardless of whether we are creating traditional or digital art?

Octopus Time: Bellmer Painting

by Herbert Lust

Private W. Supply Gallery, Greenwich CT, 2008

Reviewed by Michael R. (Mike) Mosher, Saginaw Valley State University

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Sarane Alexander's 1978 Rizzoli book on Hans Bellmer first introduced a lot of us to the work of this arresting artist (1902-75). He was a meticulous mid-century draughtsman, to whom H. R. Giger owes much. The meticulous limning of caressable curves and lubricious orifices is a form of lovemaking, linking eye, hand and subject on display. By overlapping the sweeping, fatty extremities, and concavities of the human body, Bellmer's cut-up and remixed women and men, genitals, mouths, legs and furniture, limning details of sexual memory then reassembled into smooth, sugary, simultaneous and seamless pretty Frankenstein monsters of sex. As in the drawings (crafted with words into comics) of another great obsessive, Robert Crumb, seminal gushers and female orgasms pour forth. Some drawings employ textured and drippy decalcomania, which suggests sticky, dried substances, then drawn upon to depict further couplings or gazes. Richly rendered in pencil, or black chalk with white highlights, imagery of multiple ménages, suckmouths and polysodomies, poops and coprophagia causes one to inevitably ponder Bellmer's personal life. One wonders how he might have contributed

to (or, perhaps, forestalled and postponed?) the suicide of his companion Unica Zurn. Another of his lovers, Nora Mitrani, died before turning forty.

Bellmer is often numbered, in broad surveys, among the twentieth-century's photographers, too. The photographs by Bellmer that are most often reproduced are those of the pubescent female-things he called Dolls. The Wexner Center at Ohio State University is presenting a show in 2011 of Bellmer's work, including the weird "Half-Doll", paired with the work of Louise Bourgeois, both of whom worked in Paris in the 1930s but apparently never met. This reviewer had never before seen a Bellmer photograph merely gleaned from observed life that wasn't a construction, like his posed and constructed dolls. In some cases, the prints were further hand-colored or printed in negative. Outside of these sculptural and photographic bodies of work, Bellmer privileges drawing, as I do. I personally tend to think of most photographs as unfinished, requiring the gaze of the draftsperson, the drawing-maker, to complete it. My own drawings and paintings usually begin with a collage of photographs. Perhaps Bellmer used photographs as reference for drawings as well.

The gyneacological study on the cover of *Octopus Time: Bellmer Painting*, though signed by the artist (only to sell for a fast buck?) doesn't feel to me like a completed Bellmer artwork. It feels to me like a reference photo. The artist was probably fascinated by this woman's exposed genitalia and blood-reddened fingers. Or simply been curious—Look what she's doing! Hold that! SNAP! Early on, author Herbert Lust believed this photo showed Nora Mitrani, yet Agnès de la Beaumelle, curator of a 2006 Bellmer retrospective at the Centre Pompidou in Paris, compared this woman's anatomy to other photos of Nora and determined, in a feat of gynaecological art historical investigation, that it wasn't her. Lust chooses to name the 1946 photo "I Am God", in the tradition of Courbet's similarly focused 1866 oil painting of gal parts entitled "The Origin of the World".

In his commentary, Herbert Lust compares the image to an octopus, the woman's eight long fingers arrayed above the creature's "head" composed of the rounded pubic region, with its open maw in the center. This inspires the book's title *Octopus Time*, and the image of the cephalopod recurs in Bellmer's oeuvre, multi-armed lustbuckets shoving peppermint sticks, et cetera, into their mouths. The reviewer reflected on these as Virtual Reality innovator Jaron Lanier praised the capacity, elegance, and "Glory of Cephalopods" on a *Wisconsin Public Radio* interview in March 2011. (http://www.wpr.org/book/11book.cfm).

Lust contrasts Bellmer's aquatically moist depictions of female anatomy with those of the desiccated Duchamp in his warm and appreciative essay, though does not really create "a new literary genre, a spoof using art history to express a world view... despised by all prominent Duchampians" (Hey! I think I'm a Duchampian!) as Lust claims. Some ways in which the author enters the art historical story are interesting, but his narrative is marred a couple times by irrelevant personal information that might have been better served in back-of-the-book footnotes. One catches that the photograph "I Am God" is no longer Herbert's own, but is listed as a part of the Conrad Lust collection. So who is Conrad Lust? A son? Brother? Grandson? No relation? As Herbert Lust provides personal anecdotes in his commentary, one might expect the work's disposition to be recounted.

The reader can't help put down the engaging publication with a sneaking suspicion Lust wrote the book just so he could put "I Am God" on the cover and enjoy the subsequent controversy, daring publications to show it in their advertising. *Bookforum* did, which piqued my own interest, and the book, while not essential, does inform a bit on a notable skillful, eccentric, sexy and creepy artist. Beyond its *sui generis* cover image, it's good to see the Bellmer works on paper from the Conrad Lust and Private W. Supply Gallery collections in *Octopus Time: Bellmer Painting*. And could Nabokov himself come up with a better name for a Hans Bellmer connoisseur than Mr. Lust?

A Touch of Blossom: John Singer Sargent and the Queer Flora of Fin-de-Siècle Art

by Alison Syme

Pennsylvania State University Press, 2010

340 pp.

ISBN: 978-0271036229

Reviewed by Michael R. (Mike) Mosher, Saginaw Valley State University

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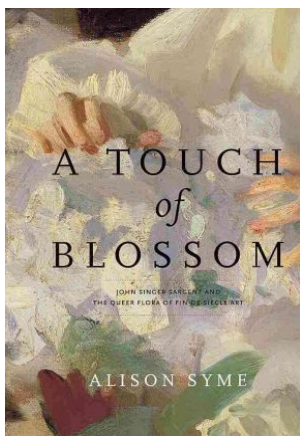
How queer was John Singer Sargent? The painter Jacques Émile Blanché, whose social re-

lations with Sargent were frosty, once sniped that the superior artist's sex life "was notorious in Paris, and in Venice, positively scandalous. He was a frenzied bugger". Like the four theories of Aubrey Beardsley's sexuality—that he died a virgin, that he was gay, that he frequented hygienic heterosexual brothels, that he had an affair with his sister—Sargent may just be interesting enough for his art that we continue to speculate on his private life. Somehow the dinner company of Robert de Montesquieu or Henry James doesn't mean Sargent was in bed with them. Or maybe he was, but must we titter so, as Alison Syme does for 340 pages of *A Touch of Blossom*?



I'm attentive because I'm a second-generation *Sargentista*. As a working-class teenager employed one summer in the 1920s by Harvard University's Fogg Art Museum, my father was responsible for transporting Sargent drawings from curator-collector Paul J. Sachs' residence to the Museum, and developed a lifelong appreciation for the virtuoso artist. A defiant teenage PoMo and Dadaist myself, I badmouthed Sargent then, and had to develop and grow into a certain degree of painting knowledge and modest skill to appreciate the artist's mastery and painterly panache. Sargent's "The Daughters of Edwin Boit" (1882), where children stand or sit still in the shadows and shifting light of a prosperous house, may be one of the greatest American paintings of the nineteenth century; in this book, Alison Syme does more with the portrait trope of the brother and sister standing so close they almost become one.

Sargent painted the occasional male nude, some eroticized in an orientalism of his time that he also mirrored in female figures. There was an obvious pleasure, or camaraderie, in his glancing watercolors of Florida workers, Tyrolean hikers or British soldiers bathing nude. Is painting, especially figurative painting—and nudes—invariably about sex? A century ago there was also the sense of the male nude as "classical", the athlete or soldier. Whatever his personal predilection between the sheets, John Singer Sargent's skillful, bravura painting style got him commissions from President Theodore Roosevelt, "General Officers of the Great War" and saber-wearing Sir Frank Swettenham, and one imagines the artist holding his own in conversation with these stalwarts.

Syme's chapters in *A Touch of Blossom* discuss nineteenth-century French and English representations of artists as insects; men, women or children as flowers or even vegetables; brushes and palettes (or lanterns and matches) as fertilizing stamen and pistils. Syme catalogs a greenhouse worth of plants and their meanings to cognoscenti and aesthetes. She compares the Art Nouveau depiction of stems and drooping leaves to gentlemen's hand gestures in various Sargent portraits. She notes the way they hold a cigarette, place hands on fellows' shoulders, and Sargent's depiction of one sketching friend lying on his stomach, bottoms up, in the grass. She takes unhealthy pleasure in using terms like "limp-wristed". Taught in grade school not to pick on the classmate who wanted to come over and play piano for my mom and sing Elvis's "Teddy Bear" to me, this reviewer is especially irritated by Syme's recurrent, almost sneering, use of "inverts", however historically accurate. Black people were called a rude term then too, but one wouldn't employ it frequently in a biography of Sargent's contemporary Booker T. Washington.

To illustrate that Sargent's portrait subject Dr. Pozzi was eminent in gynecology in France, we are delivered a gallery of oft-grisly medical illustrations, especially those of what look to be incredibly painful ovarian growths literally dwarfing the sufferer's body. At one point as a teenager I reached a degree of revulsion reading William Burroughs' sexual violence against ephebes, when I realized I was one; reading Syme at her creepiest brought back that feeling, as when Dr. Pozzi's plush velvet bathrobe becomes a blood-engorged cervix. As the Viennese psychoanalyst muttered to an interrogator as imaginatively stimulated as Professor Syme, sometimes a cigar is just a cigar!

This reader is not sure *A Touch of Blossom* is a "brilliant interpretation of Sargent's work" as much as erudite fantasies upon it. More a pillow book, a garden of erotic tale-spinning, where everything alludes to something carnal. Like late Vladimir Nabokov at his ripest, an exotic crackle of sexuality as a thong panty stretched over all subject matter.

This reviewer is normally a fan of purple prose and grew up on Hunter S. Thompson and Lester Bangs, the effulgent rock critic. Sometimes the joke's overextended, a frisson of innuendo as a battering ram, or the reader feels a lack of affection for her subject, only her sniggering. The text is over-stimulated, abundantly and salaciously bloviating. As an art history text, it's a bodice-ripper. Or let's call it an Edwardian gay equivalent, a trouser-buttons-ripper.

Despite enumerated reservations, there are ways that I like this grand and ambitious book. There aren't a whole lot of art history titles that are page-turners, that make you want to read what's going to happen—or what outrageous Alison's going to claim—next. The best, though not most historically precise, biography of bravura rock n' roll piano player Jerry Lee Lewis is Nick Tosches' *Hellfire*, and perhaps its time Sargent got the same poetic treatment in Dr. Syme's long, peculiar prose poem. As art history it is as subjective as Gertrude Stein's *Picasso* or Guillaume Apollinaire's *The Cubist Painters,* however thoroughly, meticulously documented. Every well-reproduced Sargent painting here is worth a look, and some are majestic. It's full of fun Edwardian visual culture, like seed packets with the faces of silk-hat gentlemen, sailors ("Heh heh, Beavis, he almost said 'seamen'!") or children sprouting out of the plants, or with their own faces replaced by flowers. I enjoyed touring the conservatory of psychobotanist Alison Syme, bedecked with fine Sargent paintings and other imagery of the era, as she shows off her swollen, oddly-shapen sprigs of truth grafted to colorful bunkum. Yet I doubt I am the first or only one to call *A Touch of Blossom* a striking, weird hothouse flower indeed.

Zones of Remembering: Time, Memory, and (un) Consciousness

by Don Gifford; D. E. Morse (ed.)

Rodopi Amsterdam, 2011

157 pp.

ISBN: 978-9042032590

Reviewed by Rob Harle

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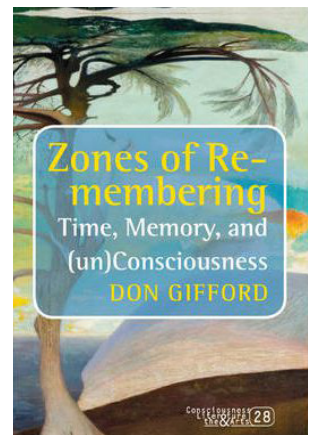
Reading this book is like taking a trip down memory lane (pun intended). Each chapter is a lecture given by Professor Gifford at Massachusetts in 1995. It is not so much the 16 years since he gave the lectures, though much has certainly changed in academia since then, but more that Gifford was a traditional "old school" style scholar. As Donald Morse, the editor of this collection of lectures says, "Don Gifford was a formidable lecturer and a great teacher in the tradition of Ralph Waldo Emerson in that he provoked his listeners into learning" (p. 8).

The late Don Gifford was incredibly well read and the kind of intellectual who questions everything in true Socratic manner. He was not afraid to challenge any so called "established" truth, and throughout these lectures he continually sorts the wheat from the chaff concerning the functioning of memory. He does this with a sense of humour, which makes the mostly unedited lectures, a pleasure to read.

The book is divided into two parts:

Part 1 *Time, Memory, and Consciousness*. This section presents the six lectures given in 1995, as follows: 1 – *Zones of Re-membering*; 2 – *Ancient Greeks and Aboriginal Australians*; 3 – *Doing Memory and Doing Language*; 4 – *The Intertwining of Language and Memory*; 5 – *The Sign Stream of Our Histories*; 6 – *Memory and the Self and Art as a Way of Knowing*.

Part 2 *Time, Memory, and The Unconscious*. This section presents a lecture and essay: 7 – *The Imitation of Dream in Literature*; and 8 – *A Chip on His Shoulder or One for the James Joyce Centennial*.



The main thrust of Gifford's investigation was to explore memory and how this relates to the complexity of human experience. He discusses both individual and collective memory and suggests that memory is stored in the arts, "which in turn provide a way of knowing and of nourishing Memory and consciousness". Gifford does not discuss memory from a neuroscience-neuroanatomical approach, it is through the humanities, and especially literature that he develops what he believes constitutes the nature of memory.

Robert Adolph in his Intro-

duction "Assaulting 'Newton's Sleep,'" notes that Gifford's goal "is not to solve the mind-body problem, or define the nature of consciousness and time, or show us how the brain works..." "His first aim, I think, is to show us no single, blinkered explanation can account for the depth and complexity of human experience, and in particular its grounding in Memory" (p. 11). He achieves this goal reasonably well. After finishing the lectures, I felt as though I had gained a great deal of knowledge concerning literature, history, romanticism (his fundamental approach), and the complexities of human action. However, I had to keep reminding myself that this was supposed to be a book about memory and consciousness, not literature *per se.* I think this came about for two reasons: Firstly, Gifford is a chronic digresser and wonderful story teller, and one tends to get lost in these digressions; secondly, his openly stated bias against science as providing ultimate answers, which is perhaps true to a certain extent, tends to leave his overall result wanting.

Further on in his Introduction Adolph states, "A major theme of this book is how consciousness *is a function* of Memory" [my emphasis] (p. 12) Now this assertion is clearly open to fairly hostile criticism from both scientific and certain spiritual views of the nature of consciousness. Gifford does not discuss these at all. For this reason I found the book somewhat disappointing. Having said this, I still recommend the book as a great read for those interested in the history of human thought, and also how human memory, from the earliest times, has become integrated and enmeshed with literature specifically, and the arts generally.

Fastwürms Donky@Ninja@ Witch: A Living Retrospective

by Philip Monk
The Art Gallery of York University, 2011
112 pp.
ISBN: 978-0921972600

Reviewed by Rob Harle

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This book will cast a wonderful spell on your imagination. It is a combination of documentation, catalogue and critical discussion of the living retrospective exhibition at the AGYU (Art Gallery of York University) by the zany artistic combo, Dai Skuse and Kim Kozzi, *á la Fastwürms*. "The AGYU steals, but only with good will and the best of intentions. And it only steals from the best. Mimicking artists' strategies, the AGYU is already in on the anti-establishment game. Our collaboration with *Fastwürms* to produce DONKY@ NINJA@WITCH was a highly unusual venture: a hybrid interspecies exchange, so to speak, that contaminated both the institution and the anti-establishment" (p. 25).

Fastwürms was founded in 1979 and is the "cultural project, trademark, and joint authorship of Kim Kozzi and Dai Skuse". This entity is "a rare 'avatar artist', crafted by joint authorship". It is about "multidisciplinary, multimedia artworks that integrate time-based, performance, and visual art in the context of immersive installations, social exchange and event architecture principles" (p. 108).

The book is full of colour illustrations and photos and has an Introduction by curator Philip Monk, a love letter, a poem (an appropriation of Bob Dylan's *Subterranean Homesick Blues*), a list of works shown in the exhibition and three essays, as follows. *Learning To Be Donky* by Emelie Chhangur; *Props To The Fairy People* by Jon Davies; *Nature In The Network* by Sally McKay. The essays are an essential attribute of the book as the whole thing is a little parochial, in that *Fastwürms* is very much a Toronto based artists' group. Sure they have exhibited outside Canada, but this show and many of their colleagues referred to, are part of the Toronto art scene.

It is a credit to the AGYU and contributors to the book that an outsider, and one from the Antipodes, can gain a good understanding and appreciation of this duo's radical, DIY artwork! They unite "every creature, scrap of cultural detritus, and social scene into one harmonious and hedonistic union. The arena for their aesthetic alchemy is subcultural style – working class, youth, stoner, witch, goth, queer, cat-fancier, pirate, country, anarchist; all filtered through pop-mediation, camp adoration/ irony, and an amateur's loving hand" (p. 47).

The *Würms* love animals for their own sake, especially cats, but then these feline creatures have a long connection with witches, which of course is a fundamental aspect of Skuse and Kozzi's art and life. They cast spells wherever they go, in whatever materials are at hand. Their ethical system, or personal manifesto "which brings together the most radical and compelling elements of witch and queer cultures is, the witches code of, "do what you will, harm unto none" (p.47).

An entertaining, inspiring and radical book about a pair of entertaining, inspiring and radical artists.

Affect and Artificial Intelligence

by Elizabeth A. Wilson

University of Washington Press, 2010

200 pp.

ISBN: 978-0295990477

Reviewed by Jussi Parikka, Winchester School of Art/University of Southampton

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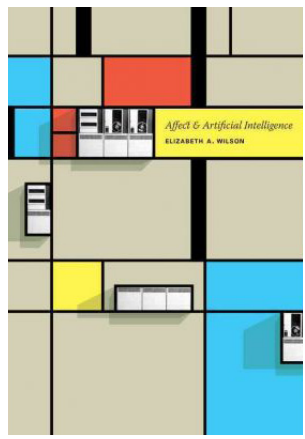
Giggling. That is something that you would not expect to be emphasized in a book about early artificial intelligence and cultural theory. Instead of just wanting to go through the in itself depressive homophobic culture that surrounded Alan Turing and probably contributed to his suicide, Elizabeth A. Wilson wants to paint a different kind of a picture of the intertwining of affect and research into cultures of computerized rationality. Hence, Turing is not seen only as the unfortunate victim of state persecution and enforced chemical castration, but she wants to emphasize the overflowing positive affect-worlds that were intimately linked with Turing's analytical questioning. The "positive affects", such as Turing's giggling and delight, are carried over to the analysis that intertwines theory with historical material, insights from his personal life, and his work – and succeeds in this really difficult genre of cultural analysis really well. Hence, the often disembodied – and also what critics have persistently labeled as narrowly defined boundaries – of intelligence that the early research into AI of the 1950s and 1960s suggested was actually embedded in a complex circulation of affects, motivations, desires, emphases, and investments. Wilson's book on affective worlds is not just a critique of AI for neglecting such drives and affective tendencies – but demonstrates through archival work and theoretical insights that we can do more as cultural theorists.



Wilson starts the book with an epigraph from Bruno Latour and the insistence to think of critique as multiplication. Critical theorists should not be content to stay on the paranoid mode of criticizing of what went wrong – for instance the seeming lack of embodiment in such AI discourses, the phallocentric rationality, and homosocial gender bias – but how to use material affirmatively (but no less critically) to come up with novel ideas –that is, something more. As such, some of Wilson's positions, and underlying methodological insistence reminds us not only of Latour but also of such material feminists as Karen Barad and Rosi Braidotti.

Wilson's readings of the affective registers of people such as Turing or for instance Walter Pitts (of the 1940s fame of the McCullough-Pitts model of neurons that was the first to ground a scientific link between the wet brain and the binary logical computer.) What is intriguing are her archival take and the desire to address the relations between affect and computer-based discourse of artificial intelligence through the early phase of AI. Instead of going the more obvious route – of claiming that, whereas early AI neglected emotions and affects and proposed a narrow view of what intelligence is, and what was later corrected with the more embodied, relational and dynamic models of learning robotics – Wilson wants to point out that affect was already there. Hence, her work is perhaps psycho-biographical, but even more so about the environments of creation in which relations between people, mathematical theories, and engineering of such machines was completely filled with various affective registers. Wilson emphasizes this point at the beginning her archival work but that could be even more visible and richer in the actual analysis (as I am sure she did a lot of groundwork with materials).

Wilson never distinguishes between affect, emotion, and feeling, which might lead to some questions. At times affect means more or less emotions, but at the same time she does hint towards a richer, relational notion of affect arising of relations – even physical relations – between people and things. It also elaborates affect as an affordance – as more than a categorical "drive", and as an intensification of our engagement with the world. As such, the book is a great intervention into the continuous debates concerning our relations with machines – most recently by such figures as Jaron Lanier and Sherry Turkle in rather pessimis-

tic tones. What Wilson is saying with her elaborated, theoretically refined, and exciting take is that we need more *introjection*, less projection. We are already intermingled with our machines, with object-relations, and in affective circuits that include not only people but machines too. Bruno Bettelheim's case study of the "robotic boy Joey" analyzed by Wilson (29-30) is a case in point.

In addition to the chosen case studies, for instance the work of "machine-machine" relations of "affect" – when affect is understood as triggering relationality – would have been a good addition (I am thinking about the work of W. Grey Walter and his robotic tortoises). In addition, when she uses affect as a way to think through "intersubjectivity" (27) – instead of for instance seeing it as the pre-individual social in the manner as does Brian Massumi – it would have been interesting to elaborate the point a bit. Is affect only between subjects, or constitutive of the subjectivity itself, already partly swallowed in other people's and things' world (as she otherwise seems to suggest)?

In any case, just like her previous book *Psychosomatic*, this is a great read and engages the reader in a kind of a "draw the lines between the dots" kind of a practice: The book has a lot of implicit links to theoretical discussions that are going on currently and *Affect & Artificial Intelligence* offers a nicely grounded perspective to many of these.

Apichatpong Weerasethakul: Primitive

Apichatpong Weerasethakul
New Museum

19 May – 3 July 2011

Curated by Massimiliano Gioni, Associate Director and Director of Exhibitions, with Gary Carrion-Murayari, Associate Curator

Exhibit address: http://www.newmuseum.org/exhibitions/439

Reviewed by Aparna Sharma, UCLA

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New York's New Museum is exhibiting internationally acclaimed, Thai filmmaker, Apichatpong Weerasethakul's multi-platform video installation *Primitive* — an ambitious work that raises the links between class struggle and memory through a pronouncedly reflexive cinematic vocabulary that reinstates early cinema and classical film theory's interrogations around the moving image as constituting a representation of 'reality.' This is a crucial intervention in the medium of moving image at a time when boundaries between fiction and faction, commercial and home movie are increasingly understood as having been dissolved. While in the Western hemisphere as in the neo-liberal mediascapes of postcolonial societies, such as in South and Southeast Asia, this dissolution of boundaries has translated into celebratory discourses claiming the democratization of moving image media and technology; Weerasethakul's *Primitive* problematises dominant and normative visual cultures transported under the aegis of 'globalisation.' It presents a site-specific vocabulary (site understood both geographically and historically) through which we are emphatically alerted to the naivety in claims of digital media as democratic. *Primitive* makes critical observations and raises incisive questions about the scope and extent of working class struggles that do not necessarily translate into desired revolutions. How do people live after their voices and relationships to their environments have been brutally repressed? What legends and practices do they conjure to make meaning out of their existence? And how can digital media enter such contexts preserving the integrity of the voices and experiences repressed by the incessant, onward march of History?

Primitive is set in Thailand's farming village, Nabua that in the 1960-70s was the seat of clashes between the Thai military and communist-sympathizing farmers. The tensions peaked so high they altered the demographic profile of the region. Though Weerasethakul enters this community a generation after the clashes here have subsided, *Primitive* resonates with recent confrontations between the Thai military and Bangkok's working classes, many of who hail from rural communities such as Nabua. *Primitive* was conceived during the research for *Uncle Boonmee Who Can Recall Past Lives* (2010) that won the prestigious 2010 Palme d'or Prize at Cannes. In *Primitive* Weerasethakul recruits and follows a group of young Nabua men, mostly teenagers, to explore and share how they experience their landscape and the social and political history that has shaped it. *Primitive* includes eight works — each dwelling on aspects of life and activities performed by the work's characters. On one screen Weerasethakul closely follows the process of building a spaceship that will allow its travelers to navigate 'past' and 'future' — two temporal categories that heavily impregnate

the Nabua community's present. The spaceship is an anchoring theme that links *Primitive's* thinly tied videos together. *An Evening Shoot* sees some young militia practice shooting and killing. In *Nabua Song* we hear an inspiring folk song calling for liberation and justice. *Primitive's* images are sensuous as a thoughtful camera dwells on the details of weather, colour and embodied experience, evoking a lush landscape and people's relationship with it. At the same time Weerasethakul's images make for demanding viewing. We are consistently and consciously distanced from what we see. This is not merely on account of cultural difference but because of the very cinematic vocabulary that Weerasethakul deploys. In some works editing results in unconventional shot durations that make it uneasy to sustain attention thereby resisting scopophillic pleasure towards this site that easily lends itself to an orientalist visual imaginary. In some images elements such as smoke, fire, lightening and its sounds push us into the realm of a disorienting fantastical. Many images are shot in twilight or the dark hours of night — thereby straining viewers' identification with the profilmic. In *I Am Still Breathing,* the camera is riotous as it follows the young men run and board a lorry on which they sing and dance. Shaky and close-up Weerasethakul finely executes this piece to share in the collective energy of the film's subjects, containing the handheld camera from slipping into commonplace, anti-mainstream conventions.

Observing the young men through a range of activities — some foreign, others common, we are positioned to appreciate Nabua and its people on their own terms. This is more than an ethnographic prerogative for the emic or insider view. Many images are accompanied by conversations or gestures that reference the site's chequered political history. These references are always oblique and suggestive. On many instances we are witness to long durations of actions such as lightening, music, sleep, eating, games. These long durations are as punctuated with spontaneity as they are laden with idleness. Cumulatively they allow us to appreciate how memory permeates the young Nabua men's sense of masculinity. As viewers we are constructed to both witness actions we see, and to follow those indirect, shared sentiments — anticipation, anxiety, loss, absence, idleness, energy — that quietly yet heavily linger in the air. As we navigate between what we literally see and the obliquely referenced our viewing contract is pushed out of a comfortable realm of *looking* into a position where we are compelled to ask of the images we see, whether they are real or imaginary; fiction or faction; or both.

Weerasethakul's cinematic vocabulary is clearly reflexive. Exaggerated durations, explicit cutting, distanced tracking shots juxtaposed with handheld camera — these are some of the common techniques we have seen in a range of world cinema contexts that surface in *Primitive.* But *Primitive's* reflexivity exceeds, both ontologically and philosophically, the reflexive impulse as understood in classical and political modernist film theory and discourse. In *Phantoms of Nabua* we follow the group of boys playing football in the night. The ball is on fire. In the background is a screen depicting the very scene we are seeing, subtly resonant with Vertov's *The Man with the Movie Camera* (1929). At one instance in the game, the ball is kicked towards the screen and the screen catches fire. Eventually, it fully burns and the image of what we were seeing on the screen disappears. This moment edges a sensation of violence upon the viewer. We are pushed from the realm of seeing the represented representation, back to the primary representation. Is this a choreographed accident? Is Weerasethakul gesturing the death of cinema, positioning it as coincidental with the contradictions of working class struggles? Not literally because the light of the back projector continues — peering directly and sharply at the viewer's eyes. Moving shadows, the shadows of the Nabua men who we see on screen — remain.

Cinema is the dance of shadows. As Primitive resituates the viewer into this most elementary feature of the medium, we can understand that the work's title — Primitive, is an acute rewriting of colonial imperatives; a rewriting that disassembles 'global' mass mediated visual cultures that often support an orientalist imaginary. It is as if in Weerasethakul the deconstruction of cinema collapses into and cannot be performed without the deconstruction of dominant, colonially-inflected visual cultures. These are not two separate projects — one is the relief imprint of the other. Primitive does not grieve over or valorize the working class disposition. Nabua, its people and their histories are not objectified, ordered or presented in any didactic or determinist terms of reference. Many postcolonial and minoritarian cinema cultures suffer and fail by regurgitating the very codes of representation that they set out

to critique. Primitive is a marked contrast, a unique formal approach free from any celebratory or determined notions of local politics and visual aesthetics. It concludes claiming that a people-centered cinema is as responsive to working class consciousness as it is active in deconstructing its own means and mechanisms of production. This is tightly in line with Vertov's practice, but in Weerasethakul the euphoria surrounding post-revolution Moscow that characterized Vertov has been fully replaced by the irreconcilable contradictions of postcoloniality. As one leaves the installation, one cannot but be reminded of La Sortie des usines Lumière à Lyon whose focus on workers has appealed generations of Marxist film critics. Primitive continues the promise of that cinematic instance from 1895 and neither art history nor film theory can afford to overlook this work.

Making Art History: A Changing Discipline and Its Institutions

by Elizabeth C. Mansfield (ed.)

Routledge, 2007

288 pp.

ISBN: 978-0415372350

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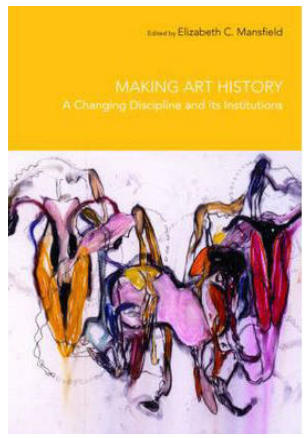
Making Art History is an all-important selection of essays on the changes that have been taking place in the discipline and in the institutions in which art is exhibited and studied. Mandatory reading in graduate and under-graduate art history classes, the book will be of great interest to anyone interested in art and the ever changing perspectives scholars bring to the analysis of art history. In bringing together this powerful and fascinating collection of chapters in a finely crafted volume (which follows upon a related Routledge volume Art History and Its Institutions, 2001), Elizabeth Mansfield has made a lastingly useful contribution to the field. The introduction "Making art history a profession," masterful in its brevity and clarity, definitively recalibrates our collective understanding of the discipline.



The book consists of four parts: "Border patrols: art history as identity," "The subjects of art history," "Instituting art history: the academy," and finally "Old masters, new institutions: art history and the museum." Each section begins with a cogent introduction. All of the chapters are highly compelling works of scholarship. Focusing on a wide range subjects, a great deal of territory and art history is covered including traditions previously not included when teaching the canon of Western art history. For instance, there are two chapters on Islamic art. The first of these is the wonderful early chapter "From the Prophet to postmodernism? New world order and the end of Islamic art?" by Barry Flood Finbarr, and the second is "Deep innovation and mere eccentricity in Islamic art history" by David Carrier. Read together in the larger framing context of the other chapters on the histories of canons, limits, origins, re-figurations and contestations, they illustrate just how dynamic and interesting the ever expanding field of art history is today.

The first deft chapter is Marlite Halbertsma's "The call of the canon: why art history cannot do without," followed by Steven Nelson's well measured account "Turning green into black, or how I leaned to live with the canon." At no point do the chapters become obscure, in cases they are polemical. Donald Prezioski's chapter "Unmaking art history" is true to his established quest. "Remaking art history: working wonder in the university's ruins" by Claire Farago provides a pessimistic account of otherwise arguably stable institutions. Anna Chave's chapter "Figuring the origins of the modern at the *fin de siecle*: the trope of the pathetic male" is the most provocative of all. For the *Leonardo* audience, in particular, there is an especially interesting and eminently useful chapter on art, science and evolution by Robert Bork. There Bork with caution and rigor gently and persuasively insists on the differences between the work of humanists and scientists and, thus, the necessary autonomy of the arts and sciences.

Claire Farago calls for more open-interdisciplinary programs. She advances the notion that disciplines create and enforce knowledge as part of historical political formations of nation states and asks: "To what extent should we as scholars... take responsibility for the effects

of the knowledge we produce? (p.166). Taking us back to Socrates and Aristotle and swiftly through aspects of colonialism, fetishism, and Marxism including Kant's heavenly peregrinations and Zwigli's theological critique of idolatry, she foregrounds what was formerly in the background. I can think of few such wide ranging yet short discussions of hegemony and art history that are as readable as this. The same goes for all of the chapters in that they never get lost in the excess of theory and abstruse language so typical in art criticism and critical theory, disciplines that often impinge heavily on contemporary art historians' interpretive work. As such, this is a very fine contribution not only to art history but also to the entire interdisciplinary project.

Indeed, these wide ranging perspectives, considerations, and critical sentiments speak well of the vitality of the discipline. They return us to canonical foundational figures such as Sir Kenneth Clark, Clement Greenberg, and Steven Freedberg so as to situate the present in relation to ruptures and/or continuities with the past in art historical scholarship. Nowhere is the tension more pronounced and more polemical than in Chave's feminist interpretation that opens up the final section on the contestations enervating the discipline. In providing such arc and range, this is in a sense a great survey book.

Every art historian will benefit from using it as a basic resource at once complex but eminently readable. It raises searching political, disciplinary, and institutional questions while not throwing out the proverbial baby with the bathwater though T. J. Clark and Jacques-Louis David, no less Marat and other pathetic males, would not at all agree with Chave's critique. Steve Nelson, writing rather more on race than gender, describes how for the African-American artists Renee Green and William Pope, "blackness is a discursive tool that is disruptive, constructive, and deconstructive" (pp. 65). Nelson asks: "What would happen if we paid more attention to ambivalence in African-American visual practices?" (ibid.). In answering this question, he proposes that it would allow for an expanded canon including broader more provocative and oppositional methodological frameworks. [1] All the chapters do so in different ways for different art histories.

This book will expose the reader to a wide range of issues currently facing the discipline and how those issues impinge upon all art institutions today. It is the perfect text for a graduate or advanced undergraduate introduction to art history as a discipline. For professionals at large it will broaden our collective appreciation of the field. The only problem with the book is that one keeps wanting to pick it up again. And then, each chapter is so interesting that each time one struggles to choose which chapter to read first – Stephen Melville's limits or Christopher Bucklow's shape shifting, Christopher Marshall's high anxiety or Eric Rosenberg's critique of Freedberg and Greenberg. Or would you turn first to Connor's (con)test of the attitudes and behaviors of museum and gallery staff responsible for installations?

Perhaps, however, you might begin again with Janet Kraynak's discussion of the incorporation of the study of contemporary art into the expanded canon of art history. There Kraynak considers how the present rather than the past is now central to the discipline, whereas traditionally speaking, contemporary art was treated separately and by art critics. And if by chance you have a more classical interest in Flemish art, Gregory Clark's federalist manifesto calls. Either way, over and over again, whichever way you read it, *Making Art History* is an irresistible collection.

Notes

[1] See for instance, Barbara Pollack's discussion of the work of Mickalene Thomas in "Rhinestone Odalisques", *Art News*, January 2011, pp. 94-99. In terms of modern African women artists worthy of inclusion in the expanding canon, see Martin Kimani "Wangechi Mutu" *Juxtapoz* November 2008, pp. 70-81 and Simon Njami "Jane Alexander also in *Juxtapoz* November 2008, pp. 116-125. More broadly, see Bill Anthes *Native Moderns: American Indian Painting, 1940-1960* (2006), Patrick Frank, ed. *Readings in Latin American Modern Art* (2004), Elizabeth Harney *In Senghor's Shadow: Art Politics, and the Avant-Garde in Senegal, 1960-1995* (2004) and Michael Sullivan *Modern Chinese Artists: A Biographical Dictionary* (2006).

Inside Jokes – Using Humor to Reverse-Engineer the Mind

by Matthew M. Hurley, Daniel C. Dennett, and Reginald B. Adams, Jr. (eds.)

The MIT Press, 2011

384 pp.

ISBN: 978-0262015820

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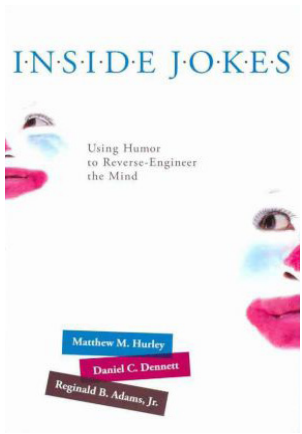
Laughter currently seems to be at the centre of attention, since following Parvulescu's recent book, *Laughter – Notes on a Passion*; *Inside Jokes – Using*

Humor to Reverse-Engineer the Mind is the second book published by MIT in a relatively short time on the topic.

Whereas there are some inevitable overlaps with Parvulescu's, these are obviously very different books. Parvelescu concentrates hers on the actual phenomenon of laughter, relating it to a wide range of subjects like laughing as incantation, the matter of laughing at, passion, the mouth, the last avant-gardes, woman, reading/listening and finally the archive of laughter (see my review in *Leonardo* December 2010, http://www.leonardo.info/reviews/dec2010/doove_parvulescu.php).



Hurley, Dennett and Adams, on the other hand, state in their preface that they will explain "why humor exists, how it works in the brain, and why comedy is an art" and thus different from science (p. x). While they admit that theirs "is an unabashedly eclectic theory, drawing heavily on existing work on humor" (p. 7) their extensive bibliography, however, does not include Parvelescu, possibly because it was published too late.

The starting point for the book was Hurley's dissertation; nonetheless for all three authors the book represents the "proper account of laughter" (and amusement) that "moves beyond pure phenomenology". This account was first called for more fully by Dennett in his *Consciousness Explained* (1991, pp. 64-66). However, there is a significant deviation from the original call by Dennett, which was that "[a] proper account of laughter must leave out the presumed intrinsic hilarity, the zest, the funniness, because their presence would merely postpone the attempt to answer the question" (1991, p. 64). Rather confusingly this is exactly what Hurley, Dennett and Adams do not do in this latest book. This book looks inside jokes and how humor can be used to reverse-engineer the mind. At the same time, it *delivers* inside jokes and *uses* humor to reverse-engineer the mind. It seems obvious that a book that wants to look inside jokes would present examples of these. It is worse if a book tries to both explain humor and be funny at the same time. One could argue that Hurley, Dennett and Adams are happy to take on a risky business, as humor might be a universal phenomenon, but the appreciation of it, as they indicate themselves, is not necessarily so. This leads to some fairly weak jokes at the start of the book, a feature that is reflected in the title of the book and unfortunately continued throughout.

Apart from a thorough study of humor and the working of jokes, the reader is not only presented with mostly non-referenced jokes at the beginning of each chapter and section, but, additionally, also with a mysterious system of numbered, equally non-referenced, jokes throughout the book, causing considerable distraction. There is also an overall populist kind of tone that somehow is bothersome with insertions like "in case you wondered", and the kind of sloppy quotations mentioned earlier.

The most interesting question this book poses and tries to answer, however, is why humor exists in the first place. It appears to be very prominent in our lives, and maybe more so then ever before given the profusion of stand up comedy in recent times. In order to answer this and other why questions, Hurley, Dennett and Adams declare that they want "to provide a preliminary sketch of not just a cognitive model, but an emotional and *computational* model of humor" (p. 3). Additionally they want to work "toward a theory that would allow humor (…) to be computed and experienced by a nonhuman agent (…) that not only can make jokes but that can truly be said to have "a sense of humor" much like the human sense" (p. 4). In order to do this they argue that humor "depends on *thought*" requiring that their "book must sketch a theory of the kind of general intelligence that could support a genuine sense of humor" (p. 5). In the process they introduce some "key novelties" such as "a new evolutionary explanation of the origin of humor; an ecologically motivated theory of the emotional component of mirth; and a cognitive theory of humor and laughter" (p. 6).

The question remains what is humor for? From a biologically determinist position there is a possible, and seemingly logical, connection to fitness where "females use sense of humor (in males) as a hard-to-fake advertisement of intelligence and power" (p. 11). But Hurley, Dennett and Adams regard humor more as a "powerful reward system" that will keep our "brains

engaged full time in real-time (risky) heuristic search, generating presumptions about what will be experienced next in every domain" (p. 12). It, thus, becomes clear that humor and laughter are connected to insight and leads to mirth as we crack the puzzle or, for that matter, the joke. In a way we all seem to be cast as fulltime detectives, constantly solving problems and delighted when we do so. Apart from solving problems, we come across automatically as we go through daily life, we also enjoy inventing them and jokes are in this sense puzzles, mathematical problems, or detective stories.

Hurley, Dennett and Adams have, indeed, managed to write a puzzling book with an open end as they freely admit that their research is nowhere near creating a nonhuman agent with a sense of humor. Despite the criticism above on aspects of its structure, *Inside Jokes* certainly does deliver a thorough study of jokes, humor and laughter, which is worth engaging with. It is rich in its references and thought provoking, providing amongst others a phenomenology of humor and a brief history of humor theories on which to build further research. It is just a pity in trying to be both funny and serious, it falls between two stools. Admittedly (a sense of) humor is a personal matter, and there will be a range of readings of it, but the strategy that the authors have adopted can (and in my view does) make research into the complicated topic of laughter and jokes more complex.

Compression & Purity

by Will Alexander

City Lights, 2011
94 pp.
ISBN: 978-0872865419

Reviewed by Allan Graubard

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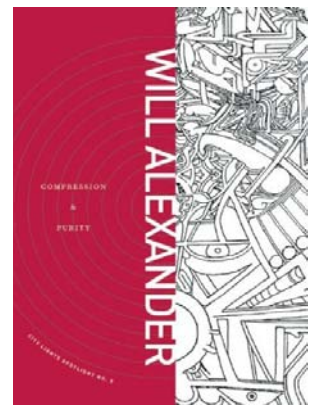
Will Alexander is a poet and poetic-critical interpreter of the world with a uniquely compelling voice, which has finally gained him the kind of recognition he deserves. On its own, that is enough to interest us in him. At the same time, his is a voice that Americans in the main have avoided, as much for its metaphorical density as for its reach, including the epic or anti-epic or what might resemble one given our current state of culture. From his *Asia & Haiti*, a 1995 national book award nominee, to his recent *The Sri Lankan Loxodrome* (New Directions, 2010), he has offered us an intensity that we cannot mistake for another's. He is his own medium: complex, transparent, opaque, shifting, hermetic, poignant, subversive, demanding, intimate, distant and, more than not, all at once.

I could go on here, but perhaps you see my point. Alexander is not the usual poet or, I should add, novelist, playwright, artist, performer and sometime pianist. His roots in jazz, the symbolists, and surrealists have fed him well, and he returns perpetually not so much as a source but certainly as a vector through the realms he envisions and revisions.

Nor is that the end to it. His avidity for scientific lexicons, the discoveries that form them, and the way he uses them precisely toward poetic ends has also opened that juncture where knowledge and sensibility couple – as much to avoid the weaknesses that each reveals distinctly as to engage their reciprocal strengths. In this light, it is best perhaps to describe Alexander's work in terms of analogy, inspired by an insatiably lyrical desire to free language from the quotidian, along with its emotional subtexts, yet informed by current perspectives on any number of topics, from abyssal oceanography to astrophysics.

Compression and Purity, Alexander's newest volume, speaks to all this in the 22 poems and texts he populates its pages with. And he does so with largess but also as a counter-active to it.



From the first poem, "The Blood Penguin," Alexander sharpens this boundary. Here is a visceral image raised from the unconscious that touches on the symbolic (and I use this term in its potential collective sense, as a matter for ritual and ceremony). Yet this bird turned "carnivore" with vestigial wings for swimming rather than for flight, and whose "air" is both gaseous and soluble, draws to it interior/exterior squalls that dispense with known markers. It is also one of three poems in the collection that appear "in character," making them monologues of a sort, and all the better for it. What other poet would speak to us, not about, but as, a "Blood Penguin," a drop of "Water on

New Mars," or the "Pope at Avignon"; perhaps an amalgam of the seven Popes who reigned there in the 14th century: stark deadly years that saw genocide (the campaign against the Cathars) and massive epidemic (the Black Plague). And of Mars, we have the rovers and satellites to thank for our new sense of the planet but Alexander to thank for his visionary mutation of what we have met anew. As he puts it to begin the poem: "Being water/I am the voltage of rocks/of algid suns in transition/ flying across a scape/of bitter Martian dioxide."

Who, then, is "The Ghost Survivor," this "body by drosera" that declines to "an invaded mausoleum," no doubt the husks of creatures ingested by the genera with its near 200 species of carnivorous plants? What, for Alexander, is the relationship between "…Scorpians and Swallows"? Does "The Pointless Nether Plow" only allow the farmer to carve "his soil with volcanic blue seeds" or are their other uses that we can invent for it if just for ourselves alone? Is the horizon anything other than "…Parallel and Sonar," an ambient target for "Alien Personas" who exist in us "beyond each iota of reason" we might bring to their configuration. How does the "Vibration from the Coast of India" affect us as the history and reality of that country compel ever-greater concern? What is it about "...Prana" that we seize and lose, that ennobles and abandons us; this static.

These are some of the scenes and several of the questions that Alexander presents in this volume. For those who know his works and those who don't, his clarities and opacities, with their internal rhythmic charge, will invoke a dynamic that figures, as the constellations once did, the myriad connections that tie us to our human and natural universe; the one interpenetrating the other without cease.

Illuminating that dance both as foreground and background, masked or unmasked, in as out of character is Alexander's pleasure and method.

The rest is up to you…

Visceral: The Living Art Experiment

by Oron Catts and Ionat Zurr

CuratorsScience Gallery, Trinity College, Dublin, Ireland

28 January 2011 - 25 February 2011

Gallery website: http://www.sciencegallery.com/

Think Art - Act Science (Pensar art – Actuar ciència): Swiss artists-in-labs

by Irène Hediger

CuratorArts Santa Mónica, Barcelona, Spain [1]

18 December 2010 - 15 May 2011

Museum website: http://www.artssantamonica.cat/default.aspx

Reviewed by Harriet Hawkins, Deborah Dixon and Elizabeth Straughan

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Recent months have witnessed a series of exhibitions staged by organizations that have played a crucial role in shaping what is now a highly diverse, international landscape of art-science collaborations. Viewing these shows as retrospectives is useful, casting them as it does as 'barometers', as much for the organizations, as for broader trends across this landscape. In this brief commentary we focus on two recent examples -- 'Visceral: The Living Art Experiment', and 'Think Art-Act Science.' These emerge from two very different entities: SymbioticA, the bio-art lab based in the School of Anatomy and Human Biology, at the University of Western Australia, and Swiss artists-in-labs (ail), based at the Institute for Cultural Studies in the Arts, at Zurich University of the Arts. Looking at their shows, we gain a sense of their differing *modus operandi*, insofar as SymbioticA revolves around the development and deployment of their own lab facilities, foregrounding a 'learning-by-doing,' whilst ail has nurtured a series of 'labs as host' relationships. We gain an appreciation for what has been achieved, but we are also able to project forward, to ponder the questions that these shows pose for: the artists and scientists who develop these forms of work; the cultural producers and exhibition spaces that catalyse these collaborations, and develop both exhibitions and the audiences; as well as those of us who engage in the critique of these forms of practice.

A retrospective trend?

Retrospectives are perennially haunted by questions of justification, choice of content and why now? The answers, in this case, lie in the continued proliferation of art-science practices, but also the 'coming of age' of a series of renowned, well documented, art-science organiza-

tions. SymbioticA are celebrating their 10th birthday, whilst Swiss ail are similarly drawing together the fruits of nearly ten years of activity. That both these organizations are housed within University departments is telling of the financial regimes that allow for such endeavors, but also of the significant commitment both display to research agendas and artistic CPD. In addition, both organizations have undergone a series of funding cycles, sourcing soft money from a number of artistically and scientifically orientated public-funding entities. With ongoing shifts in the international funding terrain for the arts and sciences, from STEM to STEAM and so on, it is interesting to note that in the UK and US at least there is increasing funding of 'pure' research into such entities, as well as their instrumental impacts; research that enables us to map empirical studies of art-science onto broader appreciations of interdisciplinarity and the changed academic landscape that is emerging in the wake of the science wars. [2]Such intellectual maturity is manifest within the exhibitions themselves. In 'Visceral,' the exhibition showcases a range of work by SymbioticA's residents, each exposed to the techniques, protocols and viscerally affective materialities involved in bioart. Eschewing long standing ethical concerns that often produce the interpretive 'hook' for the production and analysis of bioart, these works exhibit engagements with the malleability of materialities (such as tissues) and technologies, such that there are no longer any easy answers to the questions of *what is of the human* and *what is of the monstrous?* [3] Further, we find the dominance of digital media art supplemented by critiques of materials, practices and modes of viewing and experiencing that are as much a part of fine art theory and history. It is noteworthy that SymbioticA accompanied their retrospective show with a symposium that invited past residents, both artists and academics (the two often blurred), to engage with the organization and the practices of its artists, as well as bioart more broadly.

Swiss ail's nine-month residency model pairs artists with labs in organizations such as Chuv, a research hospital in Lausanne, Switzerland, the Swiss Federal Institute for Forest, Snow and Landscape Research, and CERN. Their end works have the status of experiments, or 'prototypes,' a sensibility that carries over into ail's curatorial work. Thus we find each prototype accompanied by videos, with artists and scientists alike offering commentary on the often discombobulating progress of the residency. These accounts offer up a series of illuminating reflections on what is at times an intense and emotional meditation on translation and mistranslation, and on the mutual struggles of hospitality towards the 'other'. *Contra* many written pieces on art/sci *per se*, this is not the simple, idealized and sometimes saccharine tale of 'boundary crossing.'

Emerging spaces of display

In essays now infamous within the art-sci world, CP Snow remarks that, "there seems then to be no place where the cultures meet." [4] Turning from metaphor to geography, it is worth noting the integral 'place' of the venues themselves within the art/sci world. Both these exhibitions find homes in relatively young institutions, The Science Gallery in Dublin, and Arts Santa Monica in Barcelona. Each is part of a long trajectory of spaces where art and science have found a home together, from the herbariums of the Renaissance to the world fairs and expos of the 18th and 19th centuries, and the specialist galleries of the 20th century. What the Science Gallery and Arts Santa Monica have in common is an interest in how space performs not as a simple backdrop to exhibits, but as a meeting place. And so Science Gallery employs both arts and science students to narrate such works, whilst in Barcelona the critical commentary provided by ail has itself been supplemented by a program of workshops by visiting scientists.

A critical space for art/sci

For us, what is interesting about these moments of self-storying is their reflective nature, belying any glib rhetoric on the 'bridging' of two cultures. We see an effort to open out the critical dimensions of such practices, as well as their end product and display. What does it mean to open up the lab to artistic engagement – philosophically, but also financially and politically? How do ostensibly scientific mediums and techniques become enrolled in art and with what effect? Who are the intended audience, what are their expectations and where will they be engaged? Such retrospectives tackle all of these questions and more. And yet, what remains unresolved – indeed largely unremarked upon – is that whilst these art-science works jostle for critical space within the pages of new media journals, and even the pages of science journals, far less often do they enter the spaces of art history and theory debates. What such observations give us, as critics and researchers, is pause to question, how it is

that we should go about fashioning spaces and modes of critique that are adequate too, and cognizant of, the richness of the debates engaged by this continuing set of artistic-scientific practices, and the organizations which support them?

References

[1] This show is currently at the Kunsthalle Luzern, and is touring to the US later in the year, see; http://artistsinlabs.ch/

[2] See for example: http://artscience.arizona.edu/

[3] See for example: Dixon, D., Hawkins, H. and Straughan, L. 'Artists Enter the Laboratory' *Science,* 331, pp. 860; Dixon, D. (2008) 'The Blade and the Claw: Science, Art and the creation of the lab-borne monster.' *Social and Cultural Geography*, 9(6): 671-92., C.P. Snow (1953) The Two Cultures.

[4] http://www.sciencegallery.com/ http://www.artssantamonica.cat/default.aspx

East Bay Open Studios Preview Exhibition

Pro Arts Gallery, Oakland, California

3 May – 12 June 2011

East Bay Open Studios 2011

4 – 5 and 11 – 12 June 2011

Gallery website: http://www.proartsgallery.org/ebos/index.php

Reviewed by Amy Ione, The Diatrope Institute

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After reviewing the 7th Creativity and Cognition Conference [1], held in Berkeley in 2009, two thoughts kept reverberating in my mind as time passed. First, I thought about the many reviews I have written about art and events in the Bay Area and wondered why I have never looked at the vibrant art produced here. I also thought quite a bit about Cathy Treadaway's paper, mentioned in that review, in which she outlined her approach to integrating newer technologies into her handcrafted art. To put these thoughts to rest, I decided to review the annual East Bay Pro Arts Exhibition (EBOS) in the Bay Area this year. This 2-weekend event highlights the work of over 400 artists located in the San Francisco Bay Area, many of whom open their studios to the public. While perhaps not as well known outside of the Bay Area as other locally-based projects such as *Burning Man*, which has achieved global recognition, EBOS does offer a noteworthy mix of innovative art, groundbreaking museum and gallery exhibitions, live concerts, and great food.

The focal point of the show is the ProArts gallery in downtown Oakland, where each artist can include a small example of his or her work. The resulting collage is remarkably strong and immediately highlights the talent in the community. Perhaps the most creative contribution was one that showed the degree to which art, science, and technology is now a normal part of any exhibition space. In this case, Raines Cohen mounted a large postcard for the exhibition inside a locked box. Just before the opening reception, he unlocked the box and placed an iPad inside that was running a video presentation of his work and photographs throughout the opening reception. At this point it became clear that the postcard was a clever placeholder, and the purpose of the locked box was to use it for the video invitation that he ran during the opening, which was intended to entice people to visit his space. [I assume that the postcard was returned to the locked box after the opening reception.]

The purpose of the ProArts gallery space is to help art enthusiasts devise their visitation plan. I must admit that although I mapped out a plan from the gallery presentation, once I got going, I found it hard to stay on track. I was lured into spaces by posters on the street and comments from artists I met as I visited with them in their studios and other visitors I encountered along the way. I am not sure if I recommend this approach because I missed studios of interest based on their gallery pieces. Still, I was glad I took advantage of those who tried to draw an audience to their space because I found some gems this way.

The first day of the four-day event I traveled around with a colleague. We picked as one of our first stops a building where several prominent Bay Area artists (Richard Diebenkorn, Elmer Bischoff, William Theophilus Brown, and Paul Wonner) had had their studios there in the 1950s. Together with David Park, who had a studio in downtown Berkeley, Bischoff and Diebenkorn founded the Bay Area Figurative style. Moreover, it

was in this space, in the mid-1950s, that Diebenkorn created his famous "Berkeley Series" of abstract landscapes in this space.

As it turned out, one of the particularly robust studios I visited, Marty McCutcheon's, is now located in this building. McCutcheon's space was set up to be a gallery exhibition of his work and was one of the high points of the day. The studio consisted of a large sculpture/installation around the walls that was uniformly whitewashed (though with bits of unpainted colors showing through). The all-white installation was put together with found and discarded objects (a chair, a television, old paint brushes, etc.) constructed in a flattened format resembling a synthetic cubist painting. While my companion saw shades of Diebenkorn in the asymmetrical geometry (suggesting some resonance with where the studio space was located), I thought more about Louise Nevelson's unique assemblages made from cast-off wood and other materials that she, too, transformed into works of art. Like Nevelson's work, I think the monochromatic color added a mysterious quality that made the work alluring. The installation also incorporated a video projection that complemented the assemblage and truly elevated the presentation because in the video McCutcheon showed his hands drawing and working. These clips, which were pieced together, were even more fascinating once I realized that I could see him create some of the whited out pages of text that were a part of the assemblage. This juxtaposition brought the work of William Kentridge to mind, whose creative practice includes drawing a bit, shooting the drawing, and then drawing and shooting some more.

At first I was surprised that McCucheon's space was set up to highlight his work and that the "working studio" aspect of his area was so invisible. But, as it turned out, many of the folks I visited did not highlight their working space. This was a bit disappointing. For example, there were many locations where artists grouped together to increase foot traffic, one of the largest being at a former Barnes and Noble space that was transformed into an art fair, with 43 artists displaying their work. This was a mixed bag. In some ways the setup made the "studio" aspect of Open Studio seemed quite remote. Yet, I did find both intriguing work and many artists who integrated art, science, and technology themes into their projects.

Maryly Snow, for example, brought to mind that while digital art is still a relatively recent phenomenon, artists have used art, science and technology for a long time in various forms (e.g., printmaking and photography). She was quite representative of the way artists now mix and match, often using printmaking as a technique to create works that offer a commentary on scientific and mathematical ideas. Briefly, she works with "appropriated" images, finding ways to reassemble them and make them her own. She had several bubble chamber images on display. Her web page says these are from the Lawrence Berkeley Labs. She also showed her Art for Physicists portfolio and photocollages, which are quite unlike those of David Hockney. Whereas he keeps the multiple pieces in the presentation, Snow assembles the collage with tape and then rephotographs it so that it becomes "whole" again.

Of the places I visited, I thought Benny Alba's studio/gallery was perhaps the best mix in terms of combining a number of artists with a "studio" feel. Benny greets visitors as they walk in, making you feel like a guest in her home. The studio itself, with 11 artists inside, felt quite cohesive and had the kind of community feel that was missing at the Barnes and Noble site. The work of Vicky Mei Chen, a printmaker, stood out. She produced small, hand-made artist books (in slipcases) exploring the relationship between urban landscape and the entities that occupy the space. Another artist of note here was Jennifer Downey, a painter whose work centers on nature and how humans interact with nature.

Although I found that traveling to so many studios has its ups and downs, the ups are more prevalent than the downs. There are also both rewards and challenges. Visiting one multiple space environment, with a maze-like interior, was annoying because it was surprisingly difficult to find the artists that I wanted to see. Thinking about it later, this layout probably offered the artists who worked there more privacy. Cluttered locations showed "the artist" more but, in some case, this meant there was not enough room for visitors (because the space was so taken up by the art). It is harder to visit artists who work in spaces that are not shared with others. [Of those I visited I particularly liked Barbara Maricle's, who displayed some mixed media prints that included old architectural blueprints and other materials.]

One of the fun things about this type of event is that going here and there exposes things that are ordinarily invisible. Ironically, one building with an open studio introduced me to an

exciting work that was just "sitting there" in the lobby. Called "The Tule Wave," the piece is a large-scale kinetic sculpture by Berkeley-born Reuben Margolin. It consists of a small electric motor located overhead that rotates a pulley, which in turn imparts movement to 241 Dacron strings. The strings then pass through brass grommets in a tension grid and descend to support 1140 sections of Tule Reed and more than 3000 brass beads. I urge readers to visit "http://www.reubenmargolin.com/waves/Tule/" for an image of the piece and more information about how it was made. Installed at the David Brower Center in Berkeley in 2010, it is in a location I walk by daily. Yet, I had never been inside and had no idea that this extraordinary artwork was housed there. With so much attention given to museums, exhibitions and art-designated spaces, I wonder how many similar gems we miss as we live our lives. In this case, I find it hard to describe the dynamic and overall presence of this hanging work.

While I found the organization of the ProArts event extraordinary overall, there were a few things that were less successful in my view. The website itself is a valuable tool in planning one's itinerary, so I can understand why many of the artists decided to display multiple images, but several of these links were broken. I also would have liked an option to save my itinerary in the online gallery.Still, all in all, East Bay Pro Arts Open Studio confirmed my sense that art, science, and technology is quite evident across the board these days. This event, which mixes well-established masters with younger artists, highlighted many aspects of creativity and also allowed many artists to show what goes on inside their working space. It was particularly in the studios of the artists who are using what are often considered more traditional tools that I realized (from conversations and their libraries) that creative people have a knack for integrating the old and the new.

References

[1] *Leonardo Reviews*: posted December 2009 http://www.leonardo.info/reviews/dec2009/everydaycreativity.ione.php

Contemporary Art in Eastern Europe

by Nikos Kotsopoulos (ed.)

Black Dog Publishing, 2010

240 pp.

ISBN: 978-1906155841

Reviewed by Florence Martellini

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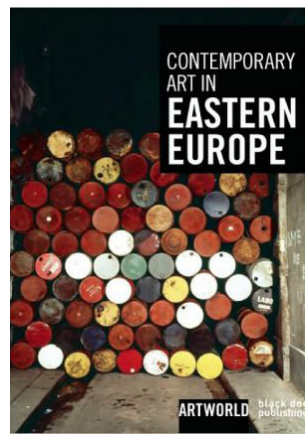
Contemporary Art in Eastern Europe is an insightful compilation of Eastern European art made from the 1960s to the present day. From Russia to Poland and Romania, and from the Czech Republic to Yugoslavia and East Germany, it is an attempt to see through the eyes of artists, critics, photographers, and curators the changing realities of the eastern side of the European continent. Complemented with a map, a timeline, and artist biographies, the book also features excellent essays from respected writers, which put the selected artworks into a socio-historical context, in particular, those of Boris Groys, Zdenka Badovinac and Eda Cuffer who highlight the dominance of Western art in shaping 20th century art in Russia, Europe and America.

Groys' essay is key to understanding the notion of 'Eastern European countries'. Sharing borders does not mean that people from neighbouring countries think and live in the same way. Groys takes the same approach about the Eastern European states and, in particular, their contemporary art. He claims that their individual identity needs to be acknowledged and that we should not put them all in one 'block' in order to easily differentiate them from those on the Western side of the European Union. However, their experience of Communism the Soviet type, which is a layer above social and cultural identity, unites and differentiates them from the outer world – Communism ideology aimed to erase any traces of individuality. Historiography finds no place for Communism as such as it relies on concrete facts, so Communism is often perceived as an ideological facade intended to camouflage solid national interests. Many observers argue that the notion of Eastern Europe should be forgotten so that Eastern European countries can return to their individual cultural identities. Contemporary Eastern European artists themselves are ambivalent about their relationship with their Communist past, hence their tendency to solely express individual cultural traditions and identities and to ignore the ground in the Communist past. This ambivalence transpires through their artworks, which look utopian and dystopian at the same time.

For example, cohabitation between abstract forms and human faces reveals itself as utopian and dystopian in the work of Pavel Pepperstein, which seems off-the wall and witty but contains more serious undertones. Ambivalence is also found in Artur Zmijewski's work, which plays with contradictions unresolved. Milica Tomic focuses on

the intangible issues of identity, nationality, and ethnicity, which can profoundly affect people's daily realities. Mircea Cantor's work deals with strange encounters and displacement such as a city recomposed within moving mirrors, possibly to make out at one moment and distort the next. The use of irony is also a means for artists to distance themselves from the official ideology and, at the same time, refer to its almost forgotten utopian, avant-gardist potential. Some artists look at the Communist past through the prism of moral accusation. Others remobilise the Communist ideology for the critique of the present capitalist conditions as exemplified by Alexander Kosolapov's sculpture of Minnie and Mickey Mouse in a Social Realism fashion and portrait of Gorbachev in Warhol style. Adrian Ghenie's distorted Elvis questions the authenticity of images portraying fame. Vladimir Dubossarsky's and Aleksander Vinogradov's choice for painting as a medium is part of a calculated strategy to reflect on the changing state of Russian society. Boris Mikailov and his highly realist photographs focus upon homeless and poverty, criticising the general diffidence of the post-Communist world. In this case the artist does not reflect on the ambivalences of the utopian politics in that he attempts to purify it from its historical distortions. Emotional and spiritual transformation born out of this questioning is explored through spatial awareness with artists such as Miroslaw Balka and Marina Abramovic.

Despite it being disregarded, the Communist past haunts Eastern European and Russian art practices due to the increasing internationalisation of Eastern European art. The art market experience has been new and quite traumatic to Eastern European artists. Groys points out that the memory of this non-commercial mode of art existence is still fresh in Eastern Europe and that may constitute the most obvious specificity of Eastern European art that is ideologically charged in a way that Western art is not. These memories have complexity and depth that utopian abstractions are lacking. Thus, the globalisation of Eastern European art means not only its submission under the rules of the international art market but also a re-actualisation of the experiences of its Socialist past.



Badovinac and Cuffer examine the dominance of Western art in Modernism during the 20th century. More specifically, Badovinac focuses on the unilateral dialogue at play between Western and Eastern parts of Europe that only made Eastern art visible when it fitted within the frameworks dictated by Western European and American trends. With the current climate showing a return to localisation, the simple model that labels Eastern Europe as 'the other' no longer works. Eastern European art needs to be looked at as a patchwork of different states; hence, a multilateral dialogue East-West is necessary. Eastern European artists take also this opportunity to assert strongly their position as individuals. Cuffer gives an historical insight into the difference between Modernism and avant-garde art movements. The former aimed to ban the old norms and *clichés*, and the latter was an assault on existing social order that give birth to utopian political ideas, such as National Socialism, Fascism, and Capitalism. She shows how art was used by political leaders as a propaganda tool to convey these new ideas in Eastern Europe, in particular the Soviet Union, Western Europe, and America.

Ideas and emotions expressed in these artworks relate to memories, identities issues, and cynicism towards the establishment as well as hope. These artists are all connected directly or indirectly to a Communist Soviet type regime but their messages are not un-familiar to us reflecting a current trend in global contemporary art. However, Eastern European contemporary artists are more assertive in taking ideological and political stance towards the establishment and society as a whole than the Western artists. They seem to still be on the edge of a Capitalist system––a position that allows them to step back from and observe it more objectively, reasserting not only their authority as individuals but also upsetting Western European art convictions. As Eda Cuffer explains "…But when different notions of art started getting through the Western filters forcing a critical re-examination of the legitimacy of long held convictions and institutionalised narratives, when the stories coming in from the tributaries started shifting the whole direction and flow of art thinking, this proved frustrating for individuals shaped by labo-

ratory cultural experiences…"

Richly illustrated profiles showing more than 50 leading artists contextualised by experts on the subject, *Contemporary Art in Eastern Europe* questions and opens a debate about existing stereotypes associated with Eastern European countries. It is also an important and reliable source of information to anyone who seeks to understand the ever-increasing presence of Eastern European artists on the global contemporary art market.

Le Sel de la Semaine: Henry Miller

by Fernand Seguin

Icarus Films, 1969/2010

DVD, 53 min. (French with subtitles)

Distributor's website: http://icarusfilms.com

Poison Woman: Figuring Female Transgression in Modern Japanese Culture

by Christine L. Marran

University of Minnesota Press, 2007

256 pp.

ISBN: 978-0816647279

The Rule of Mars: Readings on the Origins. History and Impact of Patriarchy

by Cristina Biaggi (ed.)

Knowledge, Ideas and Trends, 2006

454 pp.

ISBN: 978-1879198319

Reviewed by Jonathan Zilberg, University of Plymouth, Transtechnology Research

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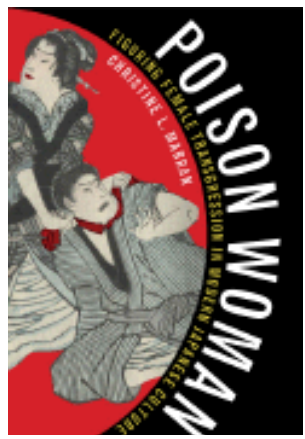
These three very different works each speak to sex, gender, and patriarchy in different times, places, and cultures, as well as disciplines. Exceptional resources for classes on gender and power, they provide examples of how the social history of gender is variously approached and understood. From the autobiographical insights of Henry Miller (1891-1980), driven to writing by a despair born in his dislike of American materialism (no less his wife) to a unique literary analysis of sex, drugs, and murder in Japanese history, and the historical depth and breadth of patriarchy and matriarchy led by women seeking change, they make for an interesting triad.



They each have powerful interdisciplinary value whether it be to the study of gender in literature, media, archaeology, myth, and medicine, or culture, law and history. From Miller taking us back to how his accounts of the sex lives of modern Americans in Paris in the 1930's came about to Marran on the continuing Japanese fascination with isolated cases of sex and murder in the Meji period to the present day study of culture and power in the matrilineal societies of the Mingangkabau of West Sumatra and Naxi in India, the Kurgan Theory of Marija Gimbutas on the European Neolithic Mother Goddess Cults and much more, these are each wonderful resources in their own rights. Each might serve different pedagogical purposes: Miller for revisiting a classic misogynistic account of gender relations and the modern history of censorship and pornography, Marran as a penultimate example of what constitutes compellingly cogent literary scholarship, and Biaggi's edited collection of widely ranging types of research and writing, a rich resource bound to captivate any undergraduate class on gender and power in historical perspective.

For the vast number of people who have read any of Henry Miller's work, this interview will be fascinating because of how well it succeeds in providing an intimate appreciation for the man and of the autobiographical basis of his work. *The Tropic of Cancer* (1934) was his first published book. The second was *The Tropic of Capricorn*, later came *Sexus*, *Plexus* and *Nexus*. But nothing he ever wrote after the *Tropics* received the same fame and notoriety. For Miller, it proved impossible to escape from the expectation of pornographic titillation that most people hoped to find in his writing, something that deeply aggravated him. We learn here that *The Tropic of Capricorn* was an autobiographical novel, an expression of despair, a man struggling for freedom, to be an artist. Likened to Walt Whitman by Karl Shapiro, hailed for his "primitive honesty" by Anais Nin, Miller achieved his freedom through penury. Every genera-

tion has his kind. In the 1930's young American aspiring artists and writers gravitated to Paris if they could, and there, unchained from the constraints of pre-War American society, they experimented with the freedom and excess that Paris offered the libertine.

Here we meet the man in his old age on French television in 1969 reflecting back on his life in endearing American French, very much a Buddhist in his philosophy of acceptance, in his selflessness and gratitude, in his anti-establishmentarianism. He felt no shame at all in begging, even going so far as to do so in the press. In return he would send you a watercolor painting. His affable and sensitive nature came to me as a complete surprise. I had not expected such a gracious man. I was expecting from his novels a different kind of person, a Picasso-like Minotaur. Above all, however, one comes away perhaps with an appreciation for just how much Miller abhorred literary pretension. Miller is a testament to plain speaking and writing, to the immediacy of experience, and necessity of passion. This brings us then to Marran.

Poison Woman is a phenomenal book. It has great relevance across the disciplines including medical science, law, and history. Focusing on famous cases studies of transgression in Japan, it provides detailed accounts of sensational 19th Century histories of the *dokufu* (poison women) in the courts, the press and the literature. There, the cases of convicted murderers, such as Night Storm and Demon, Viper, and Lightning make for riveting reading. Marran's is a work of deft scholarship revealing why these women and their stories become national obsessions. In addition, she relates how and why this tradition of the poison woman as the ultimate transgressor continued to serve anti-authoritarian impulse in Japanese society through the 20th Century. Nowhere does Marran succumb to the impenetrable intellectual pretension of other literary studies as for instance in the tortuous case of Kevin Bell's *Ashes Taken for Fire: Aesthetic Modernism and the Critique of Identity* (2007) also from the University of Minnesota Press. Highly sexed notorious women who poisoned and murdered their lovers, Henry Miller would have loved it. So will you.

The Rule of Mars makes for equally fascinating reading but of a completely different sort. Honoring the memory and work of the late Marija Gimbutas of UCLA and an outcome of the Second Archeomythology Conference held in Italy in 2002, it revisits the violent Kurgan transformation of society from matriarchy to patriarchy in the third millennium B.C. Whether one takes a skeptical position or not, the articles are all well worth reading and will add a wonderful sense of frisson to classes on the matriarchy-patriarchy debates in anthropology, archeology, and history. Some chapters refer to prehistoric cultures and infer value systems from the archaeological record, myth, and literature, others refer to contemporary contexts such as "Antigone in Sumatra: Matriarchal Values in a Patriarchal Context" by Peggy Reeves Sanday, and others concern the legacy of the Amazons and political pathways to taming testosterone toxicity. While many archaeologists will be deeply critical of the sense of surety in the hypothetical claims made here about prehistoric matriarchal cults and gender balance in the Paleolithic, Neolithic, and Bronze Ages, and while scholars in public policy and policy makers in the halls of power especially "the women with shoulder pads" will find its idealism unrealistic, it is a passionate collection and a forceful defense of Gimbutas' much discredited revolutionary and original work. In any event, it will be an interesting resource for teaching about gender across the disciplines. Because of its explicit political dimension, it will inspire endless debate on the relationship between knowledge and power.

To end, cut short as a lover strangled or stabbed in the act, *Le Sel de la Semaine*, *Poison Women*, and *The Rule of Mars* are each significant and memorable contributions to the study of gender and patriarchy. When used together, they will make for a lively if unlikely triad.

Theories of International Politics and Zombies

by Daniel W. Drezner

Princeton University Press, 2011

136 pp.

ISBN: 978-0691147833

Reviewed by Anna B.Creagh, UCLA

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Daniel Drezner's latest work considers the potential responses of international governments to the unlikely event of a zombie outbreak. Applying well-known theories of international politics to scenarios posited by famous zombie narratives, Drezner explores how different political ideologies would shape

the response of their adherents to a global zombie crisis. An extension of the author's article *Night of the Living Wonks,* Drezner devotes chapters of his slim volume to pragmatism (realpolitik), liberalism, neoconservativism, bureaucracy, and social construction theory. He synthesizes examples from zombie literature and film with current events and government policies to answer the question, "what would different theories of international politics predict would happen if the dead began to rise from the grave and feast upon the living?" (p. 1). Drezner argues that considering such "out-of-the-box" threats as zombie outbreaks helps us to grapple with what former U.S. Secretary of Defense Donald Rumsfield famously referred to as the "unknown unknowns" of international security. The ultimate "unknown unknown," the zombie, provides a unique platform on which to interrogate the fundamental tenets of differing political ideologies.

A professor of international politics at The Fletcher School of Law and Diplomacy at Tufts University, Drezner adeptly summarizes the different theories of international relations and successfully differentiates between them. Unfortunately, Drezner's engagement with zombie scholarship is overstated and pales in comparison to his understanding of international politics. Though he references an impressive number of zombie texts, his over-reliance on the films of George Romero and the literature of Max Brooks will be frustrating to serious scholars of zombie history and theory. Drezner tends to gloss the major themes of their works as the principles of the entire zombie canon, which serves his purposes as a political theorist but calls into question the rigor of his research into the zombie phenomenon. While readers may chuckle when he suggests that liberals would want to create a WZO and demonstrate for zombie rights (p. 58), or that neo-cons would likely see zombies as part of a new axis-of-evil and "invade Iraq again out of force of habit" (p. 62), Drezner's light-hearted tone and pun-filled prose sometimes overshadow the seriousness of his claims. The tongue-in-cheek illustrations similarly cast this tiny tome as somewhat of a novelty, belonging alongside other humorous volumes such as *The Zombie Survival Guide* and *The Zen of Zombie.* Still, many political scientists will find Drezner's approach both innovative and provocative. This book will primarily appeal to those with a vested interest in international relations and a passing interest in the undead.

Drezner's easy prose and simple explanations will make his book a favorite among college students, and academics will appreciate his consistent references and bibliography. The simplicity of the book and the theme of zombies will likely make international politics less intimidating and more accessible to beginners. One major flaw of the work, however, is that it feels rushed. Many interesting points are merely introduced rather than explicated, and one wonders why "space constraints" (p. 17) prevent Drezner from exploring Marxist or Feminist responses (perspectives which have arguably been the most significant for zombie theorists) in a book totaling a meager 114 pages before references. Similarly, his suggestion that Haiti's law prohibiting zombification somehow indicates that world governments are already preparing for a zombie catastrophe (pp. 5-6) is not only misguided but misleading and betrays Drezner's lack of respect for facts about both the history of zombies and that country's religious and political ideology. He is clearly more concerned with his hypotheses about political ideology than with understanding the relationship between zombie narratives and fears of "unknown unknowns." While Drezner's analyses of international relations theory is thorough and well researched, he cherry-picks "facts" about zombies from inconsistent sources to flesh out his pontifications. Surface details and statistics garnered from Wikipedia substitute for deeper research, and, for all his scholarly acumen, he leaves serious academics wanting more. Drezner's approach to international politics is thought provoking and timely, but the zombie is a gimmick.

Theories of International Politics and Zombies raises some interesting questions about the nature of international relations and answers them in the context of a dystopian fantasy of global pandemic. Many will enjoy this quick read for what it is—an innovative approach to international relations theory and a humorous introduction to political ideologies. Those hoping for deeper analysis will

be disappointed.

Paris 1919: Inside The Peace Talks That Changed The World

by Paul Cowan

National Film Board of Canada, 2008

DVD, 94 min. (French with subtitles)

Distributor's website: http://films.nfb.ca/paris-1919/film.php

Reviewed by Jonathan Zilberg, University of Plymouth, Transtechnology Research

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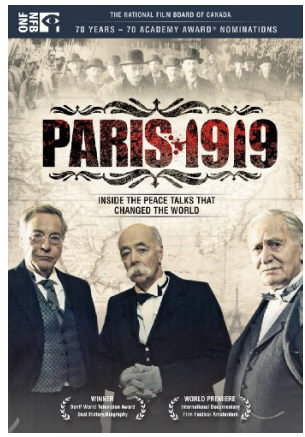
Paris 1919 revisits the creation of the Treaty of Versailles that ended World War One, concluded the Age of Empire, and ushered in the modern colonial era. An excellent teaching resource for history classes, it will be particularly useful in high school and undergraduate classes on the history of 20th and 21st century conflicts. *Paris 1919* revisits how national boundaries and colonial territories were arbitrarily defined at the Berlin Conference of 1885 and tortuously redrawn in the aftermath of World War One, laying the basis for future conflict. Moreover, the film provides historical snapshots of great relevance today. Consider for instance the Hashemite King Faisal expressing sympathy for the Zionist cause and accepting The Balfour Declaration. Consider the division of the Ottoman Empire into multiple modern nations/Arab kingdoms, the unresolved Chinese and Japanese hostilities and the Italian-German fascist nexus. Then, there are the various Asian and African leaders vying for future power and influence, minor actors at that time destined for playing key roles in the cataclysmic changes that would take place over the coming decades leading up the World War Two and beyond.



The principle actors are the Americans, the British, the French represented respectively by President Woodrow Wilson, Prime Minister Lloyd George, and President George Clemenceau. The film is possibly at its best towards the end when the German government representatives refuse to accept the long drawn out treaty bringing the world to the brink of war yet again There stands Woodrow Wilson resolute and Maynard Keynes' resigned after struggling to assess the costs of the war, the value of German assets and thus a reasonable sum for reparations minus any punitive damages. There we witness Lloyd George's famous last minute flip flop on reparations, and finally the German capitulation, the signing ceremony on that cold winter day in the Palace of Versailles.

Inspired by Margaret McMillan's bestseller by the same name, the film skillfully incorporates original materials into the re-enactment. It certainly succeeds in its aim to portray the complicated process of drafting the terms of the ending of The Great War and how Woodrow Wilson sought in vain to create a League of Nations in order to prevent future such conflicts. [1] However when one compares the film to the television documentaries based purely on archival film, it seems to lack the drama and pathos of the real. With its narration and staged scenes, as well crafted and informative as they are, the film is in my view not particularly emotionally arresting outside of the iconic archival footage. It seems much less powerful than the other recent films staging re-enactments and combining archival materials so as to revisit signal periods and events in modern British history such as *The Queen* and *The King's Speech*. Briefly by way of comparison, the former focuses on the changes that have taken place in the monarchy over the course of the 20th Century while the latter focuses on King George the 6th's ascension and how he overcame his speech impediment - as did Winston Churchill. In all these films, *Paris 1919* included, we learn about private turmoil and the orchestration and power of major political and media events in modern history. Regardless of their relative merits, such films emerging as they are at this time constitute a *fin de siècle* phenomenon as we leave the 20th Century behind and move into the next – perhaps asking ourselves where our predecessors have been and where our children might be going.

In that context such films are both important and interesting and especially relevant to the younger generations today. Many of them will not have yet heard Winston Churchill's World

War Two speeches. Nor might they appreciate the significance of the scale of World War One and its consequences no less the significance of the Berlin Conference of 1885. Nevertheless, perhaps the sudden eruption of Arab democratic revolutions will spur interest in a film such as *Paris 1919*. Perhaps current events and such well made resources will prove a boon to high school and college history programs. What better way than combining film and archives to spur an appreciation of history, of the changing fates of monarchies and colonial systems spanning the Age of Empire, World Wars, revolutions, independence movements, the hopes and the failures, and the ongoing conflicts predetermined by maps drawn up long ago by competing global powers.

Finally, *Paris 1919* is a film about humanity seeking peace and justice against all odds. Alongside similar films turning back the pages of history, it could do much to advance the importance and relevance of the subject of history in higher education today.

Notes

[1] Recently Margaret McMillan has noted that the final payment of the war bonds for World War I war reparations was completed in December 2010 by the German government (see "The war to end all wars is finally over", The International Herald Tribune, Monday, December 27, 2010, p. 8). McMillan's review is especially important to those who will watch and debate the film Paris 1919 for as she writes: "…the payment brought to a close one of the most poisonous chapters of the 20th century. It also, unfortunately, brought back to life an insidious historical myth: that the reparations and other treaty measures were so odious that they made Adolf Hitler's rise and World War II inevitable." As regards the ongoing conflicts in the Middle East and their historical origins, see A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East by David Fromkin (1989) and Karl Meyer The Dust of Empire (2003). Also see Eric Hobsbawm "From Peace to War", The Age of Empire 1875-1914, pp. 302-40. ■

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