mausoleums and animist ritual cham-cross as strange combinations of technology scrums. The rooms came from Prod 2015’s collaborative art and net-art, to a staging of Scrumology Abraham’s 1990 Amiga 500 proto Jan de Weille and Annie DOEK, to recoding manifested as menus Eduardo Kac’s 1985 videotext poems ranged from slide “re-enactments” of tions displayed as artworks. These the exhibition included 10 installa-

I managed to catch the excellent exhibition Une Archeologie des Media on its last day at Seconde Nature in Aix en Provence, France <www. secondenature.org/-Archeologie desMedia-.html>. I was the only visitor in the well-laid-out and airy rooms. The only sounds were occasional chirps from some of the 30-year-old computer equipment on display. Curated by the Preservation and Art-Media Archeology Lab (PAMAL) at the Ecole Superieure d’Art d’Avignon, the exhibition included 10 installations displayed as artworks. These ranged from slide “re-enactments” of Eduardo Kac’s 1985 videotext poems to recoding manifested as menus of DOEK, Jan de Weille and Annie Abraham’s 1990 Amiga 500 proto net-art, to a staging of Scrumology Prod 2015’s collaborative art and technology scrums. The rooms came across as strange combinations of mausoleums and animist ritual cham-

cbers. The pieces “spoke” as cultural artifacts rather than as artworks. The exhibition would have been totally at home in Paul Otlet’s 1910 Mudaneum, which he envisaged “as an enormous intellectual warehouse of books, documents, catalogues and scientific objects. Established according to standardized methods, formed by assembling cooperative everything that the participating associations may gather or classify.” (Union of International Associations, 1914, p. 116). In fact their status as artworks seems irrelevant to me; they are clearly evidence of artists’ roles in articulating digital culture as it happens, as early adopters of new technologies, but not only smart users but smart developers—pushing their development in directions driven by agendas very different from those of the hardware and software designers. It seemed to me the exhibition managed to include, in uneasy equilibrium, display of hardware (functional or not), emulation or performance of work, display of work intended to appear online and not in physical space, explanatory material and a successful contextualization of work that was not intended to be shown together. The accompanying issue of Magazine des Cultures Digitales (MCD) guest-edited by Emmanuel Guez, provides an excellent snapshot of current discussions in the archeology of media (MCD has become a leading theoretical and contemporary digital art magazine in France). The issue provides a number of well-developed texts surveying archaeology/recycling, exhibition and conservation. The texts are remarkably free of the usual contextualizing to our favorite “French” philosophers; their list of “key” books are those by Friedrich Kittler, Siegfried Zielinski, Erkki Huhtamo and Jussi Parikka (there is little discussion of variable media approaches—our very recent Leonardo book Re-Collection: Art, New Media and Social Memory by Richard Rinehart and Jon Ippolito would have been a good addition). The issue has a refreshing mixture of theoretical/conceptual articles and texts by artist/developers and curators and comes across as a productive nexus of theory and practice.

The PAMAL group (http://pamal.org/), led by Emmanuel Guez, has a strategy that reminds me of that developed by groups such as Triple Canopy in New York; their practice combines research, exhibition and interventions as ways of unpacking the “history and meaning of things
as they happen.” PAMAL has three interconnected axes: on conservation/restoration/archeology of media; Digital Art Vanishing Ecosystem, which seeks through artistic experimentation to reenact and develop work with a particular interest in the glitch (the MCD issue has a number of interesting discussions on bugs and glitches); and a third, which is curatorial and exhibition theory and practices.

The archaeology of media field is beneficiary of the long life expectancy of a generation of pioneers, many of whom are living and active in their 80s and 90s and in a position to “push back” on the young historians, curators and theoreticians trying to write multiple narratives of our art, science, technology fields of practice. By coincidence, the exhibition Primary Codes <www.oifuturo.org.br/evento/codigos-primordiais/> ran 15 June–16 August 2015 at Oi Futuro Flamengo in Rio de Janeiro, Brazil, with staging of early work by Frieder Nake, Paul Brown, Harold Cohen and Ernest Edmonds—all four early pioneers in computer arts and still very active; these four artists have plenty to say on how the archeologists of media misinterpret or misread developments in which they were players.

As pointed out by Kittler, Huhtamo, Grau and others, many of the underlying cultural imaginaries have long histories, particularly as they are tied to emerging recording and transmission technologies in the 19th century. Yet often current artistic work is driven by a sense of ahistorical immediacy (e.g. the current déjà vu of Oculus Rift). As I have argued elsewhere, we are seeing the development of what might be called the “hard humanities,” where historians and theoreticians find themselves not only articulating narratives of the past but also being asked to be prescriptive on future cultural change and innovation. In this we benefit not only from the pioneers still alive and able to challenge our interpretations but also the creation of hybrid spaces where artists, historians, theoreticians and curators work elbow-to-elbow, if not linking arms.

**BOOKS**

**LARUELLE: AGAINST THE DIGITAL**


Reviewed by Gabriela Galati. Email: <gabriela.galati@plymouth.ac.uk>. doi:10.1162/LEON_r_01203

Alexander Galloway’s Laruelle: Against the Digital is the first in-depth study in English of the work of French philosopher François Laruelle. The book is divided into two parts: In the first, Galloway explains the main concepts of Laruelle’s thought and his relation with the digital, locating him as a philosopher of immanence; the second part approaches a methodology for withdrawing from the “Standard Model.” Although the title may be misleading and make the reader believe that the book will address subjects related to new media, software and computers, it does not, as Galloway briefly explains in the introduction and then develops further at the end of the book. Galloway takes as a point of departure Laruelle’s methodology to escape the standard method and embrace immanence—which, according to Laruelle, other philosophers of difference such as Gilles Deleuze and Alain Badiou have not attained. In this sense, according to Laruelle, the best response to philosophy is to cease doing it (p. xvii); Laruelle’s main aim is to think philosophy unphilosophically. In the first place, to do non-philosophy means for Laruelle to “abstain from the philosophical decision,” that is to say, to reject the idea that anything in the world can be subject of philosophical reflection: “Non-philosophy declines to reflect on things” (p. xxiv).

In doing this, one is able to enter the terrain of “science,” in which theoretical validity is given by the possibility of elaborating axioms. In turn, this allows him to take philosophy as the “raw material” of non-philosophy; to do non-philosophy is to use philosophy as the object of study of non-philosophy. After clearly explaining that digitality is the basic distinction not so much between zeros and ones but between one and two, Galloway advances his own goals: to demonstrate that digitality and philosophy are the same because both are based on “distinction,” and therefore that in withdrawing from philosophy Laruelle was also withdrawing from the digital (pp. xviii–xix). In opposition to the digital, the analogue means to bring heterogeneous elements together as one. In this context, in Galloway’s insight, digitality is not in any way related to computers or new media but is considered as a strictly theoretical concept.

Galloway pedagogically exposes all these principles in the introduction; this discussion of course deepens throughout the book while at the same time building on his own principles and explaining at the very end the usefulness of the whole operation for the understanding and analysis of digital media. In Chapter I, “The One Divides in Two,” Galloway explains multiplicity, univocity and immanence, beginning with Deleuze but eventually discussing other philosophers who could not escape transcendence, and then advances his own first three theses. Chapter II is dedicated to “the Standard Model” and puts into relation immanence,
transcendence, difference, the multiple, integration, analogicity, distinction and digitality. Chapter III is dedicated to "The Digital," and Chapter V to "Computers," both are among the most interesting in the book thanks to Galloway's detailed and acute analysis of Deleuze's philosophy, but exactly because of it, these are also the chapters in which it is possibly most evident that Laruelle's theoretical building does not add much to what Deleuze has already done.

In fact, the main problem the book has is not so much Galloway's but Laruelle's: His neologisms and conceptual operations often sound like a solipsistic exercise. Although certain concepts like "cloning" or "the prevent" are undoubtedly attractive, one cannot avoid asking about their theoretical relevance and consistency; and one has often the impression that Laruelle, when not inventing new words, is using the concepts of philosophy to do non-philosophy.

Having said this, the book is not only exhaustive in explaining Laruelle's theoretical construction on philosophy but is also extremely clear in the analysis of other philosophers, mainly Deleuze and Badiou. Galloway concludes his work by giving a synthetic and lucid summary of the whole book, presenting 14 theses based on the previous analysis of Laruelle's oeuvre, persuasively arguing for the importance of his own philosophical development for further thinking on digital media theory.

REIMAGINING CINEMA: FILM AT EXPO 67


Reviewed by Jan Baetens. Email: <jan.baetens@arts.kuleuven.be>.
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Expo 67, Montreal's 1967 world's fair, was a landmark exhibition not only in praise of the technological and humanist optimism displayed by its unifying theme (man as creator of his own environment and builder of a community that embraces the whole world) but also for its transformation of the fair into a total experience in which the boundaries between man, machine and city were meant to disappear (although the official point of departure of the fair's message was Saint-Exupéry's humanistic universalism, the real conceptual framework of the event was much more to be found in the work by Marshall McLUhan). Expo 67 did not just show new artefacts, new technological achievements, new architecture; it was itself a kind of techno-determined Gesamt- kunstwerk enabling the visitor to get the feeling of what modern life was making possible. Among the most salient features of Expo 67 were its multiple cinematographic shows (most pavilions entailed one or more shows of moving images), some of which have proved key contributions to completely new forms of filmmaking and film-going.

This collected volume, the result of a five-year research project by a team of Canadian film scholars, focuses on the way several (Canadian) film-events helped shape the idea of "expanded cinema" and contribute to the larger shift from traditional theatrical single-screen projection with fixed spectators (the situation soon to be critically examined in the post-'68 "apparatus theory") to dramatically different practices relying on multiscreen, multi-image, 360-degree projections, with immersed, participative and often mobile spectators, but also on the integration of cinema and architecture inside and outside the world fair (a situation or set of situations with which post-cinematographic readings of digital cinema are today very familiar but whose impact in these years was truly tremendous). Studies on post-cinema, expanded cinema, digital cinema are certainly not lacking (a still-inspiring example is Future Cinema, the catalog of a 2003 ZKM exhibition curated by Jeffrey Shaw and Peter Weibel), but it may come as a surprise that in these works the pivotal role of Expo 67 does not always receive the attention it deserves. There are many reasons for this partial neglect. Some of them are anecdotal: Although developed by a team of Canadian filmmakers and entrepreneurs and already shown at Expo 67, the IMAX widescreen technique, for instance, the commercially most successful technique on display in Montreal, was actually only "institutionalized" in 1970, at the next world's fair in Osaka, Japan. Others are much more fundamental, such as the dismantling of the exhibition site, which prevents the "reenactment" of the actual experience, as well as the disappearance of most of the films shown during the event, some of them stored in archives they cannot leave (not even for scholarly purposes), others simply lost (and sometimes hardly documented, except by spare eyewitness testimonies). Reimagining Cinema: Film at Expo 67 is therefore a project whose title should be read at face value: It entails, first, the verbal and visual reconstruction of a lost filmic and cultural heritage and, second, the critical and interdisciplinary analysis of the actual meaning of the role and place of cinema in the larger context of the Montreal's world's fair.

The result is breathtaking. The research project has managed in recovering a large number of original documents (the film stock, completed with descriptions by actual visitors, interviews with filmmakers and producers, official and amateur photographs, press and magazine reviews, unpublished reports and analyses), and thanks to these efforts it is now possible to give a precise description of what the key filmic events actually offered to the spectators. The book focuses on eight key experiments (ranging from the infamous Disney-produced 360° Canada 67 documentary, as unanimously and wildly enthusiastically applauded by the public as it was despised by the scholarly and professional press, to innovative forms of slideshow and found footage cinema, as for instance in the amazing dramatically avant-garde works shown in the
Christian pavilion). Each of the technical descriptions is then followed by a combination of verbal analysis (including interviews with makers) and visual illustrations (where these are available, of course).

What makes this book so appealing is the perfect balance between historical reconstruction and critical analysis. Few research projects give such a strong sensation of the difficulties, but also the wonderful achievements, of recovering a past that is to a large extent definitely lost. For even if one manages to identify and access the original film material, it is not reasonable to think that it will ever be possible to rebuild the specific viewing and projection context of these works (not to speak of the difficulties in understanding the public’s embrace of films that would seem today utterly banal, if not slightly ridiculous). All chapters do a great job in this regard, and the reader gets a very precise idea and even feeling of what was shown during the Montreal world’s fair and how and why the public reacted to the works as well as to the larger built environment. As several contributors rightly stress: The medium here was really the message, and it would be a mistake to focus too closely on the medium’s “content.” Yet the book does much more than propose a stunning verbo-visual reconstruction of cinema at Expo 67. It also provides detailed historical and cultural analyses of an event that took place during a certain number of events that constitute its larger background: the Summer of Love, the widespread use of psychedelic drugs and the war in Vietnam, but also the introduction of color television in North American homes and the beginning of Quebecois nationalism and political terrorism—all societal changes that both enhanced and contradicted the world’s fair’s universalist techno-optimism. All the articles make very clear that cinema at Expo 67 was much more than an attempt to free cinema from its narrative and theatrical chains or an endeavor to make art, technology, architecture, environment and society deeply interchangeable. In spite of the official newspeak that surrounded it, Expo was also the symptom and result of profound societal changes and contradictions that Reimagining Cinema unearths in decisive ways.

THE SOCIAL MACHINE: DESIGNS FOR LIVING ONLINE


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The designers behind Facebook, Twitter, Instagram and other successful social media spaces are always seeking ways to make online interaction more fluid and intuitive, if not necessarily more meaningful. Facebook does not care what you post, just that you post frequently; content is only significant for ad placement. In this way, commercial social media spaces are not hosts but landlords with a set of rules for engagement and an implied payment due. Profile pages give users the opportunity to brand themselves with text and image. Favorites and likes amplify messages that the crowd deems important, funny or moving. It is a fairly simple design strategy and it works. But, what else is possible?

Judith Donath’s The Social Machine: Design for Living Online is a designer’s thoughtful exploration of the ways interfaces can bring about meaningful social interaction in a networked world. If a machine solves a problem, she asks, what is the problem that a “social machine” is trying to solve? What drives people to seek each other out, to form identities, alliances and communities? And more importantly, how can the computer help us find new ways of doing these things? This book is neither a survey nor a compendium of best practices for the professional designer of social spaces.

It is written for both “the creators and users of new social technologies.” Donath’s aim is to think creatively about what is possible, what is beneficial, what is ethical and what is dangerous in social interaction design as we move, inevitably, towards more mediation in our daily lives. The book is beautifully illustrated, with examples from Donath’s own experiments, the work of artists and designers in the field of social interaction design, as well as historical works of art that depict social spaces and identity.

Donath divides the book loosely around various perspectives of visualizing social interaction. Although the visual is emphasized, representations of social interaction may be auditory, haptic or even olfactory. The term visualization also implies vividness or a sense of presence and not just a realistic representation. In many cases, less information can make for more vividness. For example, live video conversations seem to be more vivid but can actually present more problems of presence due to the awkwardness in reading social cues. Donath uses the familiar cinematic terms long-shot, medium-shot and close-up to present various perspectives on social interaction. The “long-shot” perspective are interfaces that map the interactions of communities, track social connectivity and information flows and provide useful navigation through large and complex social interaction. The “medium-shot” focuses on visualizing small group interaction, where
there is more than just information exchange. How can an interface foster online conversation? By portraying participants more vividly, by defining contexts and boundaries, highlighting relationships, emotional reactions and rhythms in an exchange. And finally, the “close-up” is how the individual is seen and chooses to be seen in online communities. Perhaps the most interesting section, because it is the most challenging from a design perspective, is how to create a meaningful “data portrait.” Usernames, photos and fantasy avatars allow us to keep track of distinct identities online, but give us very little information about a person and as representations they can often be misleading. Data about a user’s networked life conveyed through abstraction and metaphor may be one way to make an individual more vivid, but this introduces other issues of privacy, surveillance and control over one’s identity.

Donath makes a compelling case that because networked social spaces are designed interfaces, issues of privacy, surveillance, healthy group dynamics and the health of the larger commons are also design issues. That she presents these issues in their ethical complexity is a testament to her concern and hope for design strategies that pay attention to all the implications of networked life. The Social Machine: Designs for Living Online is “a manifesto about what the connected world can be like.” Social interaction design can not only be a catalyst for healthy online communities but also a catalyst for more interactive physical spaces that are themselves increasingly networked. Think about what our cities would be like without parks, benches and gathering spots. These are public spaces, not overly determined or rule bound, as they are spaces to be alone or together with others. But they are conducive to openness and vivid presence. It is in this spirit that Donath wants designers and users of social technologies to think in new ways about how we become vividly present to each other in virtual spaces.

THE CONTAINER PRINCIPLE: HOW A BOX CHANGES THE WAY WE THINK

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Tell me how you store things, and I will tell you what sort of a person you are. And increasingly, we do not keep things only close by in personal collections—whether drawers, boxes and chests—but transported as part of global logistics that ensure that whatever data finds whatever address. Containers stand as a historically crucial reminder of the point at which storage and transportation start to define both human culture in a rather significant anthropological sense from ceramics onward and, then, also, the logistical culture that ties our age to the standardized formats of size, movement and address spaces. Such space does not merely cross the planet but defines it as an epistemology. The container ship is one obvious reference point in terms of the visual culture of this planetary condition but not the only one in what one could claim to be the containment culture of our era. Alexander Klose’s The Container Principle: How a Box Changes the Way We Think is an alternative media and design history of the seemingly simplest and most formal of principles. And yet it also becomes a material history of what defines the container space: It’s not just nothing in the hollow space but the framing of something where the frame becomes a material epistemology. Indeed, it is a question of the materiality of frames, whether the containers are empty or full—in either case, boxes and containers are formative of thought and cultural practices. This function as storage and transport is both a technique as part of hominization (such as in understanding how wine becomes possible with contain-
well researched, the references are not always visible, which to some readers actually might be slightly problematic. In either case, the arguments offered are good food for thought when considering the intersections of infrastructure, media and design. It’s also the cross-sections of physicality and data that define Klose’s argument about the container principle. Indeed, not merely the physical form but its relation to standards—and not merely the formal principles but the way in which they take place across the vectors of the real world as well as sites of storage is what defines this junction. In his words:

As both symbolic and physical media, they work in two directions. On the one hand, they are agents in the digital in the physical spaces of transport, in which everything is subjected to their logic of the processing of standardized, clearly separate (discrete) units, and in this respect the computer-driven control is double. On the other hand, they operate as agents of materiality in the symbolic spaces of data processing, where containers implement a specific kind of physical spatiality and where metaphors from the realm of transport (and architecture) play a central role in the construction of the systems (201).

Klose’s book is a good take on media infrastructures that define the media culture beyond the usual objects of focus. It’s the sort of media scholarship that speaks strongly to design and architecture, too. With a range of recent books, such as Nicole Starosielski’s The Undersea Network, Deborah Cowen’s The Deadly Life of Logistics, Shannon Mattern’s Deep Mapping the Media City and Ned Rossiter’s forthcoming book Software, Infrastructure, Labor, it contributes to what might seem the grayest of areas to write about—boxes, containers, cables, standards and such—but is still at least for this reader one of the most interesting themes that runs through contemporary design and media scholarship.

INFORMATION VISUALIZATION: AN INTRODUCTION, THIRD EDITION

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I am a person who discovered visualization by creating artworks. For over 30 years I dedicated my creative explorations to making visual performances of extant examples of music. I have lately focused my attention on scientific collaborations that use multimodal representations as part of a larger collaboration, which makes me part of the art-science community. I will review Information Visualization: An Introduction, Third Edition from that point of view. I think that this approach is logical when taking into account the transdisciplinary, art-science audience that is attached to Leonardo. With this in mind, I would describe this book as a design manual for people who need to learn the visualization world quickly and with a broad outlook of design processes.

Robert Spence wrote this Springer book for persons relatively new to interaction visual design. It is structured to take the reader on a path that moves from the source (intention), through various environmental configurations (process), until a proficiency of craft has emerged. As Spence writes, his book is not aimed at experts in the field of visualization—but rather to readers seeking an intense and concentrated exposure to interaction design for visualization. However, I do recommend that you buy the actual book, not the eBook version, which constantly turns diagrams on their sides. It is important to be able to study comfortably the diagrams and engage with the examples.

A representation is the end of the process of organizing data into a comprehensible entity. In the act of perceiving, one is constructing knowledge and must filter the incoming data so that patterns are recognized. Our brains engage in data mining. The basic perceptual patterns our brains recognize include object identities, locations or movement, color, size and other meaningful attributes. Many artists are playing with these concepts in their collaborations with scientists.

The quite interesting mental model that Spence describes and uses for interaction designs is Don Norman’s Action Cycle, taken from Norman’s The Design of Everyday Things (1988). Spence takes this model apparent in the everyday world into the design of dynamic queries and action plans that are ubiquitous interactive cross-modal mappings and navigational interactions. For the artist-scientist who means to put him- or herself into the domain of science, it is important to familiarize oneself with the methods and techniques used by scientists. This book does not give examples of delicious visualizations, such as seen in Tufte’s volumes; instead it gives prototypes of different ways to approach visualization problems. It traces a broad course of various methodologies used for designing interactive systems, ones that sort out information into digestible units. The book is a good textbook for early courses in visualization techniques.

In summation, Information Visualization is a toolkit that describes in logical order many different kinds
TEXTURES OF THE ANTHROPOCENE: GRAIN VAPOR RAY

Reviewed by Johanna Ickert. Email: <johanna.ickert@plymouth.ac.uk>. doi:10.1162/LEON_r_01207

The consequences of human activity on the planet have led many scientists to declare the current geological era the Anthropocene. The premise of this concept is that under human influence, the Earth system is changing in its totality, becoming unstable and less controllable. This situation is frequently considered a result of earthbound human knowledge and unknowingness, as a consequence of how humans perceive the world.

Against the background that recent knowledge-based activities of humans are mostly fragmented and discipline bound, the editors of Textures of The Anthropocene: Grain Vapor Ray take a different approach: “When humankind itself becomes a natural force,” they state in the preface of the first volume, “traditional methods of knowledge acquisition—the natural sciences on the one side and the humanities on the other—have reached a limit.” The Anthropocene, with its increased material and immaterial interconnections and processes, therefore requires novel approaches to the constitutive dynamics of the world. This book is provides such an approach by following the editors’ claim for methods “that integrate material transformations and fluid theoretical models” and that help to establish “a new sense of amazement at the wonder of the Earth.”

Textures of The Anthropocene: Grain Vapor Ray is a four-volume book that deals with the fundamental questions arising from the interplay between earthly conditions and human imagination, two fundamentally inseparable categories. The editors approach this interplay between matters and matter, focusing on the dynamic of textures in motion: The particulate (Grain), the volatile (Vapor) and the radiant (Ray). Grain, Vapor and Ray are the titles of the main three volumes. Each of them provides a series of paired historic and contemporary texts on textures “through which the reader can (re)image Earth-shaping processes.” The historic texts—reaching from Hippokrates to Lacan, from Spinoza to Kafka—can be read as archives of different perspectives on the dynamics of material processes. A variety of contemporary authors, including theorists, practitioners, scientists or artists, respond to these “historical imaginations,” providing further thoughts on the constantly shifting qualities of the textures. Authors like Peter Sloterdijk, Tim Ingold and Bronislaw Szerszynski comment on the historic texts, extend them or even completely depart from them. All together, the authors provide a variety of accesses to explore positions on the textures and forms that knowledge takes on within the Anthropocene.

A fourth volume serves as a “manual,” proving a framework to approach the other volumes. It gives prefatory remarks in the form of a longer essay that explores the contours of human knowledge in relation to the Anthropocene. Furthermore, it provides two indexical registers, which create connections between the themes and concerns that run through the chapters, organized around titles, keywords and authors.

Presently, the vibrant discourse on the Anthropocene shows typical features of a new “grand narrative.” The innumerable parallel debates that evolve out of the concept might trigger its sneaking devaluation. Therefore, instead of further describing or analyzing the necessity of interdisciplinary approaches or the role of art, the editors set up an experimental framework to find entry points to the dynamics of the Anthropocene. In this way this edition responds to the concept’s vastness without classifying the Anthropocene discourse into its dimensions: geological, social, institutional, ethical, political, etc. On the contrary, it allows a reconfiguration of the many perspectives in which “matter matters and tells us tales.” These lively connections between the different texts that open up a space for the reader to explore “world constituting” languages and forms of knowledge production through their interplay. It is the compilation of these meticulously selected texts that creates the impressive editorial work. Its creativity unfolds in the synergetic coupling of texts and the juxtaposition of different knowledge bases, which are not only text-bound but also represented in a multitude of illustrations, archival footage, graphs, etc. Even the covers of the volumes play with different textures.

This book takes the “materiality of the world at its word.” With no doubt it is an innovative, highly informative and inspiring response to the call for a non-dualist, sensitive understanding of the dynamic of the Anthropocene as a fundamental category. It shows how the Anthropocene discourse can unleash new approaches to human knowledge that do not necessitate to reinforce their inspirational power by over-stimulating doomsday pictures or technological promises of salvation. The way the editors approach the topic of knowledge production in the Anthropocene is deeply political, as they chose an editorial approach that
focuses on interaction, participation and dialogue. Given these strengths, it is somewhat disappointing, however, that the book does not outline the necessary preconditions for building further forums that enable such necessary transformations. No chapter on how education systems could be transformed. No chapter on frameworks for a sustainable development. No chapter about how risks and potentials, knowledge and power within this world of “our” own creation are unequally distributed between the rich and the poor. It is those perspectives that are lost within the many realities the book describes. If the book cannot give clear political claims on how novel forms of knowledge production can be established, it will still be a thought-provoking book, yet the energy to change a running system will be absorbed by the aesthetic and intellectual fascination with the “new sensuous-aesthetic praxis” that it is promoting.

THE POETICS OF INFORMATION OVERLOAD: FROM GERTRUDE STEIN TO CONCEPTUAL WRITING


Reviewed by Jan Baetens. Email: jan.baetens@arts.kuleuven.be. doi:10.1162/LEON_r_01208

Poetry is not only language driven, which is a truism, it is also technology driven, and the increasing technologization of language as well as the information overload that it produces have of course a dramatic impact on the reading and writing of poetry. At first sight, this impact is purely negative: In an information-saturated culture, where the sheer amount of available data and the ubiquity as well as the instantaneous reproduction and dissemination of this data is already beyond human imagination (and perhaps also beyond human control), there are good reasons to think that poetry is no longer a relevant way of using language. At second sight, however, the situation is a little different, not only because poetry does not disappear at all (its very resistance can be seen as the symptom of its lasting and stubborn social significance) but also because the poetic medium, at least in its most ambitious and avant-garde forms, helps develop new strategies to counter the bureaucratic and depersonalized management of data, language and eventually people. Whether these strategies are socially and politically successful is open to debate, but Stephens’s history of the poetic involvement in medium and technology issues from 1900 onward is convincing and suggests that it is not possible to discard the poetic avant-garde as powerless and sentimental. It is on the contrary the poetic endeavor that discloses and explores important parts and consequences of information overload.

Stephens’s book is an important continuation of the groundbreaking work of, among others, Marjorie Perloff, whose pioneering study of the relationships between writing and mediality (cf. Radical Artifice: Writing Poetry in the Age of Media [1994]) has been the starting point of an important strand in literary analysis, prolonged and expanded afterward by scholars such as N. Katherine Hayles and many others working at the crossroads of medium theory, media archeology, textual materialism, digital humanities and, most importantly, close reading, for it would be a serious mistake to think that the focus on technology automatically translates into a shift from close to distant reading. One may stress the importance of big data for poetry, both as a creative practice and an object of research, but this deep-rootedness of poetry in information and medium technology does not imply that writers, readers, critics and scholars abandon what poetry makes poetry.

The Poetics of Information Overload combines two strands. On the one hand, it offers an excellent overview of the notion of information overload and the many changes it underwent during the 20th century. In addition, Stephens gives also a clear discussion of the social, political and ideological debates that surround information overload in the broader context of the managerial and bureaucratic control of human behavior and society. In the critique of this control, which is often nothing more than the illusion of control, the role of poetry is key, Stephens argues. On the other hand, the book proposes also an inspiring and challenging new history of avant-garde poetry in America, yet not without paying a more than deserved tribute to certain foreign models, such as for instance Raymond Queneau’s A Hundred Thousand Billion Poems (French original: Cent mille milliards de poèmes [1961]). What makes this history so interesting is first of all its span: The Poetics of Information Overload manages to describe the essential movements and figures of the last hundred years and it succeeds in doing so by the clever selection of leading figures (some of them more known than others, but this is definitely a strong advantage of the book) and by the refusal of distinguishing between major and minor tendencies and debates. The study is divided in six chapters, which cover the 20th century in a very balanced way (Stephens does not fall prey to
the illusion that the closer we come to the present, the more we have to say about history). If Stein and conceptual or constraint-based writing (the school of “uncreative writing” as it is called today, although not by Stephens himself) represent the beginning and end of the book, there is also room for chapters on Bob Brown and his readies (devices that interact with microfilm technology and the ideology of speed-reading), on Charles Olson and his attempts to rethink information processing in relationship with the human body (this chapter is centered on the Black Mountain College pedagogy), on the mimeographic or photocopy revolution of the 1960s (a chapter in which McLuhan is intensely present) and finally on the “Language” poetry of the 1970s and 1980s (probably the most directly politically inspired movement of the century). This highly pedagogical structure is all the more convincing since Paul Stephens pays much attention to certain larger tendencies that bridge the gap between the technological and stylistic particularities of each period. Fundamental in this regard is the notion of appropriation art, which may be seen as the unifying element of the whole history of the avant-gardes (next to the political and ideological stance toward language management). Well-documented and elegantly written, Stephens’s book demonstrates the vitality of literary and poetic studies in the age of big data criticism, where questions of style and individual authors may seem superseded by the dream of laying bare hidden patterns with the help of sophisticated computer programs. After having read The Poetics of Information Overload, one should become aware, though, of the inherent limits of certain forms of Digital Humanities. Information management is not just unavoidable but necessary, and there is not the slightest note of Luddite nostalgia in Stephens’s work. However, what we can learn from poetry is vital as well and Stephens is an excellent guide in this respect.

**SARA ANGELUCCI:**
**PROVENANCE UNKNOWN**

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This captivating book contains a richness of content that belies its physical size. It is the catalogue for Sara Angelucci’s exhibition Provenance Unknown, staged at the Art Gallery of York University in Toronto in the spring of 2013. And so it is perhaps fitting how I find that leafing slowly through the pages brings to mind the action of wandering, initially without focus, through an exhibition space. Certain items entice the reader (viewer) to look closely, sometimes repeatedly returning for another look in an attempt to make sense of the work on display. So I find I am responding to both the book and my idea of the exhibition.

The book presents, by virtue of its being produced in association with and a reflection upon an exhibition, an introduction and commentary upon the artist and the work and a partial account of a past event. Rather like the morphological creatures in Angelucci’s Aviary, it has an uncertainty and instability of form I find. In addition to the many color images (these compose more than half of its content, showing the installation in the gallery space and all of the individual works), which map to the three sections of the exhibition space, the book contains three short essays. These are each associated with certain information is not provided, so I resort to Google for this and follow up the many references to the work of W.G. Sebald scattered through the texts and with which I am at present unfamiliar. I wonder here whether the authors were directed specifically to certain literature by Angelucci or Chhangur or if instead the artist’s work alone is responsible for this harmony of citation.

The first essay, “Sounding Silence,” opens with a passage from Sebald’s “Campo Santo,” in which he refers to Nabokov’s “preoccupation” with the study of spirits, “fleeting, transparent beings of uncertain provenance and purpose.” This essay is written by the exhibition’s curator, Emelie Chhangur, who unsurprisingly speaks for Angelucci, variously and confidently asserting the artist’s intentions (although perhaps they are her own, it is hard to be certain here) of “[offering] a space of contemplation between what is knowable about the human form in the photograph, and what can be imagined from the other side” (p. 9). I am uncertain of her meaning here; what “other side” is she referring to? Similar small but frustratingly incomprehensible phrases are found in the other essays: “the palpable presence of absence” (p. 36) is one such.

Chhangur refers to Angelucci’s earlier preoccupations with her own identity and family lineage and her role as an amateur historian who through an “eccentric enquiry” opens up a space in which the subjects of the lost portraits may come to life. It is curious then that the taxidermy birds, in their short lives glorious vital flashes of translucence and flickering light, even fixed in the artifice of the diorama, are still beautiful, still alluding to movement through the light-reflecting glass of their display cabinet, although deathly eyed and brittle feathered, whereas, rather than reinvigorating the portrait subjects, the artist’s clothing of them with feathers obscures and even appears
to suffocate the human bodies represented, allowing only their eyes to indicate life, perhaps in an appeal to the viewer for a return to their usual anonymous form.

It is this unauthorized repurposing of the photographs, no matter how meticulously done, I find most troubling and unnecessary. I have the same sense of disquiet when encountering carte-de-visite and cabinet cards cut up for decoupage and scrapbooking craft projects or clumsily pierced to display the latest range of earrings in a jeweler’s shop window. That the studio portrait is a record of intent, of its subject toward significance, that it records the aspirations of the sitter toward being noteworthy, special and somehow of value is ignored by those who trivialize them. I am relieved that Angelucci’s Aviary has not required the destruction of the original photographs. It is in these that I recognize “moments of poise and record” (p. 62) rather than in the “strange personages” described by Woodley in the last of the three essays.

Why are the photographs insufficient in themselves? Why the impulse to combine them with photographs of endangered and extinct birds? Of course the rationale is provided on the artist’s behalf by the curator’s essay. Chhangur refers to the work’s revealing of “other species not yet known to any system of taxonomy” (italics in the original). Well, perhaps: But the subjects in these photographs lived at a time when taxonomic classification was of great interest to academics and laypersons alike. Harriet Ritvo’s 1998 book The Platypus and the Mermaid and Other Figments of the Classifying Imagination provides a comprehensive account of this 19th-century enthusiasm, when even the stitching together of taxidermied animals to prove the existence of mythological ones was a practice undertaken by showmen and “scientists” for the education, amusement and wonder of the Victorian audience. The unknown human subjects of Angelucci’s Aviary might have themselves been familiar with Grandville’s characters, or known fairy stories inhabited by human-bird, human-animal, shape-shifting beings. Now digitally enabled morphological beings populate the virtual social and game worlds of the Internet. Chhangur seems to overlook this long history of such manifestations in her consideration of Angelucci’s digitally manipulated photographic presentations.

The second essay, written by Claude Baillargeon [1], presents an informative and coherent account of the installation. Titled “Enchanting Reimaginings,” it mimics in form the artist’s presentation of her work “as a three-act drama of mourning, rebirth and remembrance” (p. 34). By chance, my reading of this essay took place in woodland, where natural birdsong presented a sharp contrast to the artificiality of the toy bird whistles of the artist’s 2011 composition The Venetian Forest, which was originally intended as “an allusion to the medieval wooden pilings still anchoring Venice to its marshy lagoon” (p. 35). Visitors to the exhibition would hear this recording of a “live” improvised performance of the work in the space assigned as a 19th-century domestic parlor, its unnatural sounds emphasizing the lack of life, even of traces of life in the almost-empty room. Listening to the recording of this composition brings to mind a mechanical singing bird in a cage, an automaton “toy” encountered as a child, fascinating in its almost-lifelikeness but only ever able to repeat the same few phrases over and over, just as the portrait photographs are repetitive in presentation of pose and expression — almost lifelike but never quite fulfilling photography’s promise. To take a portrait photograph requires the acquiescence of its subject, unlike the birds who did not fly willingly into the diorama wishing to be preserved there. Baillargeon comments upon Angelucci’s passion for opera as an influence upon her work, so undoubtedly she would have encountered and was also perhaps influenced here by the many dramatic incarnations of Mozart’s Papageno [2], an ordinary man whose business is to catch and sell birds, carrying a cage upon his back and softly constrained by a cloak of feathers [3].

In his “Act Two,” Baillargeon rather fancifully describes the portrait photographs as the “untethered spirits of anonymous beings” (p. 37) in a “chimeric world,” recalling Max Ernst’s “bird-like humanoids.” Then following Chhangur he also cites Sebald and the influence of Angelucci’s favorite passage from Campo Santo. Here we are given further information and an insight into the artist’s creative process, one of adaption in response to encounters with the ornithology specimens of the Royal Ontario Museum, where Angelucci finally selected the photographs to suit the characteristics of the birds rather than her original intention of the reverse.

In “Act Three” and in the still images taken from the multimedia installation of The Anonymous Chorus, I find welcome relief from the deathliness of the feathers of Aviary. This is the part of the exhibition I regret having missed. Baillargeon provides a full and descriptive account evoking the immersive experience; in particular his likening of the form and presentation of The Anonymous Chorus to the popular 19th-century public spectacle of panorama and diorama is apt. The responsibility for the narration, the storytelling that would have accompanied such illuminated images, is for this work carried by the chorus [4]. I sense here warmth in his words, suggesting he found this the most satisfying and moving element of the work [5]. Asleep in the Dust is the third essay. Its author, E.C. Woodley [6], begins by describing his recollections of seeing a film of his grandfather as a young man “[who] looked supremely beautiful in his good clothes” (p. 61). He explains how the past, presented in the few moments of film, appeared to him as “uncluttered.” The deliberate emptiness of the exhibition’s first space might also provoke such a response; Woodley’s interpretation and Angelucci’s almost-empty “parlor” present a vivid contrast to the cluttered and elaborately decorated public and domestic spaces of the
19th century. I am uncertain whether the artist’s allusion is to the domestic parlor or drawing room or the public/private liminal space of the photographic studio. If the latter, then the sparsely furnished first gallery space presents a contrast to the multitude of seemingly unnecessary objects visible in so many portrait photographs, sometimes so many that they engulf the subject, imprisoning them in a fabricated surreal landscape. In Angelucci’s Aviary pictures, flightless creatures are imprisoned by their feathers, just as are the grotesquely beautiful taxidermy birds in the glass cabinet, carefully positioned with wings spread in frozen flight. These representatives of “spirits” appear to me to be quite “unable to transcend . . . our known universe” (p. 37), and so the allusion breaks down.

Woodley writes about the alienation of nature in the cities, where sightings of birds are so unlikely as to be “fantastical.” He suggests that Aviary’s subjects are taking up their rightful place in an ancestral portrait gallery where they present models of dignity and genetic complexity. But I wonder how he would respond had the photographs of the birds been overlaid with the clothing of the anonymous subjects of the carte-de-visites. Woodley’s account of The Anonymous Chorus is rich with description and justifiable praise, although the poetic religiosity of his likening of the work to a “Messianic prayer” and, for example, his references to the creation of the Earth in Genesis, and the spotlighting of individual elements <http://sara-angelucci.ca/>. Although, rather like watching the big match on television, I hear an expert commentary and am privileged in seeing both the overview and the detail, I miss something intangible that cannot be transmitted by text or image or sound, only attained by being present.

Notes
1. Google helps me here.
3. I find a visual analogy here to a photographer.
4. A “list of works” including the music is usefully provided and comprehensive acknowledgements are offered to many collaborators.
5. As I do, albeit secondhand on Vimeo.
6. Google is less helpful here, and I am still uncertain who E.C. Woodley is.

Sampling Media

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“Take something. Do something to it. Do something else to it.” That was a gnomic utterance by the artist Robert Rauschenberg, riding high (Time magazine cover story) when I was in college. It could be an epigram in this informative essay collection. What some call mix culture, and Stefan Sonvila-Weiss called mashup culture, David Laderman and Laurel Westrup, looking back to the 1980s rap group the Beastie Boys, prefer to call sampling. The catholicity of their introductory flyover cites the tape loops of Jim Shaw in his college-age audio sessions with Mike Kelley, Oulipo literary experiments and the Beats’ cut-up texts, even the allusions to Hong Kong cinema found in Quentin Tarantino’s Kill Bill.

Laderman posits that what was once Dada is now normative in mainstream media, a viewpoint shared with Lev Manovich, historic techniques coming to the fore with the artists in the 1970s New York “Pictures Generation.” He mentions Bruce Conner’s rhythmic use of found footage and notes the music by Nick Cave and Barry Adamson. A key work is DJ Spooky’s 2004 Rebirth of a Nation, which I found myself telling my graduate Digital Media class about on the 100th anniversary of D.W. Griffith’s racist Birth of a Nation predecessor, the source material for Spooky. Like Danger Mouse, Spooky demonstrates unique artistry found within a cloud of broken parts. Richard L. Edwards’s “Remixing with Rules” examines restrictive remixes, such as that of the rule-making Oulipo writers. One might add Ron Silliman’s 1978 book-length poem Ketják, which used a Fibonacci sequence to assemble its sentences. R.D. Crano’s “What Ever Rubber Was at Hand” appreciates the images of the spectacle and intentional exploitative class dynamics in the films of Guy Debord, giving us a fine explanation of Debord’s motivation and process. In his chapter, Barry Mauer juxtaposes textual strategies in three personages in different realms. These three are the Paris Cinematheque Director Henri Langlois’s small-c catholic curatorial practice; Memphis radio disk jockey Dewey Phillips’s genre-busting in days of racial segregation, to excite and inspire musicians like Elvis.
Leonardo Reviews

Her statement was turned into a sampled dance song (whose video flashed an image of Dodson barbecuing) and earned her an appearance on The View. Di Fede does cite David Laderman’s paper on sampling by David Byrne and Brian Eno for their album My Life in the Bush of Ghosts as inadvertently Orientalist practice, something I certainly want to read. Although promises are posted on the website of the University of Nottingham’s film studies journal Scope that its archives will soon be back up, their absence made me wish that piece by Laderman had been included in this volume, too. Readers will, however, appreciate the book’s accompanying website, which allows them to examine firsthand many of the projects discussed in the book, including the sampled Mr. Dodson.

Jaimie Baron writes well on found-footage films, the work of Christian Marclay and Gerard Freixes Ribera. Here I learned of Akosua Adoma Owusu’s 2007 Intermittent Delight, which juxtaposed Ghanaian textiles and Westinghouse refrigerator advertisements. Yet one wonders why the book has no mention of the greatest film sampler of my own generation, Craig Baldwin, the filmmaker behind Spectres of the Spectrum (guerrilla actions against the conspiracy to privatize the Internet) and the amazing “Tribulation 99” (US Latin American policy 1930–1990 only making sense if interpreted as a response to alien invasion of interplanetary Quetzals). Baldwin is also distinguished as an erstwhile underground film curator, for a quarter century presenting Other Cinema in a San Francisco storefront on Saturday nights (full disclosure: I proposed a Baldwin essay for this volume). There is a single earlier mention by Laderman of Bruce Conner, with whom Baldwin studied at the San Francisco Art Institute, but not the following generation, Conner’s children, so to speak. From his vantage point at the peninsula’s Cañada College, David Laderman is well-positioned to survey the sampling career of Baldwin, the related practitioners around A.T.A. (Artists’ Television Access) Phil Patiris and David Cox, the Prelinger archive, 1980s billboard “correctionists”-quastreet performers Rats for Profit, and all their roots in San Francisco Punk culture, aesthetics and politics still roiling 20 miles to Laderman’s north. He might then turn to examine the digital technologists 20 miles to his south, maintaining Google’s YouTube and on the Apple campus, and the tech (Oculus Rift virtual reality?) of the next wave of creative sampling. One likes to think that’s his next book, well in progress.

TOPLESS CELLIST: THE IMPOSSIBLE LIFE OF CHARLOTTE MOORMAN


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Thoroughly researched and somewhat fast-paced, this book by Joan Rothfuss on Charlotte Moorman, American performance artist, avant-garde musician and entrepreneur, is an intriguing read. She was an interesting woman and participated in innovative works, but I’m not sure why the author calls hers an “impossible life.”

Charlotte Moorman (18 November 1933–8 November 1991) was born in Little Rock, Arkansas, to an alcoholic mother and a father who died when she was young. She toyed with a classical career and trained with various teachers, including, briefly, at the Juilliard School of Music. She also played with various orchestras and quite possibly would have succeeded as a classical musician, although appointments were difficult for her to find. She soon came under the influence of certain avant-garde composers and experimental artists, such as Yoko Ono, Karlheinz Stockhausen, Nam June Paik (with whom she collaborated a great deal) and John Cage, allowing herself to be used in exciting but sometimes very dangerous
ways. She wore a television set bra, rested TV sets on her bare breasts, caressed an ice cello, performed nude, hung suspended by several helium-filled balloons above the Sydney Opera House while playing the cello, hung suspended from helium-filled weather balloons in a piece called *Sky Kiss* created by Jim McWilliam, and so on.

Paik created many works for Moorman, including *TV Bra for Living Sculpture* (1969) and *TV-Cello* (1971). An inevitable notoriety came her way when she performed Paik’s *Opere Sextronique* at the Film-Makers Cinematheque in New York City (1967). This musical event required she perform acts with her cello in various states of nudity and props that included a bikini with blinking lights in the first movement and then being topless in the next and so forth. She was arrested and charged with indecent exposure mid-performance by three plain clothes policemen. It was this arrest that gave her fame as “the topless cellist.”

As an entrepreneur, Moorman may have had the most influence on the avant-garde scene. She founded the annual Avant Garde Festival of New York in 1963. This festival presented experimental music (of the Fluxus group and happenings) as well as performance, kinetic and video art, which was in its infancy at the time. The title “Annual” was a bit of a misnomer as the festival wasn’t held every year; instead, just 15 events happened from 1963 to 1980. The events were performed in very interesting places, including Shea Stadium, the World Trade Center and the Staten Island ferries. Moorman was a valuable spokesperson and negotiator for what were challenging and controversial performances, even speaking on a well-known popular television show in order to drum up support for her ventures.

The Korean-American composer Paik and others employed Moorman to expose prevailing ideas about feminism and the role of women in music, but she herself was never a feminist and she was uninterested in feminism. It is on this point that I question the author’s remark that Moorman’s performances critiqued the way classical music just uses female musicians as a conduit for male authority, for Moorman’s absence of interest in speaking her own voice merely perpetuated this scenario. She was obedient to the intention of the composer, usually a male composer. This point is crucial to my query regarding the “improbability” of Moorman’s life. That she did not even question the authority of the male gaze is the thread that connected her life, as I see it. To be sure, she broke away from the conservatism of the “white picket fence” mentality of the small town in which she grew up, but she continued to see, as they did, that the man was the mover and shaker of life.

Moorman contracted breast cancer and, typical to her way of being, used this experience as a performance piece. Not even death was to be excluded. This endeavor was not a matter, for her, of ideological, aesthetic, or even cathartic purpose, but, as she said, a way “to make something positive out of this damn fiasco.” A number of performance pieces were shaped around her mastectomy, medical procedures and even the syringes used to inject painkillers. In this way, she married her history, her body, her desires and her disease, thus fulfilling a fundamental of performance art. It is art in action; it is what happens between this moment, and this, and this.

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**DO ZOMBIES DREAM OF UNDEAD SHEEP? A NEUROSCIENTIFIC VIEW OF THE ZOMBIE BRAIN**


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The dodgy premise of this book is that a consideration of the zombie brain, or of the lack of most of it, might help the uninitiated accidentally learn some science and in particular neuroscience. It’s all a bit boisterous, and in part apparently written for idiots, or the living dead themselves: “At first glance it might seem that the brain is just a random set of wrinkles and folds, but in fact it is quite consistently organised.” No, really? I thought it was just nice to eat.

The problem is that the most interesting part of zombie studies lies not in their differences from us, as exemplified by their staggering, relentless pursuit of brains to eat in movies, but their similarities, not to mention identity, to us. Zombies are about one thing and one thing only, and that is consciousness. For the rest, we might as well learn about neuroscience by looking at differences between us and, I don’t know, cats or giraffes. Zombies, in this context, are nothing special at all. The authors, both assistant professors in psychology and neuroscience, do mention the philosophical or p-zombie in a footnote, but that’s it. Their description of how zombies are produced, apparently even today, as slaves for the Bokor in the Haitian religion of Vodou, using the puffer fish poison tetrodotoxin to induce coma and datura to wake the victim up, to resurrect him, is presented as fact, though it is in fact still controversial.

Of course, much neurology has proceeded by studying what symptoms are caused by damage to particular parts of the brain, and zombies
are mostly damaged brain and so afford a spectacular array of causes and effects. The problem is that these zombies are not real. They are absurd, mostly incompetently conceived fictions masquerading here as coherent, in some sense, medical oddities. Still, as a jumping-off point for a guide to neuroscientific wonders and alarums, it might do.

In general, there need hardly be zombies in the book at all. The living dead are forced, rather than staggering and biting their way, in. An illustration shows a potassium woman with a cricket bat, homage to *Shaun of the Dead*, ready to smash silly zombified sodium ions clambering through windows marked “ion channels.” Elsewhere, damage to the central thalamus might make you unable to attend to stimuli occurring on your right side, just for example, “a rotting hand reaching out and grasping at your right leg.” Oh dear.

However, take the zombies with a skull-full of salt, wade through prose that sometimes verges on the patronizing, and there’s a useful introduction to neuroscience skulking in here, somewhere. Both authors are members of the Zombie Research Society. Had they been into vampires, slime moulds or model railways, they would no doubt still have written a book much like this, with those obsessions as pegs on which to hang some quite interesting neuro-stuff.