IMPOSSIBLE NATURE: THE ART OF JON MCCORMACK


Reviewed by Rob Harle (Australia). E-mail: <harle@dodo.com.au>.

Zen cautions us not to mistake “the finger pointing at the moon” for the moon itself. Similarly I would caution the reader of Impossible Nature not to mistake this book for McCormack’s art. One of McCormack’s main areas of artistic investigation is the concept of “containment,” that is, images bounded by the perimeter of the computer screen, paintings contained within frames and so on. It is rather ironic that not only does this book “contain” some of McCormack’s images but further renders them somewhat impotent compared with his originals because these are without movement.

To address this unavoidable problem faced by all video, dance and performance artists—of having their art captured on a flat, 2D, motionless book page—McCormack has included a dynamic DVD that brings us very close to the original impact of his major works. It is hard to find words to describe these works adequately; “stunningly beautiful” would be one phrase, “eerily familiar yet somewhat alien” would be another. These describe first visual impressions and say little about the purpose and philosophy behind them. This book helps our understanding of the art and includes essays by McCormack himself as well as Alan Dorin, Jon Bird and Annemarie Jonson.

McCormack, a visionary and pioneer of “electronic media art,” exemplifies the Leonardo project of art-science symbiosis, as he is both an artist and a computer scientist. He has a Ph.D. in computer science from Monash University, where he still works. His art is all the more remarkable when one considers that he produced his first major piece in 1989, when many of us were just learning how to send e-mails on clunky old computers with 640Ks of memory!

The book is lavishly illustrated, mostly in color, and contains a useful glossary and a good bibliography. In the four essays by McCormack, he describes his various artworks and discusses his reasons for creating works about nature that could not be made without a computer—these have been called “sublime computational poetics.” His philosophical position seems rather paradoxical in that by creating artificial natural worlds he forces us to consider the real natural world and how we are destroying it at an alarming and disconcerting pace.

Jon Bird’s essay “Containing Reality” discusses the previously mentioned notion of containment. He does so, not only in respect to various McCormack projects, but also from a computational perspective, in particular the constraints of computer programming and the creation of algorithms to produce the “artificial” in a generative and perhaps emergent way.

Annemarie Jonson’s short text discusses Turbulence: An Interactive Museum of Unnatural History, a major McCormack work from 1994. Regarding the paradoxical nature of the work, Jonson states, “McCormack frames Turbulence as a meditation on nature: ‘a lament for things now gone and a celebration of the beauty to come’ “ (p. 23). Jonson believes these dualisms are “a preoccupation of our epoch, as the boundaries dissolve between the cybernetic and the organic, the synthetic and the natural, the virtual and the real” (p. 23).

Alan Dorin’s essay discusses AL (artificial life), the computational and methodological basis for much of McCormack’s work. This essay is a further paradox: Dorin on the one hand helps us understand McCormack’s work at a deep level; on the other hand, the center section of his essay (pp. 78–81) adds nothing helpful to the book. I found this section highly irritating; its tone is condescending, as though preaching to schoolchildren regarding the destruction of the environment and the total alienation from nature and animals. Gross assumptions regarding human society, nature and technology are toppled off by suggesting that, “If we are to survive in the long term, the humanist view is preferred” to the “engineering worldview.” The humanist view is precisely why we have destroyed as much as we have. While humanism has quite a few philosophical meanings, it always regards humans as the pinnacle of creation or
evolution and, as such, assumes nature is here for us to exploit!

This minor criticism aside, the book and the art presented on the accompanying disc is wonderfully challenging and pushes the viewer and reader to think deeply about the relationship of the natural to the artificial. McCor-
mack’s art “simultaneously criticises and embraces our dependence on digital art” (p. 90). Just to confound the dualistic nature of McCormack’s philosophy, I will close with his own observation: “If technology has one consistent feature it is that it promises long before it delivers (if indeed it ever does deliver)” (p. 74). McCormack’s work, despite its reliance on technol-
yogy, does deliver some important and hauntingly beautiful art.

**IL DISEGNO OBLIQUO: UNA STORIA DELL’ANTIPROSPETTIVA**


Reviewed by Ian Verstegen, University of Georgia Studies Abroad, 52044 Cortona (AR), Italy. E-mail: <iversteg@uga.edu>.

In 1984 the Venetian architect and designer Massimo Scolari published the now-classic “Elements for a History of Axonometry” in Casabella magazine. It remains to this day one of the few non-
technical (but technically informed) reviews of the birth of axonometric projection from Renaissance military or cavalier perspective. The article noted an anticipation of the parallel perspec-
tive presumed by axonometry in geo-
metric proofs, noted the use of parallels in the study of shadows, and ended on a speculative note, comparing the rejection of faws observed in linear perspec-
tive to a Platonic viewpoint of timeless perfection. In a footnote, Scolari wrote that “the publication of a text on the history of the axonometric is anti-
cipated.” Thus, when the book under review was announced—Il Disegno Olioqu: Una Storia dell’Antiprospettiva (The Oblique Drawing: A History of Anti-Perspective)—I was excited. Alas, the book is “merely” a collection of all of Scolari’s previously published, yet still exciting, essays on oblique, military and parallel perspective, on architect-
ural models and geometrical proofs—in short all the themes touched on in the original essay—under one cover.

In the very brief preface, Scolari notes how his reflection on axonometry began in that very essay that serves as an introduction to the book and “remains still today the title of a book I should have written” (“rimane ancora oggi il titolo di un libro che avrei dovuto scrivere”). The book should not disap-
point, however, because it is useful to have all of Scolari’s thought brought together. Indeed, the fact that some of the material was originally published in English (like the “Axonometry” article) or emerged from teaching seminars in the United States opens up the hope that this book might be translated into English, given this jump-start from the preexisting English texts.

Scolari makes the (increasingly less) startling assertion that linear perspec-
tive has not been of much interest or use in world history, let alone in the Greco-Roman past. Beginning with the Egyptians and Near-Eastern civiliza-
tions, most cultures have preferred forms of oblique perspective utilizing parallels. This is close to Rudolf Arn-
heim’s discussion of the “Egyptian Method” (Art and Visual Perception, 1974) in world art except that Scolari goes further and notes that such a method of graphic transcription is not just a common means of expression but also the backbone on which ancient cultures related ideas about mathemat-
ics and engineering. One of Scolari’s chapters and its discussion of ancient Greek mathematical treatises on papyri is particularly fascinating. The mainte-
nance of oblique strategies throughout the Byzantine and Islamic dynasties, and their independent usage in Chinese traditions, assured a currency when the Renaissance rolled around. Except then, of course, the discovery of linear perspec-
tive was not truly an epochal discovery but rather the continuation and refinement of ancient conventions.

Scolari shows how mathematical proofs in oblique and parallel perspec-
tive were the first to transport the possi-
bility of reading depth not only along x and y dimensions (up and down along the parallel frontal plane) but also along the z dimension (in depth). This was then picked up by the military engineers of the 16th century, who used a compass to read off dimensions in all three dimensions to calculate costs, judge the success of a fortress design and plan an attack.

Scolari was a pioneer in noting the virtues of non-perspectival methods and their various links and connec-
tions. But here perhaps is where the pioneer, who offered such fresh and exciting possibilities 20 years ago, par-
ticularly makes us wish he had indeed written that book. The transition just outlined, that Scolari so ably lays out, is downplayed in favor of its continu-
ties with ancient practices with oblique perspective. Did the ancients ever read off dimensions in the same way? If not, how then did their drawings of machines (another memorable chap-
ter) literally inspire building? What is the contribution of the drawing to blueprints, working drawings and work-
ing by “remote control”? Once military perspective was introduced, did it inspire the epochal changes in the Western mentality that are usually ascribed to the rise of perspective? These are tasks for contemporary research. Now, with a knowledge of Scolari’s great contribution, they can be certain not to reinvent the wheel and maintain his broad vision as a model.

**TCP/IP ESSENTIALS: A LAB-BASED APPROACH**


Reviewed by Rob Harle (Australia). E-mail: <harle@dodo.com.au>.

Have you ever wondered why, when you send an e-mail or download a web site, it does not result in terminal electronic gridlock? Have you ever wondered what TCP/IP or SMTP means when you are setting up your home computer to connect to the Internet? This book reveals all. It does so in a logical, straightforward, easy-to-read manner.

The book is primarily intended for electrical engineering, computer sci-
ence and computer engineering stu-
The book clearly explains that the secret of avoiding electronic gridlock or contaminated data lies in the layered system discussed and used is Linux. The experiments are based on courses taught at Polytechnic University over 8 years. While Solaris commands are included in the book, the main operating system discussed and used is Linux. The four authors are all senior research associates at various universities, except for Shivendra Panwar, who is also a professor of electrical and computer engineering at Polytechnic University, Brooklyn, NY.

As the preface suggests, this book uses a minimalist approach to teaching the essentials of networking and is not intended as a comprehensive reference text on the subject. Appendix A is a fairly comprehensive “Instructor’s Guide,” which includes information about lab equipment required, software installation and router configuration and set-up. Appendix B covers initial router configuration, and Appendix C provides source code applicable to the experiments. This book is well illustrated with numerous diagrams and flow charts to visually explain the theories and experiments involved.

The book clearly explains that the secret of avoiding electronic gridlock or contaminated data lies in the layered hierarchical arrangement of the various protocols involved. Each layer controls certain aspects of the transmission and then reports back to the layer above, which can then perform its function within the stack. The whole process involves a great deal of forward and reverse checking and sending of data in discrete stages or hops. I remember a few years ago a little program available for home computers that could trace your e-mail message. It was truly astounding to see the message hop from one server to the next, sometimes going around the world to end up in a neighboring state!

As mentioned, the book is intended for serious networking students and qualified engineers seeking networking certification. However, I think it is also suitable for those computer “nerds” among us that just like to know how things work. As a matter of interest, TCP stands for Transmission Control Protocol and IP stands for, strangely enough, Internet Protocol. These seemingly simple letters are actually the basis of the whole Internet data flow management and control. This publication is a soundly researched and very well-presented technical manual.

Fantastic Reality: Louise Bourgeois and a Story of Modern Art


Reviewed by Rob Harle (Australia).
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Fantastic Reality is the detailed story of Louise Bourgeois’s fascinating career and life. Mignon Nixon has done an excellent job of producing not only a detailed, exceptionally well-researched scholarly work, but at the same time, a personable story that is a fairly easy read. Bourgeois’s story is intimately linked with many other artists and, as the title suggests, with modern art. This work discusses Bourgeois’s relationship with both modern art and some of its more famous characters, such as Duchamp, Miró and Giacometti.

The four main factors in Bourgeois’s life—motherhood, psychoanalysis, surrealism and feminism—are woven together in an effort to understand this enigmatic artist. While Nixon’s analysis goes a long way toward helping us in this understanding, we are still left with a slight knowing smile, which acknowledges Bourgeois’s remarkable talent for playing games.

The surrealists took game playing seriously; so too does Bourgeois. She does this convincingly, because she is well grounded in ordinary reality. Apart from being a sculptor dealing with messy, earthy materials, she also raised three sons and early in her career battled against the patriarchal status quo, including rejection by certain surrealists, especially André Breton. This, together with her innate understanding of psychoanalytical theory, allowed her to create her own fantastic reality. “It is here in this shadow world of psychoanalysis that Bourgeois’s work is theoretically founded” (p. 268).

The book is written from a psychoanalytical perspective generally and discusses Freudian and Kleinian theory specifically. Even if the reader has problems with psychoanalysis as a “way of knowing” the world, as I do, Fantastic Reality will still prove to be a satisfying read, not only because of its detailed historical account, but also because Nixon has written the book with Bourgeois, not only about her. I think this is a very important point to consider, as far too many books are written about artists, especially with a psychoanalytical take, without the author having ever met or interviewed the artist.

Fantastic Reality has numerous illustrations, including personal photographs of Bourgeois herself, together with her drawings and sculptures. All are in black and white. There are six chapters, together with an epilogue and good index.

Bourgeois’s career was clearly influenced by the resistance to women’s art that she experienced in her formative artistic years. This, combined with her
surrealist associations, developed into a driving force in both her life and her art that could be termed “psychoanalytical feminism.” “Bourgeois’s art was self-consciously and intimately linked with the history of psychoanalysis” (p. 50).

It is well known that the early evolution of the surrealist movement was coterminous with the development of Freudian psychoanalysis. “Through burlesque and parody she has embodied feminist resistance to phallocentrism, to the objectification of the female body as sex object, to conventional gender roles, and to the patriarchal arrangements of the avant-garde” (p. 82).

While Bourgeois’s feminism embraces many of the traditional feminist ideals, she is a somewhat idiosyncratic feminist. Rather than engaging in academic-style discourse, she plays and plays hard. Much of her work, especially sculpture, takes patriarchal and phallocentric symbols and turns them back on themselves in an attempt to disempower them. One such work Fillette, a sculpture of male genitalia in latex over plaster, is presented numerous times in photographs by Robert Mapplethorpe. Bourgeois poses with the sculpture under her arm, and in her arms as a baby. I found the psychoanalytical interpretation of this work and performance (pp. 71–82) in Chapter 2, “What’s So Funny about Feminism?” to push the interpretation to the point of incredulity. Also the work lacks subtlety and is really a bit of a yawn!

This is not a criticism of the book per se, more of Bourgeois’s art and of psychoanalysis itself. This is a fascinating book about a fascinating artist that I would recommend to both general and specialist readers; just remember, however, that the book is as much about psychoanalysis as it is about Louise Bourgeois and modern art.

**AN INTRODUCTION TO BIOINFORMATICS ALGORITHMS**


Reviewed by Stefaan Van Ryssen, Hogeschool Gent, Gent, Belgium. E-mail: <stefaan.vanryssen@pandora.be>.

It is doubtful that an outsider to informatics and biology would expect there to be an intense interaction between these fields but, surprisingly, there is. Contemporary molecular biology poses many problems that can be clarified, researched and eventually solved through mathematical means. In fact, a whole new branch of computing has emerged over the past decades. As molecular biology has progressed and has been confronted with new problems, computer scientists, engineers and biologists alike have sought algorithmic solutions. In their turn, the newly developed or applied computational techniques opened up new avenues of research and ignited new interests in biological problems deemed unsolvable beforehand. This is a great and entertaining story in itself, and it is obliquely told in the captions at the end of each chapter of this book. But the main text is about algorithms and molecular biology—as it should be—in what is, after all, a textbook.

To make a long and quite complicated story short, the whole idea of bioinformatics revolves around problems such as where and how to find genes in long DNA strings of “TACCAGAAGGAT” and their complementary translations in the AUCG code of RNA. Or, to take one exemplary problem and grossly oversimplify: How can we detect whether two somewhat related species share a gene, knowing very well that genes can take slightly different forms? You found the straw in one haystack, and now you are wondering if the other haystack also contains a very similar but not quite identical straw. Given a lot of time and patience, you might eventually find some candidate straws, but unfortunately it might take a few thousand years. So that is where computers come in, right? Not yet. Even with contemporary computers, it would take an unacceptably long time to find similar strings in the approximately 3 billion bases—long strands of DNA—if we simply align the original string with a piece of the target, compute their similarity, reject and move on to the next base along the line. So, this is where algorithms come in. If by now you are thinking of the Traveling Salesman Problem or the Brussels Tourist Challenge (how to get from one place to another and see as many sights as possible along the way without retracing your steps) you are absolutely right. Both problems and many more have their counterparts in biology, and they can be solved—or at least made easier—by applying the appropriate algorithms.

This book first offers a short but clear introduction into both faces of the coin—algorithms and molecular biology—and in the subsequent chapters exposes the strategies scientists have followed to solve specific problems. To name just one: Comparing sequences (which I have clumsily tried to sketch above) can be done by using Dynamic Programming, Divide-and-Conquer Algorithms and Combinatorial Pattern Matching. Nine different computational techniques are thus mapped unto 10 fundamental problems in biology. (Page vii even has an elegant overview of this mapping, so if you do not want to plod through the whole text you can jump in from any angle that takes your fancy.) The chapters are organized around the algorithms. Each has a series of problems at the end, so the reader can try her hand at devising solutions herself. Moreover, the short vignettes about the pioneers of molecular biology and bioinformatics make a motivating and inspiring read for anyone who is not (yet) interested in doing research herself.

**SETTING THE RECORD STRAIGHT: A MATERIAL HISTORY OF CLASSICAL RECORDING**


Reviewed by Stefaan Van Ryssen, Hogeschool Gent, Gent, Belgium. E-mail: <stefaan.vanryssen@pandora.be>.

Colin Symes, a lecturer at the Australian Centre for Educational
music magazines, each with their own “private” goals of making profit, encapsulate the music itself with a whole range of texts and symbols that unavoidably stain a “virgin” reception.

A Material History of Classical Recording traces the history of the material carriers of the cultural prejudices that shaped our listening from the early inventions of Edison and Berliner to the web sites of today. Through quotes, examples and anecdotes Symes succeeds in unrolling a broad carpet of trends and tendencies in the recording business. How and why were LP sleeves designed to be the way they are? What problems do the so-called jewel boxes pose for conveying the messages the publisher wants to get across? How is classical music advertised? What are the norms that music magazines have enforced? These and many questions about the narrative architecture of classical recording get a thorough treatment.

But two questions or problems remain to be solved. One—and certainly not a minor question for those in the business—is how new evolutions such as the MP3 standard and the iPod will affect the paratextuality that was considered necessary to keep audiences on track. Stripped of a printed cover and unaccompanied by a booklet, how can a recording of a Mozart concerto or a Barber sonata get the necessary (pedantic or prejudiced) gilding to make it palatable to a shifting audience? The author hints that there will no longer be a need to “set the record straight,” but I cannot accept that as an answer, considering the huge amounts of money that are at stake and the fact that he convinced me of the unavoidability of paratextual messages to keep the mill running. Maybe the convergence of cell phone, PDA and MP3 player—something the author probably could not envisage at the time of writing—will spawn a new kind of embedding. Or maybe the utterly disgusting “visuals” that some computer media players generate will shift the focus from textual to visual encapsulation? Classical recording has, of course, already found an answer for the aficionado in the music DVD, where the listener gets an even stronger illusion of “being there,” but this might not be the way future generations want to experience classical music.

The second question concerns the parallel material history of popular recording. Is a straightforward translation of the classical story possible? Or is there an entirely different relationship between texts and music and, if so, what does this tell us about the evolution of high and low culture toward a new hierarchy? I do look forward to Symes’s answers.

INTERZONE: MEDIA ARTS IN AUSTRALIA


Reviewed by Mike Leggett, University of Technology Sydney, PO Box 123, Broadway NSW 2007, Australia. E-mail: <mike.leggett@uts.edu.au>.

Interactivity and media arts are at the core of this survey of the last 15 years of creativity in Australia. Why Australia? As an early adopter of new technologies, the country can be regarded as a microcosm of the wider international scene, having its five main cities dispersed across a continent the size of the U.S. and internal communication as between countries—via airlines and on-line. The introduction of the computer and its various applications to the arts scene was bootstrapped with the hosting of TISEA (Third International Symposium of Electronic Art) in Sydney in 1992. Author Darren Tofts picks up creative developments from around then until 2005. The plethora of full color images that spill from the superbly designed square-format pages are matched in intensity by the vivacity of his commentary.

In an opening section the ground is debated—what are the terms we use so blithely? How do they lead us into an area about which practitioners and the audiences who have followed them are familiar, but about which a new generation is mostly ignorant? In recuperating the recent past, the opportunities presented by the convergence of the computer and media are sharpened. Dispensing with many of the accumulated working terms, Tofts focuses upon the artifacts of interactive media arts with clear and weighted prose of a high order, without jargon or glib references to fashionable writers. The tiny Endnotes/Bibliography section indicates intent: Interzone is not for the well-read academic or well-traveled curator, who can hone his needs from other tomes and reference works, such as Stephen Wilson’s encyclopedic Information Arts. This is for the audiences, the visitors to...
interactive media spaces, and the practitioners new to the scene who seek some guidance and analysis, some clear and stimulating perspectives on outcomes. If appetites are whetted, then there is no shortage of bibliographies elsewhere from which to proceed, including Tofts’s earlier books.

Spectatorship is redefined by the three “I”s—interaction, interface and immersion. It leads into other chapter headings, which cover precursors and visionaries; abstraction of the virtual; artificial nature; and story spaces. Each commences with a cogent summary of the central issues and questions, filled out and developed through the work of selected artists in the field. Advice is proffered in one or two paragraphs on each of the highlighted works. We track the author’s responses and reactive thought processes as he, as we, play co-respondent to the artwork, the initiating respondent in the dance of making the work, each distinctive by form, different by contention.

Work in the performance area and the biological receives brief mention. Inevitably, of the practitioners selected, there will be in the mind of each informed reader those few omitted. This reflects the complexity of compilation and the difficulty for the author, though committed engagement is clear, to attend all the exhibitions mounted throughout the period.

The overview, however, reveals a distinctive preoccupation with issues of representation amongst the artifacts arrayed. This is less to do with the antipodal distance from which the larger audiences in Europe and North America, as much of the work has been seen internationally. But it indicates that most Australian practitioners, as with those overseas, have either migrated from the visual and media arts or been trained into the interactive media arts by earlier migrants. (Most of the artists have close involvement with teaching.) In the current climate of cross-disciplinary collaboration, Interzone critically examines the artifacts and some of the processes emergent from these traditional structures.

The book, while aiding and enlivening seminar and coffee culture discussion, could undeniably become the final visible repository of many of the works it features. The ephemerality of chip and operating systems mutating annually often prevents interactive media artwork from being preserved by the active collector or museum, engineering the ephemeral beyond the claims of earlier generations of now well-collected artists. As a milestone, Interzone is well placed to anticipate fresh directions for computer-mediated art activity.

The activity that produced the artifacts in the book is implied—and even more so, the social structures from which it emerges. In Australia, as in Europe, investment of funding by the state encourages, if not supports, practitioner-based activity. This affects outcomes for audiences as surely as does the medium with which the artist is working. One of the several ex-pat Australians referred to in the book, McKenzie Wark, now resident in New York City, once memorably described the whole apparatus of cultural production across myriad art forms by tying in practitioners, curators, theorists, teachers, managers, etc. with studios, venues, marketing, distribution, government funding, etc., which together produce one, big, distinctly Australian artwork—a commentary indeed on the complexity of the culture.

With some official encouragement, artists have begun to seek scientists and technologists wishing to collaborate committedly on projects of mutual benefit. The arena of audience involvement with art will likewise shift and mutate into an interzone that creates human-computer interaction of a different order, between respondent and correspondent. The role of initiator and auteur is becoming less dominant, less in charge of how an interactive encounter may proceed. By bundling and linking a variety of electronic and microprocessor devices, this moves the art activity decidedly away from the geographically installed and hard-wired artifact toward systems and processes that are definable, more mobile and harder to classify within the taxonomies of art and social behavior.

Tofts is well placed as an observer and commentator on the national and international scene, having consistently written about emergent artwork and its issues in the local press, and having also jointly edited for MIT Press Prefiguring Cyberculture: An Intellectual History. Having previously authored the excellent pre-history of cyberculture, Memory Trade, Tofts concludes in Interzone by looking to the future: “The challenge is to amplify the visible and sonic presence of media art in the ambience otherwise known as culture.”

**GIVE OUR REGARDS TO THE ATOMSMASHERS: WRITERS ON COMICS**


Reviewed by John E. Barber, Schools of Arts and Humanities, University of Texas at Dallas, Dallas, TX, U.S.A. E-mail: <jbarber@eaze.net>.

A great deal of current discourse concerning “new media” revolves around its simultaneous engagement and subversive escape. This mysterious combination fuels questions concerning the nature and type of expression(s) we see, or foresee, in new and emerging electronic environments. At the risk of attracting immediate ire with an unusual connection, let me suggest that a model against which to investigate such questions has long been available in the form of comic books.

According to Sean Howe, editor of Give Our Regards to the Atomsmashers: Writers on Comics, nothing beats comic books with regard to the combination of engagement and escape. In fact, says Howe, “That’s the common thread of this art form” (p. x, his emphasis). Howe argues in his introduction that, as a medium that is read, comic books provide a degree of control to the audience not afforded by movies, television, theater or audio recordings. The pace and tone of the reading, of the interaction with the medium, are pliant and controlled by the reader, or interactor.

The words in comics are, like printed
words elsewhere, hard-earned information. The images, on the other hand, invite readers to dwell, to reflect, to meditate, in a way that pure text cannot and will not. This intrinsically greater sensory relation to the narrative component provides an almost guaranteed involvement in which one is forced into a more intimate relationship with the medium, resulting in the aforementioned simultaneous engagement and submissive escape (p. ix-x).

Of course, comics have long been considered trash culture and, so, their utilization—and worse, enjoyment—confers outsider status on their user. Ironically, however, comics also offer supplication to the outsider through the example they provide of “otherness” or “unlikeliness,” the very confinements that overhang current acceptance of much of the potential demonstrated by emerging utilizations of new media.

A problem with comics noted by Howe is the dearth of “personal writing about this most personal of art forms” (p. xii). What sort of dialogue, he muses, would bubble to the surface if comics creators, critics and fans were encouraged to share their thoughts and ideas?

The result is this collection of 17 essays by comics creators, scholars and fans. Three examples provide apt illustration of the contents’ applicability to thinking about new media. First, Aimee Bender argues that the visual experience is crucial to reading. With comics, she says, the symbolic language and imagery underlying comics—the “immediacy to iconic words and pictures”—promote a more direct jump from image to unconscious (pp. 46–47).

Christopher Sorrentino concludes with an interesting paradox, applicable, arguably, to new media, when he says those who champion comics are looking for themselves and, in seeing things through a glass darkly, see only themselves (p. 69).

Finally, Geoffrey O’Brien cites Ezra Pound’s conception of a book: that it should be a “ball of light in one’s hand” (p. 119). As a ball of light, says O’Brien, comics seem always on the verge of exploding. Reading comics, we are not so much concerned to learn what happens, but rather to enjoy “lucid detachment,” the freedom, the ability to move in and out of what we can see and experience as an illusion. But this illusion is as real as we choose to believe. We can solidify or dissolve it at will (p. 125).

The same, perhaps, might be said of new-media creations.

Of course, Give Our Regards to the Atomsmashers is not about new media, nor is there any overt connection made or implied by Howe or the writers whose work is collected in this volume. The connection, any connection, between comics and new media may ultimately be only an illusion, but it is one that seems to work, especially since what we know about creating and using comics may well inform our creating and utilization of new media.

Of course, if you really like—and, better, read—comics (even secretly), this book offers the added benefit of talking about a topic to which you are attracted.

**USER INFOTECHNODEMO**


Reviewed by Martha Patricia Niño Mojica, Pontificia Universidad Javeriana, Facultad de Artes Visuales, Carrera 7 Number 40-62, Colombia. E-mail: <ninom@jaferiana.edu.co>.

Peter Lunenfeld presents a collection of essays originally written for the “User” column in the international magazine *Artext*. Despite the nonacademic and playful style of writing that makes room for interesting iterative word games such as metroretrospsychometrotropsycho, androgynovideoandrogino, infotechnodedoinfotechnnodeom infotechnodedo newmedia infotechnodeom newmedia in newmedia, and are valued for their revenues rather than for quality. The chapter “Teotwawks” has some rather comic first-person commentaries that deal with techno-apocalyptic imagination around the year 2000, including hysteria and faith vampires—nonbelievers obsessed with belief—who were hoping to find nourishing psychosomatic stigmata but instead found themselves starved and disappointed while contemplating the savior on burrito wrappers. By that time, they were unable to foresee what was in store for them on 9/11.

The chapter “Forever” deals with statements from the anti-death league, including instructions on proper maintenance rituals, the right combinations of vitamins and antioxidants in order never to get sick, eugenics, and descriptions of 135th birthday parties in which the birthday celebrant is surrounded by the kids, grandkids, great-great grandkids and naturally her or his new lover.
Chapters such as “25/8” and “Master List” highlight the complete victory of dromocracy, the monarchy of speed, guided by the principle of ultra-efficiency; in which the straightest path is the best and the human being is constantly trying to push past the limits of flesh into the realm of pure performance.

Some chapters have plenty of local cultural references. “Urine Nation” is somewhat difficult to grasp for someone born outside of Texas; I had problems seeing the utopian potential that could unify all languages and sign systems based almost exclusively on male transgressive practices. Other topics covered in the book are architecture, narratives, art, nanotechnology, videogames, globalization and the suspicion against the cosmopolitans, films, cultural obsession with pop stars, biological and genetic metaphors in relation to cybernetic and mechanical ones, and illusions of perceptions.

Integrating a good deal of self-criticism throughout the book, Lunenfeld mainly recognizes the potential dangers inherent in toxic activities such as doing theory in real time, which he compares with holding mercury in the fingers—not only for the mercurial liquid-solid properties of the media itself but also for the relevant concern of being re-absorbed by the bigger solid-liquid puddle of media’s banality. He also acknowledges the risk of interpretation, as when he recognizes the possibility of being considered an elitist, sexist or even homophobe for emphatically disbelieving those who loudly profess their love for television, not as a guilty pleasure derived from a self-referential sphere of personal consumption built around celebrities, but as something analogous to bibliomania. His name suggests, Salmela has a Finnish background, but has been trained in and works in the United States. He worked at several bureaus before starting his own atelier in Duluth, Minnesota.

The most striking aspects of Salmela’s work, at first sight, are his use of materials and colors, the integration of either existing structures into new buildings or the seamless blending of entirely new buildings into remote, often wild, natural environments. His preferred building material is wood, both painted and unpainted, and unlike many architects, Salmela explicitly acknowledges the company of carpenters he has been working with preferentially over the years. Wooden structures, paneling, floors and furniture are brought to life by the light that falls through often eccentrically—in both meanings of the word—placed windows. It is as if the buildings enter into a continuous dialogue with their natural surroundings—whether a waterfall, brook, hillside or patch of practically pristine wood, they are all much more than just backdrops for eye-catching and imposing creations. Mostly residential buildings, his works seem to hesitate between disappearance and attitude, forcing the owners or inhabitants always to be conscious of their responsibility toward the surrounding nature and the building at the same time. Still, these are not mere cottages, dug into a hillside and covered with grass-like hobbit holes. Each building has its own awareness and makes a point because it does not simply follow a program or perform its preset functions but appears to participate actively in the life of its inhabitants, its guests, its co-users of the natural environment.

The most striking example of Salmela’s craft is—not surprisingly—a sauna at the Emerson Residence in Duluth, of which Fisher says, “the semicircular shower at one end and the windowless brick box at the other have a geometric clarity that makes the whole outbuilding look like a mathematical exercise in Platonic form (p. 19).”

From the end, the sauna also looks like a geometrical abstraction of a house. The gable roof appears as a triangular prism on its side, with no end walls or interior trusses to interrupt the purity of its shape, a structural feat achieved by engineer Bruno Franck. Likewise, the semicircular shower at one end and the windowless brick box at the other have a geometric clarity that makes the whole outbuilding look like a mathematical exercise in Platonic form (p. 19).

I rather disagree in this case with Fisher’s further reference to Aldo Rossi’s building style, but the words “clarity” and “exercise in Platonic form” in this short quotation ought to be stressed, as they express exactly what makes some of Salmela’s work specific in its formal aspects.

The book itself contains Thomas Fisher’s short essays about some 25 finished buildings and 16 works in progress, splendidly illustrated with photographs by Peter Bastianelli-Kerze.

**A BIBLIOGRAPHICAL HISTORY OF THE STUDY AND USE OF COLOR FROM ARISTOTELE TO KANDINSKY**

by Kenneth E. Burchett,

Reviewed by Wilfred Niels Arnold, University of Kansas Medical Center, E-mail: <warnold@kumc.edu>.

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**SALMELA, ARCHITECT**


Reviewed by Stefaan Van Ryssen,
Hogeschool Gent, Gent, Belgium. E-mail: <stefaan.vanryssen@hogent.be>.

David Salmela’s architecture, evocative and eclectic, blends in with the rural environments where he has been building. As his name suggests, Salmela has a Finnish background, but has been trained in and works in the United States. He worked at several bureaus before starting his own atelier in Duluth, Minnesota.

The most striking aspects of Salmela’s work, at first sight, are his use of materials and colors, the integration of either existing structures into new buildings or the seamless blending of entirely new buildings into remote, often wild, natural environments. His preferred building material is wood, both painted and unpainted, and unlike many architects, Salmela explicitly acknowledges the company of carpenters he has been working with preferentially over the years. Wooden structures, paneling, floors and furniture are brought to life by the light that falls through often eccentrically—in both meanings of the word—placed windows. It is as if the buildings enter into a continuous dialogue with their natural surroundings—whether a waterfall, brook, hillside or patch of practically pristine wood, they are all much more than just backdrops for eye-catching and imposing creations. Mostly residential buildings, his works seem to hesitate between disappearance and attitude, forcing the owners or inhabitants always to be conscious of their responsibility toward the surrounding nature and the building at the same time. Still, these are not mere cottages, dug into a hillside and covered with grass-like hobbit holes. Each building has its own awareness and makes a point because it does not simply follow a program or perform its preset functions but appears to participate actively in the life of its inhabitants, its guests, its co-users of the natural environment.

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**A BIBLIOGRAPHICAL HISTORY OF THE STUDY AND USE OF COLOR FROM ARISTOTELE TO KANDINSKY**

by Kenneth E. Burchett,

Reviewed by Wilfred Niels Arnold, University of Kansas Medical Center, E-mail: <warnold@kumc.edu>.
Kenneth Burchett has performed a labor of love, and his product is both a reliable source and an encyclopedic reference for historical aspects of color usage. This book will certainly be one of the important places to start for serious scholars who wish to consult the original literature.

Part one is a short history of color harmony with 10 chapters on topics ranging from ancient concepts through color vision, meanings and information, to color guides. The items are handled as short summaries. In general, the author is more concerned with a rapid introductory trip through a large territory rather than analysis, evaluation or criticism of landmarks.

Part two is entitled “Books on Color Harmony and Color in Art.” I particularly appreciate the figure on page 92, which depicts the timelines for 12 outstanding authors in the field. Dates of first copyright are also indicated on the graphic. The viewer can instantly see the possibilities for overlapping influences. Chapters 13 to 24 are devoted to these dozen books, and the individual themes are summarized. The choice came out of the author’s doctoral dissertation (1976) and was based initially on 32 items offered by five experts (Rudolf Arnheim, Faber Birren, Frans Gerritsen, David McAdam and Siegfried Rösch), who are given brief biographies in Chapter 25.

Part three, “Color Bibliographies and Indices,” is a large compilation, reflecting the author’s years of scholarship and experience. Specific references (of the order of 800) occupy 42 pages of text. A general bibliography has some 77 pages and over 1,400 references. This is followed by subject lists, arranged internally by dates of publication, e.g. under “aesthetics” are found Hogarth, 1753 “The analysis of beauty,” followed by 95 others ending with Pavey, 2003 “Color and humanism.”

(One can imagine great utility here for term papers.) The index of subjects is adequate and is not damaged by the inclusion of some rather global headings such as “art” and subheadings such as “color in art,” because it is much better to be redundant than frugal. The index of names is extensive and always found fidelity between text and indexed page number. Vincent van Gogh is given a total of seven mentions—a bit skimpy for one of his fans. Burchett may not be among them because he makes a small error by employing an upper case “Van” throughout the text. Otherwise, typographical and compositional errors are joyfully rare.

There are a couple of quirks about the title itself. The particular bracket of Aristotle to Kandinsky is never properly explained in the text. The absence of “color harmony” in the title is surprising even though this term is mentioned a dozen times by commentator Jack Davis in his two-page preface and is given repeated prominence by the author himself in Chapter 1, “Classical Color Harmony.” A clue comes from the introduction: “The knowledge of color harmony, despite the effort which has gone into color study in the past, has never been assembled into an agreeable modern concept. The essential requirements for producing a satisfying affective response to color remain unclear.” This statement will elicit significant argument in the audience because we do know a few things (from both neurophysiology and neuropsychology) about complementary colors and so forth. Also, Burchett’s term “agreeable modern concept” is surely not much of a goal for the science of color.

The author’s declared emphases were history, philosophy and bibliography rather than example or experiment; perhaps this justifies the absence of color plates—it is a pure black-and-white book except for the covers. On the other hand, if the aim was to decrease production costs, this was not reflected in the final price. Unfortunately, the issue of price will inhibit the wider reading that the book deserves. (Reviewer’s note: an academic discount of 20% is apparently available by dealing directly with the publisher.) Burchett currently teaches color theory at the University of Central Arkansas, in the town of Conway.

**Draw the Lightning Down: Benjamin Franklin and Electrical Technology in the Age of Enlightenment**


Reviewed by Stephen Wilson, Art Department, San Francisco State University, 1600 Holloway, San Francisco, CA 94132, U.S.A. E-mail: <infoarts@sfu.edu>.
Materials together—for example, fur on amber or balloons on hair. Inventors developed all kinds of serious devices to work with this limited form, including machines to do the rubbing and Leyden jars and other contrivances to store the electricity.

Schiffer describes the full range of research in many different areas of inquiry—electrophysics, public displays and shows, hobbyists and collectors, electrobiologists, earth scientists, property protectors, chemists, telecommunication developers and inventors. He presents vivid stories to give a taste of the time—for example: proposals to electrify water in order to enhance the productivity of agriculture; elaborate devices to apply charges to different parts of the body as medical treatment; early experiments to control charged particles of pigment (the forerunner of xerography); battles over the wisdom of putting up lightning rods (fundamentalists believed that lightning should not be interfered with because it was one of God’s tools for punishing the wicked); and debates over the essential nature of electricity and what it connected with other forces and materials of the world and the growing knowledge in many fields. There are many fascinating illustrations drawn from the time—for example, a proposed lightning rod hat with chains going down to the ground that people could wear during thunderstorms.

So why might Leonardo readers be especially interested? 1) Many technological artists focus on the spirit of exploration and curiosity as features of their work in technological innovation. This era is a marvelous exemplar of this kind of spirit. 2) There is a growing interest in deconstruction of the mystification and specialization that accompanies contemporary scientific work. The book provides examples of an alternative model—much of the significant electrical research was undertaken by amateurs, people for whom science was not their major occupation. 3) Some of the fascinating areas of specific research described in the book have not been pursued by mainstream science. They provide potentially fruitful areas for contemporary techn-artists to explore. 4) Electricity underlies much contemporary technological art. The book’s historical/anthropological survey provides a rich background for those who want to think deeply about electricity’s cultural and technological context.

ARNHEIM, GESTALT AND ART: A PSYCHOLOGICAL THEORY

Reviewed by Amy Ione, The Diatrope Institute. E-mail: <ione@diatrope.com>.

In his foreword to New Essays on the Psychology of Art (1986) [1], Rudolf Arnheim writes: “My papers tend to look like mavericks in the company in which they first appear and reveal their raison d’être only when they are allowed to come home and complement one another.” Reading this statement several years ago, I thought how apt it was. His name invariably comes up in discussions of art and perception. Yet, I believe, he remains an enigma, a powerful thinker who seems to defy classification. Part of the puzzle in locating his niche, perhaps, is that his original and perceptualist approach is not easily placed within typical categories. Another component, no doubt, is that until recently there have been no book-length studies of his work.

Ian Verstegen’s recently published Arnheim, Gestalt and Art: A Psychological Theory remedies this lacuna. Verstegen, who clearly admires Rudolf Arnheim, carefully explains this thinker’s core ideas and his influences. The book’s main theme is that Arnheim’s analysis of art serves a fundamental need in studies of the psychology of art. Verstegen’s expansive critique demonstrates how. Overall, the book offers a piercing critical examination of interrelated themes in Arnheim’s work and examines where his major ideas intersect with the writings of major figures who have written on similar topics. Structurally the book is divided into three parts: foundational principles, such principles applied to the various arts, and the developmental aspect of art. It also communicates that Arnheim distinguished three levels in the perception of affects. First, he identifies a crucial cognitive state of the identification of objects. This could correspond to the affect as it is experienced. Then, there is the expressive and motivational component. These are identical and could correspond to the perceptual expression that is available to other perceivers. Thirdly, there is the emotional expression, the level of tension that is perceived by the person. Within this framework, Verstegen proposes that Arnheim’s use of the Gestalt approach offers a worthwhile option, providing a unified approach to perception. Areas considered include the various sense modalities and media, how dynamic processes unfold in time, and how these processes imbued Arnheim’s views of creativity and development. Buttressing his argument are the far-reaching summaries that contrast Arnheim’s thought with that of others. These range from Arnheim’s rejection of the naïve epistemological idea of unconscious drives working blindly—the Freudian legacy—to his disappointments with Gibson’s failure to adequately incorporate art into his visual theories. Verstegen also compares cognitive nativism (associated with J.J. Gibson) with cognitive inferentialism (associated with Helmholtz). In short, Arnheim recognized that the Gibsonian view left little space for imagination and made it difficult to discuss anything other than representational art, a point often made by others as well. The Inferentialists, on the other hand, dependent so much on “inference” that the vast terrain covered by their theories fails to adequately grapple with the problems of perceptual organization in a way that meaningfully integrates the dynamic aspects of the art experience and the creation of art. Also mentioned are topics such as the recent revival of Gestalt psychology (in the work of people such as Steven Lehar), how Arnheim intersects with researchers commonly associated with vision and cognitive science (e.g. Zeki, Solso, Shepard, Kosslyn), where he disagrees from Gombrich and Wollheim, how Gestalt psychology compares with information processing, and how his views align with those of Werner, Piaget and various art educators.

Development is an important aspect of Arnheim’s work, so I was pleased to see that the sections of the book devoted to Arnheim’s developmental studies are solid and substantive. They convey that many of his ideas (e.g. dynamics of visual action or pantomimic form) have their roots in Arnheim’s classic Film as Art (1932), first published when he was only 28, which occupies a unique place in terms of formal theories of visual perception. Sections on Arnheim’s view of creativity are similarly compelling. These include some discussion of how Arnheim used a study of Picasso’s Guernica to comment on fully functioning creativity in an individual in terms of concrete projects. General reference is also made to individual artistic development in terms of childhood, adulthood and old age. These sections convey Arnheim’s
view that creativity includes a dialectic between individual growth and maturation.

Throughout it is clear that Arnheim sees art as a major way of knowing the world. He neither elevates the internal world nor neglects the external environment. Equally impressive is Versteegen's analysis of two competing aspects of Arnheim's thinking on the intelligence of the senses. As he writes:

There are two competing aspects of Arnheim's thinking on “the intelligence of the senses” . . . There is, on the one hand, the ability of the senses to contain universal or abstract information. And there is, on the other hand, the manipulation of images for productive thinking. We might relate the two by saying that individual perceptions already contain abstract content, just as a work of art can be called the abstracted solution to an artistic problem. It is, however, the manipulation of symbols within the work of art that represents the problem-solving aspect of creation and the means to the solution of the final work (p. 22).

That Arnheim, Gestalt and Art is as much a general appraisal of Gestalt psychology as a critique of Arnheim is particularly evident in the chapter on music. Versteegen claims Arnheim's deep and passionate interest in music influenced his thinking overall, although he did not publish extensively in this area. The author thus offers constructed musical theories to place Arnheim's work in the context of Gestalt psychology by drawing upon Victor Zuckerkandl's perceptual approach. Although I found the musical theories fascinating, and acknowledge that Arnheim's early involvement with some of the scholars who looked at connections between music and Gestalt psychology indicates his deep feeling for all aspects of music, Versteegen's analyses seemed too much of a stretch in a survey of Arnheim's theoretical work. My sense is that we lessen this thinker's contributions when we extend them too far was confirmed with the chapter on poetry and the poetic. This is unlikely to happen, so I am glad to have the opportunity to have this conversation indirectly through Versteegen's excellent book. I am equally delighted that Rudolf Arnheim has lived to see this well-done study of his work published. It is a grand addition to the psychology of art literature. In summary, this book makes it clear that Rudolf Arnheim is an important thinker.

Reference

SHOOTING FROM THE HIP: PHOTOGRAPHY, MASCULINITY, AND POSTWAR AMERICA

Reviewed by Jan Baetens. E-mail: <jan.baetens@arts.kuleuven.be>.

Sometimes the best books are the simplest ones, and Patricia Vettel-Becker's study on the remasculinization of photography in the postwar years (from 1945 till the late 1950s, when the dominant social role of photography is once and for all taken over by the new medium of television) is a perfect illustration of this virtue. The author starts from the idea that masculinity was in crisis in the immediate postwar years, first because of the difficult reintegration of the often very unheroic veterans to their work and home place, and second because of the even more difficult reduction of the responsibilities and independence of the often very heroic women who had been obliged to take their men's places at home during the war. Vettel-Becker analyzes the transformations in the field of photography as one of the many strategies developed by a male-dominated culture to reinforce or re-establish traditional roles of masculinity and to remasculinize society as a whole. The very strength of this wonderfully written book (and please note that this is not just the usual compliment the reviewer gives to a book that pleased her) is that it sticks to this one single hypothesis or perspective, while managing to reinterpret and
to restructure completely a very broad field—and even two, since Patricia Vetel-Becker not only provides a new analysis of postwar photography in America, but also offers new insights in the cultural theory of that place and the times by connecting photography to several other fields such as, for instance, cinema (film noir), politics (McCarthy), and the art and gender debate (in this sense, it might appear very fruitful to establish a relationship between this book and Andreas Huyssen’s theory on the feminization of lower arts during the Pop era in the early 1960s).

What makes this book not only so attractive, but also so dramatically convincing, is twofold. First, there is, of course, the newness of its basic stance, which helps to produce a new vision of what we thought we knew almost by heart. The rereading of Robert Frank’s *The Americans*, a book that Vetel-Becker juxtaposes with Bruce Davidson’s work on a Brooklyn gang, is a paramount example of the very innovative character of this study, but the same remark can be made for the playmate and sports photography of the 1950s, which the author rereads by putting the two together.

Second, there is the breadth of the author’s scope. Even more eye-opening than Vetel-Becker’s analysis of Robert Frank, William Klein, Irving Penn, Richard Avedon, Weegee and many others (some of them unknown to a modern audience, which is both a great advantage and a great pleasure) is the author’s study of the different genres that organized the work of photographers in those years as well as her very clear and intelligent rereading of the institutional context of the ways pictures were shown—in magazines, in books, in museums. *Shooting from the Hip* does not just focus on some isolated authors or some lesser known practices, it really tackles the whole field, all the genres and almost all the great photographers of that period. In each case, Vetel-Becker manages to put forward the gender aspect of a work, a genre, a context, both at the level of the pictures themselves (the author is a wonderful close reader) and at that of the framing discourse and the cultural practices surrounding and including photography. Vetel-Becker is able to explain major shifts in photography, such as the transition from prewar documentary photography to postwar magazine street photography. Gender—and the author is, as far as I know, the very first to stress this point—plays here a crucial role: In postwar years, documentary photography was considered “feminine” for its appeal to emotion and its possible link to suspect ideologies (in the McCarthy era, collaboration with the enemy was a form of surrendering “weak” and “soft” bodies to foreign seduction), whereas the depoliticized street photography enabled the photographer to present his work in terms of battle, struggle and conquest. Moreover, the emergence of photojournalism is linked with gender from other viewpoints, too. Vetel-Becker studies very convincingly the gendered structure of power relationships within the world of photojournalism (with the hypermasculine photographer feeling diminished by the script of the—mostly feminine—picture editor or researcher, both being under the final supervision of the—systematically masculine—editor-in-chief). She also emphasizes the tension between the art world (which was considered feminine) and the harsh press or product photography (which enabled the male photographer to enact his role of breadwinner and independent freelancer). This tension can be seen in the policy of the MOMA (although it has not been stressed enough, and Vetel-Becker does it wonderfully) that “The Family of Man” is also, and maybe in the first place, a reaction against fine art photography, or in the choice made by some photographers of the book as a new medium for the exhibition of their work (to publish in a book meant to ignore the feminine museum and art world, among other things).

In short, this is a refreshing and very important book and a major contribution to the use of gender theory of photography, bringing to the fore a feminist rereading of the canon as well as the mainstream of a period, instead of focusing on “repressed” authors and practices or on their rediscovery.

**SHAPING THINGS**


Reviewed by Dene Grigar, Texas Woman’s University. E-mail: <dgrigar@twu.edu>.

When Bruce Sterling’s edited collection *Mirrorshades* came out in the mid-1980s, science fiction aficionados and computer geeks found a genre, however short-lived cyberpunk was, that spoke our language and gave us a peek into a future that we were, however unconsciously, helping to form. Here was a writer whose vision of technology influence’s great many of us about information politics, from the power of information to the ethics of hacking it. While at first glance *Shaping Things* seems a far cry from the “Storm Troupe” in *Heady Weather*, the “Mechanists” from *Schismatrix Plus*, or the “medical-industrial complex” of *Holy Fire*, his impetus to examine the future is not. *Shaping Things* is speculative *nonfiction*—as speculative as any fiction work Sterling has created—about fixing tomorrow by intervening today through, well, shaping the things we create and interact with.

Those who attended Sterling’s 2004 keynote address at SIGGRAPH will recognize the subject matter, themes and terminology of this book, since they were introduced in that talk. For the rest of us, his discussion of “spimes” (not to mention “biots,” “fabling,” “archids,” “oblopia,” “otivion”) may seem odd, since it is his “flat out neologism” (p. 8) for “manufactured objects whose informational support is so overwhelmingly extensive and rich that they are regarded as material instantiations of an immaterial system” (p. 11). Some of the ideas found in the book, however, actually date back to his 1996 novel *Holy Fire*, particularly the idea about the danger posed by the things we unmindfully create and use.

*Shaping Things* offers couples and us about us, both ethical and logical, about production, particularly production as it is affected by industrial design. Speaking of the former, the book posits, on the one hand, the method for getting beyond what series editor Peter Lunenfeld calls in his “Endtroduction” the “vision deficit” that has plagued “our made world”—(p. 146) and has, according to Sterling, the potential of rendering it “unthinkable” (p. 7). In an urgent voice, represented by black print, the capitalization of all his words and the centering of his text, Sterling tells us that:

**THE ONLY SANE WAY OUT OF A TECHNOSOCIETY IS THROUGH IT, INTO A NEWER ONE THAT KNOWS EVERYTHING THE OLDER ONE KNEW, AND KNOWS ENOUGH NEW THINGS TO DAZZLE AND DOMINATE THE DENIZENS OF THE OLDER ORDER (P. 122).**

It brings little comfort to know that
we are only part way through the process of finding a better way of living, particularly when the facts he gives us about the current state of our world are so loathsome.

The logical argument, spoken in green print (conveying a strong political message), tells us what will happen if we do not heed his warning. When talking about “detritus, fertilizers, and pesticides,” for example, he tells us: “A human body can be understood as a sponge of warm saltwater within a shell of skin; so everything we emit ends up partially within ourselves” (p. 134). Not a happy thought—but Sterling does not simply point out problems humans have created with their creations; he also offers a solution, a design solution. At the end of the book we learn that, in order to avoid that fate, we need to work. We need to tear into the world of artifice in the way that our ancestors tore into the natural world. We need to rip root and branch into the previous industrial base and re-invent it, re-build it. While we have the good fortune to be living, we should invent and apply ways of life that expand the options of our descendants rather than causing irreparable damage to their heritage (p. 142).

The end result is a book we are compelled to read and carry around with us to read again and again, a bible that we are compelled to read and carry around with us to read again and again, a bible

**Wild.** Inspired by books published in the 16th century that were “small enough yet important enough to carry in one’s pocket” (Wild, p. 149), the book does, indeed, differ in size from most academic books and can slide into places most others cannot. Its dimensions are not what stand out, however; rather, it is the design and formatting that are hard to miss. As mentioned above, the author makes use of the print medium to make his case for better industrial design: Font color, size and type vary; text is highlighted, underlined and bracketed; ideas are connected across pages by green string-like hyperlinks. In sum, concepts are instantiated with tools the print medium makes possible.

While some critics may not appreciate this aspect of the book, I do; I have come to wonder if what this series offers (and why it fits so well with Sterling’s work, as well as Hayles’s and others who have published in it) is that it is an approach to invention that is quite classic in nature—that is, it instantiates abstract ideas in concrete form, just as something like a parable does. In Mark Turner’s *The Literary Mind*, he argues that parables are a kind of “narrative imagining—the understanding of a complex of objects, events and actors as organized by our knowledge of story” [1]. Yes, he is talking about *stories*, particularly the doubling of stories (as they arose out of oral cultures) to both literal and secondary readings as a way of making a salient point. However, we can just as easily see that design and formatting can function similarly. What I mean is that if we see a parallel between the literal story of a parable and the design of Sterling’s book (or the series, in general), then perhaps we would see that Sterling’s tricky discussion about “technosocial transformation” (p. 5) is as concretized by the book’s design as the secondary reading is by the literal reading of a parable, for all parable means etymologically is putting things side by side for comparison. In essence, the book’s design is the visual equivalent of conceptual imagining—which seems appropriate for this present-day technoculture, one so inculcated by the processes of instantiating words through inscription, print or computing that we think visually.

The irony of the book is, of course, that it is still a book, an object that can and will be folded back into the production stream of [the] future” (p. 11). However, there is little way around this problem of predicting the future with today’s technology and cultural mindset, but certainly Sterling tries and succeeds.

**Reference**


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**BOOK AND EXHIBITION**

**THE ARGUMENTATIVE INDIAN: WRITINGS ON INDIAN HISTORY, CULTURE AND IDENTITY**


Reviewed by Aparna Sharma, Film Academy, University of Glamorgan, Wales, U.K. E-mail: <aparna31s@netscape.net>.

It is now agreed that the voice from the third world is urgent and has a role to perform in the articulations of knowledge arising in European and American academies, as also within wider public discourse in the first world. Indeed, there is a commitment of which the increasing stress on cultural specificity within the disciplines of the arts and humanities is a principle symptom. It is, however, curious that the discourses of post-colonialist and cultural studies, where the concern with the third-world subject gained prominence and has been pursued with commitment, have inadvertently either polarized localisms and nativisms, or stressed dialogic engagement largely in relation to the colonial encounter. Consequently, we are left with a partial view of the complex global interactions embedded within the third world experience, which is neither homogeneous, nor variegated in simple arithmetic terms. At a time when societies in the West are increasingly debating the scope of “multiculturalism,” a whole historical tradition that we may encounter elsewhere, outside the West, which may serve to contribute in honing the notions of cultural interactions,
is completely bypassed, depriving us of some necessary groundwork that has been usefully attempted, if not fully accomplished.

In Amartya Sen’s new text, *The Argumentative Indian*, we encounter a very reasoned, incisive and critical posture that is the much-needed antidote, presenting before us the possibility for some historical corrections that will contribute in contending the third world on more provocative, interrogative and reflexive terms than interpretive or ascribed notions of, say, cultural hybridization, multiculturalism or cultural specificity would allow us. As the title suggests, the scope of Sen’s text is the subcontinent that he evokes comprehensively from a decisive position. Sen’s contention is that the dialectical or dialogic tradition is central to Indian thought; it can be traced to the earliest historical and philosophical Indian scriptures and texts and is sustained through the history of the subcontinent in response to crucial social, political and cultural stimuli at principal historical junctures.

Sen’s work in the fields of social theory has often been commented upon as attending to deep philosophical crises. It is no surprise that Sen commences *The Argumentative Indian* evoking and appreciating the multiple and argumentative positionalties from the rather philosophically difficult territories of the *Mahabharata* and the *Upanishads*. Reminiscing the irresolvable moral debate between Krishna and Arjuna (*at the cusp of the great war*) that culminated in the discourse of the *Bhagavad Gita*, Sen then plots features of the Indian construction such as democracy and secularity, foregrounding the heterodox tradition and “reasoned skepticism” within Indian thought. He raises moments of cultural interactions, such as the medieval mystical poetic traditions of the Sufis and bhaktas, the historical ties of intellectual and theological exchange between India and China, right up to the most profound confrontation in recent Indian history, between the towering modern figures of Rabindranath Tagore and Mohandas Karamchand Gandhi.

The dialogical imperative has, of course, been asserted in the Marxist tradition(s) of historization in the subcontinent. What Sen’s argument allows is the possibility to derive from that history, situating it in conversational terms: one, across disciplines be they political, economic or cultural; and, two, across the familiar first- and third-world categorizations, in the bargain disturbing our faith in those divisions as being neat or contained. In this measure Sen’s scholarship assumes value not only within the Western academy, where it serves to situate third-world and subaltern subjectivity in historically competing terms; within the national context, too, it serves to depart from strict and narrow national agendas that assert nativism in rather limited terms. The philosophical and esoteric edge of his text complements the reason and rigor of the intercultural exchanges he presents. Strategically, however, Sen avoids slipping into idealist notions by constantly arriving at a materialist stance from where he attends the issues of gender, inequality, class, nuclearization and diasporas—a prerogative that his scholarship naturally enjoys, given his contributions in the field of development economics, where his engagements have been with the issues of poverty, inequality, unemployment, famines, etc. This further serves in situating the dialogic imperative not in elitist terms as in some “nationalist” art historical discourses, but as a “critical voice” that is the “traditional ally of the aggrieved.”

At around the same time that Sen’s text was released, a solo exhibition of Mexican artist Frida Kahlo ran at London’s Tate Modern. Curiously, as in *The Argumentative Indian*, at this exhibition, which gathered a comprehensive body of the artist’s work, we encountered some critical inter-cultural exchanges. Frida Kahlo’s work has been celebrated across the world, extensively studied and commented upon. One would be hard pressed to find another example where the personal is so clearly contextualized within the sociopolitical as in Kahlo’s work. The question of identity is central for Frida Kahlo. Some have found in her work a strong surreal edge, which, while it cannot be visually denied, was contested strongly by Kahlo herself.

There is then the feminist and feminine dimension to her work, where she raises issues around gender by locating and confronting herself as the subject. In this, she uses her personal encounters, catapulting them through the intervention of form to a claim that transcends immediate identity toward a more disturbing and fluid conception. Long before post-colonial criticism, Kahlo’s art was smattered with moments of hybridity as part of her own critical stance toward an arriving neo-colonialism. Her approach to her Mexican identity and her appreciation for native art and forms of expression such as the *ex-voto* are clearly more interrogative than the turn of the American Abstract Expressionists toward Native American art. Lastly, she turned all the essentialisms of her third-world position strategically on their head by punctuating her work with moments of androgyny, biological hybridity and strong Eastern philosophical influences.

In much of the scholarship surrounding Kahlo’s art, there is a tendency to identify an immediate relation between the forms she employed and the personal, political and cultural contexts in which her work arose. While this cannot be avoided and is indeed the starting position for approaching work as complex as Kahlo’s, such a strategy nevertheless risks pigeon-holing Kahlo’s work as being the articulation of a third-world, local position through form that is at once native and internationalized. Kahlo’s work testifies to more imperatives than simply the internationalization of the personal and the local.

In her later works, during the 1940s, we consistently find Kahlo drawn toward Buddhism and Hinduism. This is manifest in numerous pieces in which she employs the yogic third eye. A strong connotation of speculation is attached to that, which in Kahlo’s work arises as fluid and varied. This variation at once comprises a critical revisitation, an interrogation and a disintegration of the third eye in terms of a metaphysical or spiritual discourse. Kahlo evokes the meditative, speculative stance, but she uses the third eye not fully in transcendental terms. A material, political correlate is employed to indicate the third eye in some of her images: her husband Diego’s face in *Self Portrait as Tehuana* (1945) and a skull in a pastoral landscape in *Thinking about Death* (1943). In *Diego y Yo* (1949) the third eye is doubly inscribed; on the third eye on Kahlo’s face is Diego’s face, on whose third eye a lone eye.

Kahlo’s evocation of the third eye points at the difficulty—near impossibility—of the transcendent position in relation to the sociopolitical and cultural issues she confronts. The transaction in Kahlo at once furthers our understanding of the complexity involved in any inter-cultural exchange that by its nature demands interrogation and appropriation, not merely an amalgamation of a cultural impetus.
There are other instances where Kahlo evokes Indian mythology; however, as with the third eye, that evocation is not pure but adulterated with Kahlo’s own confrontational inscriptions that do not shy from bold essentialisms and exoticisms akin to her position.

In Kahlo we thus encounter a reworking of the Eastern philosophical and mythological positions that situate cultural transaction first, in competitive terms—not within the familiar equations of perceived hegemonic relations, but rather as a freer, motivated exchange that at the same time marks a departure from limited notions of nativism. Second, this transaction surfaces as critical—involving interrogation and reworking. Such mode of cultural interaction can be situated historically on intellectual terms within a wider cultural history of the world, rather than under the rubric of a particular historical moment—colonialism, for instance—or any other form of hegemony or exploitation thereof.

While The Argumentative Indian is distinct in terms of textuality and discipline, there is a welcome and rigorous coincidence it enjoys with the art of Frida Kahlo. In both we are introduced to the possibility of approaching the third world subject as not simply fashioned by colonialism. In both, the global interactions and their reasoned appropriation within variegated sociocultural fabrics allow us to depart from any reductionist notion of nativism or nationalist agenda, on the one hand, and any celebratory, negotiated possibility of hybridization, on the other. The local is posited as conversational, not antagonistic toward the “global,” which likewise is not homogenous. The local surfaces as commanding a sense of “critical openness,” as Sen terms it, and this is a significant departure from the relationships of hegemony that a discipline such as cultural studies within the Euro-American academies has emphasized in relation to subaltern subjectivity. This “critical openness” not only is valid within the political-economy approach, but is of value to the arena of cultural politics, including cinema. It is no wonder Sen devotes a chapter-length discussion to the cinema of Satyajit Ray, in whom we find some of the most celebrated exhibitions of local cultures through influences such as Italian neo-realism. Also, though there have been more critical cultural figures across the third world since Kahlo or Ray, Sen’s arguments usefully situate and provoke the scope of third-world cultural praxis including third-world cinema, which is still largely defined from the position of the first world.

**Films**

**REGULAR OR SUPER—VIEWS ON MIES VAN DER ROHE**

directed by Joseph Hillel and Patrick Demers. Deckert Distribution, Leipzig, Germany. 2004. DV Cam, 16 mm, 35 mm, Digital Beta, 56 min.

Reviewed by Andrea Dahlberg. E-mail: <andrea.dahlberg@bakenet.com>.

This film has won an abundance of awards and mentions at various national and international film festivals: Best Photography, 2005 Rome Documentary Festival; 2005 Chicago International Documentary Festival; Critics Choice, Chicago Tribune (Nov. 2004); Best Canadian Film, 2004 International Festival of Films on Art (Montreal); Special Mention, Best Urban Documentary, 2004 Barcelona DocFest; 2004 Vancouver Film Festival.

Its modest subtitle—“Views on Mies van der Rohe”—accurately describes its content. The film depicts the views of architectural historians, architects (including Rem Koolhaas), academics, Mies van der Rohe’s grandson, and people who live, work and use buildings he designed. There is no claim that these views are typical or representative in any way. Very little information is given about van der Rohe’s life, and very few of his buildings are shown. The views vary considerably, with a few providing real insights into the work, while others—and especially those provided by Koolhaas in a rushed interview—are barely intelligible and leave the viewer to try to make some sense of what is said. A significant part of the film centers on a gas station van der Rohe designed near Montreal in Canada (hence the title of the film). In all, the film seems incomplete and to consist of whatever aspects of van der Rohe’s work were readily available to the filmmakers. The overall view one forms of the film is that, while it is well made, the content was largely dictated by financial and other purely practical concerns at the time.

All low-budget films are subject to these constraints, but the challenge for the filmmaker is to turn them into advantages. This film is only partly successful in this regard. Its strengths lie in its pacing, music and camera work. As a film about one of the greatest architects of the 20th century, however, it does little more than acknowledge the well-known fact of his genius.

**AUGUST SANDER: PEOPLE OF THE 20TH CENTURY**


Reviewed by Roy R. Behrens, Department of Art, University of Northern Iowa, Cedar Falls, IA 50614-0362, U.S.A. E-mail: <ballast@netins.net>.

This excellent film is the first documentary about German photographer August Sander (1876–1964), whose best work was created in the 1920s during the Weimar Republic, in advance of the rise of the Nazis. A portrait photographer who posed his subjects in their typical home and work environments, instead of in artificial studio settings, he is surely one of the most interesting photographers of the Modern era. His intention, as he once explained, was to make “a picture of our times absolutely true to nature,” but he did not hesitate to stage the way in which his subjects stood. For example, in “Young Farmers” (1913), three dapper German farmers, dressed in suits and sporting canes, pause as they walk side-by-side on a path in the position that Sander arranged them. Two on the right stand together in almost identical postures, while a third on the left stands apart, in contrast to the pattern made by the other two (he also smokes a cigarette, and his hair is out of place). This is not unlike a three-phase joke, when an expectation is set up by the first two examples, then delightfully felled by the punch line. Looking more closely, it is apparent that the hats and canes of the two figures on the right are perpendicular, in contrast to those of the third man, which rhyme but are set at an angle. Typical of Sander’s work is his skillfulness at implanting clever, quiet rhymes, while also recording what Henri Cartier-Bresson would call a “decisive moment,” albeit a moment that Sander designed. Using his own unforgettable photographs, this film adroitly walks us through the long and often tortured times of Sander, a brilliant observer of human behavior who...
It so happens that Dockstader (b. 1932) is a pioneer in electronic music and musique concrète, whose works from the 1960s, such as Quatermass and Apocalypse, have been recently rediscovered. Trained as a painter and filmmaker, he moved to Hollywood and produced sound for films, later working on educational video projects. Being a self-taught sound producer, he ran out of funding and resources to continue making his music, and he disappeared from the recording stage.

David Lee Myers, on the other hand, made his name in the 1980s under the name Arcane Device. His tools were feedback, synthesizers and computers, rather than Dockstader’s recordings and overheated tape recorders, but the younger man managed to convince his friend to try the newer devices. Dockstader seems to have been a quick study. He soon “realized that many of the old principles—slowing, speeding, pitch-change, reversal—were the same—but with much more control and better sound. And no tape hiss. Because it was faster and I could keep my belief in what I was doing, more fun.”

The two of them started gathering frog and toad calls, recording around ponds late into the night, and took that material into the studio, where the two men subjected it to every transformationimaginable without ever losing a trace of its origin. What the artists did with their source material was not haphazard, though. Being professional “listeners,” they wanted to come up with a final result that could attract and keep the lay listener’s attention. So they augmented and interpreted the sounds they had collected, using them to recreate the environment of a pond, as if projecting their internal perception back over the water and among the reeds. Art and life are thus blended into a new, richer acoustic experience.

SCIENCE IN CONTEXT. SPECIAL ISSUE: WRITING MODERN ART AND SCIENCE


Reviewed by Amy Ione, The Diatopé Institute. E-mail: <ione@diatrope.com>.

Comparing recent writings on art and science with comments from earlier centuries brings to mind the degree to which our conclusions reflect the context of our era. Often discussed is how the process of adapting our minds and sensitivities to new views of reality and living systems re-frames ontological and epistemological debates, influences scientific theory and experimental design, and imprints art theory and practice. Less discussed are the roots of contemporary activities, many of which are traceable to late 19th through mid-20th century events. This is the period primarily covered in Linda Dalrymple Henderson’s special edition of *Science in Context* titled “Writing Modern Art and Science.” This superb collection offers methodological models that contextualize how developments in science play a critical role in an artist’s cultural context. One of the strengths of the book is that the contributors offer well-researched information that illustrates conjunctions among art and science without trying to “prove” conjunctions exist, or confound science with technology. As a result, the volume offers research that elevates the field on its own terms by elucidating points of intersection.

This is not to say that issues joining art, science and technology are absent. Anne Collins Goodyear’s essay “Gyorgy Kepes, Billy Klüver and American Art of the 1960s: Defining Attitudes toward Science and Technology,” for example, juxtaposes the two figures named in her title. After acknowledging that, due to similarities in their work, the two names are frequently linked, Goodyear demonstrates that there were philosophical and practical differences between the artist Kepes and the engineer Klüver. Her vehicle for distinguishing their contributions is a comparison of the organizations they nurtured (Kepes, the Center for Advanced Visual Studies at the Massachusetts Institute of Technology, and Klüver, Experiments in Art and Technology).

Goodyear’s stated intention was to reveal both how the cultural conditions of the 1960s contributed to the perceived need for such agencies and how interactions between art, science and technology reflected, at once, the culmination of aspirations reaching back to the opening decades of the 20th century and a perceived break with the past. Yet, what was most impressive was the power of her tightly argued essay to reach beyond its own focus through the questions she examined. The author’s unique insight into the distinct origins of such organized collaborations between art, science and technology.
ties the personal to societal concerns so effectively that she touches on issues that continue to haunt the many practitioners. One of the most thought-provoking aspects of the text is the way it brought to mind the many who wrestle with whether collaborative projects work best within academic settings or without a traditional base.

Barbara Larson's contribution, "Odilon Redon and the Pasteurian Revolution: Health, Illness, and le monde invisible," was remarkably contemporary despite its focus on an historical figure. Larson speaks of how the Symbolist Odilon Redon incorporated the invisible world of microbes into his works on paper. Centering the argument on scientific medical issues that stimulated this artist's creative process allowed the author to expand on Redon's work beyond his metaphysical and symbolist views. Of particular interest is her discussion of his anxiety over invisible biological danger, a perspective that resonates among many still.

Equally compelling were Peter Geimer's "Picturing the Black Box: On Blanks in Nineteenth Century Paintings and Photographs" and Oliver A.I. Botar's "'László Moholy-Nagy's New Vision and the Aestheticization of Scientific Photography in Weimar Germany." Although both interrogate the status of photography in relation to art and science, the differences between the two essays serve to accentuate the range we find in the literature related to these topics, and in this volume as well. Geimer looks at the work of Edouard Manet, Thomas K a f e, Albert Londe, Arthur Worthington and others to show how scientific and artistic practices were re-configured in the 19th century. Two reproductions—one comparing Worthington's photographs of a falling drop of milk into water, the other his etchings of a falling drop—were among the most articulate contrasts I have seen. In this case, the juxtaposition demonstrates how photography altered the imaginative process and the visual products as well. The two images vividly record similar information, but they are conceptually quite different. The photographs provide a sequenced account of the actual falling. The drawings, which needed to rely on attentive observation and a longer rendering time, appear static and more contrived. Thus, we can see that both are imaginative creations, and yet placing the drawings next to the photographs provides a stunning statement of how dramatically the use of photography altered visual options.

Botar's essay, on the other hand, speaks of Moholy-Nagy's suggestion that products of applied—particularly scientific—photography be employed as exemplars for art photography. The author explains that the artist integrated such applied photographs with art photographs in his practice, publications and exhibitions. This in turn laid the groundwork for an aestheticization of scientific photography within the 20th-century artistic avant-garde. According to Botar, the science at play was "biocentrism," and his key inspiration was the biologist and popular scientific writer Raoul Heinrich Francé and his conception of Biotenchnik (bionics). Botar's discussion is well argued, particularly his description of this artist's desire to teach people to see more, a goal that greatly influenced Moholy-Nagy's work. Also of value was Botar's integration of several figures of the time (such as the preeminent biological illustrator Ernst Haeckel). Like that of Geimer, Botar's writing shows the crucial role of the imagination in photography and the role of the photographer in this intervention.

Two additional essays round out the volume. Gavin Parkinson's re-thinking of connections between quantum mechanics and surrealism tracks the diffusion of the new scientific findings into French sources. In doing this, Parkinson establishes the way in which Surrealists (such as Wolfgang Paalen and Robert Matta) worked to find a language for quantum physics that would aid them in assimilating its findings with surrealism. Stephen Petersen's essay moves to the mid-20th century, exploring how artists reacted to the Atomic Age. Both of these essays would have benefited immensely from color reproductions. The analysis of artists associated with the Atomic Age (Dali, Pollock, Fontana, Dova, etc.) translated better, perhaps because I am more familiar with the work that was shown to illustrate the text. Reading the Surrealism chapter, admittedly, I had some problems envisioning the images. For example, Paalen's Figure pandynamique has enough contrast to convey its dynamism in the half-tone reproduction. Polarités majeures, however, translated into a monotone that seemed both muddy and scratchy.

Overall, the publication is delightful. One shortcoming is its lack of attention to art and the brain, an area that I believe could benefit from more attention in general. Nonetheless, as a whole, the six well-developed case studies come together to illustrate that reactions to altered perceptions of the physical, the invisible, and what lies in between stimulated projects that rewrote our view of the world, transformed the human story, and added new avenues for artistic innovation as well. The composite is enhanced by Henderson's introduction, which broadens the terrain covered by the papers and demonstrates that terms like "science," "art" and "modernism" have significations that have varied over time. To her credit, Henderson points out that the contributions of Leonardo and the Society for Literature, Art and Science have aided the field's development. "Writing Modern Art and Science" does this as well.

Indeed, the essays in this volume are so integral to the Leonardo mission that the publication struck me as an indirect tribute to all that Leonardo's many venues have done to elevate awareness of art and science intersections. As a whole, members of the Leonardo community will find the essays useful in their own research. They are meticulously researched, provide extensive bibliographic references, and are supplemented by a wealth of details in the footnotes. I highly recommend the book. Those who have access to a university library can find the contents on-line through <journals.cambridge.org>.

18TH INTERNATIONAL DOCUMENTARY FILM-FESTIVAL AMSTERDAM (IDFA)

6TH SHADOW FESTIVAL

Reviewed by Martha Blassing, University of Plymouth, U.K. E-mail:<martha.blassing@gmail.com>.

The International Documentary Film-festival Amsterdam (IDFA) has already been introduced to Leonardo readers as
The discourse on the documentary film genre at festivals, in retrospect, has often suffered from a lack of discussion around the elements of form, structure and composition within an aesthetic and ethical framework. In contrast, discussions on content have often constituted the dominant or even exclusive topic, and ethical issues often only arise from occurring inherent ideological manifestations. IDFA has more than once used the festival to promote free-speech rights for documentary filmmakers and the subjects appearing in the films; at this year’s festival, a selection of European and American propaganda films produced during World War II stimulated a critical and self-conscious discussion of propaganda within contemporary documentary filmmaking, with particular regard to documentary as a means for ideologically driven goals. This was particularly useful, as within many documentary films on the market can be criticized for their lack of reflectivity and the failure to allow space for viewers to make up their own minds and create their own interpretations.

The apparent difficulties of IDFA to come to terms with the balancing act between film content and film form reflects a growing imbalance of the festival in which the sociopolitical agenda—manifest in a variety of IDFA’s activities—dominates over a critical reflection of the subject of film form. IDFA’s mission statement addresses these issues, and the festival seems to show a shift in sequence of these categories, starting with film form, followed by content toward communication with the audiences, where shock and sensation constitute an important part in the description. Through this imbalance, the festival does not acknowledge sufficiently the critical agency of the audience, especially for those who expect documentary film to express an intelligible, reflective and critical approach in the very form and construction of its medium. At IDFA, slightly too often, one gains the impression that the festival is displaying and selling “better television programs,” which director Ally Derks seemed to confirm when she stated in her opening speech: “After all the incoherent media violence that we get served up, a bit of depth is a welcome change.”

No doubt, with more than 3,000 submissions a year, one can see the festival’s potential to not merely distance itself from the general populist media market, but to develop into a serious forum for documentary film on a metalevel of discussion and communication, with a focus on interventions not only with regard to content but also with regard to film form and characteristics inherent in the applied media. IDFA made a promising start by inviting filmmaker Peter Wintonick as convener of the IDFAcademy masterclasses and events in recent years; in addition, the broadness of the IDFA program every year includes a number of films whose makers are informed by a subtle understanding of film form, ethics of approach and a healthy tension between aesthetics, visual pleasure and a critical discussion of the content. One of the highlights of this year’s festival was a retrospective of French photographer and filmmaker Raymond Depardon, to whom the Netherlands Filmuseum dedicated a retrospective, exhibition, press-conference and masterclass in collaboration with IDFA. (For more information on the film program see www.idfa.nl.)

While IDFA’s engagement with political and social issues deserves special recognition, in order to fulfill the festival’s aim to become a true forum for “films for thought,” it seems necessary to reflect more consciously within the festival program— with regard to the contextualization and the selection of the films—on the awareness that films are able to raise, not merely through emotional involvement but also through intellectually constructed filmmaking. Examples such as KZ by Rex Bloomstein, Our Daily Bread by Nikolaus Geyrhalter or How Many Roads by Jos de Putter, as well as those previously mentioned, open up a discussion of an intellectually sophisticated, self-reflective, ethically conscious style alongside the possibility of an empathetic involvement of the audiences. Alas, it is only in some of the programmed films themselves that these underrated topics can be found and evaluated, rather than in the festival communications and addresses. Despite this apparent lack of contextualization and critical self-awareness of the festival’s public interface, the program of IDFA comprises more than 300 films and as such does offer a rich variety for every taste. To be sure, critical discussions are provided in the special debates and forums but rarely after the film screenings, since the programming is often too tight for a meaningful Q&A. IDFA never seems to have invested much in these discussion sessions, which could be a vital aspect of the festival and could serve as a direct interface with the audiences. As a consequence, it never reveals itself as a fully thought-through event.

To show interesting, politically “urgent” and critical films is a task of high value in itself, and IDFA certainly provides one of the biggest and most productive markets for documentary films, but this engagement may not be considered sufficient if IDFA has ambitions to be taken seriously as a critical discussion forum for documentary film beyond developing its markets. If it is serious about the development of the IDFAcademy, then it would do well to take advice from the broad range of its own constituency.

Individuals seeking more subtle discourses within the genre of documentary film in a dialogue with—and not separated from—the sociopolitical discussions raised by the content may find more common ground at the Shadow Festival, founded by Stephen Mayakovski as a counter-festival to IDFA and running at the same time. The Shadow Festival focuses almost entirely on radical, critical and artistic approaches to film form and claims to show creative, innovative and unconventional contemporary documentary filmmaking and to establish a critical podium for contact and dialogue between the filmmakers and the public.

While the IDFA film program invites one to cherry-pick from a broad range of documentaries, the critical film viewer may find herself commuting to the Shadow Festival for more radical experiments with film form and in particular for the extended and well-informed discussions after each screening. Despite its innovative, creative and radical claims for the documentary film genre, in its sixth edition the Shadow Festival still remains in the shadow of IDFA. This could be due to the lack
merely interested in showing us their rural lives and interconnectedness with nature and the spiritual world in this last village to receive electricity in Japan. His interest also lay in discovering the reasons for Masayo’s happiness. He explained that he was able to stop filming only once he not only understood her happiness, but also was able to experience it himself. This jewel of a film made transparent how film in its form and content is constructed by a network of individual conscious interactions between film subject, filmmaker and audiences.

The most obvious overlap between Shadow Festival and IDFA can be found in IDFA’s Paradocs section, which focuses on media artists’ productions and a connection between the cinema and art galleries. While IDFA has reduced its original interest in artistic interventions to a peripheral role, Shadow Festival embraces short films, installation pieces and audio-visual experiments and integrates these into the main program. As both festivals earn their own merits, my suggestion as a devotee of both would be for Shadow Festival to come out from under the shadow of IDFA to shine in its own right, which without doubt it deserves.

(For the even more experimentally oriented viewer, it should additionally be noted that in the week after IDFA and Shadow Festival, the Impakt Festival took place in Utrecht, with the subtitle “Adventures in Sound and Image.” For more information see <www.impakt.nl>.)

Some of the outstanding contributions to Shadow Festival 2005 were Sergei Loznitsa’s Fabrika (Russia), a documentary on a steel and plaster factory, in which the second half of the film runs backwards, reminding one of Vertov’s use of film aesthetics as political statement. The color compositions and sounds of the film, without any speech or explanations, made it an intense physical and intellectual experience and reminded the audience of the powers of cinema in its early days.

Malerei heute (Painting Now—“Paint Last” meaning today and nowadays) by Stefan Hayn and Anja-Christin Remmert (Germany) has been described by Maya-kovski as a “typical Shadow Festival film”: 156 watercolors of billboards painted by Hayn in the city of Berlin between 1998 and 2005 stand in contrast with intermittent moving-image footage constructing a chronological collage that explores the social and political changes in a coalition of public and private domains. With a voice-over providing an intellectual account of impressions, opinions and political facts of the moment designated to each billboard, this film expresses a true “cinema of thought.”

Another highlight of the festival appeals to discussions of consciousness: Taimagura Baachan (Taimagura Grandma) by Yoshihiko Sumikawa (Japan). While filming Masayo Mukaida and her husband over the course of 15 years, Sumikawa was not

of a clear profile outline or possibly the necessary acknowledgment of the impossibility of detaching form from content without running the risk of emptying the film of any substantial content. To its credit, the Shadow Festival complements a full 10 days’ visit to IDFA by enriching the viewer’s critical thinking about the documentary film as genre in addition to presenting a collection of innovative films. One of the strategies and merits of the Shadow Festival is to invite documentary filmmakers whose work lies at the edges of the genre for a 2-hour “masterclass”—type presentation every afternoon with discussion (a similar approach to the IDFAcademy masterclasses) as well as to take at least 30–45 minutes for a panel discussion after each film screening.

(Special guests for the 2005 workshops were Cherry Dyuns, Albert Elings and Eugenie Jansen, Joe Gibbons, Mike Fishman, Clemens Klopfenstein, Ken Kobland, Stefan Kolbe and Chris Wright—for more information see <www.shadowfestival.nl>.)

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Some of the outstanding contributions to Shadow Festival 2005 were Sergei Loznitsa’s Fabrika (Russia), a documentary on a steel and plaster factory, in which the second half of the film runs backwards, reminding one of Vertov’s use of film aesthetics as political statement. The color compositions and sounds of the film, without any speech or explanations, made it an intense physical and intellectual experience and reminded one of the powers of cinema in its early days. Malerei heute (Painting Now—“Paint Last” meaning today and nowadays) by Stefan Hayn and Anja-Christin Remmert (Germany) has been described by Maya-kovski as a “typical Shadow Festival film”: 156 watercolors of billboards painted by Hayn in the city of Berlin between 1998 and 2005 stand in contrast with intermittent moving-image footage constructing a chronological collage that explores the social and political changes in a coalition of public and private domains. With a voice-over providing an intellectual account of impressions, opinions and political facts of the moment designated to each billboard, this film expresses a true “cinema of thought.”

Another highlight of the festival appeals to discussions of consciousness: Taimagura Baachan (Taimagura Grandma) by Yoshihiko Sumikawa (Japan). While filming Masayo Mukaida and her husband over the course of 15 years, Sumikawa was not

merely interested in showing us their rural lives and interconnectedness with nature and the spiritual world in this last village to receive electricity in Japan. His interest also lay in discovering the reasons for Masayo’s happiness. He explained that he was able to stop filming only once he not only understood her happiness, but also was able to experience it himself. This jewel of a film made transparent how film in its form and content is constructed by a network of individual conscious interactions between film subject, filmmaker and audiences.

The most obvious overlap between Shadow Festival and IDFA can be found in IDFA’s Paradocs section, which focuses on media artists’ productions and a connection between the cinema and art galleries. While IDFA has reduced its original interest in artistic interventions to a peripheral role, Shadow Festival embraces short films, installation pieces and audio-visual experiments and integrates these into the main program. As both festivals earn their own merits, my suggestion as a devotee of both would be for Shadow Festival to come out from under the shadow of IDFA to shine in its own right, which without doubt it deserves.

(For the even more experimentally oriented viewer, it should additionally be noted that in the week after IDFA and Shadow Festival, the Impakt Festival took place in Utrecht, with the subtitle “Adventures in Sound and Image.” For more information see <www.impakt.nl>.)

**INTERNATIONAL CONTEMPORARY ART FAIR (ARCO ’06)**


**Reviewed by Marcus Neustetter, Director, The Trinity Session, The Gallery Premises, Johanneshurg, South Africa. E-mail: <mm@onax.co.za>**.

After most workshop, discussion and exhibition experiences of technology-focused art in the context of Europe, I return to my context in South Africa and am stumped for a few days in trying to position these experiences locally. While the exposure, the potential for new partnerships and the intellectual engagement is overwhelming, the local practicalities and limitations redirect my attention to the necessities, such as practical survival and the need for education and development. Upon my return from ARCO and its discussion forums, however, the transition from a place with an active digital art scene and strong contemporary art market to the local reality was easier. The vast challenges in the dysfunctional third-world art industry, the sporadic and low-key explorations and experimentation with creative uses of technology, and the misappropriation and misrepresentation of these activities on the global platforms usually leave me lobbying for more sensitive and inclusive global processes at platforms such as ARCO.

What helped address the contextual gap of difference was the question that Gerfried Stocker posed to the invited panelists during the discussion forum “Directions of Digital Art,” challenging opinions on the future of digital art: How do we see the future of digital art? This brought forward fundamental issues regarding the very term “digital art,” classification of the medium and criteria that seem to define this mode of production.

Particularly exciting in the responses, especially by the panelists representing a point of view from the developing contexts (homogeneously described as Africa, South America, India), in my opinion, was the simultaneous diversity and similarity in the presented environments, the experiences, approaches and logical deductions. Ideas around self-organization, survival, education and community were present in various presentations of these individual speakers, creating exciting links for unpacking and evolving questions of locally relevant approaches and applications.

This was juxtaposed with contemporary artistic examples and historical reflections by artists and historians, which alluded to a return to simple reflection on the processes of engaging with a system (be it within the context of a society, a technology or modes of communication), interacting and enabling audiences, and acknowledging artistic intention as a definition of an artwork.

The resulting discussion presented perspectives on this openly defined space of digital art in relation to the contemporary art industry. This also highlighted new communities, audiences and markets that come with the domain of new technologies.

With the overburdened question Is it art? presenting itself toward the end of the discussion of the position of digital art, the exciting aspect to this particu...
lar exchange was that beyond the conference hall it was being dealt with practically at the ARCO exhibitions.

While an exhibition series was taking place at the Centro Cultural Conde Duque, presenting an impressive curation of digital culture, such as the high-end Digital Transit exhibition (ARS Electronica and MediaLabMadrid), interesting meeting points of art and new technologies found their ways into the halls of ARCO. Not only did the Blackbox act as a platform and the Telefonica Foundation exhibition present their new-media prizewinners, but digital artworks could be seen amongst the more traditional media in various gallery stands.

After the panel I was interested to find out more about these works that were appearing within this art market platform. After several discussions it became clear that these artworks were, in fact, being traded in the art market beyond the specialist galleries, such as Bitforms in New York. I was not only pleased to hear this in response to the above-mentioned discussion, but also in terms of my personal position around the necessity of market development for digitally focused artworks.

Usually this type of exposure just reminds me of the vast gap in my local industry, larger than the digital divide, a gap between the art and its underdeveloped markets. This gap makes me question the survival of digital art that wants to emerge as technology becomes more accessible and prolific, but currently has no industry to tap into or develop. So, I return to South Africa after my discussions with my fellow panelists and an experience of ARCO, and I find that, while the gap will remain in the near future, the very nature of the discussions in this forum and the inclusion of digital artworks in the context of the traditional art industry gives me hope that digital art not only will become an item of trade but also in itself will help to create new markets in the art industry through its technological networks and inclusive communities.

**Leonardo Reviews On-Line**

The reviews published in print are but a small selection of the reviews available on the Leonardo Reviews web site. Below is a full list of reviews published in LR March–June 2006 <leonardoreviews.mit.edu>.

**June 2006**


_Angels and Demons in Art_, by Rosa Giorgi. Reviewed by Martha Blassnigg.


_Malick Sidibé: Portrait of the Artist as a Portraitist_, by Susan Vogel. Reviewed by Martha Blassnigg.

_Media Ecologies: Materialist Energies in Art and Technoculture_, by Matthew Fuller. Reviewed by Mike Leggett.


_Solaristics_, by Thessalonians. Reviewed by Stefaan Van Ryssen.

**May 2006**

_Arnhem, Gestalt and Art: A Psychological Theory_, by Ian Verstegen. Reviewed by Amy Ione.

_Art et Internet. Les nouvelles figures de la création_, by Jean-Paul Fourmentaux. Reviewed by Jan Baetens.

_Cyberculture, Cyborgs and Science Fiction: Consciousness and the Posthuman_, by William S. Haney II. Reviewed by Rob Harle.


_Next Wave Festival, Melbourne, Australia, 15 March–2 April 2006_. Reviewed by Aparna Sharma.


_Secrets of the Sideshow_, by Joe Nickell. Reviewed by John F. Barber.


April 2006

Antonia Negri: A Revolt that Never Ends, directed by Alexandra Weltz and Andreas Pichler. Reviewed by Stefaan Van Ryssen.


Digital Art at ARCO: An Indicator of the Markets of Technological Art Products? Reviewed by Marcus Neustetter.


The Human Hambone, directed by Mark Morgan. Reviewed by Roy R. Behrens.

Le Corbusier’s Hands, by André Wogenscky; Martina Milla Bernad, trans. Reviewed by Roy R. Behrens.


Shaping Things, by Bruce Sterling; designed by Lorraine Wild. Reviewed by Dene Grigar.

To Be Seen, directed by Alice Arnold. Reviewed by Roy R. Behrens.

The Weather and a Place to Live: Photographs of the Suburban West, by Steven B. Smith. Reviewed by John F. Barber.


March 2006


Baikal Ice, by Peter Cusack. Reviewed by Stefaan Van Ryssen.


Perception and Illusion: Historical Perspectives, by Nicholas J. Wade. Reviewed by Amy Ione.


Shadows, Specters, Shards: Making History in Avant-Garde Film, by Jeffrey Skoller. Reviewed by Jan Bactens.