against the Commonwealth of Virginia by Richard and Mildred Loving). The Lovings, the key figures in this case, are captured in The Loving Story, a film produced by Nancy Buirski and Elisabeth Haviland James and available through Icarus Films.

Married in Washington, D.C., on 2 June 1958, Richard Loving and Mildred Jeter returned home to Virginia where their marriage was declared illegal because he was white and she was black and Native American. At that time, anti-miscegenation laws—laws against interracial marriage—existed in 16 states. Such laws are a typical consequence of states’ rights in the United States, a mechanism that allows the laws of different geographical areas to reflect the mores (and biases) of specific parts of the country.

The Loving Story conveys how such laws can impact lives with a poignancy that a strict narrative could not. We meet a young interracial couple that wanted to live together in Virginia. They were not activists or rebels. The film captures their lives using a trove of recently uncovered 16-mm film, old news clips and still photographs that present the Lovings, their lawyers and the time in a form that needs little supplemental narrative. To summarize, the case was brought by Mildred Loving, a black woman, and Richard Loving, a white man. After they married in Washington, D.C., close to their home state of Virginia, they returned home. Based on an anonymous tip, the local authorities arrested them (while in bed), and they were eventually sentenced to prison in Virginia for marrying each other, because their marriage violated the state’s anti-miscegenation statute, the Racial Integrity Act of 1924, which prohibited marriage between people classified as “white” and people classified as “colored.” On 6 January 1959, the Lovings pled guilty. They were sentenced to 1 year in prison, with the sentence suspended for 25 years on the condition that the Lovings permanently leave the state of Virginia.

One of the driving elements of the film’s script is the racial bias in the legal case brought against the couple. Even the judge’s ruling against their marriage shows this bias. Leon M. Bazile, the trial judge, wrote: “Almighty God created the races white, black, yellow, Malay and red, and he placed them on separate continents. And but for the interference with his arrangement there would be no cause for such marriages. The fact that he separated the races shows that he did not intend for the races to mix.”

The Lovings did not like living in the District of Columbia; they missed their families and wanted to go home. How they lived and felt about the situation is effectively captured in the photographs and interviews that compose much of the film. There are also rare documentary photographs by Life Magazine photographer Grey Villet that recount the little-known story of the Loving family—first-person testimony by their daughter Peggy Loving and footage of the two lawyers who took the case. Indeed, one of the remarkable features is seeing clips of the two young American Civil Liberties Union lawyers, Bernard S. Cohen and Philip J. Hirschkop, discussing the case as young men, as well as in contemporary interviews in which they look back on this work.

The Civil Rights section especially stood out. It is introduced with footage of a large demonstration and followed by a clip of Mildred Loving softly

**Leonardo Reviews**

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**Film**

The Loving Story


Reviewed by Amy Ione, The Diatropie Institute, Berkeley, CA, USA. Website: <ione@ diatropie.com>.

Ironically, as I was wondering where to begin this review today, I noticed a car with two bumper stickers matching the sentiments I was tossing around in my mind. One read: “Hate is easy. Love takes courage.” The other said: “Got Constitution?” Both relate to the details of the Loving case, in which the United States Supreme Court legalized interracial marriage (or held laws against interracial marriage to be unconstitutional [prompted by a suit brought
explaining to someone in her living room that she was not involved in the Civil Rights movement. Rather, she relates, she decided to write to Robert Kennedy simply because she and Richard wanted to go home to Virginia. Initiating the kind of individual litigation they needed to pursue was not a part of the Attorney General’s purview. Kennedy, however, directed her to the American Civil Liberties Union.

Growing up in the United States, I was educated to believe that our political system, despite its faults, was the best in the world. We learned that although change was sometimes slow, rightness or justice of some kind prevailed. I can remember learning about the landmark Brown v. Board of Education case even in grade school. This was the case in which the United States Supreme Court declared state laws establishing separate public schools for black and white students unconstitutional, paving the way for integration. Brown was a major victory and helped propel the civil rights movement of the 1960s. The Brown case was handed down by what is known as Warren Court, because the Chief Justice at that time was Earl Warren. Their unanimous (9–0) decision stated that, “separate educational facilities are inherently unequal.”

I do not recall studying the 1967 Loving case in school, although it certainly drew on Brown. Like the Brown case, the Warren Court struck down Loving unanimously. Warren’s opinion read:

Marriage is one of the basic civil rights of man, fundamental to our very existence and survival. . . . To deny this fundamental freedom on so unsupported a basis as the racial classifications embodied in these statutes, classifications so directly subversive of the principle of equality at the heart of the Fourteenth Amendment, is surely to deprive all the State’s citizens of liberty without due process of law. The Fourteenth Amendment requires that the freedom of choice to marry not be restricted by invidious racial discrimination. Under our Constitution, the freedom to marry, or not marry, a person of another race resides with the individual and cannot be infringed by the State.

The court also concluded that anti-miscegenation laws were racist and had been enacted to perpetuate white supremacy:

There is patent[ly] no legitimate overriding purpose independent of invidious racial discrimination, which justifies this classification. The fact that Virginia prohibits only interracial marriages involving white persons demonstrates that the racial classifications must stand on their own justification, as measures designed to maintain White Supremacy.

Watching the legal challenges presented in the video and listening to the sentiments of the people involved with the case brought to mind recent challenges to laws forbidding same-sex marriage in the United States, an issue set to go to the Supreme Court later this year. Advocates of same-sex marriage often offer the history of civil rights law as a touchstone and a rationale as they fight for equal rights in the courts. As with the Lovings, those fighting today often capture the personal and human qualities that drive the fight for marriage equality.

To my surprise, the connection between race restrictions and gender-based restrictions is covered in an exceptionally well-crafted teacher’s guide that comes with the video. This guide is also available on the Icarus site (see <http://icarusfilms.com/guide/js_teacher.pdf>). One section of the supplemental notes that the question of who can marry today remains controversial and the guide invites students to look at the issues. (Loving, of course, was a case cited in the initial court ruling in favor of same-sex marriage.) Prepared by the Southern Poverty Law Center, the materials are valuable on their own terms, and I think teachers will find them useful. This guide includes maps and timelines, expanding the discussion with sections on the place of the Lovings in history, the question of rights in general, the legal process and the power of activists.

As I reviewed the supplemental guide, I could not help but think about the way times change. In recent years, the U.S. Supreme Court rarely writes unanimous opinions. Perhaps this is why many of us who were schooled to believe so strongly in a self-correcting formula built into the United States constitution wonder if we were naive in our younger days and now are simply jaded, or if time has changed the viability of the political system. Still, regardless of how the current case turns out, there are clear commonalities. Indeed, one of the most remarkable aspects of The Loving Story is how it conveys an unpretentious couple in love. They were not activists, although there is a sequence in which Mildred acknowledges that while she got involved because they simply wanted to return to Virginia, she also recognizes the broader ramifications of the case. Rather, their sincerity and love drives their story.

The courage of the Lovings is matched by that of the same-sex couples today who are seeking legitimacy for their relationships. In a concurring opinion to Loving, Associate Justice Potter Stewart wrote: “It is simply not possible for a state law to be valid under our Constitution which makes the criminality of an act depend upon the race of the actor.” Today, of course, “sex of the actor” would be the operative phrase. Given the humanness of these issues, it is not surprising that this film has won many awards. It is perfect for classrooms and for all interested in who people are and how they make things happen.

**PERIODICAL**

**CAPTAIN CAP (VOL. 1)**


Reviewed by Edith Doove, Transtechnology Research, University of Plymouth. E-mail: <edith.doove@plymouth.ac.uk>.

The translation into English of Captain Cap as the first in a series of three is both welcome and very timely. It is welcome since the Absurdist Texts & Documents Series by Black Scat Books project has filled an important void, since the only other English venture into Allais’s writing, The World of Alphonse Allais, translated by Miles Kingston and published in hardback by Chatto & Windus in 1976, was made available in paperback in 2008. But apart from being long-awaited, Captain Cap also comes at a timely moment because its ironies are particularly apposite today as we witness global intellectual colonization. The importance of not forgetting about the French context and its originality for a true understanding of this text was underlined by the former director of the National Library of France, Jean-Noël Jeanneney, when he launched a counter-attack against the U.S. imperialism by Google Books, in which search results for European writers initially were mostly provided in English (which resulted in the establishment of the Europeana Libraries—
Among other things, the fact that his observations have relevance now more than 100 years later.

He dryly remarks (in French with English subtitles) that on being confronted with the gift of a small thermo flask brought to him by a Google Books VP in order to win him over, it was clear to him that they did not understand who the director of the National Library of France actually was, or what he (commercially) represents.

The importance of Allais in the French-speaking world is clear in, among other things, the fact that his Captain Cap’s proclamation “Loin d’être l’apanage de certains, l’assiette au beurre doit être le privilège de tous” is today still used in the online version of the Larousse dictionary as an example of the use of the word assiette (www.larousse.com/en/dictionaries/french/assiette/5827). Inevitably, something gets lost in the traffic between languages and, in this case, the “assiette au beurre” proclamation becomes in Doug Skinner’s current translation “Far from being the privilege of a few, the pork barrel must become the privilege of all.” “Pork barrel” alludes to a typical American kind of politics and might be, but, alas, some important information does get lost. L’Assiette au Beurre was one of a series of satirical magazines that existed around the turn of the 19th century in Paris, and Allais was one of its contributors. Born in 1854 in Honfleur, Normandy on the same street as Erik Satie, with whom he later collaborated, he published Captain Cap: His Ideas, His Adventures, His Drinks in 1902, a few years before his death in 1905.

Allais, along with Alfred Jarry, remains highly respected as one of France’s truly great humorists, brilliant in his subversion of truth and reality, demonstration of which is the fact that in 1954 the literary Prix Alphonse-Allais was instigated, with Ionesco as its first laureate. However fictional Allais’s Captain Cap may seem, rather like Jarry’s Ubu, he did exist, as Doug Skinner points out in his informative introduction. In the hands of Allais, he just becomes quite a lot more active than the original, running for election in the Ninth Arrondissement, second district of Paris. Election as what exactly, however, stays uncertain. Captain Cap is the hero who launched shooting stars while a starter at the Conservatorium, the discoverer of the meat-mines of Labrador, and, maybe most notably, the fighter of bureaucracy. In short, he becomes larger than life and absurd in every way. It also becomes apparent that in spite of all his strengths, he was not elected but disappeared. However, in order to help with drinking away one’s sorrows there is a whole section of rather stiff cocktails at the end of the book that probably reveal Captain Cap’s true character the best.

As a frequent user of the holorhyme, in which each sentence gets a hidden meaning, Allais was an important influence on Duchamp, who relished tongue-in-cheek wordplay in his œuvre, regarding which the significance of his French origin too often seems forgotten. Allais frequently exhibited at the Salon des Arts Incohérents and was editor-in-chief of the humoristic journal Le Sourire. At the same time, he was a highly critical commentator on (French) politics, something that also becomes clear in reading between the lines of Captain Cap. The fictive play with reality that, as in Jarry’s pataphysics, often seems to reveal much more about reality than a pure scientific approach, becomes clear in Allais’s so-called abstract drawings and compositions, such as “First Communion of Anaemic Young Girls in the Snow” (Carré blanc, 1883) and “Funeral March for the Obsequies of a Dead Man (1897)”—masterpieces of irony that resonate with today’s conceits.

This publication of Captain Cap is a little gem. It is wonderful that not-for-profit publisher Black Scat Books, which seems to operate in true pataphysical tradition, with former bookstore owner Norman Conquest (sic) as its “President-Fondateur” clearly respecting its French origins, has taken the initiative to bring Allais’s text to the attention of the English-speaking world. Its highly recommended blog blackscatbooks.com proclaimed Monday 18 February, usually known as Presidents Day, as Allais Day, “A day of celebration for all who are sick to death of Presidents Day. Have a drink! Buy a book! And vote for Captain Cap!” Perhaps now more than ever it is important to just do that and keep reading as many languages as possible in order to get between the lines.

Books

TRANSFORMATIVE BEAUTY: ART MUSEUMS IN INDUSTRIAL BRITAIN


Reviewed by Jan Baetens, Belgium.
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Few subjects seem more outdated, less “modern” (in the narrow, art-historical sense of the word), so distant from today’s questions on museum studies, than the topic so masterfully examined in this book. At the same time, though, few books manage better than this work to highlight the great relevance of their subject for contemporary historians, estheticians, city planners...
and museum-goers. In this robustly scholarly and committed study, Amy Woodson-Boulton examines the role and place of art museums and more generally the museum movement in the three major “regional” centers of late 19th-century industrial Britain: Birmingham, Manchester and Liverpool. For good or for bad reasons, Victorian art itself and the Victorian approach to art as a kind of middle-class and pragmatist reinterpretation of the romantic ideal of “beauty and truth” have been scornfully discarded as parochial and moralizing kitsch by almost all modern and modernist movements during the 20th century (it has only been in a couple of decades that this kind of art has gained new interest). However, Woodson-Boulton’s book demonstrates convincingly how the challenges faced by the newborn institutions (the three museums were established between 1867 and 1883), the paradoxes of their incredible public success (each of them attracted audiences comparable to the crowds that visit today’s blockbuster shows), and the sharp debaters surrounding their fundamental choices and references can teach us a lot about many contemporary ideas and discussions on art, museum management and education.

In the absence of any centralized art policy in 19th-century Britain, but also in the absence of any museal institution as we understand it nowadays, the almost simultaneous birth of art museums in major industrial cities in Britain was anything but a coincidence. Social reformers and promoters of art, with John Ruskin as their most influential spokesman, found each other in the widely shared conviction that art had a specific role to play in an industrial society. Its goal was to display beauty in order to heal the viewer suffering from the ugliness and difficult living and housing conditions of an industrial environment. This display of beauty had to occur in a place meant to become the public equivalent of the private home (a place of peace, quiet, warmth and regeneration) of which most viewers were deprived. Art, in such a perspective, is then defined by its subject: The beauty of art is less the beauty of the work’s materiality as such than that of the subject it represents (and this subject is always nature, more particularly nature seen as inherently beautiful, created by God). Art, in other words, was seen as a window on the world, and this window could only be inviting and compelling if the subject on view did also tell a story (for it was believed that only the story could help make sense of the representation). This fundamental assumption explains first of all what kind of art was on display in these Victorian city museums: realist art, contemporary art, British art. There was no room for formal “thickness,” exotic (Catholic) themes or motifs, and definitely not for old masters, since works of that kind were incapable of functioning as transparent windows: What they showed was less the world than themselves, in their opaque materiality, and moreover the public had forgotten most of the stories behind them. Second, Victorian assumptions about art also explain how these works were put on display in the museal space: not as items belonging to an underlying grand narrative of “art history,” but as a heterogeneous collection of items, some of them “artistic,” some of them “industrial,” some of them “arts and crafts” and all of them supposed to regenerate the body and mind of the spectator. Finally, such an approach to art also explains why museums were considered necessary and why city councils agreed to spend (much) money on them. Museums addressed the victims of industrialization and offered the public, often with large grants from the industrialists themselves, what it had been lacking for long: the beauty of nature, the soul of a home.

Besides the careful and always thought-provoking description of this program, which took very different forms in the three cities (and this is a source of permanent surprise through-out the whole study), Woodson-Boulton’s book pursues three major goals. First, the author wants to disclose the great complexity and the countless contradictions of the city museum movement. At the level of the artworks: The application of Ruskin’s program to the concrete setting of realist art for often uneducated spectators reveals an insurmountable conflict between beauty and truth, which tended to become enemies in industrial Britain. At the level of museum management: Very soon the debates on opening hours, free entrance policy, the need for thematic temporary exhibits or special events with art for sale, and the offering of other services and facilities disclose the sometimes contradictory needs and desires of various groups in a country that is still extremely class- and gender-divided. At the level of the social and philosophical role of art: How does it connect (or not) with religion, education, politics (here a key role is of course played by the controversies that accompany the public’s craving for expanded opening hours, even on the “Sabbath”)? Second, Woodson-Boulton rewrites an important chapter of British cultural history. On the one hand, 19th-century city museums are still largely uncharted territory, and Transformative Beauty is a great contribution to our knowledge on this hidden part of the artistic past. On the other hand, existing scholarship on the institutionalization of art in that period has traditionally focused on the leading role of the royal family (as the model collector), the London establishments (which did not face the problem of the industrialization of the museum’s environment and whose audience was differently educated) and the conceptualization of the museum as a tool for nation-building (which is certainly not the case here). Third, and this is perhaps its most crucial ambition, the book rethinks art history’s own historicity. It demonstrates the clash between the basic principles of a Victorian city museum and the still-dominant axiom that structured the 20th-century modern, i.e. “white wall,” museum confronting individual visitors with objects that are no longer windows on the world but works of art for art’s sake. It also shows how the pre-modern, Victorian approach to art and its emphasis on subject and narrative will be replaced during and after the First World War by a new, anti-realist, anti-narrative, anti-representative program that presents the works as parts of a totally different
frame, that is, the historical transformation of art as a play of autonomous forms. Art, in this modern program, ceases to serve social reform and loses its references to ethics and theology, since it rejects the traditional burden of representing the hidden or lost beauty of God’s creation. At the same time, the shift from pre-modern to modern museum remains a good model to better understand the changes that Western museums are undergoing these days: What artists, museums directors, policymakers and visitors are obsessed with today is power and politics, and to a certain extent the radical heteronomy of Victorian museums offers an excellent key to a different reading of today’s revolution in museumland—which is more than a return to the past, for in the meantime decisive elements have been abandoned as well (contemporary Western art is no longer determined by middle-class reformism or post-romantic encounters of beauty and religion, for instance). Modernism may be rejected today, but it cannot be discarded as a simple intermezzo.

**Painting with Architecture in Mind**


Reviewed by Agnieszka Mlicka, Central Saint Martins College of Arts and Design, University of the Arts London. E-mail: <a.mlicka1@arts.ac.uk>.

With the title in mind, it is easily anticipated that this book advances the current debate on painting in the expanded field, but it covers a much larger territory. Exemplified by practices from the early 20th century through today, the contributing authors approach the relationship between painting and architecture through notions of color, aesthetics versus aesthetics, (de)framing and display, geometric thinking, objecthood, dematerialization and autopoiesis. The introduction by Edward Whittaker and Alex Landrum hints at this heterogeneity, but it lacks a more consolidated outline of the book in order to provide insight into what “painting with architecture in mind” might signify. A more useful attempt at a contextual framework is provided by John Chilver, who seeks to analyze current developments in contemporary painting based on, but distinct from, modernism and postmodernism. Chilver argues that contemporary painting paradoxically derives its pictoriality from the simultaneous disappearance of the painting-as-object and the materialization of the space of display. His ability to ground this otherwise expansive topic is partly because of his incorporation of artists’ intentions aside from his own interpretation and the larger historical framework. In contradistinction, several other chapters, such as Linda Khatir’s on framing painting, take a more philosophical approach that requires solid background knowledge for a full engagement with the text. The danger with such impenetrable essays is that the artist’s intentions are overridden by the abstract analysis of the work. This approach fails to acknowledge that “painting” in the book’s title is an active verb rather than a passive object.

Several chapters do not address painting at all, raising further questions as to how the discussion contributes to contemporary concerns within painting practice. For example, Whittaker’s and Rajchman’s respective analyses of Lawrence Weiner’s and Fred Sandbach’s works evoke exhausted discussions on conceptual art and objecthood. A much more unusual contribution is the in-depth discussion of Matisse’s mural by Eric Alliez and Jean-Claude Bonne, which proves that painting with architecture in mind can be traced back to early modernism. Their text revisits the critical moment when painting moved outside itself, rejecting pictorial representation to engage with its architectural context through notions of perception, becoming and processes. While there is a danger in applying contemporary concepts such as “the becoming of space” to works created almost a century ago, Matisse’s thinking may offer useful insights to contemporary painters choosing to work in spaces that do not conform to the white cube model. Therefore, this chapter would have benefited from a more direct dialogue with current strands of inquiry.

The book offers potential for further crossover debate that could have been picked up by the editors. In his writing on the integration of color into architecture, Mark Pimlott raises the thought-provoking question: “When art is led down the path of fulfilling or representing a function, does it cease to be art?” Bernice Donszelmann’s text seems to respond by arguing that the inscription of a wall’s surface, for instance through art, is inseparable from the architecture. Her interesting take on the critique of autonomous form builds upon Gottfried Semper’s writing that prioritizes surface above structure. Catherine Ferguson comes close to answering this question in her intriguing treatise on how painting is analyzed. She argues that rather than asking what painting is within its own discourse, painting requires a different kind of interpretation to bring out its functional value. Through the concept of autopoiesis, and building upon Deleuze’s idea of the representational image of thought,” she aims to establish some methodological principles of analysis that “proceed” with painting though logic rather than observation. The application of this idea to her own analysis of Scheibitz’s painting proves more difficult, but nevertheless, the text is an original contribution to the current debate on painting. This may be because of the underlying shift from discussing architecture to the issue of functionality in relation to painting. In this regard, what is perhaps most functional in this book is the fold-out insert of a painting specially designed by the artist Brad Lochore. While lacking the vibrancy of other illustrations, the architectural fold straight through the image continues to simultaneously disturb and intrigue. It evokes a curiosity as to the “framing” of this work in the way it occupies an asymmetric space on the double page. As noted by the editors, it becomes a standing object that emerges out of another space, while also potentially functioning as a model for a real architectural space.

If the painting holds such a relevant proposition, why is it not acknowledged in the contents? After all, this contribution truly signifies how challenging it is to understand the spatial thinking of the painter.
Computers and Creativity

This is a challenging, thought-provoking and important book. Challenging because it forces us to confront issues of our relationship with intelligent machines; thought-provoking because it asks many difficult questions, some of which do not as yet have answers; and important because it tackles the issues of machine intelligence and artificial creativity in a non-trivial, non-hysterical and profound manner.

As the title suggests, the main thrust of the book is exploring the relationship of computers and creativity. There are two significant approaches discussed. Firstly, how can human creativity be aided and augmented by using computers either as creative cohorts or as standalone, although still not autonomous, machines? Secondly, if it is indeed possible, how would we build robust autonomous AI machines capable of being creative and able to evaluate original works that they create as well as those of their human associates?

Refreshingly, there is no technomessianic hype at all in this book. All chapters are written by leading researchers (25 in all) working at universities, literally at the coalface, one might say. This approach leaves no room for flights of science fantasy and ill-founded speculation, which I have found is almost endemic in the Extropian-style literature regarding human-machine integration. Considering the complexity of the subject matter and its theoretical underpinning, every chapter is extremely well written, in a way that makes the book thoroughly accessible to expert and educated layperson alike.

Computers and Creativity is divided into four parts comprising 16 chapters. I will list the titles in full, as they provide prospective readers with a good overview of the range of research and topics covered.

Part 1: ART. The Painting Fool: Stories from Building an Automated Painter; Creative Ecosystems; Construction and Intuition: Creativity in Early Computer Art; Evaluation of Creative Aesthetics.

Part 2: MUSIC. Musical Virtuosity and Creativity; Live Algorithms: Towards Autonomous Computer Improvisers; The Extended Composer; Between Material and Ideas: A Process-Based Spatial Model of Artistic Creativity; Computer Programming in the Creative Arts.


Part 4: EPILOGUE. Computers and Creativity: The Road Ahead.

(This Epilogue is very short but asks some of the hardest questions we will ever have to answer regarding the human-computer encounter).

The book has a slight bias toward visual art and music but is equally mindful of and useful for creativity studies in all areas of human endeavor. As Margaret Boden mentions in the Foreword, “If I had to pick just one point out of this richly intriguing book, it would be something the editors stress in their introduction: that these examples of computer art involve creative computing as well as creative art” (p. v).

Some of the researchers are skeptical of the possibility of creating a truly autonomous creative machine that will function similarly to humans in respect to creativity and also be capable of emotional involvement with works of art. Others believe that we will create such machines, although they may not be exactly like us—that is, they may have their own ways of creating art completely independent of their original builder/programmer intentions. Will we be able to recognize and appreciate such creations? You will have to read the book yourself to try and assess this somewhat bizarre possibility.

I found all chapters interesting and believe they have added much to the project of producing creative computers, fully autonomous or not. However, Chapter 13, Creativity Refined, was almost like an epiphany for me in that the concept presented (removing value from creativity) seems to be an original and essential answer if we are to progress in creating true machine creativity. As authors Alan Dorin and Kevin B. Korb write, “This chapter introduces a new definition of creativity that is independent of notions of value or appropriateness. These notions, we argue, have encumbered previous definitions and confused the production of software-based creativity” (p. 339).

The concept for Computers and Creativity originated at the 2009 interdisciplinary seminar organized by the book’s editors and Boden, held at Schloss Dagstuhl-Leibniz-Zentrum für Informatik in Germany. The seminar was attended by artists, designers, architects, musicians, computer scientists, philosophers, cognitive scientists and engineers. The finished book is the result of subsequent group discussions and extensive review work over the ensuing years. I thoroughly recommend this book to the widest possible range of practitioners, theorists and students in the field of artificial intelligence related to creativity and the arts.

Computing: A Concise History


Reviewed by Brian Reffin Smith, Collège de Pataphysique Paris, France.

There are two descriptions of this book, one on the cover—the title—and one in the introduction. That there is a difference, almost a conflict between them, is an indication that there is more than one way of analyzing what has been going on, how, and why, in...
roughly the last 70 years—a lifetime!—of computation. The title is “Computing: A Concise History.” But on page xvi of the introduction, the book is defined as “a summary of the development of the digital information age.” Is the history of computing the development of the digital information age, or vice versa? It’s not at all certain. One is content, the other context. Technological determinism haunts such questions.

The words we use in a history of computing are a minefield of uncertainty. The author asserts that the terms “analog” (U.S. English) and “digital” were unknown before the late 1930s, but the former word’s use, even only in its American spelling, in the English corpus from 1900 to 1910 was more frequent than at any point until nearly 1945; the latter was in use to indicate a number under 10 by about 1450, and interestingly, as a noun, to refer to discrete keys on a piano by 1878. Of course the author means their use in the context of his subject, but a history, even such a concise one, perhaps needs to be a little more open to what might be important semantic underpinnings.

Why would anyone want a history of computing? To what problem or question is this book, largely written in laypersons’ terms, a solution? Well, I doubt many people directly involved in computing will read it, apart perhaps from a few students, but for many of us the book will provide an interesting and timely overview of the historical context in which changes, and particularly today’s changes, have occurred. Interesting, because of the coverage of the uses to which computers have been put across the ages. Today they are seen as data storage and routing machines but in the early 1980s they were creative tools, whether for business, education or the arts. Timely because there will be very few more histories of computing: Almost everyone thinks that computing means the social uses of computation and would think the very word “computation” bizarre in the context of Facebook.

There are occasional errors and typos—a particularly comical one on page 4 where a “not” should surely be a “now”—but on the whole this is a useful little book, let down by a suicidally dour design and an absence of that sine qua non of computer texts, jokes. There is little too about MIT; I remember Nicholas Negroponte coming to the Royal College of Art in 1970s London with a huge Laserdisc under his arm, showing interactive bicycle mending (of course it was really militarily funded: missiles, not bicycles)—there might have been room for the work of his Architecture Machine Group and later the Media Lab at MIT, Joseph Weizenbaum too is absent. Still, at least Ted Nelson gets a line or two.

Finally, it is rather ironic that MIT, whose Press is the publisher of this book, is currently at the center of a row about a possible role in the suicide of Aaron Swartz, who was investigated for allegedly trying to access academic papers. The Internet, in its initial form as the Arpanet, as this book shows, was never remotely intended to have anything to do with freedom of information. A history of computing is a history of the embodiments of our dreams and our limitations.

THE INVENTION OF HETEROSEXUAL CULTURE


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

The translation of a French study published in 2008, this book is an original and highly stimulating contribution to the broader field of LGBT studies. As the title of the book makes clear from the very start, Tin’s subject is not heterosexuality but heterosexual culture, and the distinction between human nature (in which heterosexuality is a given) and human culture (in which it only seems “natural,” at least today) is one of the fundamental building blocks of this new approach to human sexuality. The ambition of the book is to highlight that the gap between nature and culture can only be explained if one accepts to study it in historical longue durée terms, which shed a very different light on the past as well as the present and the future of heterosexual cultural practices and the organization of Western societies around a mythical conception of heterosexual love.

Tin’s story begins in the 12th century, a period characterized by the emergence of what has become so totally self-evident today that we tend to consider it essential and transhistorical: heterosexuality as an ideal of interpersonal and social relationships. As convincingly demonstrated by Tin, this heterosexuality meant a revolutionary shift in a culture that until then was strongly dominated by paradigms of homosociality, in which issues of heterosexuality and family were kept at the margins of the strong bonds that defined relationships between men in a chivalric or monastic environment. Tin admits that there is still no conclusive explanation of why this homosocial structure was put into question, but its historical reality can, of course, not be denied. From that point on, Tin proposes a real grand narrative ranging the whole second millennium A.D. and studying mainly the conflict between heterosexuality and the three major forces that have attempted to counter or block it: the chivalric world-order, which saw heterosexuality as a danger for its ideals of masculinity; the religious world-order, which rejected
it as a danger for its ideals of spiritual love; and the medical world-order, which linked it with various kinds of problematic, i.e. unhealthy, behavior (in the beginning of the 20th century, heterosexuality, the newer form of lovesickness, was esteemed as dangerous as homosexuality). Relying on a corpus constituted by literary sources, Tin scrutinizes these resistances to heterosexuality, often very long (as already said, these phenomena have to do with longue durée historiography) but always, despite frequent moments of success, profoundly reactionary and rearguard.

A second layer in the book is the discussion of the notion of sexual and social normalcy, and the progressive criminalization of what is the flipside of the rise of heterosexuality: homosexuality. A third one has to do with the social and sexual treatment of women, which Tin clearly distinguishes from the changing views on heterosexuality.

Tin proposes an appealing interpretation of heterosexuality in Western culture, with a good mix of broad general tendencies and a fine sense of detail and close reading. The choice to focus on literary sources, rather than unpublished archival material or legal documents as might have been expected from an author who has read carefully the work by Foucault, has a double advantage. First, it allows for a creative rereading of the French literary canon, from the Chanson de Roland to Paul Claudel over Montaigne, Corneille and many others. This rereading is refreshing. It shows, moreover, how the literary canon has been misread or even misused in the past. Second, the emphasis on literature helps bring into focus the importance of education and of the social framing of sexual matters. As an aspect of culture, not of nature, heterosexuality is something that cannot be separated from education, and Tin has many clever analyses of the way in which the literary and school system (for many centuries, both were almost inseparable) promoted forms of writing while manipulating, withdrawing or censoring other ones in order to impose a certain idea of human sexuality. Logically, the last chapter of the book is then an appeal toward the “end” of heterosexual culture (not of heterosexuality) and a plea for a new revolution that replaces the age-old “natural” domination of heterosexual behavior and practices by creating a more diverse sexual culture.

**INTERACTING: ART, RESEARCH AND THE CREATIVE PRACTITIONER**


Reviewed by Flutur Troshani, University of Shkodra, Albania.

Were we seeking a term that conveys some of the significant transformations in contemporary art, research and creative practice over the past decades, “interacting” would be among the first to come to mind. Its appeal is easy to understand given the increasing audience engagement with the artwork, its undeniable malleability and the transformation of the museum into “interactive space.” Candy and Edmonds, the editors of this study, acknowledge its significance and indicate that practice-based research in interactive art appropriates and transforms contemporary discourse, the unstable contours of which suggest the critical depth of the epistemic questions that can be raised if creative practices and research methodologies are brought together. Deep down, the collective voice of these essays problematizes the demarcations between research methodologies and creative practices to the point that they come to be entangled into and to reconfigure each other’s domains. In doing so, step by step, these essays trace a heuristic methodology, which lays claims upon how research can be brought into creative practice, what is transformed during that process and how the interactive art practitioner mediates and refracts relations both within and between them.

These essays stretch back to the work of art, intended here as a complex where creative and research practices conflate, but they also stretch forward to the contemporary context, the epistemic and aesthetic protocols of which insist that the inherent nature of the artwork has been transformed both in terms of “conceptual models” and “procedural tropes.” The point is that interactive artworks have set before the artists, researchers and academics a new model that moves beyond methodologies and frameworks imported from existing discourses and practices. From there, the value of interacting turns out to be central to practice-based research. To visit it within the tripartite relationships between/among “artworks and audience,” “creative practitioners from different disciplines” and “practitioners and the norms of research” is to develop a particular discourse, the constituents of which are not only conceptual and aesthetic but also collaborative, reflective and networked. Inevitably, this leads to apprehending how this discourse, however convoluted its dispositions may be, is to be interrogated and systematized. The challenge, in other words, is to put practice-based research into our conceptual mapping and into the agendas of contemporary art projects. As their response, Candy and Edmonds have brought together contributions that come from different disciplines, the collective voice of which is generally well-orchestrated, although occasionally, given their inter-, trans- and multidisciplinary and skewed approaches, it turns out to be dissonant and repetitive.

The structural designation of the essays falls into five distinct sections prefaced by brief introductions. These make sure that the essays do not veer away, invested as they are in idiosyncratic disruptions by their multidisciplinary drive. The methodical association of art and research provided by the first section, “Interactive Art and Research,” brings into sharp focus the working concepts and, more notably, (re)configures them into ways that are crucial to maintain the theoretical coherence required to bring together the voices of the contributors. This also ensures that the proceeding essays keep abreast of the main argument and that the logical progression from one essay
to the next remains unaltered. First, Edmonds begins by locating retrospectively interactive art within the early experimental practice of the 20th century and pays special tribute to Duchamp’s role in undergirding interactive art. Then follows Candy’s contribution, which explains how “practice-based research is explored through the prism of practitioner research in interactive arts.” And, finally, Stephen Scrivener, a practitioner himself, explains his personal “long-term experience of involvement in practice-based research” (p. 17).

In the second section, “Curatorial and Reflective Practice,” the centrality of interaction breaks with the underpinnings of curatorial work as practiced in the setting of the traditional museum. It even pushes further the adoption of a more open-ended approach by means of which the stability of the interdisciplinary concepts together with the fluidity of their associated facts and practices are set aslant. By implication, here, the museum is both open and interconnected space, where the audience is directly engaged with the work itself. All the projects described in this study have been carried out at Beta_Space and the Powerhouse Museum in Sydney, which technically may provide the necessary infrastructure to bring these works to life.

It is understandable that in the overall dialectic of this study, the signifying and circulating power of interdisciplinary theory and research, do at one level subsume the individual and reflective, but, on the other, it also raises questions about the collaborative. Thus embedded, the third section, “Collaborative and Communication,” asks what happens de facto and how should we attend to collaboration carried among practitioners coming from different disciplines? An implicit trajectory of this discussion is pushed further in the next section, “Creative Engagement.” Here, looking into the interconnections between creative practice and research methodologies ultimately reveals their mutual containment, thus mirroring from there the active role of the audience. Finally, in the last section, “Art Practice,” the editors have included a discussion of artists who relate their own practice to theory and research.

In conclusion, this book advocates a practice-based research that is attentive to both the praxis and the behavior of interactive artworks. It is one that draws from the epistemological structures provided by creative practitioners who come from different disciplines. Acknowledging this, the argument goes, allows us to see how research can be brought into art practice and vice versa. Gradually, a theoretical cartography of working concepts in practice-based research emerges. Its continual transformations enable the resonance—at times even dissonance—in how we practice both art and research today. There is a short biography of the contributors, bibliography and index at the end of this book.

**Taliesin Diary: A Year with Frank Lloyd Wright**


*Reviewed by Roy R. Behrens, Professor of Art and Distinguished Scholar, University of Northern Iowa, U.S.A. E-mail: <roy.behrens@uni.edu>.*

In 1934, American expatriate author Gertrude Stein returned to the U.S.A. for the first time since moving to Paris in 1905. Accompanied by her companion, Alice B. Toklas (whom she had secretly married in 1908), she toured the country giving talks to promote her new (and perhaps most enduring) book, *The Autobiography of Alice B. Toklas.*

When she spoke at the University of Wisconsin, architect Frank Lloyd Wright was in the audience (she said he looked familiar, but could not remember why). Apparently, Frank, Gertrude and Alice had met earlier in Paris, at which time (as this diary notes) his impression was that Stein was “the most unattractive, uninteresting and dull person he had ever spoken to.” She dominated the conversation, he recalled, while the mute compliance of Alice gave new significance to her name—she was, of course, reported Wright, “Alice be talkless.” In Madison, Wright invited the pair to return with him to Taliesin, his famous home and school nearby, en route to their next engagement. But they demurred (exchanging nudge-nudge glances), for the reason, they said, that they liked to travel by airplane. “We want to fly to Milwaukee,” they said.

This book is called *Taliesin Diary* because its primary text is the diary of an American Jewish woman who lived (along with her husband) with Wright and his wife Oglivanna, their family and student apprentices for nearly a year at Taliesin near Spring Green, Wisconsin. The diarist was Priscilla Henken, a New York-born high school English teacher, who traveled to Taliesin in October 1942 with her husband, research engineer David Henken. Together, they “slaved” as apprentices in Wright’s Taliesin Fellowship until she left (apparently rather abruptly) in August 1943 to return to teaching in New York, while her husband stayed on until later.

I have read dozens of published diaries, from which I have concluded that not all diaries are worth reading. But this one is fascinating, largely because it is candid (albeit often painfully so) and well written. It is especially honest about the corrosive influence of Wright’s third wife Oglivanna (they had married in 1928), who, by more than one account, was the Rasputin of Taliesin. In page after page, do not be surprised to be taken aback by the abrupt and usually damaging ways in which Mrs. Wright (“La Dame”) jostled to assert control over the apprentices, her aging husband (he was in his seventies then and incapable of standing up to her) and others who were living and/or on the staff at Taliesin.

The earlier entries in the diary are the most engaging, largely because its diarist was energized and hopeful then. Initially, both Priscilla and her husband were fully committed to working with Wright. But as time passed, both she and I (the reader) began to sense a “perfect storm.” So many things were happening then: the U.S.A. had entered World War II and young men were threatened by the draft. Some of the male apprentices at Taliesin were pacifists and refused to report to the draft board, while others had applied to be conscientious objectors. As time went on, Wright’s Spring Green School was rumored to be a safe haven for opponents of the war—along with free love advocates, atheists and socialists, even communists, God forbid.

As reported in this book, FBI director J. Edgar Hoover sent out a directive that year advising that Wright’s school should be closely watched because it “contained no classrooms” and “appeared to be a religious cult.” According to Hoover, the Taliesin Fellowship “held dances to the moon, told the students how to think and if a student did not attend certain meet-
Wright appears to be kindly but hapless and hopelessly henpecked. In Welsh, “Taliesin” means “shining brow.” But, in reading this book, you are more likely to conclude that Frank Lloyd Wright’s brow, in later life, was not so much shining as “beaten.”

BORGES AND MEMORY: ENCOUNTERS WITH THE HUMAN BRAIN


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

Contrary to what its title may suggest, this book is less an analysis of Borges’s literary treatment of how our memory works than a presentation of historical and cutting-edge research on the same subject. Borges, in other words, is not the subject of the study, but its most important rhetorical channel. It may come as a surprise that the Argentine-born and -educated neuroscientist Rodrigo Quian Quiroga did not know of “Funes the Memorious” and other famous stories by Borges when he started working on the functioning of the human brain (the author does not focus on the distinction between mind and brain, just as he does not stick to the difference between body and soul), but it makes his personal account only more vivid and intriguing. For after all, Borges’s tales, many of them from the 1940s, give as vivid a description of human memory as today’s most sophisticated visual theories and representations, even if they do it in a way that modern scientists may label definitely non-scholarly.

Borges, however, had perfectly understood the essence of memory, which has of course to do with storage and retrieval but also, and perhaps even more importantly, with forgetting, filtering, selecting, on the one hand, and abstraction, generalization, categorization, on the other hand. Memory can only function as we want it to do if we are capable of leaving many things aside, while relying at the same time on the possibility to label, classify and pigeonhole what we retain in the various times, layers and types of memory that contemporary brain science helps differentiate. Just as Borges tells his readers about memory by describing the strange case of Funes, a man who remembered literally everything he had ever experienced but proved incapable of “thought,” i.e. of creative thinking, Quiroga presents his overview of neuroscience by highlighting a wide range of illnesses, disorders, and freak stories that all insist upon the same message: the vital necessity of forgetting and generalizing, as well as the horrible consequences they incite in the human mind and human behavior.

Quiroga’s book may not contain much new information on how neuroscientists study and represent memory nowadays, but the way in which he does it is refreshing and accessible to a very broad audience. The structure of the book is mainly chronological (it follows more or less the findings in the field since the early 19th century), but with many fascinating digressions to theoretical and philosophical issues that provide excellent new readings of some great authors such as William James, Gustav Spiller and John Stuart Mill. Quiroga is a superb storyteller who has the intelligence to make himself invisible behind the subject that he narrates. He generously foregrounds the seminal thinking of all those, in Western as well as non-Western traditions, who preceded him in the field and proves very sensitive to the unfathomable suffering that goes along with neurological dysfunctions. Moreover, he manages to establish a real dialogue with his reader not only by seducing him or her with the rhetoric and humor of his fables and anecdotes, but also with a great sense of timing and construction. Each chapter discloses a new dimension of a universe that never becomes a labyrinth of concepts and research hypotheses.
Throughout the book the reader is invited to “play” with the author, who is a master in combining verbal and visual information and who helps the reader take a wonderful journey through the human mind.

**VIRTUALITY AND THE ART OF EXHIBITION: CURATORIAL DESIGN FOR THE MULTIMEDIA MUSEUM**


Reviewed by Dene Grigar, The Creative Media & Digital Culture Program, Washington State University Vancouver. E-mail: <dgrigar@vancouver.wsu.edu>.

There have been several excellent books published about curating multimedia art in the last four years, including Christiane Paul’s *New Media in the White Cube and Beyond* (2008) and Beryl Graham and Sarah Cook’s *Rethinking Curating: Art after New Media* (2010). Joining them now is Vince Dziekan’s *Virtuality and the Art of Exhibition: Curatorial Design for the Multimedia Museum*. While Dziekan understandably covers some of the same topics as the other books (e.g. materiality, space), he covers new ground in that his book focuses on the quality of virtuality and what it means for curatorial design in the context of the museum. Specifically, he suggests that virtual objects “compel [museums] to address the importance of multimedia, defined both as content delivery and technology infrastructure, toward its expository techniques.” Citing the work of Mieke Bal, he claims that that building upon the “multimedia’ aspect of the museum” may have “far-reaching implications about what could happen if the mixed media nature of museums were to become a paradigm of cultural practice” (p. 63).

Anyone who has ever mounted an exhibit of virtual objects that visitors to the space can easily access themselves with their own computer or mobile device knows instinctively that what museums (and I would include galleries, as well) offer is an experience, which Dziekan suggests is one with a narrative that ultimately pulls works together in a way that compels visitors to think more deeply or differently about the work, the ideas put forth and their own views and perspectives. Virtual objects provoke participation from visitors, who become part of the narrative experience that the curator sets in motion with his or her design.

The book is divided into two main sections. In the first, “Expositions,” Dziekan addresses theory in relation to virtuality, the art of exhibition, spatial practice, digital mediation, the multimedia museum and curatorial design. In the second, “Exhibitions,” he provides concrete examples of theory in practice as it pertains to the curatorial philosophy, applied curatorial design and artwork of exhibits he has himself curated (to name a few areas). The fresh reminder that online objects are not necessarily always virtual ones, coupled with well-argued theory and its application to his practice, makes the book insightful and useful. Those coming from a practice involving multimedia sound installations will notice a focus on the visual and seeing. But Dziekan, who is digital media curator of the Leonardo Electronic Almanac, brings his deep experience to bear in this book and presents us with very excellent material to consider. Because each chapter begins with a synopsis and is kept at a brief length, the book seems aimed at the classroom. And, indeed, I am using it this semester in the curating course I am teaching to advanced undergraduates, who seem to have little difficulty grasping the concepts Dziekan presents. But it is ideal for graduate students in digital media programs interested in curatorial design. Using it for teaching makes me hope that future editions of the book will include an Index, for the book does not currently offer one. Also useful for students new to curatorial design for multimedia art would be a glossary of terms.

The book is well written and thought out and so is highly recommended.

**TO LIFE!: ECO ART IN PURSUIT OF A SUSTAINABLE PLANET**


Reviewed by Rob Harle, Australia. E-mail: <harle@robbieharle.com>.

This is a challenging book for three reasons. Firstly, it brings us face-to-face with the current global ecological and environmental issues confronting us. Secondly, it forces us to question just what it is that makes an object or process art. And, thirdly, it attempts to (re)define the role of artistic practice. The notion of the traditional artist using oil paint to produce a static, beautiful two-dimensional painting is challenged throughout the book—artists now use data, plants, earth, microbes—almost anything in their artistic endeavors!

As the back cover says, “This book documents the burgeoning eco-art movement from A to Z, presenting a panorama of artistic responses to environmental concerns, from Ant Farm’s anti-consumer antics in the 1970s to Marina Zurkow’s 2007 animation that anticipates the [alleged] havoc wreaked upon the planet by climate change.” There is certainly something for everyone within the large range of artistic projects discussed throughout the book.

One of the purposes of this book is to provide an educational forum. The book may be used as a core text in studio art practices, contemporary art history or environmental studies. Page ix gives online auxiliaries for instructors and students, for example the Teaching Guides at the publisher’s website <www.ucpress.edu>.

Perhaps the main usefulness of this book is as a definitive guide to the complete field of eco art. One section discusses 20th-century eco-art pioneers, among them some of the better-known artists or artistic groups: Beuys, Hundertwasser, Kaprow and Ant Farm. This is followed by 34 more artists, 21st-century eco-art explorers, including such luminaries as Maya Lin, Eduard Kac, Red Earth and The Beehive Design Collective. The emphasis is mainly on the projects of these 49 artists rather than the artists themselves. *To Life!* is copiously illustrated with black-and-white drawings, diagrams and
photos. There is an addendum in the form of a personal survey, a section on suggestions for further research and a good Index.

It is not necessary to read the book from front to back in the normal way. It may be consulted as a sort of static hypertext document. The guideposts for this approach are mapped out in the Schematics, Indexes and Glossaries at the beginning of the book. This is actually quite ingenious as the cross-referencing takes you to the best available example from the combination of inputs. These pages are followed by a number of explanatory essays that discuss what eco art is and is not. Eco art themes, aesthetics and materials are also discussed. The essays are not especially scientific or complex and are suitable for all levels of readership.

I can envision some wonderful projects for even young schoolchildren to help convey the importance of environmental sustainability and give kids a real sense of the earth. One minor criticism is the verbosity of some of the essays.

The book describes eco art very well and locates it accurately within art history, but lacks a deep theoretical understanding—this is not a criticism per se but more an observation to alert the prospective reader.

To Life! is unashamedly biased in favor of eco art, giving the impression that traditional art, particularly painting and sculpture, is passé. I take the pluralist position that all forms of art are relevant in our multicultural global society, and to dismiss one form or another borders on a kind of fundamentalist arrogance. Comments such as the following ignore or are ignorant of the statistics that show the attendance at art galleries is increasing, both for those of the old masters and especially those of contemporary traditional style artwork such as portraiture. She writes: “The art world is a very prissy little thing over in the corner, while the major cultural forces are being determined by techno science” (p. 211). The major forces affecting culture are the sales agendas of national and multinational corporations using social media such as Reality Television, the Internet and Facebook!

I believe this book will become an essential reference work for all those working as, or thinking of becoming, eco artists. It will prove itself invaluable to teachers at all levels of education from schools to universities.

**GRAPHIC DESIGN PROCESS: FROM PROBLEM TO SOLUTION**


*Reviewed by Roy R. Behrens, Professor of Art and Distinguished Scholar, University of Northern Iowa, U.S.A. E-mail: <roy.behrens@uni.edu>.*

A solution to a design problem (a poster, book or web design) is a noun: It is a tangible, knowable thing. But the process it develops from is closer to a verb. It is made up of constantly flowing events (like William James’s “stream of consciousness”) and is typically so faint, non-linear and elusive that we hardly know it is going on, much less how to grasp and define it.

While its authors admit to the challenge, this book makes a valiant attempt to shed light on the perpetually “moving target” of problem-solving in design (a subject that is closely related, of course, to innovation in any discipline), and it does so in a clever way: by purposely looking aside, not unlike how we make stars appear more clearly at times by looking at them indirectly. It introduces 20 case studies by discussing the widely varying work of design teams and designers throughout the world, by talking with those designers (about their influences, work strategies and beliefs) and by looking for evidence of the process itself, however that might be discernible from thumbnail sketches, experimental studies, preparatory models and revision proofs.

The works in the book are highly diverse, in part because graphic design is no longer as tightly defined as it was. Today, as the authors remind us, it “spans many media, offers exposure to endless subject material and reaches into countless other disciplines for inspiration.” Even more distinctions arise because “there is no single way to conduct a design practice” and “every project demands its own way of working.”

The structure of this book reflects the often-bewildering manner in which problems progress toward solutions, sometimes by loopy, meandering routes. The book begins by focusing on two widely shared initial concerns, “research” and “inspiration” (which can and do take many forms), and concludes with “collaboration.” Propped up by these structural bookends are four other sections that deal with more specific means for exploring potential solutions: “drawing,” “narrative,” “abstraction” and “development.”

What struck the authors (they are teachers as well as designers) is how seemingly little agreement they found among the 23 designers, whose primary zones of concurrence were three: “The busier a designer is, the more ideas mix in the mind for inventive solutions; ideas usually come when a designer least expects them; and exposure to visual art at a young age, through a relative, teacher, or friend opened a path to design.” That said, in moving from one case study to another, I found signs of other agreements about problem-solving. Sometimes these help to distinguish “design” from other categories, such as “science” and “art.” In one section, a quote from design theorist S.A. Gregory claims that science differs from design: Scientific
problem-solving is about “finding out the nature of what exists,” whereas problem-solving in design is about “inventing things of value which do not yet exist. Science is analytic; design is constructive.” In another section, there are inklings of the gap between design and artistic creativity. It is widely assumed among artists that “mundane limitations such as time and budget . . . run counter to the act of creativity,” but when designers solve problems, “it is these very restraints that stimulate inventive solutions.”

Another thread that runs throughout is the belief that solutions can often result from cross-fertilization, metaphorical thinking or sort crossing (implied by the earlier notion about busy designers being more innovative because they mix up this with that), as occurs for example in visual puns. In one case study, a breakthrough came out of a comment about the resemblance between Arabic letters and a plate of tagliatelle pasta. For another designer, the solution to a poster problem began when he saw the relation between EVIL and LIVE. In a third problem, that of designing a gallery where exhibition attendees could post their handwritten responses, the provided COMMENT sheet was punched so that the O became a hole, the same size as the provided pencil that also functioned as a peg for posting the note. Lastly, a poster designer used interwoven paper strips to construct a provocative portrait of a Nigerian writer from the Yoruba tribe (famous for their arts and crafts, weaving among them).

There is much, much more to harvest in this volume than those few aspects mentioned here. It has an engaging and well-written text, but, like most books on graphic design, its exquisite visual examples provide us with more than words alone can tell.

**Missions for Thoughtful Gamers**


Reviewed by John E. Barber, The Creative Media & Digital Culture Program, Washington State University Vancouver. E-mail: jjfbarber@eaze.net.

Digital video games are frequently decried as sources of psychotic behavior or commercial entertainment. Rarely are they championed as perhaps the only solution to the world’s most intractable problems. Following the latter view, we note that videogames are remarkably diverse, genuinely creative, increasingly realistic and frequently subversive, all allowing us to experiment imaginatively with how, and with what results, a gaming attitude might be carried into aspects of daily life. A gaming attitude represents, fundamentally, the desire for enjoyment and playfulness in an alternative world whose rules are less complicated than real life. Rarely is such an attitude considered as the underlying basis for play in all aspects of human life. Andrew Cutting believes it can be and sets out to demonstrate how in his book, *Missions for Thoughtful Gamers*, a no-nonsense sequence of 40 challenges (“missions”), thought experiments and creative exercises, each designed to involve game players and other interested readers in becoming more creatively curious and self-aware.

As Cutting notes, “the overarching mission of this book is to bridge the apparent gulf between everyday enjoyment of gaming, so often explained away under the catch-all label of ‘fun,’ and big philosophical questions such as Who am I? What is it like to be me in this world? What is real? What is true? What makes life good?” (p. 8). Accordingly, the missions presented by Cutting explore how videogames may be utilized to address broader questions of general human concern. It is a challenge, says Cutting, “for gamers to better understand themselves as part of the historical mainstream of human experience and to find how to express this understanding using, so far as possible, non-specialist language that’s comprehensible to gamers and non-gamers alike” (p. 17). Sharpening his point, Cutting says, “It’s not this underlying basis for play, but the particular forms taken by videogames as we hitherto know them that limit how gamers might currently imagine life as playable” (p. 7). The forms Cutting proposes are many, varied, and thought provoking, beginning with a tutorial devoted to demonstrating the three basic concepts of game design: rules, systems and computations. Readers, gamers and “play thinkers” (p. 17) learn to make some rules, think systematically and perform as a human tic-tac-toe machine.

Cutting builds on this tutorial by providing missions through which one can consider videogames as enquiry, as tools for exploring the glamorization of mythologies associated with objects within videogames (weapons, for example), as opportunities for scholarly gaming and as a new form of literacy. Copious notes for further reading resources are provided as well. At the heart of these missions is Cutting’s contention that videogames, by simulating diverse environments with increasing realism, enable players to experiment imaginatively, safely and hypothetically with life-risking scenarios, to experiment with the potential results of carrying a gaming attitude into every aspect of our lives (p. 5). Individual results may vary, but the journey will be less intellectual, spiritual, and moral, especially if life players make or participate in no promises, vows, ceremonies, conferences, and rituals. Such things, says Cutting, help make us more human. Without them, we miss ways to become and understand who we are (p. 8). Cutting concludes that gaming can make learning fun and more successful, in a number of different forms—from a simple quiz to a learning quest structured as a series of missions central to specific training and educational strategies.

*Missions for Thoughtful Gamers* provides (pardon the pun) a game book for those embarked on a quest for understanding and meaning. This book is both inspiration for a new generation of game designers, critics and educators, and a humane introduction for play thinkers as to why videogames matter today and into the future.
MAY 2013


The Fairies Return: Or, New Tales for Old by Peter Davies. Reviewed by John F. Barber.


APRIL 2013


The Substance: One Drop Changes Everything by Martin Witz. Reviewed by Rob Harle.

MARCH 2013


FEBRUARY 2013

America’s Other Audubon by Joy M. Kiser. Reviewed by Roy R. Behrens.

Camer Live! by Cameron Carpenter et al. Reviewed by Richard Kade.


A Natural History of Laughter by Jacques Mitsch. Reviewed by Edith Doove.

Painting with Architecture in Mind, edited by Edward Whittaker and Alex Landrum. Reviewed by Agnieszka Mlicka.

Waves by Fredric Raichlen. Reviewed by John F. Barber.
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UC Santa Barbara, Media Arts and Technology Program
UC Santa Cruz, Digital Arts and New Media Dept.
Universidad Autonoma de Occidente, Engineering Department
Universidad de San Buenaventura, Multimedia Engineering Program
Universidade de Cadas
Universidade do Minho
University of Calabria Evolutionary Systems Group
University of Denver School of Art and History

University of Evora, CHIAA
University of Florida Digital Worlds Institute
University of Illinois eDREAM Institute
University of Leiden
University of Plymouth, U.K.
University of Washington DXARTS
UTS Creativity and Cognition Studios

La Gioconda (Mona Lisa)
($500 to $999)
Roy Ascott
Lars Ole Belfrage
Martha Blassnigg
Anna Campbell Bliss
Leif Brush
James D. Burke
Richard Clar
Una Dora Copley
Trudy Dallenfeld
Michele Emmer
William Fawley
Arna Greenberg
Michael Joosman Grey
Dene Grigar
Rosemary Jackson
Larry Larson
Lynn Hershman Leeson
Guy Leverrier
Isabel Maxwell
Merrill Lynch Foundation
Emanuel Nadel
Nessim & Associates
Sam Okoshken
Steve Osherwitz
Trudy Reagon
David Rosenboom
Jack Sarfatti
Joel Silverman
Christian Simm
Tami Spector
Meredith Troubly

Flying Machine
($250 to $499)
Loren Basch
Ray Bradbury
Bettina Brendel
Shawn Brixy
David Carrier
Eva Craig
Holly Crawford
Eugene Epstein
Lawrence Fane
Herbert Franke
Doreen Gatble
Pamela Grant-Ryan
Oliver Grau
Linda Dallymple Henderson
Robert Hill
Curtis Karnow
Melinda Klayman
Kathleen Lazza
Thomas Mercer
Gianluca Mura
Frieder Nake
Barbara Nessim
Jack Ox
Ed Payne and Liss Fain
Nancy Perloff
Frank Popper
Harry Rand
Beverly Reiser

Mark Resch
Eric Roll
Edward Shanken
Leonard Shlain
Todd Siler
Jesse Tischler
Joan Trunkbrod
Kevlin Tsao
Jonathan Willard
Barbara Lee Williams
Richard A. Wilson
Stephen Wilson
Gary Zellerbach

Angel
($249 and under)
Anonymous, Aaron Alper, Charles Ames,

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