GREEN: THE HISTORY OF A COLOR


Reviewed by Giovanna Costantini. Email: <costantini.giovanna.l@gmail.com>.
doi:10.1162/LEON_r_01242

To enter Michel Pastoureau’s most recent volume Green: The History of a Color, one of a series that includes Blue (2001) and Black (2009), is to step through the painted portal of a French château whose rooms contain some of the most revered artworks of European history imprinted upon our collective memory through color. Just as the building’s design reflects the values of a specific era, color encodes a history elicited through convention, association and evocation. Confining himself to the relative cohesion of the European art historical tradition, particularly the French from classical antiquity to the 19th century, Pastoureau chronologically explores multiple semiotic levels of the social, cultural and symbolic history of green.

Although Pastoureau points to the evolution of color as one much dependent on perceptions of gradations of light understood today as differentiated wavelengths within an electromagnetic spectrum, his discourse, squarely focused on treatments and interpretations of local color as practiced by artists, is less a scientific analysis, theoretical survey or aesthetic, metaphysical reflection than a social history, recounted in language, lore, religious belief and literary symbolism. Within the vast bibliography of color that ranges from technical handbooks (Feller, Mayer, Clarke) and dictionaries of symbols (Chevalier, Gheerbrant, Cooper) to theoretical and scientific treatises (Cennini, Alberti, de Piles, Chevreul, Rood, Itten), Pastoureau’s investigation defines the color that embellishes painting, manuscript illumination, sculpture, textiles, costume and heraldic emblems as a social phenomenon. “It is the society that ‘makes’ color,” he claims, “that gives it its definitions and meaning, that constructs its codes and values.” A French professor of Medieval History and Western Symbolism at the Sorbonne’s École pratique des hautes études, Pastoureau has published extensively on the cultural significance of color, medieval symbolism and heraldry, with books that include such exquisite titles as L’arbre: histoire naturelle et symbolique de l’arbre, du bois et du fruit au moyen age and The Bear: History of a Fallen King.

Closely attuned to etymology, the author cites connotations that derive from terms such as glaukos and chloros, coined in Homer; viridis, in use among the Romans; and silva and sylvaticus from the medieval oral tradition and the heraldic sinople. He considers mineralogy, trade networks, dyes and artificial pigments as well as industrial practices involving regulatory guilds, sumptuary laws, medicinal plants and herbicides. He regards green, chemically unstable and subject to fading over time, as an ambivalent color, suggestive of life, growth, nature and hope as well as sickness, demonism and putrefaction. Various informed by biblical symbolism, liturgical exigency, Arabic medicine, the Protestant Reformation, iconoclasm, courtly romance and Renaissance speculation, empirical studies in the aftermath of the Scientific Revolution and Newton’s experiments in light refraction led to more systematic color theorizations informed by analytic psychology, physiology, physics and later...
19th-century movements toward abstraction—forces that exploded what had once been a more tightly circumscribed, culture-specific and fundamentally literary color vocabulary. Thus in some ways Pastoureau traces qualities assigned to color that mirror the sociological transformation from hierarchic structures to egalitarianism and scientific inquiry.

Pastoureau's text is lively and animated, studded with fascinating historical anecdotes: of Seneca, who found the walls of Roman bathhouses to be dressed up like peacocks; of Nero, who relished leeks and viewed gladiator contests through a large emerald so as not to be bothered by the rays of the sun; of the Green Knight of Arthurian legend and Perrault's Cinderella and Celtic fairies; of the amorous reputation of the French king Henry IV, known as le Vert Galant; of speculation surrounding the 16th-century Irish ballad "Greensleeves"; of Schubert's fear of green; of the discovery of green; of the 16th-century Irish ballad "Young Goethe in a Green Coat" and Chardin's "Self Portrait with a Green Eyeshade"; and of elegant promenades, enchanted jungles and idyllic flower gardens by Seurat, Rousseau, Monet. Amid such opulence, Pastoureau skilfully interweaves threads of history—Pope Innocent III's declaration of green as the color of Hope in Life Eternal; the privilege of green reserved for Bourbon royalty; and green, as the dynastic color of Muhammad that becomes the sacred color of Islam. He reviews key fonts of color historiography composed by Aristotle, Pliny, Kircher, Le Bègue, Goethe, Boyle, Blanc and others; specifies pigments and color treatments employed by such notables as Vermeer, Poussin and Rubens; and reveals the preferences of Venetians, Barbizons, Romantics and Fauves.

This is a highly readable series, succinct and engaging for generalists and the public at large, whose appreciation of art may be keenly enriched by its content. It joins more comprehensive studies in the field, such as John Gage's copious Color and Meaning: Art, Science and Symbolism and Color and Culture: Practice and Meaning from Antiquity to Abstraction; Marcia B. Hall's Color and Meaning: Practice and Theory in Renaissance Painting and more technical analyses of specific pigments and minerals in Robert Feller's anthology Artists' Pigments.

We are struck as much by the cultural coherence and sociological implications of Pastoureau's history as by its narrative construction, for it is presented as an arching continuum composed of meanings, orders and borders once shared among a discrete population over a determinate period of time. Unique to its era, locale and circumstances, the depth and intricacy of color symbolism and the communal and moral aspiration of its syntax defied for centuries the subjectivity, contradiction and complex psychology characteristic of the modern age. Pastoureau's story seeks to convey the poetic nuance and dimensionality that may have once imbued a particular experience of color. It approaches that intimate sensibility once described by Van Gogh to his sister as "the feeling of being present at a rebirth, total but benevolent, of all the things you believed in, all you have longed for, a strange and happy meeting of distant antiquity with crude modernity."

ATLAS OF KNOWLEDGE: ANYONE CAN MAP

Reviewed by Brian Reffin Smith, Collège de 'Pataphysique, Paris. Email: <brianreffinsmith@aol.com>.
doi:10.1162/LEON_r_01243

Everything is documented; everything is recorded and known. But we almost never look at it. The process of its updating is always in progress; it flows and never stops. You can't readily take a slice through it any more than you see a vertical slice of the Thames as it flows past the headquarters of the Secret Intelligence Service at 85 Albert Embankment in London. You can't film it or take a useful, single snapshot. We rely, then, on maps: data painstakingly analyzed, collated and displayed, even if almost never in real time, showing, for example, how life expectancy varies with income, where cancers lie, where taxes go or how happy people are. What is normally sequentially represented or communicated (and thereby hardly communicated at all) is piled up in one place, sequenced (and thereby hardly communicated) at all is piled up in one place, we hope intelligibly and usefully. We can see how things change over space, time, social space, mental time and so on.

Does this knowledge empower us? Not a lot, I should think. Real
information is a difference that makes a difference, and outside of specialisms and maps of transport it’s hard to see how infographics affects us very much in the everyday world, where we both fear and celebrate the map becoming the territory as we reduce the cartography of our lives and loves to that which social media allow or encourage and then complain that the map is all there is.

And yet . . . we know that we wouldn’t have known how horses gallop unless their movements had been sequentially recorded by Eadweard Muybridge, nor have understood a rocket’s trajectory had we not performed the injurious approximations of differentiation and integration. Often we do need to split continuities into useful bits in order to see or understand them, even though by so doing we risk blinding ourselves to aspects of them, getting granularities in our eyes. Maps select; then, being human, we tend to fill in the terrae incognitae with what we think we know. How we need to be discontinuous in order to perceive! How we adhere to the continuity we then invent based on our prejudices. And, naturally, we all love books of things to color in these days. If we ask a mapmaker or analyst, “Why are you showing me this?”, we might recognize that we are almost asking an art-theoretical question with certain aspects of aesthetics (but not all) removed. In fact, to ask of an image whether it shows us something in some sense worthy of scrutiny and somehow vivid for us, to ask that while ourselves making such an image too, is clearly not a million miles from art.

Visual thinking about complex data can enable us to evaluate it—and questioning the data in images can be enticing—but I am not in any way suggesting some old-fashioned quantitative or statistical analysis of art, espoused by a few people (even today!) with whom one wouldn’t really want to have a drink. Rather the reverse, and to start in a particularly obtuse and childish way: The illustrations in this book, many of them, look a bit like art. Beautifully asymmetric stuff in glowing colors ranged around the rims of discs, diagrams of interconnectivity on backgrounds the color of parchment, looking like a cross between Leonardo (the artist, not the journal; well . . .), Art & Language and Cy Twombly and with the spreading-out and coming-together of Terry Riley’s In C or the Portsmouth Sinfonia.

So what, of course. This is, though it doesn’t want to be and is much else, also a coffee-table book. In appreciating, however, against one’s better nature, that which is not really art, as art, we have to theorize a bit. And theorizing like that in front of the representations of data (OK, maps) in this book starts one going backward, reverse engineering: What would it be like to make art, actual art, like this? Are there things I can take from infographics, apart from but not necessarily ignoring the pretty-picturesness that might map (sorry) onto my own practice? More generally, do we have techniques, plans, methods or even habits for taking stuff from realms outside art and using it to make art?

Well, hello? What a daft question! Unless our art is only, exclusively, about art, all we make as artists is done, systematically or not, by, with or in spite of objects, ideas and processes from outside art. Such as, I don’t know, life. And we’re always chopping up bits of it, layering them, juxtaposing, translating or transducing them into forms that are still life but now are art too.

I suggest very strongly that reading this rather beautiful and thought-provoking book of unconventional mapmaking case studies will make many want to run quickly to their studios and do some art work. Whether it contributes to the discipline of infographics I am not qualified to judge, although other reviewers certainly assert that it does. But as I have argued elsewhere, I am convinced that sometimes books (or research, models, apps and so on) from nonart domains (metalurgy, psychometrics, exobiology, paleo-linguistics . . .) can contribute in a rich way not merely to appearances or subject matter for art, but for ways of seeing, of thinking about, and methodologies for connecting to aspects of the world that we might otherwise ignore, and this book is a fine example.

BARRY LE VA: THE AESTHETIC AFTERMATH

Reviewed by Jan Baetens. Email: <jan.baetens@arts.kuleuven.be>.
doi:10.1162/LEON_r_01244

This is a great and exemplary book on an artist of little renown, who even in the heyday of his career never really received the critical attention he deserved (a 1968 Artforum cover illustration brought him sudden fame, but this fame did not last). First trained as an architect, Barry Le Va turned to art because he was looking for a practice that could offer him the opportunity to fight whatever reduced the eternal motion and mobility of things. He is often described as a minor post-minimalist in the line of post-studio and process art, whose work was considered too radical and too hermetic to make it in the art world, to which one should add that Le Va himself proved always quite reluctant to participate in the inevitable commercialism of this art world. Michael Maizels’s study, which is anything but hermetic and which takes great care in explaining how Le Va’s work is deeply rooted in all fundamental questions and traditions of modern art, in the very broad sense of the word, is therefore the ideal occasion to revisit an amazing artist and his coherent and illuminating struggle with the formal, thematic, ideological and institutional limitations of art. Le Va’s art is generally described as belonging to the field of sculpture, but such a label does not really do justice to the complexity and intensity of his
actual questioning of sculpture and art. Obviously, Le Va's work is not alone in questioning the definition of sculpture in the modern Western tradition, at least since the major theoretical interventions by Lessing and Herder—three-dimensionality, monumentality, immobility, rigidity, eternity—were heavily challenged by most progressive artists of the 1960s and 1970s. Le Va's work is both representative of these tendencies (one should not forget that he was always in very close contact with most of his better-known colleagues, some of them close friends such as Mel Bochner) and more radical in his attempt to dismantle the most essential characteristics of sculpture as an artistic form as well as an artistic practice.

The notion of “aftermath” is used by Michael Maizels as the key to a better understanding of Le Va’s work. The repeated use of this term emphasizes three major ideas. First, the idea that all works by Le Va should be seen as the trace of a process that the spectator has to read as if it were a cue. In that sense, the enigmatic and definitely fragmentary structure of most works can no longer simply be approached in terms of incompleteness but as elements that trigger the critical participation of the spectator. Second, the idea that these works have a very powerful sense of the historical context to which they are reacting. This context is not only a contemporary one (the destructive aspect of many installations and interventions cannot be separated from the agitation that characterized the progressive art world during the Vietnam War, for instance), but also a much larger and longer one (Le Va, who worked as an art teacher in college, linked his work with all critical debates in the field of art theory and art history; as an avid reader of popular science, he was also extremely aware of discussions on science and the relationships between art and science). Third, the idea that his work has always remained so typically avant-garde (as an attempt to supersede the difference between art and life and thus as an attempt to do away with the autonomy of art) that it could only be understood as being a kind of belated and deferred form of avant-garde in an era that was witnessing the impossible rebirth of the avant-garde.

This general approach of Le Va's work is analyzed by Michael Maizels in chronological order. The author distinguishes five major periods in the artist’s “career” (although the term career may bear certain connotations that do not really match the relative critical and financial failure that characterized his work), each of them clearly seen as ever-changing responses to always-new issues and problems that menaced to reduce the work to “something one can own and sell.” The refusal to produce sculptures that can become objects for exhibition as well as sale brings Le Va to various experiments. In the initial years, he is searching for materials that resist sustainable materialization; he replaces materials with performances and events, shifting the focus from object to focus; and he creates works that are so enigmatic that they avoid any globalizing and totalizing deciphering. Later, however, he will directly tackle the solidity and materiality of sculpture and its countless relationships with architecture, always in the same dematerializing and critical spirit of his early works. The return of the third dimension and the blurring of boundaries between sculpture and architecture is then the starting point of a renewed reflection on the move from object to event (in the post–May ‘68 thinking of critical theorists such as Guy Debord and Bernard Tschumi, the “event” is less what happens than what escapes any kind of programming but happens nevertheless). For all the works produced throughout a period of more than four decades, Michael Maizels reconstructs with great care the artistic, ideological and above all intellectual context to which Le Va’s art is reacting. In this regard, Maizels pays great attention to scientific discussions, such as the lasting impact of the relativity theory or the concept of entropy in information theory in the gradual replacement of traditional sculpture, that is, the ideologically burdened symbol of a no-longer-acceptable mechanical worldview, by sculptural installations that defy the quest for order and sustainability. At the same time, Maizels foregrounds also the importance of literary texts, a less-common feature in thinking on sculpture. The analysis of the work as a clue is analyzed as a critical dialogue with Conan Doyle’s belated mechanistic worldview, whereas other works are studied as special forms of ekphrasis prompted by the reading of authors as diverse as Jorge Luis Borges and Thomas Bernhard.

There are many reasons to quote Michael Maizels’s book as an example of what serious and enlightening art theory can be today. It pays a well-deserved tribute toward a great but underestimated artist. It gives an excellent and well-exemplified reading of the essential debates of modern sculpture. It underlines the necessity of going beyond issues of art-historical influences and institutional relationships in order to understand the dynamics and transformations of an artistic practice that interacts with totally different fields (in this case: science and literature). And it does all these things in a very didactic way, which makes this book the perfect mix of monography and textbook.

**STRANGE TOOLS: ART AND HUMAN NATURE**


Reviewed by Amy Ione, Director, the Diatrope Institute, Berkeley, CA, U.S.A. Email: <ione@diatrope.com>.

doi:10.1162/LEON_r_01245

Strange Tools: Art and Human Nature endeavors to, as author Alva Noë puts it, introduce art as “its own manner of investigation and its own legitimate source of knowledge” (p. xii) using the enactive approach that he has been working with for a number of
years. According to this view, “experience is something we enact or perform; it’s not something that happens in us or to us” (p. 215), “it is something we do, or make, or achieve. And like everything else we achieve, we do so only against the background of our skills, knowledge, situation, and environment, including our social environment” (p. xii). His basic philosophical argument is that we can only understand the human mind in relation to bodily actions given that our experience is situational. Within this context he claims that our lives are structured by organization and, because art is a practice for bringing our organization into view, it reorganizes us.

When we consider art, Noë tells us, there are two levels we need to keep in mind. On the one hand, the defining feature of what he terms Level-1 activities is that they are basic and involuntary modes of organization. On the other hand, Level-2 activities play with and reshape Level-1 activities. The sum total is that active human experience is neither personal consciousness nor subpersonal (autonomic) consciousness. It is not personal because it is interactive and (again) situational activities add meaning to our lives in a way that does not reduce to subpersonal (autonomic) consciousness. Since technologies are a part of how we reorganize our lives, and art is an engagement with technologies, art includes a second-level manner of organization/reorganization.

Noë chose to characterize art in terms of strange tools rather than technologies because he sees art as an engagement with the ways our practices, techniques and technologies organize us; art is not a technological practice so much as a pursuit that presupposes such practices. Essentially, Noë tells us, the tools that help us organize our lives are bound up with our habits. Regular tools aid us in performing our normal habits. But, for Noë, artistic goals—confrontation, intervention and subversion—differ from ordinary ones. Thus, the “strange tools” that artists use aid them in disrupting and reorganizing the norms of communication:

Art always disrupts business as usual and puts the fact that we find ourselves carrying out business as usual on display. Put bluntly: The value of art does not consist in a (coevolving) fit (or dialogue) between what we make and what we like, but rather in the practice of investigating and questioning and challenging such processes (p. 238).

The strongest sections of the book are the personal stories. In these narratives Noë eloquently communicates about the many artists he has known over the years. We learn that his parents were artists and that he grew up within the vibrant New York City art community of Greenwich Village in the late 20th century:

For me, art . . . is personal. The question of art, the question of why it matters, what it is, how it figures in our lives, is in some ways my very first problem in philosophy. . . . I admit that this book’s central claim—that art is a philosophical practice and philosophy an artistic one—serves me rather well. It can be understood, finally, as my defense of philosophy and its value, a defense of my work, in the setting of my family’s engagement with art. If art is the most important thing, and philosophy is art, then it turns out I’m an artist after all. Look, Dad! (p. 208).

Perhaps it is because the “problem of art” runs through his veins that this quite easy-to-read book so often loses its way; his exposition misses the variety of goals within art practices today and the range of historical art. His commentary on architecture shows how amorphous the definitions often are. Although he refers to his father as an “artist” throughout most of the book, he also tells us, “My father was an architect . . . [and he] ran a bar in New York City. He used to say that he didn’t think of himself as having given up architecture when he took over the bar. Running the bar was, for him, an architectural practice” (p. 134). Noë’s varying characterizations of his dad stood out because on several occasions Noë questions whether architecture is really an art. Architecture is “always on the verge of collapsing into mere design” (p. 116). He also observes that some define architecture as the most uncomfortable of all the arts, because, as he explains it, artists are always concerned with wanting to “disturb everything that is already, as a matter of habit and background, in place,” so a true architecture, one that also qualifies as an art “would make uninhabitable spaces” (p. 116). Just as his father, an architect, was an artist, his mother, a potter, was also an artist: “a worker, a crafts-person, and yet hers, I maintain, was an artistic practice” (p. 134). Whereas I am happy to accept that his parents were both artists, it is less clear who decides what art is and who qualifies as an artist within the situational perspective he proposes. One complication is that Noë thinks more in terms of design than creative insights. Generally, questions about whether or not a crafts-person or designer is also an artist are bandied about in terms of how and whether technical expertise differs from creative insight. His argument seems more along the lines that craft is functional and that artists break the rules. But, since his definitions are quite arbitrary and change from sequence to sequence, it is hard to really get a handle on what the “rules” are, who defines them and how we resolve the “rules” with regard to stylistic and paradigm changes.

Like Noë, I am not a fan of reductionist models that use neurobiological or evolutionary psychology tenets in ways that take the art out of art. Yet, although he integrated the ideas of many philosophers and thinkers (e.g. John Dewey and J.J. Gibson), the study was so attuned to showing that art and philosophy are comparable practices that the experiential arguments receded as I read. Largely this came about because I increasingly recognized that what Noë likes
about both art and philosophy is that, to use his characterization, there are no breakthroughs, discoveries, results or findings in these fields—at least, "certainly not ones that invalidate or cancel out earlier ones or preclude future ones" (p. 136). Surely, this view is confirmed by all of those good philosophers who historically "proved" the existence of God using reason! Sufficient to say that Noë does not address philosophy in terms of the kinds of abstract arguments that prove God’s existence. Rather, he promotes the idea that philosophy has value even if we may not learn anything new: "You see everything you already knew in a new light. Philosophy leaves everything as it finds it but reorganizes the way you think and reason. Philosophy changes us. Philosophy aims not at discovery but at understanding" (p. 138).

Overall, five elements stood out as I absorbed Noë’s views. First, while the relationship between art and philosophy serves as a major thread throughout the study, science is largely peripheral. His overall philosophical package reminded me that one problem I have with neuroaesthetic theories is the way advocates suggest their philosophical theories are in fact scientific truths. Although Noë has problems with the same theories, he concludes that those who propose neuroaesthetic theories are not good philosophers. For him, art and philosophy are species of a common genus whose preoccupation is, again, the ways we are organized and with the possibility of reorganizing ourselves: "I don’t mean this is what artists think or say they are doing (although some will). I mean that this is what they are and have always been doing. And this is what philosophy does" (p. xiii).

Second, and by extension, Noë’s "art is philosophy" argument misrepresents the diversity of art and the diversity of opinions among scientists today and historically. More importantly, in my view, he overlooks the creative investigations that often link art and science investigations and the breakthroughs, discoveries, results or findings that often result. The outcome is that even as Noë introduces many types of art practices (visual art, dance, film, etc.), the content never captures art in terms of its commonalities with science. Leonardo readers will no doubt also notice that he does not convey the why and how of practices that are more broadly based or bring in people who work as both artists and scientists today (e.g. the artist/biologist Brandon Ballengée and the artist/neuroscientist Bevil Conway). Although he did mention a few canonical historical figures who have left behind work we can equate with both art and science projects (e.g. Leonardo and Galileo), Noë does not critically engage with both aspects of their practices simultaneously, or in a way that conceptualizes how and why both modalities informed their work. Had he done so, perhaps I would have gained a fuller understanding of his "art is bad design on purpose" (p. 101) argument.

Third, as noted earlier in terms of architecture, the definitional problems throughout make it hard to track his ideas. For example, although Noë asserts, "Neuroscience is too individualist and too internal to be a suitable science for the study of art" (p. 98), he does not explain precisely why. I understand that he is characterizing neuroscience as too internal because investigators look at brain processes rather than external ones. But surely individualism is more a hallmark of art than neuroscience? Generally isn’t it the "individual" that is, by definition, absent from neuroscience? Since many of the results neuroscientists present are based on statistical compilations rather than individuals per se, it seems Noë’s individual characterization runs counter to any normal sense of scientific studies. I presume the idea he is trying to convey is that neuroscience is too “individualistic” because it defines people as if they live in a unitary rather than a social sense. Another noteworthy definitional problem is that of “Why Art Is Boring,” one of the chapters in the book, which is a particularly odd conception given his background and strong avowal of art. Essentially he says that sure, art is boring, but sometimes it is boring in the way religious rituals are boring and then notes, “not all art is boring” (p. 141).

Fourth, his critical analyses are quite cursory. For example, although he slams the “wildly false ideas” of Semir Zeki, both he and Zeki state their conclusions in Kantian terms. It is hardly surprising that their methodologies lead them to commonalities, since the roots of both science and philosophy are in natural philosophy. Zeki’s embrace of Kantian philosophy is unusual for a neuroscientist. To Zeki’s mind: “Unfortunately, not enough neurobiologists have recognized the importance of [Kant’s] contribution to our subject” [1]. Noë, however, never considers their shared connection to Kant. What he does tell us is that Kant’s fundamental insight is that “if you try to deny the claims of universality implied in our aesthetic judgments, then you lose a grip on the phenomenon itself” (p. 261).

A short review cannot unpack why I find it astonishing that both these writers rest their views on those of an 18th-century pre-Darwinian natural philosopher [2]. Suffice it to say that Kant proposes two frames of reference. A priori truths are devoid of sensory input. The a posteriori, by contrast, is our situational reality and extends from knowledge and experience. Truths within the a posteriori require sensory input and cannot be obtained independently of the senses. In Kant’s 18th-century world, philosophies of mind and biology had quite different tenets than they do today, in part because philosophies of mind were still seen in religious and God-created terms: Our bodies were designed by God, and understanding their dynamics offered insight into His perfection. To grossly oversimplify: Kant, a philosopher who liked science and did no experiments, linked the a
priori and *a posteriori* logically, even acknowledging that evidence of biological linkages was elusive. (This remains the case.) Whereas Zeki attempts to justify his proposals by incorporating a number of insights and technologies that reflect how our *situational* knowledge base has evolved, Noë sees Kant more as a musical score we can use to come to terms with our own proposals. He does not explain why we should think that a "score" based on the worldview of an 18th-century philosopher illuminates situated sensory experience within our own epoch. It is more along the lines of the abstractions proving the existence of God. Given that Kant's "reorganization" is built on a number of foundational premises that did not stand the test of time, from a situational perspective it seems that playing this "score" is more like moving the chairs around on the deck of the sinking *Titanic* than a path toward coming to grips with art's complexity in the contemporary world.

Finally, many types of artists are excluded. Some of the people who work within traditional, even commercial, environments are unlikely to characterize their work in terms of subversive practice. In addition, there are those people who practice art simply because it is what they need to do—even if it is not how they earn their living. I would wager that for these people art is a passion and hardly boring. Roger Sperry (1913–1994), a talented sculptor, artist and ceramicist, is better known for the split-brain research he did as a neuropsychologist and neurologist. His scientific research led to the Nobel Prize he shared with David Hubel and Torsten Wiesel in 1981, and he produced art throughout his life. Charles Bell (1774–1842), also a neurologist, trained in both art and medicine. After Bell's application for a professorial appointment at the Royal Academy of Arts in London was turned down, he decided to devote himself to studies of the nervous system, although he continued to make and teach art. Many of the Pre-Raphaelites, who disliked the fashions of the Royal Academy, took classes with Bell, as did Arthur Conan Doyle, who modeled Sherlock Holmes's acumen on Bell's observational methods! There are many others I could add to this list.

In summary, Noë and I agree that art does not happen within the brain, that laboratory studies often skew what art looks like, and that communicating about art is worthwhile. Nonetheless, our sense of what we would like conversations about art, mind and brain to include seem to exist in parallel worlds. I think we agree that an artist (or a group of collaborating artists) lives within the larger contextual space, so the social reality and not just the brain per se comes into play when work is produced, although he seems to minimize the brain's involvement, which I find extraordinary given that he is a cognitive scientist. To my mind, even if the artist is telling a narrative story that is based within a social context, the process of artmaking includes neural processes. In other words, the brain is indubitably involved with artmaking, art viewing and society. Certainly, to my mind, our inner processes and situational environment work together. Sure, we cannot reduce art (and the artist) to any particular brain function; but artists cannot be *fully* encapsulated in terms of a contextual or situational position either.

At the end, *Strange Tools* did not reorganize my thinking about art. Rather, it confirmed my sense that what's at stake is not the facts. What is at stake is how we assimilate, make sense of and, finally, evaluate the facts. Art has value, then, exactly as philosophy has value. . . . [It] is the domain in which we grapple with what we already know (or think we know). It is the domain in which we try to get clear about the ways we think and respond and assign value (p. 203).

References

WHAT IS LANDSCAPE?
Reviewed by Giovanna Costantini.
Email: <costantini.giovanna.l@gmail.com>.
doi:10.1162/LEON_r_01246

The opening lines of Stilgoe’s latest excursus into landscape and the natural environment lure the reader like a siren’s song to the rim of the ocean, where “landscape smells of the sea” and sweeping storms, rolling surf and riptides dash the beach in a “limicole zone contested by wilderness and human order.” This highly original approach to visual and environmental studies relies heavily on comparative lexicology, linguistics, etymology and argot to alert “thoughtful travelers to occluded important” that underlie the meaning(s) of landscape encountered experientially. It seeks the connective fabric and evolutionary contours of the term itself, blurring boundaries of deconstructive linguistics in favor of eco-semiotics and philosophical inquiry through which he attempts to reweave the threads of ecological heritage into a more integral and historically integrated relationship between humankind and its physical surroundings. Suffused with echoes of the past and images of permanence, flux and evolutionary change, Stilgoe’s scrupulous examination of arcane lore and anecdotal circumstance recalls the multifarious spectacle and wild *silvaticus* of the untamed habitat as much as such epochal events as the Norman Conquest, the Black Death or St. Lucia’s Flood—“nuances vital to any determined inquiry into landscape.”

Although he leaves the particulars of “essential landscape” undefined, he alludes to its qualities by contemplating the role of natural forces—the fall of light, the passage of clouds, the blowing and drifting sand as wind arises. While he regards art’s historical usage of the term *landscape* to be much narrower and different from the coinage of geographers, oceanographers, mariners and others whose knowledge of the land and sea derives from direct engagement with the elements, he relies in large part paradoxically on obtuse nomenclature to explain the old Frisian roots of *landschap*, for example, winding from shovels to manufacturer’s skips, American piles and English tip carts to arrive at coastal shelves in extended anthropological ruminations. But can the unused lawn of residential communities remotely connote the medieval meadow of a manor’s orchard? Although language may or may not preserve vestigial traces of ancient immigration patterns and the transmission of agriculture, can such semiotic *noumena* reliably support assertions of subliminal motives for artistic representations of “views across water toward land”? At the same time, Stilgoe’s consciousness conveys with great sensitivity the acuity of pondered perception and reflection itself, seeming at times to resemble rather closely that of painters in the initial stages of conceptualization, as when he contemplates the effect of ledges submerged at low tide that break and explode into surf when deep waves hit them. It is hard not to envision Winslow Homer’s coast of Maine.

Among Stilgoe’s more evocative citations are perceptions of landscape by early pilots such as Anne Morrow Lindbergh, for whom the sides of houses in the morning sun appeared as facets of cut stones; or fascinating descriptions of 19th-century hot-air balloon flights with their sublime, atmospheric vistas; or airborne photography from cameras strapped to kites and the bamboo frames of dirigibles. He finds celestial illumination to offer a nocturnal field guide, with reflections from window panes, cathedral glass, flickering candles and gas lamps that lodge in the memory as brilliant signposts. Photographers often miss the fall of light, he cautions, a “magic” that differs from place to place just as color does. Citing M.G.J. Minnaert’s seminal *Light and Color in the Outdoors*, he reminds readers of the wealth of outdoor optical phenomena that “even many painters” fail to realize. It explains, for example, how smoke seen against the luminous background of the sky appears to be not blue but yellow.

The broad interdisciplinary swathe of Stilgoe’s musings on color perception—from *Goethe in Italy* (1786) to Donald D. Hoffman’s *Visual Intelligence: How We Create What We See* (1998) through early travel diaries like Hannah Hinichman’s *A Trail through Leaves: The Journal as a Path to Place*—is indicative of vast erudition culled from a lifetime of sweeping scholarship. Sources range from Randle Corravges’s 1611 *Dictionary of the French and English Tongues* and the canonic *Oxford English Dictionary* to gazetteers, thesauri, ship logs, manuals and cartographies. He cites histories of aviation, folklore, pyrotechnics, navigation, herbalism, estuaries, science, common and medieval law, art, urban studies, war, railroads, photography, cosmography and the high technology of Silicon Valley. An exhaustive bibliography, stretching over 20 pages, includes such titles as John Milton’s *Poetical Works; A Field Guide to Getting Lost; Reading the Outdoors at Night; Lumberjack Lingo; and Rats, Lice and History.*

In its contemplation of relationships between ideas and physical formations, the design and fury of human and natural forces, duration and extinction, this book is as conceptually valuable to architects, urban...
IMAGE SCIENCE: ICONOLOGY, VISUAL CULTURE, AND MEDIA AESTHETICS


Reviewed by Ana Peraica, independent scholar. Email: <anaperaica@gmail.com>.
doi:10.1162/LEON_r_01247

A new book/reader by renowned visual studies scholar—or, as he says, “iconologist”—W.J.T. Mitchell, Image Science is a collection of essays written over a full decade. Half of the essays, 8 of 16 in total, were written as speeches given at conferences, making their printed appearances unique, while the rest have been republished two or three times.

The reader follows the idea of systematic visual discourse or dialectics, which the author himself calls “triangulation” of media aesthetics, semiotics and psychology, as grounded in a previous trilogy: Iconology: Image, Text, Ideology (1986), Picture Theory (1994) and What Do Pictures Want? (2005). Image Science even has a dialectical subtitle, Iconology, Visual Culture, and Media Aesthetics, but curiously enough, it is divided in two major sections, covering the last two areas named in the subtitle, visual culture and media aesthetics. The third part of this dialectical trilogy of image analysis—iconology—is the actual topic of the whole book, which denies a purist and orthodox Greenbergian art-historical notion of the visual medium (in singular) and advocates the plurality of media.

The first chapter presents a vivid debate in criticism of art history, spreading a layout for the new interdisciplinary approach, as announced in the subtitle. The second and third chapters introduce image science as a discipline with its general concepts. Semiotic analysis of image and text in the next section is followed by an elaboration of “imageXtext.” The seventh chapter clarifies one of the most interesting confusions of contemporary media theories, based on confusion of William J. Mitchell and W.J.T. Mitchell’s accounts of the digital versus the analogue. Here the author does not fall into the abyss of fatalism but rather continues his characteristic dialectological way of thinking. The chapter “Migrating Images” compresses a theory of migrating concepts combined with postcolonial theory in visual studies, distinguishing three types of objects projecting objectivism in the place of objectivity—idol, totem and fetishism—in only a few pages. In the final chapter of the first part, “World Pictures,” Mitchell demonstrates proper visual science analysis of disparate concepts used as images of globalization—globe, sphere, planet, cosmos, world, Earth or terra, etc.—sounding a bit overly simple. This triviality is resolved in the chapters of the second part, where the whole visual media is denied on the basis of McLuhan’s theory of the medium. Besides McLuhan’s, Mitchell’s media theory relies much on Kittler, especially his Gramophone, Film, Typewriter. Entering media space, Mitchell also deals with media activism and ground activism, for example that of the Occupy movement and mediated images of violence that conclude the book.

Throughout the reader, Mitchell reanalyzes concepts of the wide field of image science such as imageXtext, metaimages, supercopies, objectivity versus objectivism, media taxonomy, media sensory ratio, rhetoric senses and synesthesia, but also nonmedia ones such as occupation, summing up previous writings. Gathering Mitchell’s concentrated essays on topics of a wide area in which visual culture and media studies overlap, the book is commendable as an elementary reading in new issues and challenges of art history but also as an introduction to disciplines of visual studies, image science and media studies to all newcomers in the field. The whole edition has a sufficient amount of repetition (including the identical table on dialectical formations occurring on pages 122 and 46) that students can memorize main thought-lines. Still, in developing further some of his thesis forming the field of analysis in visual studies, it is always useful to return to Mitchell’s own clarifications and re/definitions.

AN INTRODUCTION TO NEUROAESTHETICS: THE NEUROSCIENTIFIC APPROACH TO AESTHETIC EXPERIENCE, ARTISTIC CREATIVITY, AND ARTS APPRECIATION


Reviewed by Ian Verstegen, University of Pennsylvania. Email: <ianverstegen@yahoo.com>.
doi:10.1162/LEON_r_01248

Neuroaesthetics needs no introduction today but it does need elaboration. Buoyed by a tacit understanding of just what neuroaesthetics means,
we find within its study a mélange of studies that range from brain imaging with tenuous connections to art, from evolutionary psychological concerns to good old-fashioned psychophysics, usually without too much reflection on the nature of art, explanation or how everything fits together. The book under review does not shake this tendency but it does succeed in bringing together a number of approaches to different artistic phenomena with relatively good coverage at a reasonable price. It seems ideal for a textbook.

The book aims for comprehensiveness so it begins with a historical introduction and treats different areas of the arts. Marcos Nadal, Antoni Gomila and Alejandro Galvez-Pol review the history of neuroaesthetics. Jelmut Leder and Pablo Tinio present a basic framework for shape preferences. Editor Jon Laurion gives a “backdrop” to the theory and methodology of neuroaesthetics. Alumit Ishai reviews his research on face perception and in particular its distributed (and not localized) nature in the brain and, in line with other contributions, deals with intersubjectivity and self-perception and monitoring. Nicolai Rostrup investigates environmental neuroaesthetics, linking action centers of the brain with hippocampal functions. Jens Jørgensen reviews the tonal structure of music and its usage of brain centers associated with language and other centers (amygdala) associated with musical feeling. David Miall proposes to link experiences of literariness with “suggestive parallels” in neuroscience. Torben Grodal and Mette Kramer’s essay extends Grodal’s well-known work on mirroring action to the realm of sociality, where such skills of attunement are heightened by the film genres of romance and melodrama. Beatriz Calvo-Merino and Julia F. Christensen reflect on neuroaesthetics and dance. Bartlomiej Piechowski-Jozwiak and Julien Bogousslavsky review brain damage and art. Finally, Oshin Vartanian reviews fMRI studies of drawing, story-writing and improvisation. The book treats most important topics and is accompanied by a very detailed glossary.

In a short review I can only note some basic themes and impressions. Above all, there is varied involvement with neuroscience, beginning with the historical survey in which Fechner, Dan Belyane new experimental aesthetics and evolutionary psychology are featured prominently. Some of the chapters are more or less about experimental psychology, and the contribution of neuroscience is not highlighted consistently. Of course, these are problems for neuroaesthetics more generally. Within the volume, only David Miall is self-referential about the possibilities offered by the neuroesthetic paradigm. He asks first whether neuroscientific studies “merely supplement what we already know or if they offer genuine insight that corrects or develops existing knowledge” and secondly says “the theories that guide our neuropsychological investigations should be based where possible in our literary understanding” (p. 263). Perhaps significantly Miall has been a longtime integrator of art and psychology.

Scientists can see which colors, shapes and environments I might “prefer.” This can be useful for creating soothing interiors, say, for medical patients. But what is aesthetics about it? Writing in 1952 about experimental psychophysical studies of preferences, Arnheim wrote, “Some studies of this type can be considered useful as groundwork for a more adequate dealing with essential problems, but they are harmful when they take the place of true understanding” (Toward a Psychology of Art, Berkeley and Los Angeles, 1966, p. 20). Until we figure out what we are searching after, neuroaesthetics might better be called neuroaesthetics for the time being.

**OTHER PLANES OF THERE: SELECTED WRITINGS**


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

doi:10.1162/LEON_r_01249

When contents pages read like a text in themselves, this must reveal something about the quality of the author of the book. This anthology of selected writings by Renée Green is certainly extremely rich and in a way a work of art in itself, which makes it hardly possible to write a concise review of it. Yvonne Rainer, herself a choreographer and filmmaker, describes Green’s “far-reaching social and political interests” in her blurb on the back of the book as having “led her into taking on the roles of artist-curator-archivist-historian-exhibition designer and, perhaps most unusual, adventurress-traveler.” This layered description of Green’s activities gives a good indication of the scope of the book. Apart from introductory essays by Green herself as well as Gloria Sutton, the texts, which span a period from 1981 to 2010, are divided in five sections: Genealogies, Circuits of Exchange, Encounters, Positions and, the longest one, Operations. Even when read chronologically as I did, it still feels at all times refreshingly nonlinear. What turns reading this encyclopedic book into a dense exploratory adventure is the wide range of subjects and the different
styles of writing that Green administers, from deeply academic to storytelling or almost indexical.

The title Other Planes of There not only alludes to this layered condition but is also the title of an exhibition and installation. This double use, or maybe better reuse or retake of work, whether it is written or made, is a constant as Green clearly lives with her oeuvre and likes to revive its different components over the years in changing contexts to test out their ongoing but also changing agency. The idea of the encounter and following from this interaction in all its disguises is thus central. It is exemplified in the importance of the idea of the Contact Zone that Green introduced in her 1994 symposium "Negotiations in the Contact Zone" at The Drawing Center in New York. In her introductory essay Gloria Sutton discusses this "watershed" moment when Green organized a dialogue between cultural producers and cultural critics on the issue of art as theoretical critique and the similar but simultaneously different methodologies of both groups. This is just one example of how Green constantly questions and interrogates not only her own work but also the conditions in which it is generated: when, where and with whom. Her critical engagement is apparent in amongst others her essay "Why Reply?" (2007) on "participation of any kind in relation to international cultural events (ICEs), as well as more generally . . . the question on why engage, discuss, respond, or question." Green poses a question that seems central to her work: "How to acknowledge the beauty and power of intellect, details, specificity, and precision in the aesthetic process rather than consider these aspects as extraneous?"

Sutton starts her essay with a quote from Green during the Contact Zone symposium on the importance of moving outside of someone's comfort zone and the knowledge of one or more other languages "to enable a rethinking of established notions." Green has certainly traveled and lived throughout the world, most notably extended periods in Vienna and Portugal, and speaks several languages as well as using myriad media ones. As Sutton states, the book Other Planes of There is in itself another "contact zone" in which established notions are provoked and rethought by exposing them to different contexts.

While reading the book I remembered having run into Green's work on several occasions and in different places, to start with in Antwerp in 1993 when it was a Cultural Capital of Europe. Green took part in one of its central exhibitions, "On Taking a Normal Situation . . ." and re-publishes in this anthology the text she wrote for it under the section "Operations." She also muses in her introductory essay about the fact that the massive installation she made for this exhibition, "Inventory of Clues," was mysteriously "lost." I realize I have "lost" the catalogue of both that exhibition as well as the one of the exhibition that I visited in Firmi ny, Project Unité, in one of Le Corbusier's Unités d'Habitation housing developments. Green relates a harrowing account of her actually living in the half-deserted place right up to the opening of the exhibition. I still remember my visit vividly, and this account now adds to it. It is a shame I can't find the catalogue. It might be hiding in one of my still unpacked boxes.

Green mentions both exhibitions several times throughout her texts, and it is interesting to see how these interventions resonate both for the artist and the "perceiver," as she prefers to call the one who engages with her work.

This in its turn chimes well with two texts that follow each other in the "Operations" section. "Why Systems?" (2004) starts with an extensive definition of the word system from Webster's Encyclopedic Unabridged Dictionary of the English Language, demonstrating the many layers involved in its meaning. Green continues to discuss the "accretive process . . . that runs through all of [her] production" and how "the intersecting forms of these different elements affect how it is possible for a perceiver to engage." "Relay" (2005) again starts with a definition, this time of the word relay, that is equally layered. For Green the term, which she used as a title for the exhibition this text was written for, "suggest(s) ways of thinking about (her) work," occurring "in different and overlapping forms and tak(ing) place over time and in multiple locations." Relay and other projects at the time focused "on the relationality and tensions arising in and between locations, movement, and passages of time." Green makes her intention clear by quoting Kubler from his The Shape of Time: Remarks on the History of Things (1962): "Historical recall never can be complete nor can it be even entirely correct, because of the successive relays that deform the message." That Green is simultaneously working with Deleuze's idea of a constant becoming, also of meaning, is stressed by the title of her introductory essay "Other Planes, Different Phases, My Geometry, Times, Movements: Becomings Ongoing," which resonates throughout the book. The precision of construction, a slow precise buildup over many years, consisting of the "combination of processes and questions" that Green uses in all of her work, is not surprisingly also apparent in the structure of the book. Apart from the sections mentioned above, there are 142 plates in a separate section with color illustrations of her artwork that allude to the in-total 51 chapters. This section sits in a peculiar place, not neatly in the middle or at the end but between chapters 47 and 48. This placement makes it the kind of counterpoint that Green applies throughout her oeuvre and that thus turns the entire book into an artwork or at least into an integral part of that oeuvre. The last four chapters also become something of an afterword through this positioning after the pictorial interlude. These texts seem more reflexive, looking back in time, slightly more melancholic. The last text, "Endless Dreams and Water Between," a semifictional text about a woman, Aria, who invites three of her friends to start writing each other letters and also physically meet in
Leonardo Reviews on line
January 2016


Simple Thoughts by Peter Beyls. Reviewed by Brian Reffin Smith.

DECEMBER 2015
Headhunters: The Search for a Science of the Mind by Ben Shephard. Reviewed by Amy Ione.


NOVEMBER 2015

MIT Press Journals Podcasts

The MIT Press Journals Podcast series allows Leonardo authors and contributors to continue the conversation initiated in the pages of the journal in dialogue with each other. Tune in to hear from authors, editors and artists working at the intersection of art, science and technology. The MIT Press Journals Podcast webpage currently hosts a discussion between Jean-Marc Chomaz, Mikael Fernström, Sean Taylor, Annick Bureaud and Roger Malina on their work in the arts and sciences showcased in the article collection, Water Is in the Air: Physics, Politics, and Poetics of Water in the Arts; a conversation inspired by Leonardo e-Book Series release Art and Atoms, featuring Tami Spector, Philip Ball, Kathryn de Ridder-Vignon, Julian Voss-Andreae and Roger Malina on the connections between science—especially chemistry—and art; and more lively, engaging discussions of interest to the art/science community. To learn more: <www.mitpressjournals.org/page/podcasts>.