The spread of new sound recording technologies at the end of the nineteenth century has modified not only our perception but also our use of spoken and written language. It has significantly changed our understanding of oral and written modes of communication by bringing a new era of reborn orality. Oral language is now more present than ever, and the kind of direct, face to face, physically embodied communication that it supposes is no longer culturally and ideologically dominated by the written model of distant and delayed communication with an absent author. Poets rapidly became aware of these new possibilities. Yet in spite of the glowing commitment of modernist poets such as Guillaume Apollinaire, an early defender of the new media poetry of his times, and in the case of some attempts to constitute sound archives in view of scientific research or the involvement of writers and poets in radio broadcasting, the real and systematic exploitation of sound technology in poetry did not start before the 1950s, in the double context of the revival of public readings and the larger availability of personal tape recorders. In the beginning the renewed encounter between poetry and sound technology remained rather "passive" (the technology was mainly used to record and archive), but after some years its use became more "active" (the technology started to be used as a creative tool, transforming the way in which poetry was made and performed). In the end, it is poetry as a whole that will be radically changed. One shifts from "writing" poetry to "doing" or "performing" poetry, making room for what had been repressed for so many centuries, namely: orality.

In the Anglo-Saxon scholarly tradition, the study of this reborn orality in poetry has taken two forms—theoretically very different, in practice closely intertwined. The first one is that of the systematic building of specialized archives, with UbuWeb and PennSound as the flagship realizations of a wide and generally well-organized open access policy at various levels. The second form is that of the elaboration of a specific theory of what is meant by sound in poetry, beyond the traditional rhetorical concepts of prosody and rhythm. The key feature of this new theory is the distinction between "orality" (referring to the way in which a written text is orally performed) and "aurality" (referring to the way in which a text is capable of provoking sound effects, however different they may be from what can be heard during a normal "declamation"). Today, both poetic practice and the scientific study of poetry heavily tend to prioritize aurality at the expense of "orality," generally accused of remaining text-bound. Aurality, instead, is considered a way of liberating the full spectrum of sound aspects, including those that were long seen as marginal if not utterly futile (either "nonmeaningful" aspects such as stuttering or inaudibility during a performance, or "external," such as the impact of a microphone, echoes, surrounding noises during a recording, etc.). In short, what "aurality" imposes, beyond the human, now mechanically enhanced voice, is the very body of the poet, now seen as a fundamental feature of any poetic production as well as reception.

Two landmark publications still dominate the Anglo-Saxon field: Close Listening [1] and The Sound of Poetry/The Poetry of Sound [2]. In France, in spite of a thriving experimental sound poetry tradition, the methodical study of this type of poetry has remained much more fragmentary, while the encyclopedic or archival impulse of initiatives such as UbuWeb and PennSound was also much more modest. The volume edited by Lang, Murat and Pardo—all three scholars with an impressive track record in the field of sound analysis in poetry—has the ambition to fill this gap, and it succeeds in doing so in a wonderful way. The quality and diversity of the essays...
gathered in this collection are without any exception outstanding, and the sum of the parts should be considered the ideal platform to finally structure and reshape the previously shattered and very incomplete study of sound in poetry. In that sense, the book continues and systematizes the equally excellent volume *Dire la poésie* [3] edited by Jean-François Puff (it does not come as a surprise that several authors of this publication also appear in the current collection).

The book opens with two “foundational texts,” the (excellent) translation of Bernstein’s introduction to *Close Listening* and a carefully edited text on the aesthetics of declamation by a lesser-known representative of the Russian Formalist school, Serguei Ignatievitch Bernstein (no relative of the first Bernstein). It further offers contributions by 14 authors (many of whom, such as Vincent Broqua, fruitfully combine the no-longer-separated roles of creator and scholar) in three different sections: a historical section on the emergence and progressive use of sound technology in a poetic and institutional milieu, not a priori in favor of this kind of experiment (featuring articles by Patrick Beurard-Valdoye, Reinhart Meyer-Kalkus, Daniel Kane, Heiata Julienne and Gaëlle Théval); a section focusing on the reception and study of performing and listening practices by authors and theorists of these new archives (Jean-François Puff, Will Montgomery, Olivier Brossard and Michel Murat); and a third section that explores possible uses, and thus manipulations and transformations, for instance in the context of an exhibition (by Chris Mustazza, Vincent Broqua, Anne-Christine Royère and Camille Bloomfield).

What makes this collection so important is not only the theoretical update on work in this field after more than two decades but also the opening of this field to all types of poetry (in the anglophone tradition, there has been for many years a strong emphasis on highly experimental poetry, somewhat at the expense of more classic forms of poetry). *Les Archives sonores de la poésie* also introduces a very helpful, matter-of-fact approach in terms of do’s and don’ts, for instance, when it comes down to questions such as: Which metadata do we need when describing an archival sound item? What is the difference between presenting and exhibiting an archive? How should we think about the relationship between sound in poetry, and what the visual captures of a performance are capable of telling us? How can we reconstruct the historical horizon of producing as well as listening? What do we do when items are missing? Another great merit of this book is the strong sense of self-criticism. The collection is truly committed but never one-sided. The authors do acknowledge the resistance of large parts of the poetic field to aurality, but they do not discard it as purely reactionary. They also stress the limitations and dead ends of certain forms of contemporary research, though this does not lead them to easy skepticism (for instance, when discussing computer-enhanced listening or distant reading). Finally, the book tries to catch up with anglophone research in the field, but it also clearly foregrounds the interest of French best practices (and failures, of course).

*Archives sonores de la poésie* is a vital contribution to the study of sound and, more generally speaking, the body in all kinds of poetry. It is also a performative contribution, since the book will certainly have strong impact on official policy in the field of sound archives. It is, in short, the ideal springboard for a widening as well as a sharpening of both poetry and the study of poetry in the expanded media field.

**References**


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**SUSTAINING RESOURCES FOR TOMORROW**


Reviewed by Robert Maddox-Harle, Australia.

https://doi.org/10.1162/leon_r_02018

This book is possibly one of the most important recently published books that every literate person should read. It is "essential" reading for all those involved with food production, water resource management, architecture and fuel/energy production/use/distribution—and politicians! One thing the varied essays make clear is that we are all in this "living on the planet" gig together, and it is up to everyone to make a contribution to developing sustainability, no matter how small—every bit counts. In the Preface, the editors quote Martin Luther King Jr.: "Even if I knew that tomorrow the world would go to pieces, I would still plant my apple tree." This means it is time for people to drop the current global solipsistic iPhone (i-everything) mentality and do things unselishly for present and FUTURE generations! As the title of Willie Nelson’s son Lukas Nelson’s latest song goes, “Turn off the news and build a garden.”

This book includes 19 chapters, each one dealing with a different aspect of sustainability. All are well researched with vast resources for future study, critique and verification. The main thing that impressed me with this book is the lack of hysterical, one-sided, fanatical hype. The questions of climate change, the Anthropocene and extinction of humanity are quite often riddled with this almost evangelical sensationalism. This book is a sober, middle-of-the-road look at the facts, as best as can be ascertained at present (2020); many of these are eye-opening and not quite what we have been led to believe.

All chapters are well written and engaging, and may be read out of

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sequence to suit the reader’s specific field of interest. The book runs to 290 pages and is lavishly illustrated with both color and black-and-white diagrams, drawings and photographs. I will list the chapter titles (truncated) below, as they are fairly indicative of the scope of each discussion.

1. Energy, Renewables Alone?
2. Exploring EKCs in Urban Water and Energy Use Patterns and Its Interconnections
3. Mining Phosphate from Wastewater
4. Toward Sustainable Agriculture: Net-Houses instead of Greenhouses
5. Sustainable Food for Thought
6. Tomorrow’s Green Buildings
7. Improving the Uncertainties of Buildings Lifetime in the Evaluation of Environmental Impacts
8. Sustainable Living? Biodigital Future
9. Energy, Security and Efficiency Analysis of Renewable Technologies
10. Small Wind
11. Supercapacitor for Future Energy Storage
12. Sustainable Services to Enhance Flexibility in the Upcoming Smart Grids
13. Carbon Storage and Utilization as a Local Response to Use Fossil Fuels in a Sustainable Manner

Chapter 1, “Energy, Renewables Alone?,” is a broad, though detailed, overview of most aspects of the sustainability debate and in a sense sets the sobering stage for the rest of the book. There are well over 170 references in this chapter, which makes it a goldmine for students and researchers. It is, in part, based on a keynote presentation given by the author, Graham T. Reader, at the University of Catalunya, Barcelona, at the Tomorrow symposium (June 2019).

The chapters that I found personally of most interest were numbers eight and eleven, given my interest and original training in architecture and electrical system design. Chapter 8, “Sustainable Living? Biodigital Future!” by Alberto T. Estévez (University of Catalunya, Barcelona), delves deeply into sustainable living and biodigital architecture (I have reviewed for Leonardo a number of books from this university; all are at the forefront of tomorrow’s living architecture). Chapter 11, “Supercapacitor for Future Energy Storage” by Giancarlo Abbate et al., tackles the hard question of storing electricity when the sun is not shining, or the wind not blowing, and outlines the state-of-the-art high power storage of supercapacitors. As mentioned in the abstract, “All [these kinds] of problems cannot be solved always by electrochemical batteries. An alternative to them is represented by supercapacitors (SCs), energy storage devices specialized in high power, exhibiting also a very long life cycle” (p. 205).

As mentioned above, this book is a must-read for everyone interested in their own and their children’s future. Also, I can envisage many artists, including those avant-garde of the Leonardo community, being inspired by the wealth of information and ideas in this book to create works of art that utilize sustainable ideas in provocative and stunning projects.


Reviewed by Jan Baetens.

https://doi.org/10.1162/leon_r_02019

En cas de malheur (1958, English title: In Case of Adversity, American title: Love Is My Profession) is—or at least used to be—a famous movie by French director Claude Autant-Lara (1901–2000). An adaptation of Georges Simenon’s eponymous novel (1956, English title: In Case of Emergency), the work was critically praised and commercially very successful at its release, before falling from grace as the typical and typically despicable example of the old-school French moviemaking of “French Quality” cinema (the quality label explicitly referring to the perceived lack of quality and cultural prestige of Hollywood cinema as seen through chauvinist and protectionist French eyes). It was first challenged and eventually totally discredited by the New Wave. Today, after history’s verdict, there may be room however for a fresh take on En cas de malheur.

There are obviously many good reasons to categorically reject both the movie and its maker, besides the utterly unpleasant character of the director and the large historical shift toward more contemporary and thus allegedly more “realistic” themes and a more personal, that is, more “auteur”–centered way of shooting and editing. Let us list, for example: the blatant misogyny and patriarchal-ism of Simenon’s novel and Autant-Lara’s film, openly sympathetic to the attempts to restored shattered ideas of masculinity in postwar France; the awkward encounter of the two biggest stars ever of French cinema, Jean Gabin, the paradigmatic example of prewar vitality, manliness and working-class strength, and Brigitte Bardot, the new sex symbol that had conquered the world overnight since And God Created Woman (1956) but here acting in her first “serious” role; and, above all, the problematic and supposedly harmful role played by Jean Aurechne and Pierre Bost, the
screenwriting duo that had dominated the French Quality scene since 1940 and whose position and philosophy were so violently attacked by François Truffaut and his friends of the Cahiers du cinema in the 1950s (Truffaut's 1954 article “A Certain Tendency of French Cinema” is still today on the reading list of any film course whatsoever).

Yet the ambition of Boillat's book, provisional tailpiece of a larger research project exploring the exceptionally rich personal archive of Claude Autant-Lara [1], is less to come back on the many polemics that have accompanied the work and figure of the director than to reopen the case of his pivotal movie, at the historical interface of French Quality and New Wave, and to use this case study to elaborate a new method of film analysis based on two major pillars: first, the integration of a method and theory well established in literary studies, namely genetic criticism, which studies a text via the process by which it came to be; and second, a new approach of interdisciplinarity, apparently quite modest and pragmatic but exceptionally functional and illuminating.

In a very welcome state-of-the-art chapter on genetic criticism in general and in film studies in particular, Boillat stresses two points. On the one hand is the absence of actual best practices when it comes down to applying this method to film studies (references to genetic criticism rarely go beyond general claims, examples of close-reading are almost nonexistent, and the work done systematically sticks to a simplified and narrowly linear idea of the writing process of a movie, from source text to scenario and from scenario to movie). On the other hand is the necessity of redefining what the object of genetic criticism in film studies ought to be: not a one-person show (that of the screenwriter working through a series of versions) but a collective enterprise (equally involving the director, the producer, the actors, the agents, the critics, the public, etc.), and not a linear process (even if there is always a beginning, a middle and an end) but a spiraling development with many dead ends, a proliferating network that has to take into account the various stages of the script as well as many other data and documents, such as the idea of the star in the eye of the public at a certain moment in time or the quarrels between the actor's agent and the producer's sponsors.

Intertextuality, here, does not mean the subordination of film studies to some “grand theory” borrowed from a different, perhaps more prestigious, field such as psychoanalysis or Marxism but the fine-grained and very organic blending of closely related scholarly traditions that seamlessly complement each other, each addressing a specific component of the whole work. In this case, the domains involved are: narratology, cultural studies (more particularly gender studies), star studies, film history and, of course, genetic criticism.

Let me give an example of the way Boillat manages to intertwine these methods and theories and how genetic criticism intervenes in the building of their mutual dialogue. A striking feature of Autant-Lara's movie is the progressive abandon, as shown by the study of the genetic archive, of one of the most distinctive characteristics of French Quality of these years: the use of flashbacks (French Quality scripts generally tend to “add” flashbacks to the literary source texts they adopt, mainly in order to display the “literary” qualities of their adaptation; in the case of En cas de malheur the non-flashback policy is all the more revealing, since Simenon's source text heavily relies on such flashbacks). Yet flashbacks are not neutral, ideologically speaking: In many cases, they are used by French Quality screenwriters to foreground the male point of view (the flashback is often seen through men's eyes, while the women are reduced to the traditional position of to-be-looked-at-ness). The rejection of the flashback technique can thus be seen as an element that underlines the relatively modern gender policy of Claude Autant-Lara's movie, which is not a Jean Gabin vehicle reducing Brigitte Bardot to the mere role of sexualized victim. More generally, the close examination of the genetic archive in the broad sense of the word further strengthens this more woman- and youth-friendly interpretation. In spite of Gabin's repeated interference with the work of both the scriptwriters and the director, the archival-genetic perspective clearly demonstrates not only the permanent tension between the star and the way his image is used (and according to him: badly used) in the movie, but also the gradual emergence of a more gender-balanced presentation of the two stars, male and female, and the characters they embody and shape in the movie (a process that eventually also transforms their star image and status).

In a period of great suspicion toward theory, certainly if this theory tastes of French Theory, and of a frequently uncritical and naive embrace of interdisciplinarity, it is a pleasure and a relief to accompany Alain Boillat on his journey through the Autant-Lara archive. What makes this book so convincing—next to its great clarity and lack of jargon—is, of course, the high quality of its research and analysis. Theory is exemplarily put at the service of understanding, and interpretation does what it should do: help discover what would have stayed under the radar, establish links that might have gone unnoticed, revise and nuance existing ways of reading (instead of purely debunking, discarding or ignoring them). From all these points of view, Boillat's monograph is a considerable enrichment of our current knowledge of a pivotal moment in French cinema (if not in cinema tout court). It breaks away from the prejudices against French Quality without indulging in some soft ecumenism concerning its gender politics, for instance. It powerfully innovates the narrative analysis of cinema, appropriating literary tools in a way quite different from what is found in literary studies.
It complexifies our stereotyped reading of gender, contextualizing issues concerning the male gaze while reasserting female agency in sometimes surprising ways. And, of course, it demonstrates the possibility, if not the necessity, to enlarge the very object of film studies by proposing a totally new definition of a movie's archive.

Although Boillat's approach will not be immediately accessible to every film student or scholar, since not all archives are as complete as that of Autant-Lara, while not all of us are institutionally and financially backed by the Swiss Science Foundation, this book has everything needed to become a major source of inspiration for all those working in the field.

**Note**


BLUE: THE HISTORY OF A COLOR


Reviewed by Giovanna L. Costantini. https://doi.org/10.1162/leon_r_02020

"Sapphire is a truly celestial stone," writes Michel Pastoureau in Blue: The History of a Color. "It is often compared to the color of the sky and is said to have healing powers." Pastoureau's fifth book in a series that includes Black, Green, Red and Yellow draws together another a stunning collection of artworks whose resplendent color has long captivated artists and viewers alike. While acknowledging scientific analyses of color composition, visual perception, human psychology, subjectivity and linguistic relativity, Pastoureau's study is premised on the conviction that a history of color is a social history in which color's meanings and conventions, known historically as iconography, require a phenomenological method of inquiry relative to the group to which it is assigned.

Like other works in the series, this volume addresses the multimedia, interdisciplinary uses of color among Western European societies from prehistory to the modern era, especially symbolic values that have been codified in textual sources. In so doing, it investigates the mineral composition of pigments; economic factors and trade patterns relevant to the color's use and development over time; blue's etymology, including names, definitions and varying connotations; chemical components that effect the color's appearance under diverse circumstances; indicative customs of dress and their social codes; dyeing techniques; the color's place in daily life and material culture; religious significance; scientific theories; and qualities conveyed through art. While it is neither limited to the Middle Ages, nor a complete history of the color in Western culture, the text's five chronological divisions place decided emphasis on two periods: the High Middle Ages and the Early Renaissance from the twelfth to the fifteenth centuries, and the years extending from the Revolution to the establishment of the Third Republic in France from the late eighteenth to the mid-nineteenth centuries. These emphases correspond to more fully developed thematic interests in areas of cloth dyeing, trade in color-producing substances, the use of color in costume, heraldic signage and the history of blue in the construction of French national identity as encoded in the French flag.

A sacred fish from Egypt from the first century BCE illustrates the use of minerals and semiprecious stones such as azurite, lapis lazuli and turquoise, not only for jewelry and funerary objects, but also as components of ultramarine and other pigments utilized in tomb paintings. Lapis, specked with golden iron pyrite known as "fool's gold," came largely from Iran and Afghanistan, where these regions continued to supply the West with the very expensive stone from antiquity to the Middle Ages. The rapturous beauty of stained glass in thirteenth-century cathedrals—described by Abbott Suger as jewel-like radiance evocative of the ineffable light of the celestial kingdom—was attained by adding cobalt, ground to resemble sapphire, as a small to molten glass. Lapis and azurite contributed to the brilliant ultramarine hues of illuminated manuscripts such as Les Très Riches Heures du Duc de Berry and other Books of Hours produced in France and Belgium throughout the fifteenth century. It was also lapis that imbued the gold-studded vaults of Giotto's Arena Chapel and Michelangelo's Sistine Ceiling with transcendent luminosity. Vermeer, whom Pastoureau names as the greatest painter of the seventeenth century, achieved his incomparable handling of light from lapis lazuli, discreetly applied to the surface in a manner compared to visual music.

An emphasis on high medieval and northern Renaissance painting makes slight mention, however, of the decorative arts, particularly ceramics, that appear in many Dutch Golden Age paintings. A major source of European commerce during the seventeenth century, blue and white vessels produced in China and Japan made of kaolin (white clay) and decorated with cobalt blue pigments originally imported from the Middle East, came to be heavily traded throughout the East and West, especially by the Dutch East India Company. During the seventeenth century, a taste for "China Blue" oxides utilized in Asian
stoneware provided a catalyst for the emergence of Holland’s distinctive Delftware industry, which rapidly usurped China’s preeminence in porcelain production. In this case, a taste for Delftware’s distinctive “Delft Blue” hues and later tube colors marketed as “Old Holland Blue” originated in commercial interests to produce a less expensive, competitive alternative to popular imported Chinese porcelain. The same could be said of porcelain produced by Royal Copenhagen, founded in Copenhagen in 1775.

Pastoureau’s history of dyes examines plant-based products utilized by early populations, especially woad, also known as “Indian stone,” a flowering plant whose leaves are crushed to produce a blue pastel colorant, and indigo, grown in bushes throughout the Middle East, India and Africa and imported during the twelfth century, mainly by Italian merchants. Indigo’s leaf tips yielded a deeply saturating color long favored among Mediterranean civilizations. It was not until the sixteenth century, with Europeans’ discovery of indigo in the Americas, that its distinctive blue color became more prevalent in European garments of cotton cloths that could be stained in a greater variety of tones. This use of indigo colorants in dyestuffs led to the creation of the artificial pigment Prussian Blue, employed among plein-air painters and decorative artisans of the later nineteenth century, especially the Impressionists.

The most developed sections of Pastoureau’s study are devoted to “Blue France,” in which the role of color as a politicized symbol is traced from France’s Capetian line of French monarchs, whose heraldic symbol l’azur semé de fleurs de lis d’or (blue adorned with gold lilies of the valley) derives from Marian imagery as a reflection of the Virgin’s role as protector of the kingdom. Thus, Charlemagne is rendered in a thirteenth-century miniature garbed in a blue mantle embroidered with gold fleurs-de-lis. By the late Middle Ages, blue had become the color of kings and nobility, eventually extending to the waistcoats of many military officers throughout Europe. During the later eighteenth century, the cockade was born, an emblematic rosette of ribbons generally pinned to a tricorne or cocked hat in colors as variable as black, red, white and blue. Stirred by Napoleonic fervor and later by the American Revolution, those of rebellious sentiment in France adopted a tricolor insignia, while monarchists identified with the white cockade of the Bourbon Ancien Régime. From 1794, the tricolor flag, a symbol of popular sovereignty, national patriotism and internationalism, civic order and legitimacy, was instituted, with “political blue” declared the color of the French Republic’s defenders.

Pastoureau’s survey underscores the profoundly variable and cultural nature of color’s perception and interpretation, one that belies chronologic and ethnographic categorizations. Yet Pastoureau’s narrative is enticing in its anecdotes of Celts and Germans who dyed their bodies blue to terrify opponents; Breton women painted blue in orgiastic rituals; diabolical fools in multicolored costumes; and fardical Roman giants of great height, obesity, curly red hair and blue eyes. The volume also luxuriates in such imagery as the enchanted gardens of the Villa Livia, the bejeweled mosaics of Ravenna’s Mausoleum of Galla Placidia, the limpid tints of grisaille miniatures, impetuous sketches from Picasso’s Blue Period and the geometric silks of Malam Suleiman. It is visual music indeed.

**ISHERWOOD IN TRANSIT**

**Reviewed by Jan Baetens.**

https://doi.org/10.1162/leon_r_02021

This past summer I had the great pleasure to read the two first volumes (1939–1960 and 1960–1969, together more than 1,500 pages) of Christopher Isherwood’s Diaries. These fascinating books cover the American, more specifically Californian, half of the author’s life (1904–1986): a life often associated with his Berlin years, described in the book that inspired Bob Fosse’s Cabaret: Goodbye to Berlin (1939). Both books also give a very direct insight into some of the “transit” issues studied in this new collection, gathered by two eminent specialists of Isherwood studies (their two previous collections are The Isherwood Century [2000], and The American Isherwood [2015]): the geographical issue, that is, the becoming-American of an English author (with his friend W.H. Auden; after many travels through Europe and Asia, his decision to migrate to the U.S. in January 1939); the ideological issue, that is, the coming-out of a gay writer and an increasingly explicit defense of queer culture in general (the aspect for which he is probably best known today); and the religious issue, that is, the turn away from atheism to Vedanta, one of the schools of Hindu philosophy (a key aspect of his life and work, which has proved to be a challenge for himself, as an explicitly gay and individualist character, as for his contemporary and current readers, generally less open to this strand of spiritual life).

When reading Isherwood’s Diaries, it is crystal clear that these three perspectives, geographical, ideological and spiritual, are closely linked. When settling down in Southern California, Isherwood finds a social environment that fits his fundamental individualism while putting him in direct contact with other intellectuals interested in Eastern philosophy and religion and, more importantly, a Vedanta community that he will consider his spiritual home for the rest of his life (for several years, he even considered becoming a monk; in later years, he will do a lot of translation work on Hindu texts and devote important publications to his personal guru). Yet, in light of the questions raised by Isherwood in Transit, what comes to the fore in the Diaries is the increasing split between geography on the one hand and ideology and spiritualty on the other. For while questions of personal
life and the relationships between self and the other, both at the level of personal and sexual relationships and that of the relationship with the larger dimensions of life and the soul, are the subject of permanent struggle and internal debate, typical of Isherwood's restlessness and his permanent refusal to take himself and the world for granted. His move to Southern California (more precisely Hollywood—and, yes, the Diaries are also a place of high gossip) was undoubtedly experienced by him as a happy arrival. Los Angeles became the place where he really felt at home and only reluctantly left (he particularly hated New York, for example). Such was the comfort he felt in the hills near Hollywood that he did not cease to make sad and often naughty comments on the permanent change of the city. The rapidly increasing population and the many disquiets this involved (noisy children, filthy beaches, visual pollution of the natural environment, racial and ethnic tensions, traffic jams, etc.) are one of the small but revealing leitmotifs of his diary writing. Certain pages are even very close to the well-known soliloquy in Chandler's *The Little Sister* (1949), in which Marlowe expresses his growing disappointment with everything that had recently gone wrong in the city he both loved and hated.

In sharp contrast with Isherwood's "goodbye to geographical transit" is not only his never-ending search for a freer way of living and thinking, as demonstrated by his defense of queer culture, but also by the extremely self-critical attitude toward his own thoughts and way of life. *Isherwood in Transit* is a marvelous study of this edginess (one does not need to do digital humanities or statistical linguistics to notice that "edgy" is one of the author's preferred adjectives). This unrest, however, is not empty or without a clear horizon, and the main line of Isherwood's creative, intellectual and real-world activity is undoubtedly that of a queering individualism. Berg and Freeman's collection examines this trajectory in a well-structured and almost exhaustive way: All important periods of Isherwood's life (English, European, Asian, American) are carefully discussed; all major works, including early non-published ones, are discussed in clear and excellently written chapters that manage to combine general contextualization and close-reading (the only real missing item here would be *Mr Norris Changes Trains*, but given the richness of Isherwood's vast production, this is no more than a tiny detail). Moreover, the book also foregrounds the necessity of studying the notion of "transit" from a wide range of perspectives, always keen to bring together the personal and the political, the local and the global, the material and the spiritual, fiction and nonfiction, in short life and work. One of the most innovative articles in the book offers, for instance, an audacious reading of Isherwood's masterpiece *A Single Man* not as a campus novel but as an indirect attempt to express certain insights of Vedanta philosophy (on which the author was also writing, but with great pains and less success, in exactly the period he worked on *A Single Man*).

What makes this collection particularly interesting and worthwhile is, however, what I would like to call its own "sense of transit": its own intellectual and scholarly restlessness and sense of self-criticism of the Isherwood community. The book does not try to dissipate Isherwood's hesitations and occasional mistakes, related to issues of class (for instance in his perhaps somewhat exploitative relationships with the working class, that is, unemployed and hungry hustlers in his Berlin years) or race (for instance in his contacts with Mishima). This is a very courageous and mature approach, and I think a very healthy stance in the current context of revenge culture.

**A New History of the Future in 100 Objects**


Reviewed by John F. Barber.

https://doi.org/10.1162/leon_r_02022

The subtitle for this new book by Adrian Hon, CEO of the London-based game design company Six to Start, reads "A Fiction." While this is true, *A New History of the Future in 100 Objects* is woven from references and nods to past, similar projects and the reader's even modest awareness of the rapidly evolving 21st-century technological landscape.

Hon notes being prompted by *A History of the World in 100 Objects*, a joint venture undertaken by the British Museum and BBC Radio 4. One hundred separate radio episodes, each narrated by British Museum director Neil MacGregor, retold the history of humanity through its made objects. The radio broadcasts began in January 2010 and continued for 20 weeks. A book by MacGregor with the same title was published in October 2010. In 2016, an exhibition of some of the objects in the radio programs toured internationally. Today, the entire radio series is available for download, and an audio version of MacGregor's book is available for sale.

Hon also acknowledges his gratitude to Vernor Vinge, Iain Banks, Neal Stephenson, Kim Stanley Robinson, Lewis Hyde, Ted Chiang, George Orwell, Stanislaw Lem and other writers who imagined future worlds.

Hugo Gernsback should certainly

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Downloaded from http://direct.mit.edu/leon/article-pdf/doi/10.1162/leon_r_02026/1887767/leon_r_02026.pdf by guest on 27 March 2021
be added to this list of influential writers. Gernsback founded the magazine *Amazing Stories*, which consistently introduced new objects, mostly technological, and thus became prophetic regarding a vision of what the future world might become. Also worth mentioning is *Motel of the Mysteries* (1979) by David Macauley, a tongue-in-cheek archeological explanation of objects unearthed in 4022 from a motel buried by an unknown catastrophe in 1985. Macauley’s explanations of objects is both interesting and insightful.

The same is true of Hon’s new book, *A New History of the Future in 100 Objects*, which builds on the influences just mentioned. In 2082, Hon, as an unnamed narrator, selects (creates) 100 objects and artifacts, offering a history for each. Each object/artifact is described in a few pages. Taken together these descriptions provide a fictional history of the 21st century.

The 100 objects described by Hon include smart drugs, disaster kits, an advanced form of emojis that replace written communication, ubiquitous deliverbots, amplified teams, necklaces that relay subvocal (silent) communications, international partnerships, medical advancements, a cure for hate, a new way to watch television, active clothing, surveillance devices, a guide for making friends with post-humans, artificial worlds on asteroids, prodemocracy movements, a collective providing financial support for artists, invitations to immigrants to revitalize urban areas abandoned by changing demographics, and conversational toys supported by “a complex combination of crowdfunding, outsourced manufacturing, international politics, and five million freelance actors” (p. 3).

As Hon notes, *A New History of the Future in 100 Objects* is a fiction. But readers will find connections with current events and/or objects and artifacts that could be, looking ahead, early iterations for those described by Hon. Many examples of current technology are only a benign update or two away from Hon’s descriptions. Ankle monitoring devices and deliverbots are examples. Other current trends might prompt chilling results, for example downvoting networks that identify and erase undesirables and enhanced interrogation via virtual reality. *A New History of the Future in 100 Objects* is ingeniously imaginative in its detailing of the things the future might leave behind. In his descriptions of these objects, Hon both reminisces about our current state and prompts us to think about what might become. The future after all belongs to what we create. Smart readers will want to act before it is too late.

**FREEMASONRY AND THE VISUAL ARTS FROM THE EIGHTEENTH CENTURY FORWARD: HISTORICAL AND GLOBAL PERSPECTIVES**

edited by Reva Wolf and Alisa Luxenberg.

Reviewed by Robert Maddox-Harle.
https://doi.org/10.1162/leon_r_02023

This book is a wonderful, detailed scholarly work that explores the relationship between Freemasonry and the visual arts and vice versa. The visual arts are considered in the broadest sense, from the grand architecture of the 1700s to the exquisite craftsmanship of utilitarian items such as silverwork, teapots and porcelain items. As the introduction states, given Freemasonry’s focus on architecture and metaphor, and, by extension, symbols, it is hardly surprising that from the outset the arts figured prominently in Freemasonry’s self-image, and that numerous artists were Masons. This centrality of the arts to the history of Freemasonry, and, conversely, Freemasonry’s significance for the history of art from the 1720s forward, is the overarching subject of this book (p. 1).

The main thrust of the book’s exploration is certainly concerned with visual arts and crafts, but the book also goes into previously unknown historical facts regarding the relationship between Freemasonry and society generally and the churches specifically. Preconceived ideas and inadequate existing scholarship are exposed on many levels; it is hard enough doing detailed historical analysis of any subject, but when the subject is shrouded in secrecy and its own deliberate “veils and allegories,” the accurate connection between it and mainstream society is just that much harder.

The book is beautifully illustrated, with numerous color and black-and-white images that help reveal the way the visual arts, particularly architecture, were influenced by and, in turn, influenced Freemasonry. I must mention, as an aside, my concern with eBooks. I received this book to review in the e-version, partly because of the current coronavirus pandemic and difficulty with hard copy postage from the U.K. and U.S.A. It is extremely difficult to read a 321-page book stuck in front of a large computer screen and, in the case of a lavishly illustrated book where the images are as important as the text, basically tedious (and horrible) on an eBook reader. I enjoyed the book very much, but not the reading experience. For all those who champion the notion that the end of hard copy books is nigh, perhaps consider this dilemma.
After the excellent introduction, “The Mystery of Masonry Brought to Light,” written by the editors, there are 11 chapters, quite varied in scope, by scholars in their respective fields. These are followed by a selected bibliography and excellent index. I thought I knew a reasonable amount about Freemasonry (that which I was permitted to know) by way of my own father, who is a Mason and was Grand Master of his lodge for several years. This book showed me how little I did know, especially about the origins and political spread of Freemasonry over Europe originally and then America. The 1700s and the Enlightenment were a time of intellectual, political and geographical ferment. Freemasonry played a large, previously unknown major part in this changing epoch. This is reflected throughout the chapters; I will list these with abbreviated titles just to give the prospective reader an idea of the vast scope of this book’s investigation.

1. Freemasonry in Eighteenth-Century Portugal
2. The Order of the Pug and Meissen Porcelain
3. Goya and Freemasonry
4. Freemasonry’s “Living Stones” . . . Portraiture of John Singleton Copley
5. The Visual Arts of Freemasonry as Practiced . . . by Paul Revere
7. Freemasonry and the Architecture of the Persian Revival
8. Solomon’s Temple in America . . . 1865–1930
9. Freemasonry and the Art Worker’s Guild
10. Picturing Black Freemasons from Emancipation to the 1990s
11. Saint Jean Baptiste, Haitian Vodou and the Masonic Imagery

As can be seen, this book covers a lot of ground, not exhaustively by any means, but enough to fill huge lacunae in our knowledge and, further, to provide an indispensable resource for scholars and students wishing to conduct further research into Freemasonry’s powerful influence in our recent history.

I thoroughly enjoyed this book, despite the eBook experience, and found a delight in drooling over the reproduction of original artworks and photographs (on the large screen) of this paradoxically simple, yet mysterious complex phenomenon of Freemasonry.

THE EYELID

Reviewed by Allan Graubard.
https://doi.org/10.1162/leon_r_02024

What is a life-altering discovery? How do we know it has occurred? In what fashion do we judge its content and implications, whether for good or ill? Does it appear just like that, the sudden fruit of an intuition previously unknown or barely sensed? And how, or how well, does disbelief enter—or its cousin, irony—keeping distant just enough what would otherwise sweep away ambiguous assumptions or shifting conceptions?

These are some of the questions that seem to have animated S.D. Chrostowska in her charming dystopian novel The Eyelid. From its first introductory line, a cautionary, if buoyant excerpt from Victor Hugo, the novel takes shape. Indeed, “There is nothing like the dream to create the future,” or, in this case, a fiction that the author unveils in 42 brief chapters.

The story begins on a park bench sometime after “T”—for it is told by a narrator in the intimate language of the first person—has lost his job. Given over to idleness and wandering, his imagination sensitized by this relative freedom from work, the false security bought by a salary and all its shared values, he finds himself on a park bench as the autumn sky darkens and snow begins to fall. Before him, two swans, one white, one black, float slowly on a still lake. He senses someone has sat down beside him: “A small unimposing man gazing out at the water,” casually though perfectly dressed. He asks him the time. It is, as the fellow puts it, already “too late.”

The romantic cliché and deadpan response establish the mood for the events to come, a kind of blues or threnody in minor chords with subtle, frenzied overtones. “Chevauchet,” this man who quickly becomes mentor to the narrator, is Ambassador of the Free Republic of Onirica. Without official status of any sort, yet seeking acolytes, his is a subversive position.

The reality principle has triumphed. In order to feed arch cycles of consumption and production, sleep and nocturnal dreaming have been outlawed. Wakefulness, supported by drugs, and the spectacle, a catalytic social media goliath, control the population. The eccentric, non-productive, deeply personal world of sleep is abolished. And yet here and there, in a fluid underground known or curated by Chevauchet, free spaces in which to sleep and dream survive, accepting whoever finds them until the police close them down. The discovery of this clandestine world, the preservative role it offers, how it infects perception even when awake and the fatality that un vrij for the narrator within it compel the read.

In order for this kind of novel to exceed the narrative tropes that define it, a keen poetic intelligence is necessary. Our author knows this and uses that knowledge to effect, investing the narrative with linguistic resonance rooted in associations derived from root definitions. For a scholar of humanities and social and political thought, which our author also is, this is not rare. But in the refinements that she brings to her writing, less concerned with character than the atmosphere that characters and events inspire—a palette led by shimmering layers of chiaroscuro and the reveries attached to them—her literary skill clarifies.

The novel, of course, is a warning of what is to come or what in large part has already come for us, its readers. Where do the opacities of
sleep and the images and tales that our dreams are full of find reference in the world we inhabit? Darkness itself, the night sky of our megacities, so scored by illumination, has lost the wonder it once held for us. 24/7 media cycles play with our passions as they absorb and create them. Self-identity, ever problematic, has entered a homologous, socially sanctioned, global commercial space that militates against psychological, cultural and linguistic difference while using them, whenever feasible, for profit. As nations struggle to sustain their politics, their economic interdependence commonly calls the shots.

In these circumstances, is it possible any longer to affirm that a life-altering discovery is at all attainable, despite the marketing hype that infects the phrase, making it just one more diminished hyperbole among others? That, I hope, is up to you to decide, whenever and wherever you find yourself only and excessively you. This novel is an incitement to do just that.

**HANDMADE PIXELS: INDEPENDENT VIDEO GAMES AND THE QUEST FOR AUTHENTICITY**


Reviewed by James Sweeting.

https://doi.org/10.1162/leon_r_02025

Jesper Juul begins the preface of this book claiming that “independent games give me the refreshing feeling of starting over, of once again not knowing what video games are [emphasis in original] and having to discover them from the beginning” (p. ix). While this comment encourages a look backward at the video game medium, the extent to which this is nostalgic varies and serves as a tool to help understand the wider quest for authenticity.

Juul is clear from the beginning that this is a book about examining how independent video games became a movement within the industry, resulting in a particular form. Authenticity is therefore seen as not just something that can be used to describe these video games but also something that the developers often strive to achieve. It is also notable that, as stated in the subtitle, the focus is on independent video games, with only occasional references to the mainstream video games that continue to dominate the medium. This distinction further highlights the otherness found with independent video games that contribute to their perceived uniqueness. Juul has also stuck with the term “independent” to refer to these video games and their developers rather than the term “indie.” It can be argued that the terms are interchangeable; Juul does add that there still is no clear distinction between them, and that, if anything, they are labels with no formally agreed-upon definitions. It is perhaps because of this that Juul has gone with the less-common label to refer to video games outside of the mainstream, while also not wanting to get involved with the semantics behind it. Rather, he identifies the evolution of what has been considered distinct enough from the mainstream and the different ways in which this has been achieved.

Independent games (he also drops the video) come across as a response to the continued existence and trajectory of mainstream video games. Juul in part compares this to a sense of antimodernism (not in reference to modern art) in that there is a feeling that something has gone wrong, been lost, and that some things have gone too far. To try and rectify this is to look back and locate authentic elements to utilize once again. To be clear however—and this is where the role of nostalgia becomes a bit clearer—this is not (for the most part) about replicating the past as was. Rather, it is to help contribute to creating something different, even if it is not truly new or original, just as long as it is distinct enough from the contemporary norm. This has already begun to have an effect, as there is no longer a universal form that could be commonly considered and accepted as a video game representative of the whole medium. Juul argues that “there was a period from roughly 1980 to 2005 when we knew what video games were [emphasis in original]” (p. 10); when they were sold in physical boxes, targeted to males aged 10–35 and promoted based on technically better graphics. This links back to Juul delighting in no longer knowing what a video game is; seemingly he does not want there to be a typical video game form, which likely explains his criticisms of mainstream video games and the conservative/risk-averse approach.

One of the most interesting concepts to emerge from this book (although it had been previously introduced in an earlier paper) is what Juul has termed “independent style.” This coinage is used to highlight the visual styles as well as the creative process behind them. This approach begins to help explain why many independent games began to adopt similar visual styles, which also utilized similar visual aesthetics as video games from the 1980s and later the 1990s. In part this was the result of how these video games were being created, matching the smaller development teams, or individuals, that were creating video games during those periods. The limitations imposed by having fewer resources (people, equipment, money) unsurprisingly mean that the majority of independent developers are unable to create a video game that matches contemporary AAA (blockbuster) video games, but they can create something resembling popular video games from previous decades: hence the revival of 2D pixel-based graphics (and later low-poly 3D), something that modern mainstream video games had for a long time abandoned in the pursuit of better graphics. For others, there is also the attempt of reviving the feeling of past video games, such as the simplicity and/or difficulty that many provided, compared with either the complex systems or the range of assists found in contemporary video games.

Independent style is not just about the form of the video games themselves. As Juul states, for many independent developers it is about creating in a way that is more akin to...
the smaller studios of the past or even the broader arts and crafts movements, where creators are free to make what they want without a publisher telling them what to do and, in certain instances, without concern for making a profit, or even much money at all (although the issue of money has become more ambiguous as the independent movement has grown). In moving in this direction there is a quest for authenticity, not just in the form of the video games themselves but in the creative process behind them, and this is where the “independent style” helps to distinguish independent games from the mainstream (including past mainstream video games). Authenticity can still come from past video game form, and there are independent developers who do engage in nostalgic attempts of reviving past video game aesthetics. Not only do these developers want to create something that resembles what they might have played as a child but there is also a market of players who would like to play video games that look like those from their childhoods, too.

Yet looking to the past is not the sole exercise for many creators of independent games; for many of them there exists a desire to create and provide content that is different from the vast majority of mainstream video games. This results in a product that is not necessarily authentic in content style but will likely manage to be authentic in how it is created, based on the approach previously mentioned. The freedom that is afforded to independent developers (although often at personal financial risk) is that they can experiment with new and/or different types of gameplay experiences that do not fit the previously held assumption of what a video game can/should be. A video game can be a short narrative experience with minimal gameplay and no way to win or lose. This stretches the understanding of what would have traditionally fallen under the term video game, but a form of interactive digital media is still produced and resembles a similar overarching form—and uses similar control inputs—and can still be sold in the same digital storefronts as the latest mainstream video games.

While these alternative independent video games can increase accessibility to what could be considered a narrow-minded medium in terms of experiences previously provided, independent games can still fall foul of the limitations that arise from providing different experiences. In short, Juul highlights the presence of the derogatory term “arty hipster crap” as criticism against some of these independent games. The result is something that alienates not only traditional video game players but also fails to accommodate those who are unfamiliar with video games, instead appealing to a niche audience.

Despite this criticism, the existence of video games that attempt to provide something different to the mainstream—without focusing on reusing nostalgic elements—can to an extent influence wider mainstream video games. Independent games have become the new testbed for the industry, taking the risk to see what works and what does not. This links with Juul’s wider criticism of mainstream video games being too conservative, except now the industry as a whole has an outlet that is willing and able to take risks. While this insinuates laziness on the part of the mainstream industry to experiment, given the large-scale development that goes on behind the scenes, there are, unfortunately, valid economic reasons for not doing so; instead, sitting back and seeing what sticks and what does not becomes a sound commercial approach.

This wider approach could be what contributed to the continued relevance of mainstream video games and, particularly, the home video game console space, the death of which Juul admits he was incorrect about prophesying (console sales continue to remain healthy). Independent games, for the most part, are not big sellers when compared to mainstream video games (this is perhaps not surprising), but they are increasingly providing a sizable portion of the expanded library of content for these systems, while also propping up the medium amid extended development times for the larger mainstream video games. It is ironic, considering independent games are seen as a harbinger of change in the video games that should bring about a demise in the style of mainstream video games (and along with it the closed systems reinforced by consoles), yet after a protracted console generation (Xbox 360, PS3, Wii) that saw a new generation struggle to initially find its identity, it was the independent games propping up the powerful new systems at a time when many industry analysts (and some academics) predicted that this would be the final act for dedicated consoles.

Handmade Pixels is an insightful exploration, detailing Juul’s own quest to determine what it is about independent games that have helped to change his once-held certainty of understanding the expected form of video games. Juul relishes the thought that video game form is no longer a guarantee, that experimentation can indeed take place. Yet, seemingly, to do so, the medium has needed to look back to its past, both in content style and creative style, with the authenticity that either style provides helping to unlock the way forward, not only for independent video games but, potentially, for the industry as a whole. Juul is consistent in his investigation of the independent side of the video games industry, unveiling astute observations. Independent games might be an alternative to the
mainstream, but they could provide an important insight into not only the past of video games but also its potential future. This future might not be the one Juul would prefer—in which video game form is amorphous—but it might result in a less rigid mainstream industry, which would seem like the real victory.

VIRTUAL REALITY

Reviewed by Mike Mosher.
https://doi.org/10.1162/leon_r_02026

Gazing down at me mutely, perhaps needing dusting, is a one-foot shelf of virtual reality books from the era now called VR 1.0: Benedikt’s Cyberspace: First Steps, Jacobson’s Garage Virtual Reality, Anders’s Envisioning Cyberspace and other worthies of the 1990s. There was much excitement at the nascent field’s potential—serious philosophical and technical issues mapped out, blue-sky hand-waving inspired by creaky proof-of-concept systems. Pay no attention to the refrigerator-sized bank of computers beneath the conference tablecloths!

Yet in the past half-decade, the same progress that drove the mobile computers in our pockets has reinvigorated this arena, and I sought a book on it to assign to my contemporary Communication Media grad students. In this compact compendium of its “essential knowledge,” Samuel Greengard examines virtual reality (VR) and augmented reality (AR) in the context of what he calls XR, or extended reality. Extended realities best supplement physical experiences, not replace them. XR blends real-world physics with virtual or augmented worlds. An example might be a smartphone app that lets you see a virtual dog in a real room. Or an app that positions your real dog inside a virtual room.

The chapter “Why AR & VR Matter” gives a history touching on optical illusions, nineteenth-century stereograms, panoramas, dioramas, science fiction, my beloved home View Master of the 1950s, Morton Heilig’s Sensorama and a 1957 patent of a head-mounted display for telepresence. The virtual becomes more tangible in military-funded work by Tom Furness, DARPA and Naval Research, MIT’s Wearable Media Lab and the 1990s CAVE (Computer Aided Visual Environment) at the University of Illinois Chicago campus. They built the cathedral that was VR 1.0. Yet early pioneer Jaron Lanier became dissatisfied with the public reception of VR, saying it had been sold as an illusion, though real for “what it is.”

Cut to the last few years. In 2014 Google Cardboard offered AR on a high-end Samsung smartphone with a snap-together inexpensive viewer, yet Google Glass ignited controversy, as bar owners banned “glassholes” whose augmented gaze made female patrons especially nervous. Oculus offered VR experiences, and Microsoft’s HoloLens SketchUp viewers appeared. The 2016 Pokémon Go treasure hunt thoroughly engrossed teenagers finding virtual pocket monsters inserted into their real world, while the company harvested and monetized all useful location, transactional and social media data from their phones. A contemporary phone app offers real-time IKEA furniture placement.

Developers’ tools have been introduced for Apple’s ARKit and Google’s ARCore. Greengard predicts more convincing immersions, better miniaturizations and smoother body integrations as students internationally attend and graduate from Master of Art programs in XR design and then enter and influence the field.

XR needn’t be individual experiences only—seclusion in an opaque head mount or a lonely study of one’s phone. The Cave at Louisiana State University was created as a collective immersive experience to contrast with an individual in a headset or viewing real-time interactive 3D objects on a display on a desk. It was used for data visualizations, sometimes with active shutter glasses as in a 3D movie theater, an ancestor of the multisensory VOID in Las Vegas. There have also been some experiments with VR in law enforcement and the military, including the BRAVEMIND project to aid troops in overcoming combat-related PTSD. A student of mine was forced to drop out of his studies during the 2020 coronavirus quarantine from the stress of online classes while protecting his child and pregnant wife; I wonder if an XR, wider-bandwidth university experience would have been more reassuring.

Greengard unpacks the “technology behind the real”—OK, the illusion of it—and directions in which it needs to develop in order to reach the nearly flawless experience in XR that mission-critical applications will demand. Polygon count for quick and correct rendering under constant refresh with each movement through space needs to be complex and robust enough to feel real. We’re shown the process in creating product from concept model to actual model to AR experience, citing SLAM simultaneous motion and tracking software. San Francisco State University’s Kinesiology Department pioneered VR in exercise training. The addition of haptics brings greater responsiveness and precision to VR, and the HapT X AxonVR glove can pick up a grain of rice. Greengard maintains there needs to be development in this realm before VR can be used for surgical practice or flight simulation with the
mission-critical accuracy necessary; the goal might be a full body suit to perform these.

A key consideration in any XR experience is the field of view (FOV), which really should be 180° or more, not the 50° of the past or the 90–110° prevalent today. Wearable AR technology makes use of liquid crystal displays (LCD), light emitting diode (LED) and, increasingly, organic light-emitting diode (OLED) or liquid crystal on silicon (LCOS) eyewear. Will it be paired with head-mounted device (HMD) optical or wave-guide carriers? Employing polarized or high-resolution displays? These and other experimental optical methods are being developed and tested in various labs. Yet all are grateful that HMDs are no longer tethered by anaconda-sized cables with cathode ray tubes pressed to the eyes, as they were at the same time their deleterious ergonomic toll in the workplace was being realized, back in the glorious days of VR 1.0.

Is this essential knowledge of VR/AR/XR in 2020? This little book passes the test and is recommended to my students. In Samuel Green-gard’s clear, concise and succinct Virtual Reality, the graduate in communications or technologies has a useful overview of the field. One that I hope they enter to innovate.

MARCEL DUCHAMP
AND THE ART OF LIFE


Reviewed by Edith Doove, Transtechnology Research, University of Plymouth, edith.doove@plymouth.ac.uk.
https://doi.org/10.1162/leon_r_02027

Jacquelynn Baas’s book has a deceptively simple title and cover showing an image of the doors of Duchamp’s last work Given. This deception might be equaled by Duchamp’s wish to go “underground,” something that he did literally when he was buried in his family grave in my hometown, Rouen. As Baas points out in her conclusion, Duchamp’s ultimate goal was for both art and himself to disappear, the famous epitaph on his grave, “Besides, it’s always the others that die” (D’ailleurs, c’est toujours les autres qui meurent), pointing to the ongoing relationship to others (p. 308).

Baas is specifically known for her books on the influence of Eastern philosophy on Western art. As early as in Buddha Mind in Contemporary Art (edited with Mary Jane Jacob, 2004) she incorporated a text by Tosi Lee, a distillation of his doctoral thesis from 1993, on possible connections between Buddhism and Duchamp’s work. In the current volume, she builds further on the insights gained from editing Lee’s text (p. xi) [1]. Its importance lies in the way Baas speculatively, but nevertheless convincingly, further develops the possible links between Duchamp’s work and life and Eastern thought, more specifically tantric practices. This might come as a shock to some, as did the unexpected “theatricality” of Given: 1. The Waterfall, 2. The Illuminating Gas when it was first revealed to the public in the Philadelphia Museum of Art after Duchamp’s death. But as Baas remarks, “It is not as though there were no clues.” And although she never reveals any hard-edged evidence, she builds her case on clues of which there are decidedly more than you would think—for instance, the role of the Museum Guimet in Paris with, amongst others, its figurine of Dakini in the attitude of dance or the presence of someone like Buddhist explorer and writer Alexandra David-Neel in Paris circles. Another is Duchamp’s relationship and collaboration with Georges Bataille, to whom Baas dedicates quite a substantial part of her book. Bataille was well versed in tantric practices and collaborated with Duchamp, Robert Lebel and Robert and Isabelle Waldberg on the so-called Le Da Costa Encyclopédique (1947) as well as Le Mémento Universel Da Costa (1948–1949)—more or less tongue-in-cheek continuations of Bataille’s Acéphale. Isabelle Waldberg, who together with her husband was very much involved in Acéphale, is here also revealed not only as a very intriguing and overlooked artist but also as an important sparring partner for Duchamp, amongst others things, the scenography of his Rain Room for the Exposition International du Surréalisme (Galerie Maeght, Paris, 1947), in which he included both work by Waldberg and another important female sparring partner, Maria Martins.

There isn’t enough room here to develop all of Baas’s fascinating clues, “numerous correlations between his art, his statements, and his writings with elements of Asian practices and philosophy” (p. 307). One of the images that emerges is that of a Duchamp as part of a wider circle of both male and female artist friends such as Waldberg, Martins, Breton, Ray or Picabia, with whom, in a close spiritual collaboration, an interest in tantric or related practices was widely shared. The idea of being part of a family or clan of like-minded spirits, as in the case of the Da Costa “clan” or even the choice to be buried in his family’s grave for that matter, was clearly important to Duchamp. This leads Baas eventually to develop an intriguing new reading of works like The Large Glass or Given, arguing that they used a certain eroticism in a tantric way, that is as a passage to insight.

Baas fittingly quotes an excerpted note by Duchamp’s godson Gordon Matta-Clark, in which he referred to Duchamp’s motto There is no solution because there is no problem, that was clearly influenced by Buddhist teachings: “There are only problems because of human resistance. Passing through resistance-surprise is passing through . . . seeing what you have always expected. . . . Surprise is a state of consciousness. . . . If you look long enough you will be surprised” (p. 293).

Note

1 With Jacob, Baas was involved with the five-year consortium project “Awake: Art, Buddhism, and the Dimensions of Consciousness” at the School of the Art Institute of Chicago, from which her book Smile of the Buddha: Eastern Philosophy and Western Art from Monet to Today (2005) also emerged. Strangely, there is little or no information to be found on Tosi Lee and whether he’s still active as a researcher.

Leonardo Reviews 261
American Steam Locomotives: Design and Development, 1880–1960

Reviewed by John F. Barber.
https://doi.org/10.1162/leon_r_02028

American Steam Locomotives: Design and Development, 1880–1960 by William L. Withuhn would, at first glance, seem not best suited for review in this venue. Steam locomotives in the digital age? But consider these points. The subject is an excellent overlay of science, technology and art. The artifact of this collusion still figures prominently in our technological, historical and popular cultures. The author was the curator of transportation at the Smithsonian Institution’s National Museum of American History and a licensed locomotive engineer. As result, this tome, and that is the correct term, is both an authoritative reference and an engaging read.

Operationally, the steam locomotive is straightforward. Boilers produce steam that power pistons that propel driving wheels. This simple machinery was the literal engine behind the Industrial Revolution. Designers and engineers, honed and polished this simplicity into steam locomotives that in America became national symbols of progress and power, transportation across the country’s span, even rolling art. It is this story, the overlay of mechanical engineering and design art, technological achievement and usability, that Withuhn documents as engaging and accessible narrative. The scholarship should also be noted. American Steam Locomotives seeks to provide comprehensive access to information and insight regarding steam locomotives throughout American history, from their large-scale introduction into commerce, transportation and culture in the 1860s onward to their replacement by diesel technology in the 1960s.

There is a great deal of technology discussed in this book, including the quest for thermal efficiency, trailing trucks, metallurgy, three-cylinder power delivery, and driving wheel counterbalancing, which Withuhn describes as a combination of science, pseudoscience and black art.

Withuhn also considers aesthetic design, documenting and discussing the mechanical standards of numerous railroads and the way in which these standards resulted in distinctive and characteristic looks for their locomotives. These machines were shaped as much by their engineering function as their economic purposes and the aesthetic considerations of the people who built them. The steam locomotives of America were works of art, from high-wheeled drivers of the 1860s to streamlined mid–twentieth century modernism, comparable to works in clay, wood or marble.

Beyond objectiveness, as a historian, Withuhn is also interested in people and how their strengths and failings contributed to the story of steam technology in America. Readers will find revealing contributions from designers, mechanics and engineers and learn how they left their imprints on steam locomotives.

It is all quite a story, and Withuhn relays it equally well for a range of readers from the mechanical engineer to the casual fan. He tells his story in clear language, providing both details and entertaining narrative, thinking always of his audience. At one point, while picking through minutiae and technical details, Withuhn, thoughtfully and generously, tells readers who may be getting bogged down with the heavy going to skip ahead to the next chapter! Thirty years in writing, completed after his death in 2017 by a team of admirers, American Steam Locomotives is a significant contribution to the canon of steam.

By mid–twentieth century, some 70,000 steam locomotives operated throughout America. Railroads employed two million people, while industry, mining and agriculture were dependent on a nationwide rail distribution system. Railroads were the bellwether of America’s economy. Every community relied on railroads for goods and services, mail and shipments, travel and connections to the rest of the country. Railroads were the portals. Steam locomotives provided the mobility. Now, however, in an age of jet airplane travel, railroads in America are an afterthought and steam locomotives a curiosity at theme parks or special travel venues. Still, steam locomotives capture our imagination, representing as they do a different time, a different technology than that we favor currently. From the development of steam power on railroads in the mid–nineteenth century to the end of its innovation and production one hundred years later, this is a complex story within a larger context of technological, cultural and aesthetic changes. Withuhn weaves these strands deftly into a well-researched historical account, an insightful memorial and an authoritative reference work accessible to a broad range of audiences. American Steam Locomotives is recommended. Good for browsing as well as research. Interesting for the engineer as well as the artist.
NOVEMBER 2020


Outlaw: Author Armed and Dangerous by Rédoine Faïd; Jérôme Pierrat, interviewer; John Galbraith Simmons and Jocelyne Geneviève Barque, translators. Reviewed by Allan Graubard.

Photography from Turin Shroud to Turing Machine by Yanai Toister. Reviewed by Ana Peraica.


DECEMBER 2020

Des opérations d’écriture qui ne disent pas leur nom by Franck Leibovici. Reviewed by Jan Baetens.


From Fingers to Digits: An Artificial Aesthetic by Margaret A. Boden and Ernest A. Edmonds. Reviewed by Bronac Ferran.


Krøyer: An International Perspective by Marianne Saabye and In the Light of Italy, A Danish-Norwegian Artist Community 1879–1886 by Jan Kokkin, Anne-Mette Villumsen and Marianne Saabye. Reviewed by Giovanna L. Costantini.


Under the Dome: Walks with Paul Celan by Jean Daive; Rosmarie Waldrop, translator. Reviewed by Allan Graubard.

JANUARY 2021


iBauhaus: The iPhone as the Embodiment of Bauhaus Ideals and Design by Nicholas Fox Weber. Reviewed by Mike Mosher.

Gyorgy Kepes: Undreaming the Bauhaus by John Blackinger. Reviewed by Ian Verstegen.

The Poetics of Noise from Dada to Punk by John Melillo. Reviewed by Brian Reffin Smith.


Une fille comme une autre by Jan Baetens. Reviewed by Edith Doove.