A CULTURE OF LIGHT: CINEMA AND TECHNOLOGY IN 1920S GERMANY


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Frances Guerin begins A Culture of Light: Cinema and Technology in 1920s Germany by reminding us that there is a long tradition within representation that is central to the understanding of the coherence of light and lighting. Generally, as she states, approaches are grouped under two umbrellas. On the one hand, from Plato through the Middle Ages and into the 19th century, light was put in the service of mystical and mythical narratives that searched for metaphysical truth. In these representations, light was characteristically the symbol of truth and knowledge. In 19th-century representation, in particular, light was juxtaposed with darkness to signify the possibility of a truth defined by social integration, freedom from the burdens of everyday life and the attainment of spiritual wisdom. Conversely, from Euclid through Galileo to Einstein and the quantum physicists, the study of light has functioned within the realm of science as an integral component of efforts to empirically and quantitatively gain knowledge of the physical world. Relationships between light and darkness, in this realm, exist within the physical world rather than referencing realms beyond our grasp. The mythical and scientific trajectories have evoked societal tensions, as they did in German art and cinema of the 1920s.

While this tension per se is not Guerin’s specific focus as she surveys the culture of light, it becomes clear that this culture developed in a way that played with the tension. More specifically, she argues that German silent cinema manipulates light and lighting to represent and interact with transformations of space, conceptions of time and history, modes of representation and the flourishing entertainment industry in 1920s Germany. While acknowledging that German cinema was not as well developed as that of France or the United States, the book conveys that it shared their urbanity. We also find that German narrative film of the 1920s enthusiastically embraced the products of late industrialization when they deployed light and lighting in all their variant possibilities. Indeed, the book’s balancing of light and lighting highlights the combination as a single aspect of the mise-en-scène. This point is so well argued that the text retains the magic of cinematic effect and grasps the elusive relationship between films and the people who produce them.

Throughout the volume, the book’s organization works in its favor. Chapter One sets the stage. Here the author provides a detailed account of historical and artistic connections between film’s articulation of light and lighting and those in other media. This foundational section places 1920s German film within the development of a Modernist aesthetic in Europe. In Chapter 2, Guerin introduces a number of films from the 1910s, which provides some continuity between pre– and post–World War I projects. Against this background, she is also able to speak of technological modernity in Germany and to demonstrate the roots of themes later explored in depth by 1920s filmmakers. Her argument here is that films such as Und das Licht Erlosch foreground manipulations in light and lighting within the framed composition, narrative structure and fulcrum around which thematic issues turn.
Chapters 3–6 are the meat of the study. Analyzing the use of light in 11 films, the author moves, in each case, from a discussion of the filmic use of light and lighting for compositional purposes through the unfolding of the story to the engagement with transformations in social and cultural life that resulted from technological modernity in Germany. I was fascinated by Guerin’s ability to make me envision how the culture evolved and how deftly she paired the films and the events that marked the period. Algol (1920) and Schatten (1925) use light and lighting in self-conscious ways. Referencing these projects, she opens a discussion of the kinds of transformations that are brought to visual representation with the invention of electrical lighting and other industrial developments. Some films (e.g. Faust, Der Golem Saggfried) provide a gateway in the discussions of the cinema’s involvement in and reconfiguration of historical time. Others (e.g. Die Strafe, Jusseis der Strafe, Am Rande der Welt) examine how electrical lighting and the cinema redefined public and private space. The book also looks at the social impact of technologically produced light when it is integrated into the formation of a modern leisure industry. What was particularly enriching was the way the book weaved the German tradition into the story lines. Historical contrasts of light and darkness are evident in the culture’s literature and philosophy (e.g. Goethe). Looking at how these themes enter the cinematic narrative and are updated by the cinematic approach is fascinating. Equally wonderful is the way in which the “German mind” is evident in the new landscape.

Another plus is the author’s ability to reach toward other fields of scholarship and to reach beyond the boundaries of German film history. These sections strengthen the research immensely, allowing Guerin to foreground technical experiments that demonstrate how 1920s German cinema reflected the nation’s identity even as it looked beyond national boundaries for inspiration. Perhaps the high point of the book is the author’s ability to convey how technological modernism—the conflict between the utopian aspiration for mythical cohesion and the recognition of the material rupture brought about by industrialization—becomes transposed in the narrative films. This provided a context for German silent film to engage with its historical world. Also impressive were the sections that looked at the influence of specific individuals (e.g. Moholy-Nagy).

Frances Guerin’s A Culture of Light: Cinema and Technology in 1920s Germany reminds us of the historical tension among views of light, even while reflecting both the opportunities and anxieties surrounding modernity and democracy. Her decision to separate German film from political history serves her well. It allows this study to feature the international flavor of the German works and to underline their particularity as well. Although a few more visuals would have allowed the reader to savor the information more, the book is a fine contribution as it stands. Turning to films such as Schatten (1925), Varieté (1925), Metropolis (1926), and Der Golem (1920), Guerin’s history of early German film between the two world wars allows us to perceive the films she presents on their own terms. Rather than portraying the mise-en-scène as a foundation for Nazism, a more typical approach, she encourages us to ask how the original use of light elevates the medium, narrative and art form. In addition, and perhaps ironically, although the author puts philosophy and science aside as she delves into 1920s German film, the tensions between the mythical and the empirical remain resonant in the representations of a new and industrialized way of life. Similarly, the multiplicity of meanings we give to the term “light” remain evident, as do distinctions that are critical to cinema. Throughout, the reader can appreciate that cinema is a product of light that manipulates lighting for effect. In sum, this book encourages us to appreciate the innovative and aesthetic aspects of 1920s German film. It is a fine addition to scholarship in this area.

The book is fertile with philosophical discussion. In its preface, Poersksen alerts us that any attempt to define or approach the constructivist discourse as bearing a coherence or consonance of thought defeats the basis of constructivist understanding. As the text proceeds, we are introduced to a near “multiverse” of competing and contending interpretations of the constructivist position from different disciplines employing varied methodologies. The text very clearly posits the constructivist discourse as itself a construction, open to contention. However, instead of the cul-de-sac a constructivist position might lead to in terms of the uncertainty of understanding given the relativism arising from the implication of the observer, the text attempts to discuss engagements, from both the cognitive and neurobiological and the social and anthropological constructivist positions. While the applications that are discussed render uncertain the extent of the constructivist position, we are introduced to a wide range of philo-
sophistical concerns that inject necessary confrontation with issues of responsibility, ethics and morality, which is of value across disciplines, including the arts.

Most interviewees stress the context of practice rather than holding a rigidly ontological or fully socially determined approach. If we are to abide with the understanding that all observation is observer-implicated, then the twin questions of practice and form arise as central. In the text we encounter varied possibilities for practice: Ernst von Glasersfeld’s assessment of “viability” that he shares in relation to his research into the dissemination of education; Francisco J. Varela’s “co-construction,” through which the separation between “knower” and “known,” “internal” and “external” world can be overcome; and Siegfried J. Schmidt’s “integrative constructivism,” which unites cognitive autonomy and social fashioning with relation to the subject. These are some of the provocative instances from the text. Estimating and emphasizing the positionality of the observer, these provocations facilitate investment of that understanding in practice involving variegated subjects and conditions. The value of constructivist understanding and its relation to practice is particularly significant within post-colonial, Third World discourses that grapple with complexity constituted subjectivities on the one hand, and their articulation within “national” and “development” discourses, on the other. If Third World practitioners are to engage with constructivist discourse more closely, instead of having rather cursory and scattered encounters, practice would benefit from a less romanticized and more critical understanding that resists reductionism, allowing for a more democratic, grassroots-based interface wherein subjectivities are not overestimated or undermined but are confronted on dialogical terms—an imperative that one finds clearly lacking within much public discourse.

At its most advanced, the constructivist discourse coincides with mysticism and spiritualism. Its stress on the construction of observation and the observer proximates spiritual indications about processes and the experience of transcendence. This strain surfaces through the text, with Varela’s discussion of Buddhist practice being the most explicit and articulate exposition. However, not all interviewees agree, and their contentions problematize the mystical and spiritual positions. In this, von Glasersfeld’s assertion that the mystics’ separation of the mystical and rational knowledge renders the two incompatible, is useful in advancing the scope of intellectual engagement with spiritual discourses, both of which are distinguished, nearly oppositionally, with respect to their methods of inquiry and assumptions. Von Glasersfeld is not alone in identifying spiritual practice as founded upon certain assumptions that evade rational argument or proof. Formulating this concern will benefit more critical engagement with spiritual particularities. Biologist Humberto R. Maturana furthers the dispute with spiritualism when he points at the impossibility of insights into transcendental encounters, for the reference to the encounter is itself not independent from the observer. This understanding presumes on the inadequacy of language and discourse in the engagement with spiritualism—an insight that is needed both on behalf of intellectuals as well as spiritual practitioners to enunciate meaningful dialogue. The Certainty of Uncertainty introduces us to a breadth of debate and unpacks for us the paradoxes that might result from acknowledging the observer. At the same time, it traces assertions, conscious of the observer’s implication that has materialized into concrete practice, which may not be fully resolvable, but facilitates complex conditions with which variegated subjects might be confronted. To this extent, the text is both elucidative and stimulating. In this, its interview format is accessible, being conversational and lucidly argumentative.

**IT Project Proposals: Writing to Win**


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I have to admit to ulterior motives for wanting to review Paul Coombs’s *IT Project Proposals: Writing to Win*. I am in the midst of co-writing several grants with a computer engineering focus, and, frankly, as an arts and humanities scholar I wanted to know what project proposals for information technology look like, even though a member of the grant-writing team specializes in that area.

While the book leans heavily on business project proposals rather than academic grant proposals, I learned a great deal from it. Aimed at novices, the language is clear and precise, and the book takes the reader from the beginning of the proposal writing process to the end. Numerous diagrams and tables help the reader visualize the process. Two “Case Studies” found in the Appendix test readers on what they learned about proposal writing and a “Proposal Evaluation Questionnaire” allows readers to rate their own proposals later. Strangely missing from an otherwise flawless presentation, however, is an example of a proposal written from start to finish. An artifact like that would be priceless for novices to see.

What I found most extraordinary about the book is its emphasis on writing. From Chapter 1 (“Does Good Writing Matter?”) to Chapter 2 (“The Art of Persuasion,” “Knowing the Reader”) to Chapter 5 (“Tightening up the Text”) to Chapters 6 and 7 (“Obeying the Grammar Rules” and “Obeying the Punctuation Rules,” respectively), the book’s message fixes as much on good writing and communicating as it does on strategy (Chapter 2), content (Chapter 3), and structure (Chapter 4). The literature and rhetoric scholar in me was deeply satisfied in knowing that what I know has value outside of my classroom. How many computer majors have my colleagues and I tried to convince that core requirements in English do not constitute a waste of their time? Next time, I will hand them a copy of Coombs’s book instead.

I highly recommend this book for those teaching technical communication and computer engineering, particularly at the undergraduate level. But truly anyone who needs advice on writing IT-oriented grants could benefit from this handy guide.

**Earth-Mapping: Artists Reshaping Landscape**


**Reviewed by Rob Harle (Australia).**

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*Earth-Mapping* by Edward S. Casey is a major work investigating both critically
and philosophically the way artists have incorporated earth into their creations. Earth is to be understood in the broadest sense possible: literally, as in rocks and clay used as the medium of the work in natural outdoor settings and earthly materials retrieved from quarries, deserts and so on and used solely or as mixed media in studio-created pieces; metaphorically, as representations of earth features in landscape and abstract-style paintings and sculptures. The central theme of the book concerns mapping techniques used by artists to explore our relationship to earth, place and space. As with the term “earth,” “mapping” is used by Casey in ways that transcend our conventional understanding of maps as images or devices to help us get from point A to point B.

Years ago I read a book suggesting that maps could function as images to evoke dreams. We gaze at the colored marks on the flat paper surface and our imagination takes over, wondering what such and such town is like, what adventures we will have if we go this way rather than that, and we develop 3D images of features that are described in deceptively simple words. The earth-mapped artworks in this book have a similar effect, though at much deeper levels.

This book presents a detailed and scholarly investigation and is arguably one of the most definitive works published on this subject. It is well illustrated with both color plates and black-and-white photographs. There is a prologue and epilogue, a good index and an extensively detailed notation of each chapter. The book is divided into two parts: Part 1: Earth Works That Map and Part 2: Mapping the Landscape in Paintings. The first part concentrates on the “earth art” of four artists: Robert Smithson, Margot McLean, Sandy Gellis and Michelle Stuart. Smithson, perhaps best known for his earth-artwork *Spiral Jetty*, was the modern pioneer of this type of work, including its conceptual basis. The selection of artists is small enough to allow detailed analysis and broad enough to show the different approaches of artists engaged in this often site-specific approach to mapping the earth. Other artists relevant to the investigation are mentioned briefly and special attention is paid to earth-mapping antecedents, which highlights Casey’s extensive knowledge of art history.

Part 2 concentrates again on a small selection of artists: Eve Ingalls, Jasper Johns, Richard Diebenkorn, Willem de Kooning and Dan Rice. The appearance of the earth-landscape-mapped paintings of these artists is very well known, so a description here is not necessary. What Casey has achieved, though, is a rich, detailed—perhaps slightly fresh—take regarding these works, particularly from a philosophical perspective. “My primary concern in this volume is with certain contemporary artists who have displayed a special sensitivity to novel forms of marriage between mapping and landscape painting (and other assembled or constructed works)” (p. xix).

Casey’s project has been to “rethink art as a form of mapping” (p. xi). This approach has resulted in numerous published works, including *Representing Place: Landscape Painting and Maps* and *The Fate of Place: A Philosophical History. Earth-Mapping: Artists Reshaping Landscape* is the fourth volume in his series of studies on the importance of place in people’s lives. Casey is also distinguished professor in the philosophy department at the State University of New York.

Casey discusses two types, or better, modalities of earth works: “earth works created for the first time and painting taken to a new limit” (p. xxiii). While I recognize the limitations of space available in one manageable volume, I do think the book would have benefited from a brief discussion or at least acknowledgement of traditional indigenous earth-mapped artworks. There is no shortage of information regarding this practice, for example with the people of Micronesia’s practice of *Mapping the World in the Mind* (D. Turnbull, Deakin Univ. Press, 1991) to navigate vast ocean distances with their functional art objects. More importantly, Australian Aboriginal art, both painting and earth sculpture works, is arguably the most highly developed of this type of art in the world. In this light, Smithson is about 10,000–20,000 years behind the eight ball, both from the aspect of physical-earth-creations and their conceptual underpinnings. Putting this lacuna aside, which perhaps could form the subject of a further volume, this is a well-researched, well-written and important book.

**PROSTRAVSTVENNAYA MUSICA**

*(SPATIAL MUSIC)*


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**Spatial Music: History, Theory, Practice** is published in Russian by the Prometheus Research Institute of Experimental Aesthetics in Kazan (Tatarstan). This institute is a joint department of the Kazan State Technological University (KGTU) and Tatarstan Republic Academy of Sciences and promotes the interaction between scientists and artists in all fields. In their own words, their activities can be brought together under three headings: scientific prognostication in the fields of aesthetics and psychology; development of the necessary technical equipment; art experiments on the basis of this technique [http://prometheus.kai.ru/start_e.htm].

The Institute thus continues a strong tradition toward the creation of “gesamtkunstwerke” in Russian art, starting with Scriabin, Tatlin and Kandinsky and the line of research into new techniques in music of which L. Theremin, the inventor of the Theremin, probably is the best known exponent. The Prometheus institute also prides itself on a close collaboration with Leonardo.

The first chapter of the book sketches a brief history of spatial music, or rather of all kinds of musical
practices that take spatial distribution of the sound source as an integral part of their architecture. As such, the complex polyphonic music of the “Fleminghi,” Flemish composers who wrote music for four and more choirs for San Marco in Venice, is an early predecessor, proving that spatial aspects have always interested musicians. This interest waned with the gradual shift from polyphony to the homophonic orchestra and the concert hall practice, but it emerged again in the 20th century in the works of, among many others, Mahler, Satie, Varèse and Ives. Later, with the advent of electronic music and electronic equipment, new experiments became possible. Varèse’s music for the Phillips pavilion at the EXPO in Brussels in 1958 remains a landmark.

The second chapter analyzes the physical and psychological aspects of spatial music, setting the stage for the lengthy exposition of the aesthetic and technical principles that underlie the spatial music installation built by the Prometheus Institute. The third and last chapter describes in great detail the software and hardware of this light-music system.

The book contains a very short summary in English.

HYLE INTERNATIONAL JOURNAL FOR PHILOSOPHY OF CHEMISTRY. SPECIAL ISSUE: AESTHETICS AND VISUALIZATION IN CHEMISTRY
(including Virtual Art Exhibition: Chemistry in Art)

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Many painters who buy their tubed paints off the shelf today have little exposure to how artists prior to the 19th century worked with the finely ground minerals that were extracted from the earth and used for pigment. Nor do they recognize how closely art practice was intertwined with alchemy. To understand how to bind and mix paints, the artist needed to develop some measure of sensitivity to transmutability, and, as such, knowledge of the chemistry of alchemy aided the artistic practice. We see elements of the exchange between art and alchemy frequently in the works themselves, in which an artist might depict the mortar and pestle in his studio, or perhaps a distillation apparatus, or even the alchemist himself at work in his laboratory. Equally fascinating is our knowledge that the transition to the view that painting is an activity of the mind, which happened around the 14th and 15th centuries, occurred at a time when chemistry (then known as alchemy) found itself in a position similar to painting. Alchemists, too, were fighting the view that they were merely involved in a craft. When chemistry was recognized as a “full” science, in the 18th century, both practical and theoretical approaches to art had already, in effect, lost sight of the degree to which some knowledge of chemistry aided artists. Although chemical knowledge and discoveries continued to remain important in the manufacture and use of materials, collaborative efforts remained in the background. Views of aesthetics and the path of the academic tradition downplayed areas of overlap.

This history came to mind repeatedly while reading the special issue on Aesthetics and Visualization in Chemistry (edited by Tami I. Spector and Joachim Schummer), a far-reaching selection that conveys the many ways in which chemistry intersects with art practice, philosophy, history and scientific visualization. Although none of the essays explicitly look at how historical art practice intersects with the practices that were a precursor to the chemistry within alchemical practice, several touch on the symbolic, aesthetic and philosophical legacy shared by the arts and alchemy. Many, too, convey where the creative concerns of the artist and the chemist converge.

Each of the two volumes of this publication has a unique flavor. The essays in the first volume bring to mind the tension between chemistry’s aesthetic qualities and experience in the studio/lab. The contributors also bring to light some positive definitional tensions among art, chemistry and aesthetics. The opening essay by Roald Hoffman sets the stage. He speaks of chemistry as an art, craft, business and science of substances and communicates the importance of drawing to experimental design. His framing of aesthetics in terms of the labor of human minds and hearts is convincing, as is his placement of the messier aspects of chemistry within the realm we associate with the artist’s studio. “Experience” is also a factor incorporated into Pierre Laszlo’s rolegomenon to a chemical aesthetics, in which he presents 11 separate theses that were contradictory in form (e.g., two of his theses are that the natural is more beautiful and, conversely, the artificial is more beautiful). Laszlo conveys the mutability of chemistry and how difficult it is to wedge it into any materialist worldview. Laszlo also nicely captures that chemists, like artists, learn from experiments. Particularly effective is the way he brings to the fore the importance of smells and colors in chemistry and balances this with the need for visualization.

In terms of traditional ideas, Joachim Schummer’s expanded view on practices and epistemological questions is quite useful. This author incorporates a philosophical history that speaks to circumstances that have influenced how we see art, aesthetics and chemistry. As he correctly explains, in idealistic aesthetics, the dominant doctrine in the Western tradition since Plato, there is no place for the senses of taste, smell, touch and color, as there is no place for the sensations of material qualities other than representing the opposite of beauty. His systematic investigation of the aesthetics of chemical products distinguishes between three types of chemical products (materials, molecules and molecular models) and then aligns them with aesthetic theories. By combining the chemical overview with aesthetics’ history, Schummer demonstrates that many aesthetic theories are poorly developed. He also makes a convincing case for chemistry’s power to shift our perspective: “Rather than the putative beauty of chemical products, further investigations should explore where and how aesthetic experience becomes part or even a driving force of the research process” (p. 99).

The second volume focuses more on historical episodes. Barbara Obrist explores major trends in visualization during the medieval period in her article “Visualization in Medieval Alchemy.” Analyzing theories of natural and artificial transformations of substances in relation to their philosophical and theological bases, she traces three different pictorial types from the 13th to the 15th century, examines lists and tables, geometrical figures, depictions of furnaces and apparatus, and...
The exhibition combines nicely with the scientific theoretical ideas. Historical and contemporary topics offer a balance. Similarly, the way in which modes of visualization are woven through the writings is thought-provoking. Through-out the issue it is clear that alchemy did provide a theoretical framework that enabled experimenters to make some sense of the changes that the agencies of fire, water, air, vapors and time wrought on materials, just as chemistry continues to provide a rich source of inspiration for art today. This issue also offers a taste of the aesthetic cognition of the chemist and exposes fascinating intersections between art and chemistry today. Finally, it was fun to read and review this volume. Aside from the stimulating exhibition, which elevated the project significantly, several of the writers added notations that reminded me of why I have always seen chemistry as the most magical of all the sciences. Chemistry became “luminous” in my favorite essay of the volume, Robert Root-Bernstein’s “Sensual Chemistry.” Root-Bernstein succeeded in conveying that the experience of chemistry as an aesthetic combines the hands-on and cognitive experience. His arguments are held together through his references to Hubert N. Alyea, who taught his introductory chemistry at Princeton. According to Root-Bernstein, this professor made chemistry come alive to him as well as other students. Indeed, he was so popular at Princeton that hundreds of alumni packed the chemistry auditorium every year to watch Alyea convert Yale colors (blue and white) into Princeton’s colors (orange and black). After reading this, I found myself telling everyone the story and, as a result, the issue successfully stimulated a great deal of conversation about chemistry with my colleagues—no doubt a positive recommendation in quarters today. Interpretations that focus on layers of meaning, and the narratives that support each layer, fit easily into the art-historical tradition in which the mind is (and was) elevated. Indeed, as his article reminded me, the symbolic/metaphysical framework that came to define theorizing about art has obscured the degree to which scientific knowledge, technological innovation and the ability to work materials effectively are equal partners in art practices of earlier eras.

In summary, Aesthetics and Visualization in Chemistry is a solid and comprehensive contribution to the literature.

The highlight of the volume is the virtual exhibition. Although my computer was not compatible with the enclosed CD-ROM, I was delighted to find that the juried selection “Chemistry in Art” grew out of a call for papers and offers an in-depth contrast in ways we might think of art and chemistry combinations. Included are projects and installations by Blair G. Bradshaw, David Clark, Erich Füllgrabe, Brigitte Hitzschler, Lane E. Last, Paula L. Levine, Christopher Puzio, Cheryl Safren and Tamar Schori. Of particular note is “Chemical Vision: The Science Museum of Metachemistry” by David Clark (from the Nova Scotia College of Art and Design, Canada), who received a special award for his contribution. As he explains on the web site:

Chemical Vision is a large-scale, walk-through interactive installation that has resonances of a science museum. Architecturally, it is derived from the shape of the periodic table, or more specifically the Meyer table that has become synonymous with periodic law—an image which has become a meta-sign of the discipline of chemistry itself.

This curatorial project, on the other hand, aimed to highlight chemistry-related artworks by renowned artists Kim Abeles, Cai Guo Qiang, Susan Robb, Fred Tomaselli and Shirley Tse.

The one essay I found disappointing was the Elkins piece “Four Ways of Measuring the Distance Between Alchemy and Contemporary Art.” His aim is to explain both why alchemy is central to contemporary visual art and why it is marginal as well. Although he claims to incorporate the history of chemistry, I found little within the article that looked at the field’s experimental history, particularly as it related to alchemy. It seemed, instead, that Elkins’ thoughts are primarily built around alchemical images and ideas. He concludes:

A strategy of current painting, as well as the older alchemists, is to increase the feeling of meaning, the sense that meaning is present without the forced quality of naked written meanings. A feeling of meaning is an intuition of meaning, the result of mingling “word” and “image,” emblem and picture. The result is an incomplete fusion: in viewer’s terms, it asks for incomplete reading and incomplete viewing. Recent painting has achieved objects that are neither word nor image, and they stand directly on the heritage of alchemy. That, I think is the deepest connection between the history of alchemy and contemporary art, and one that is still waiting to be explored (p. 115).

I would have preferred more exploration of this history. Instead of concretely grappling with the alchemical experience and the gained knowledge that allowed the experimental side of the work to build basic understandings of how transformation takes place, too much of the article centered on the incorrect responses by readers to his book, What Painting Is (an earlier attempt by Elkins to equate the process of painting with alchemy). I can recall how, when reading the book, I thought his descriptions of the process of painting established some acquaintance with studio experience and yet for some inexplicable reason the “alchemical” focus was predominantly theoretical, symbolic and metaphysical. I found it quite Jungian and so was not surprised to discover (in his Hyle essay) that many thought he offered a Jungian view in the book. His efforts in this essay to clarify why this conclusion is incorrect did not convince me. Overall, his dual-sided argument fails to acknowledge the degree to which gaining knowledge through experimental work with materials and techniques was operative under the alchemical umbrella and is still operative in some
of the shop and its population (including some customers). For example, none of the characters in the so-called ‘cast’ (as if this shop would be a drama acted out by the employees) appears to have a last name, but their biographies and motivations to work at Blumenkraft are extensively described. Before long, I shall expect these people to be called “knowledge workers in a globally competitive floral workspace” and “serving the cognitive-aesthetic idiosyncratic need for a reversal from virtuality to sensuality of the radically nomadic Viennese beau monde.” Basically, that is exactly what this book does: supporting the shop’s marketing strategy of avoiding presumed petty bourgeois tastes and thereby perversely planting the seeds for a new snobbish (flower) style that will soon be absorbed by the same upper-middle classes. Similar strategies have been followed all over the world, such as by Daniel Ost, to name just one example from my own region, and have been equally successful. I seriously doubt that the love story between Gregor and Christine, with its reminiscences of La Traviata and Der Rosenkavalier, will change this book from a marketing prop into a scholarly book on flower shop design.

**THE FLOWER SHOP**


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This is a little book about a Viennese flower shop called “Blumenkraft” or “the power of flowers,” not to be understood as “flower power” or any such historically laden concept. For an English-speaking readership, the name of course also carries a reference to “craft.” Designed by an Austrian architect called “Gregor,” whose last name is not unveiled, and run by an Austrian lady who goes by the name of Christine, the shop is situated in a posh area of the city and offers floral extravaganzas to a fashionable customer base.

The most striking feature of the book is the fact that it is printed in duotone, a technique involving the printing of practically the same image once in black and once in a supporting color—in this case browns and beiges. The effect contradicts every aesthetic normally associated with flowers and greens, certainly because the book is not printed on glossy but on a matte maco paper. Obviously the author wants to stress the uniqueness and eccentricity of the shop by choosing a design strategy that diverges from anything a commercial publisher of flower books would choose. The same rhetoric trick is used in the text, which is not much more than a eulogy of the presumed radicalism and originality not the purpose of the book. I am not actually sure what the purpose of the book is, but it comes with a warning: “Book critics, beware! I ruminate and wander freely through a vast carnival of topics, seizing every opportunity to digress and explore mental tributaries” (p. xxix).

The title of the book is almost a cliché, too obviously a book with which to ensure the bookshop browsers as they stroll through hundreds of titles and cover/spine designs vying for their attention. The book has almost nothing to do with sex at all, except for perhaps Annie Sprinkle’s favorite 20 words, which she insisted be displayed in the form of “an approximation to a vulva or labia shape” (p. 49). Pickover, who by his own admission is totally obsessed with words, asked various famous people to list their 20 favorite words, from which he calculates an obscurity index. There is a whole chapter devoted to such word games and Terraqueous Chrysoprases, thank you, Bertrand Russell!

It is worth listing the various chapter titles as they will forewarn the less adventurous reader of what they are getting into. Chapter 1: On Fugu Sushi and Transdimensional Reality Worms; Chapter 2: The Quantum Mechanics of Hopi Indians; Chapter 3: Bertrand Russell’s Twenty Favorite Words; Chapter 4: DMT, Moses, and the Quest for Transcendence; Chapter 5: Brain Syndromes Open Portals to Parallel Universes; Chapter 6: From Holiday Inn to the Head of Christ; Chapter 7: The Business of Book Publishing.

**SEX, DRUGS, EINSTEIN, & ELVES: SUSHI, PSYCHEDELICS, PARALLEL UNIVERSES, AND THE QUEST FOR TRANSCENDENCE**


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

Reading this book is like taking a ride in a very fast car down a mountainous highway with thousands of hairpin bends, at each of which is a sign that flashes information. Just as you get towards the bottom of the mountain— whoops, spin-out, back upwards toward the summit. Fasten your seat belts, kiddies!

Sushi! God! Lord of the Rings! William S. Burroughs! Marcel Proust! DMT! LSD! Brain Surgery! Stellar Nucleosynthesis! plus hundreds of other dissimilar titles in this book are like signposts to snippets of information that even the most well-read, educated reader will never have heard of. You will not find an in-depth discussion in these pages on anything, but that is
Unplugged, Up Close, and Personal; Chapter 8: Neoreality and the Quest for Transcendence; Chapter 9: Oh God, Einstein’s Brain and Eyes Are Missing; and Chapter 10: Burning Man and the Conquest of Reality. There is also a preface, introduction, epilogue, notes, further reading, index and an “About the Author.” Phew!

The About the Author section is hardly necessary, as by the time we get to this we know pretty much all about Clifford A. Pickover. My one criticism of this book is the attempt, perhaps unconsciously, to build a monument to Pickover by Pickover. It becomes rather tedious and somewhat onerous digesting page after page of “I have done this,” “I have published ‘x’ number of books,” “I topped my class,” “I got my Ph.D. fast from the best university (Yale),” “I’ve created ‘x’ number of patents” and so on and on. An example: “I even use a related form of divination to create patents” (p. 69). Adopting Pickover’s use of numbers to analyze all sorts of things, I counted the number of times he uses the first person pronoun (or its associates) on one page. The result was a staggering 8% of the page’s total word count.

Even though the chapter concerning book publishing deals largely with Pickover’s personal experiences, it is most revealing and contains important information for all authors, published or unpublished. Two examples of the gems to be found in this chapter, concerning original manuscripts rejected by publishers: “Twenty publishers felt that Richard Bach’s Jonathan Livingston Seagull was for the birds. It went on to sell millions of copies around the world” and “Zen and the Art of Motorcycle Maintenance was rejected by more than one hundred publishers” (p. 170).

Putting the abovementioned criticism aside, and apart from some rather broad, poorly thought-out generalizations regarding the future of human beings (pp. 244–245, for example), this book is full of inspirational information, challenges to broaden our understanding of obscure though important areas of knowledge and fascinating little-known facts. Throughout the book Pickover hints at areas of science in which concentrated research would most likely yield valuable knowledge. One such area concerns the visions and transcendence experienced by people from different cultures using the drug DMT. The book is highly entertaining, easy to read and will be a good reference book for more things than you, I or Horatio ever dreamed of.

ANGELS AND DEMONS IN ART

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Angels and Demons in Art is the English edition by the J. Paul Getty Museum in Los Angeles of the Italian publication Angeli e demoni (Mondadori Electa S.p.A., Milan, 2003), by Rosa Giorgi, edited by Stefano Zuffi and translated by Rosanna M. Giammanco Frongia. It is the seventh volume in the Getty’s “A Guide to Imagery,” series. The book is a handy reference, measuring 7.9 × 5.5 inches and containing over 350 pages of illustrations with small, short textual supplements. As one would expect from this publisher, the reproductions are of outstanding quality. This is no casual excursion into an exotic spiritual realm but a serious pictorial art-history essay.

Through text and annotations to the images this book explores the topics of angels and demons by looking not at simple binary oppositions but at a broader thematic context. It should not be confused with many of the existing illustrated books on angels and/or demons that are often serendipitous collections either driven by a dichotomy between good/evil, heaven/earth, angel/demon or that simply focus on the variety of angelic depictions throughout history as an iconographic exploration. Giorgi’s approach, as an art historian specializing in iconography, is as one would expect: very different, innovative and illuminating. Her treatment of the subject is an exploration of the vast spectrum of human imaginary and metaphorical aspirations—a sophisticated and subtle journey, including the unconscious, the imaginary, the religious and the fantastic, as well as a philosophical, theological and art-historical discourse in a compilation that might be described as a pictorial, iconographic anthology of the human imaginary.

The historical narrative structure follows an imaginary spiritual path that leads “from earth to Heaven,” as evoked in the introduction. It ventures from the myths of creation, the earthly paradise, the underworld, hell and fire, to transitory realms such as Jacob’s ladder and resurrection into heavenly realms to the angelic hierarchies, ending with the archangels. This journey also includes particular topics, such as nightmares, psychomachy (“struggle of the soul”), ghosts, dragons, demonic animals, the ship of fools, homo bulla (“Man is a bubble”), rebel angels, the antichrist, torments, macabre dances, the Tetramorph, Ars moriendi (“the art of dying”), prayer and ecstasy, the Ladder of Virtues—to mention only a few. Mixing angels and demons (in their broadest sense) affects the range of the collection dramatically. Hieronymus Bosch (with the highest score of 11 index references for artists) and William Blake have their place in this narrative as well as Francisco Goya, with his depiction of witches and nightmares, Eugenio Lucas y Velasquez and Albrecht Dürer (following Bosch as second, with eight index references). These stalwarts of the history of the darker realms of the imagination appear amongst the more traditional, classical masters of religious iconography, from the first centuries B.C.E. to a strong presence of medieval religious art to 20th-century paintings by artists such as Gustav Klimt, Carlo Carra, Pablo Picasso and Marc Chagall. This novel listing is interesting, but it is not the book’s primary focus, nor is it an anthology intended to cover a specific period, geographical region or religious ideology. Rather, it is a collection of European iconography from outstanding artworks throughout history,
SHADOWS, SPECTERS, SHARDS: MAKING HISTORY IN AVANT-GARDE FILM

In this fascinating book, filmmaker, teacher and theoretician Jeffrey Skoller does not aim at analyzing how historical facts, events, characters or situations are cinematographically represented, but rather at disclosing the many ways in which history is thought of—and therefore made—in contemporary avant-garde film. Each of these words—thinking, making, avant-garde and film—has here its importance, and helps the author to distinguish the corpus and the issues he is working on from the cinematic strategies of narrative Hollywood movies, in which history is reenacted in a transparent way for an audience that is no longer aware of the constructedness of what it is seeing, or of the very problematic nature of its actual looking at a past made present through fictional narratives. Contrary to what happens in dominant industry forms of cinema, avant-garde cinema takes into account the epistemological shifts in our thinking about history: our mistrust of narrative structures, our suspicion of the very idea of representation, our critique of the illusion of understanding, our classic belief in objectivity, our ancient notions of a clear-cut and unproblematic distinction of present and past, and our emphasis on empirical evidence. Skoller’s basic ambition is to present and analyze a small number of films (half of them strictly avant-garde; half of them at the margins of progressive documentary cinema, such as works by Godard and Lanzmann) and to examine their exploration of thinking about history with purely cinematographic means.

For Skoller, avant-garde film is defined both negatively and positively. On one hand, there is the rejection of mainstream storytelling (and of fiction as a form of indexical illusion, i.e. deceit); on the other hand, there is the foregrounding of the proper materiality of the medium (and this medium here, except in the coda of the book, is not video or digital movies, but the by now anachronistic celluloid strip projected collectively in theaters).

The book’s theoretical framework is double. Walter Benjamin’s “allegory” offers the first key notion of all analyses: The allegorical view of history refuses the idea that the past exists independently from the present and enhances instead the possibility, i.e. the political necessity, of a constant reinterpretation of the past as it relates to the present. Gilles Deleuze’s “time-image” is the second major concept used throughout the book: Contrary to the “movement-image,” in which a given timeframe or sequence is inscribed within the moving image, a “time-image” produces a virtual time in the mind of the spectator. It is of course the combination of both concepts, allegory and time-image, that appears as revolutionary in the avant-garde’s (re)making of history outside the existing paths of traditional storytelling. For the avant-garde film, this “virtualizing” encounter with the past is a challenge as well as an opportunity: the former because the ethical and political dimensions of each rethinking of the past are not always easily compatible with the avant-garde’s nonrepresentative foregrounding of the film’s materiality, the latter because of the opening it gives to the avant-garde as a genre after a long period of asphyxiating, puritan formalism. The idea of “virtuality” plays a key role in this respect, since “virtual” is also a term that has to be interpreted in a Deleuzian sense, not as the opposite of “real,” but as the opposite of “actual” or “current”: the virtual completes the real, it is able to modify what exists; it is the horizon of the real rather than its negation. The avant-garde’s denaturalizing formalism de-realizes any reified view of the past, while projecting it into new but equally unstable relationships between present, future and past. Virtuality, hence, suggests that avant-garde filmmaking is deeply rooted in an...
engagement with current thinking (more specifically with thinking on history) and cannot be reduced to an almost fetishist dialogue with the cinema's formal properties.

Skoller's book is a very radical plea for an absolutely intrinsistant and unconditional avant-garde of filmmaking, and one feels in almost every page of the book the moral urge to resist the use and abuse of history as entertainment. Yet thanks to Deleuze's virtuality (and, to a lesser extent, of Michael André Bernstein's "side-shadowing"), Skoller's stance is not to be confused with any simplistic refusal of fiction or composition (nor of narrative as such, provided it is multilayered, contradictory, unending). The great variety of films analyzed (ranging from found-footage movies and testimonial films to documentary interventions and historical reconstructions) guarantees a well-balanced survey of what is at stake in the hardly known field of avant-garde movies, whose very form and format make it even more difficult to find the audience it deserves (although the old-fashioned way of filmmaking on celluloid is of course a tactical ally in the case of avant-garde films). It was therefore an excellent idea to end the book with an explicit opening towards the post-cinema. In a more essayistic way, in these notes on issues such as the mobile spectator, the VCR, interactivity and so on, Skoller offers numerous challenging insights on new ways of reinventing the avant-garde now. This unexpected union of the avant-garde and the digital is a message of hope for all those who, spectators as well as makers, have been assisting the gradual fading away of the classic avant-garde.

Moreover, the author has a straightforward yet elegant and well-timed style, with a perfect balance between historical precision, social relevance and critical reflection.

The starting point of the book is a triple statement ("borrowed mainly from the anthropologist Leroi-Gourhan and its further readings by Georges Bataille and Jacques Derrida (although Charlie Gere makes a cautious and therefore very clever use of deconstruction): 1) It was not man who invented technology, but technology that created man; 2) This creation of mankind has meant also the birth of history, i.e. of culture, the basic issue being the impossibility of ever bridging human finitude and time's infinity. The notion of speed and the perception of a permanent speeding-up of history is just one of the symptoms of this gap, whereas the notion of the gap is of course highlighted and theorized, but never in a dogmatic manner, within the Derridean framework of différence; 3) Art is not an ornament but rather a social and cultural necessity, which man is using as a way to come to terms with the problem of time."

In a certain sense Art, Time, and Technology tells a great narrative, that of the attempts in modern Western culture—from Morse's telegraph (an acceptable "alpha" for a study on the intersections of art and technology) to the visual aftermath of 9/11 (an even more acceptable "omega" of a sometimes wildly utopian, sometimes grimly apocalyptic history)—to achieve a coincidence ("time") between culture ("art") and media infrastructure ("technology"). Real-time artistic expressions are thus seen as the horizon of such a craving, which aims at blurring the very boundaries between the various dimensions of the cultural, technological and temporal.

Yet the major quality of Gere's work is not only to give a well-structured and concise historical survey of some of the landmark events, works, artists and thinkers of the period under scrutiny, but also to do so in a very special way, which opens room to discussing time in two different ways. Firstly, Gere is a wonderful storyteller, able to situate his coincidences ("time") between culture ("art") and media infrastructure ("technology"). Real-time artistic expressions are thus seen as the horizon of such a craving, which aims at blurring the very boundaries between the various dimensions of the cultural, technological and temporal.

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to new drugs like LSD). Another chapter tackles the transformation of the official art world and its institutions, now taken over by postmodern structures and environments that privilege a mix of chaos and knowledge to the expense of the traditional work of art (the example here is of course Les Immortels). Finally, he investigates the temporal complexities in new media art that definitely resist modernist dreams of temporal stillness (or, in the vocabulary of Michael Fried, of “presentness,” i.e. of “grace”).

The greatest accolade I could give Art, Time, and Technology, however, is that it has been written by just one author. If this had been an edited collection, one would have praised the exceptional coherence as well as the brilliant diversity of the work. Since all this is the work of just one man, it is only right to double the praise. As it is, one can only admire the breadth of the author’s interests and the depth of his insights, the clarity and sharpness of his working hypotheses and close readings and the politeness that enables him to invite readers to continue their reading instead of claiming the last word.

**CORNUCOPIA LIMITED: DESIGN AND DISSENT ON THE INTERNET**


Cornucopia Limited grants us pipeful-of-burlesque ruminations on the networked economy. Yet the title misleads, for the book is negligible on dissent, whether on-line political organization or its potential for disruption (think of the Yes Men’s fake 2003 announcement, purportedly from Dow Chemical, that apologized for the disaster in Bhopal). Coyne’s armchair outrageousness is in metaphors such as “design as theft,” the necessary appropriation of ideas. While celebrating the designer’s unusual perspective at the gaps and interstices, the hybrid juncture of brand names, edginess and creativity, he acknowledges his or her role in economic service. This designer finds too little in the book that is tangibly about design. The book is light on design theory or examples, whether drawn from graphics, architecture (Coyne’s field) and software, or their uneasy symbiosis, Web and interface design. Coyne acknowledges the marketing primacy of functionality and interface in good software design yet does not provide illustrative examples.

The book is organized into several overarching design metaphors. The first is the household, a private world that shuts out the public market. The foundation of the home is the economics of self-interest as elucidated by Adam Smith, an attitude later lambasted by John Ruskin as only worthy of “rats or swine.” Platonic ideas of order are contrasted with the messy marketplace. These poles were negotiated in the ancient world by the Stoics and then the Epicureans, who saw a sound household as the means to the good life in a private garden.

The second metaphor is the machine, an obvious one for the network and its manifested nodes. He reminds us of computers’ origin and centrality as machines in Turing’s cryptography. The design of machines is a play of opposites, and a site of machine-like bureaucracies found in organization theory from Weber to Derrida. Coyne ponders the applicability of Smith’s criteria for the economic machine, Marx’s capitalist machine critique and the lubricant of Deleuze and Guattari’s trope of irony, yet Coyne’s own misgivings as a designer gleams through here. Machines have promoted metonymic overuse of an isolated part of the human to represent a whole body (“All hands on deck!”), while another problematic posits work as a machine. Machines can be monstrous, useless or a cheap conceptual solution, like the Heaven-sent deus ex machina of drama (of which my favorite example is National Lampoon humorist Michael O’Donoghue’s advice to end short stories: “Suddenly everybody was hit by a truck”). For Coyne, machines as a category are like those art-devices of Jean Tinguely that huff and puff and ultimately collapse under the weight of their exhibitionistic exertions.

The author’s third metaphor is the game, exemplified in three decades of computer gaming. The first game we encounter, said Freud, is the mother and child playing peek-a-boo. Like all good games, it employs Cartesian location and locatedness, socially shared experience and advancing skill levels. Games require demarcations of inside or outside the game, whether in chess, Herman Hesse’s fictional Glass Bead Game or a jaunt with Lara Croft the Tomb Raider. The global capitalist system might then be seen as a game, its arenas fitting Roger Callois’ game categories: competition, chance, simulation and vertigo (which, when debased, lead to trickery, superstition, alienation and alcoholism respectively). Coyne cites Zizek’s comment that the citizen’s greatest dread is that no one—no TV crew, Web cam or state agency’s surveillance—is watching at all.

The fourth metaphor employed is the gift, which brings up issues of creativity and commerce (one recalls the 1970s motto inside the ad agency Leo Burnett USA “It’s not creative unless it sells”). This chapter acknowledges and explores political contradictions of the public and private space of the Internet more than any other. There remains the persistent trope of information as a gift, promulgated by the Open Software Initiative, the Free Software Foundation and the Ruskinesque Romantic sensibilities of LINUX originator Linus Torvalds; Bill Gates (called by one biographer the man who first thought of selling software) has fulminated against this ethic since 1976. Coyne cites Marcel Maus on the gift’s requirements of surprise, excess and difference from the exchanges of daily life. Baudelaire’s story of a counterfeit coin given to a beggar, which gets him in all sorts of legal troubles, was used by Derrida as an example of the gift’s unpredictable simulation. The gift may be an imposibility, risky and ill-fitted to the rationalism of complex modern society, impossible as event in our over-determined society for its lack of surprise, excess and difference. Coyne’s...
memorable line here is “[a]dvertising renders products counterfeit.”

The final metaphor is the threshold, a gateway of in-betweeness and liminality, with its sense of permeable borders and passage, a negotiation between inside and outsider, like Walter Benjamin’s One-Way Street. Commerce itself is interaction upon the threshold, allowing Coyne to finally designate design as theft, “something accomplished by breaking and entering.” This chapter may be his most architectural, and Coyne is professor and chair of Architectural Computing at the University of Edinburgh. Architecture has been a field that has offered up insightful thinkers on cyberspace, whether Nicholas Negroponte and his “architecture machines” or mid-Michigan’s Peter Anders, theorist of “cybridity.” Coyne often finds examples in a refreshingly comfortable familiarity with classical mythology, from the horn of plenty in the title on down. In his final chapter on the threshold and the trickster quality of its liminality, attention to cynicism (and Diogenes the Cynic) leads to a declarative natural history passage on dogs worthy of Edward Dahlberg’s Sorrows of Priapus. Perhaps Coyne could have best produced a memorable illustrated book in which each of the large points was illuminated with photography, diagrams and pictures, for his arguments are diffuse and fugitive in text form. Sadly, this book lacks design examples, processes, steps, and anecdotes from experience that so often make books by seasoned designers choice reading. Instead, we are given generalitys (and don’t bother looking for the “dissent” promised in the title). Coyne’s previous books for MIT Press, Technoromanticism: Digital Narrative, Holism and the Romance of the Real (2001) or Designing Information Technology in the Postmodern Age: From Method to Metaphor (1995), might provide more nourishment for hungry designers.

**DEEP TIME OF THE MEDIA:**

**TOWARDS AN ARCHAEOLOGY OF HEARING AND SEEING BY TECHNICAL MEANS**


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Anyone who has heard Siegfried Zielinski speak at one of the many conferences in the last decade devoted to “new media” will not be surprised by the quality of the research, the conceptual coherence and the literary eloquence of this book. What is always so surprising about his presentations, and indeed this book, is the depth of new material that he uncovers in the archives. Zielinski’s idea is that media technology today is best understood as an ecology in which no single strand or individual feature can be fully comprehended independently of the rest. And, given that not all of the rest is knowable, then it is inevitable that our understanding will always be a provisional guess. This is not such a radical or innovative idea, but whereas most commentators who recognize the ecology of media then proceed with a microanalysis or derivative teleology in which unreconstructed histories are conveniently matched with selective claims about the present, Zielinski tries to avoid this pitfall with his notion of the archaeology of deep time.

Just as an archaeologist is obliged to work with incomplete fragments of the past, so Zielinski works with fragments from the archive and connects them with shards of the present through a speculative association. This methodological intervention has the virtue of being completely inconclusive while at the same time carrying a resonance of possible completeness without over-inflating the evidence to support a fragile thesis.

The downside to Zielinski’s tactic is that there are no glib answers to pass on, no explanation of how we got to where we are and where we might end up next, no reductive conceptualization of human intelligence to conveniently “life-sized” memes. His vision of the human project takes the long view, in which cognition is distributed in both space and time. By weaving the intersecting biographies of inventors and scientists, he is only able to hint at an explanation of the present that itself is not really comprehensible. At times this can be frustrating for the reader, and, indeed, even for Zielinski there seems no conclusion to his painstaking work except the satisfaction of recovering from the detritus of history a gem that, but for his efforts, would be forgotten sooner. At times the story is so protracted that it reads like a “shaggy dog” story as the author wanders through documents and stories, and yet unlike those meandering jokes his narratives gently take shape in a fugitive image of a past so exotic and intellectually glamorous that the adventure of science becomes irresistible. The insight invariably challenges received wisdom, as for example in the archaeology of moving image technology. Zielinski’s argument not only situates the fascination with movement in a wider and more dispersed range of philosophical imperatives, but also introduces new players in that history that directs the attention of other researchers to richer grounds than the unreconstructed positivism of most media histories. In particular, the book rectifies the ideological skew that histories written by the economically dominant have visited on our understanding of both the present and visions for the future.

What makes Zielinski’s research especially engaging is that one gets the sense of a genuine curiosity at work simply by savoring the story and looking at the images he has assembled. Unlike much publishing in the field, this project unravels its evidence with humility and a minimum of personal comment, opening the way for readers to draw upon their own research to make richer connections than the author by situating his archaeological method in the process of history. This aspect of *Deep Time of the Media* is amplified by the illustrations that are carefully selected and precisely captioned, which means that, if nothing else, it becomes a valuable resource and, for many of us, the only access we might have to this material.

By invoking archaeology in the Brave New World of media, *Deep Time of the Media* is ultimately a pessimistic reflection on the inevitability of the process of history to cover its tracks.
At the same time, it is exemplary in its measured and qualified tone in a field overrun with wild speculation and unreconstructed teleologies. More than this, it is simply a delight to read, and some credit for this must go to the translator, who has caught Zielinski’s spirit and voice. Where the book is perhaps at its weakest is in its departure from history. In common with many brilliant histories, the artistic efforts of the present seem to be rather arid, and the author clutches at partial and, in some cases unbecoming, examples. It is possible of course that this is not a shortcoming of the author but an indication that we need more research of this quality to inform the present generation of artists.

For those who have not had the good fortune to hear Zielinski speak there may be a surprise in this book: good quality research presented at face value with modesty and eloquence, something Zielinski shares with only a handful of contemporary media historians and theorists.

**FILMS**

**MONTE GRANDE—WHAT IS LIFE?**


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

This is a gentle and moving film. It is so refreshing to see a movie that, while presenting challenging and provocative ideas, does so without a hint of aggression. Without the hard-sell, in-your-face hype projected by many Hollywood-style movies and one-hour television specials of similar genre.

Francisco Varela, who died in 2001 at age 54, was a truly great scientist, not only because of his contributions to neurobiology and cognitive science, but also because of his passion and dedication to the quest of science. When students came to work with him, he would simply observe them working on a project for a short time; from these observation he could tell if science was their calling. As the film shows, this passion brushed off on everyone with whom Varela was associated, including His Holiness the 14th Dalai Lama.

The film successfully integrates the three major aspects of Varela’s work and life: 1) the notion of embodiment; 2) the meaning of self-responsibility; and 3) spirituality, in a way that is easy to understand. It is a film suitable for virtually all ages and it is not especially abstruse in scientific jargon or complexity. Franz Reichle is to be congratulated on creating a film that has taken a complex scientific and philosophical issue—the nature of embodiment or, perhaps, better put, “How is it possible for body and mind to exist as an integrated whole?”—and presented it in an uncomplicated manner. This success is partly due to Varela’s own gift for communication; it is, perhaps, also his personal appearance in the film that makes it so special. The film is grounded most sensitively in the reality of Varela’s personal life, his partners and children, and his ordeal with cancer, with much of the footage shot in and around his home in Chile.

Monte Grande—What Is Life? does not dwell on Varela’s academic institutional life as such, giving no real mention of the papers and books he published. It contains extensive footage of many of his closest associates, including Humberto Maturana, Heinz von Foerster, Jean-Pierre Dupuy and professor Anne Harrington. These leading scientists and philosophers all help explain Varela’s ideas, especially the notion of autopoiesis (life based on autonomy) and the nature of consciousness. Their presence in the film together with members of his family, including Amy Cohen Varela and former partners, helps us understand a little better Francisco Varela the person.

As Varela himself explains, his association with Buddhism began after a more or less revelatory dream that, simply stated, convinced him that all his current scientific explanations of the meaning of life were nonsense. This revelation started him on a new intellectual investigative adventure that now included spirituality. That is, it allowed his heart and head to work together harmoniously and brought about the realization of the true value of subjective observation as well as objective, empirical evidence as valid scientific ways of knowing. It was the spiritual-scientific symbiosis aspect of his life and work that brought about a close association with the Dalai Lama.

Varela was a great conference attendee and organizer and had quite a following at these kinds of events. Not all of these conferences were hard-edge scientific affairs, as the film shows with footage of the 1981 Lindisfarne and the Mind and Life Conference. My only criticism of the film is that it could have benefited from a sensitive background music theme.

While I am not sure that the film completely succeeds in deconstructing the division between science and art as Bernhard Pörksen suggests on the front cover—it is going to take more than a short film, brilliant as this one is, to bring about such a miracle—however, his words do sum up the film nicely:

Delightful! Varela was a master of synthesis….Admired, controversial, and endowed with the intoxicating passion of an exceptionally gifted researcher. Told affectionately and gently, touching and astutely…. (Monte Grande) succeeds…in deconstructing the prevailing division between science and art.

**THE HERMITAGE DWELLERS**


**HERMITAGE-NIKS: A PASSION FOR THE HERMITAGE**


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

What a powerful film this is! I cannot recommend it highly enough. Having said that, I should explain that these two titles (Hermitage-Niks: A Passion for the Hermitage and The Hermitage Dwellers) are actually two versions of the same film, one of which is more detailed than the other. In a somewhat different edited form, The Hermitage Dwellers is contained within Hermitage-Niks, so you end up with both by buying the first, along with additional footage. I should also explain that the film’s subject (sort of) is the world renowned Russian art museum, The Hermitage, housed in the palace of Czarina Catherine the Great in St. Petersburg. I say “sort of” because (as its titles indicate) the film’s subject is not so much the vast palace complex, the Hermitage’s massive art holdings, nor its history, but rather all those things (and more) in relation to
the people who currently work there (for low salaries) in such essential capacities as curator, art handler, attendant, head of maintenance and so on. The film is made up of candid yet gracefully edited talks with various workers (from the young to those in their 80s); behind-the-scenes filming of the museum’s halls, of vast stairwells and storage rooms, of the Hermitage collection, of visiting tourists and schoolchildren, of museum personnel at work, and of dining and dancing on Victory Day; and of disquieting archival footage about a century of constant political strife in Russian daily life, from the Russian Revolution of 1917 to the post-Soviet era. Somehow, by whatever miracle, this place and its treasures have always survived and continue to do so now through the generous work of the museum staff.

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**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>.

**September 2006**


Napoleon David: The Image Enthroned, directed by Patric Jean; narrated by Frédéric Cerdal. Reviewed by Amy Ione.

Genes in Development: Re-Reading the Molecular Paradigm, edited by Eva M. Neumann-Held and Christoph Rehmann-Sutter. Reviewed by Rob Harle.


Physics Demonstrations: A Sourcebook for Teachers of Physics, by Julien Clinton Sprott. Reviewed by Barry Blundell.


**August 2006**

Chats Perché—The Case of the Grinning Cat, directed by Chris Marker. Reviewed by Mike Leggett.


Napoleon David: The Image Enthroned, directed by Patric Jean; narrated by Frédéric Cerdal. Reviewed by Amy Ione.

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**July 2006**


Designing Type, by Karen Cheng. Reviewed by Rob Harle.


The New Medium of Print: Material Communication in the Internet Age, by Frank Cost. Reviewed by Kathleen Quillian.


To Be Seen, directed by Alice Arnold. Reviewed by Rob Harle.

Wireless Writing in the Age of Marconi, by Timothy C. Campbell. Reviewed by Rob Harle.
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