Once dismissed by postmodern relativists, biology—and brain science in particular—now finds great favor in the art world. “Mirror neurons” are said by some experts to demonstrate that human beings have an innate sense of empathy and to help explain our appetite for expressive images. Other researchers point to photos of the brain lit up here and there as subjects are shown various pictures (happy or sad, beautiful or grotesque); they hail these brain scans for illuminating the seats of joy, sorrow, anxiety and even “aesthetic feeling.” Forget explanations of creativity based on “right brain” dominance; these observers suggest; now we can see the artistic urge at the cellular level. Among the many questions such claims raise is what, exactly, these studies’ subjects are being shown under the name of art. It is a question at which Alva Noë’s new book takes direct aim. Strange Tools: Art and Human Nature opens with an epigraph by philosopher John Dewey that concludes “the existence of the works of art upon which formation of an aesthetic theory depends has become an obstruction to theory about them.” You can take Dewey to mean that theorists too seldom account for art as it specifically is, and indeed Noë pursues that argument at length. “Science and philosophy, to the extent that they concern themselves with art, tend to do so from on high,” he writes. They deny that art “is its own manner of investigation and its own legitimate source of knowledge.” Noë’s corrective is welcome; the runaway field of neuroaesthetics is ripe for challenge, and the author, a philosopher and cognitive scientist at UC Berkeley, is well placed to launch one. But by the time we reach the book’s conclusion, Noë has also driven home Dewey’s
widely cited point that art is less a question of objects than of experience. Noé believes seeing, like consciousness itself, is dynamic and transactional. As in his earlier Out of Our Heads (2009), he claims that consciousness occurs among people and their environment, not inside our brains—and that art is an essential tool in that transaction.

In developing his theory of what art is for, Noé distinguishes between “first-level activities that organize us” and “reorganizational practices” that loop back and change those activities. First-level activities include “walking, talking, singing, thinking, making and deploying pictures for this task or that.” Art, on the other hand, is a second-level activity. Always relational and contextual, it can be seen as a tool—a strange tool, because it opposes standard notions of utility—that puts first-level behaviors “on display.”

In Noé’s terms, we don’t just use tools like art, we think with them. “Our minds bleed out of our heads, onto the paper, into the world,” he writes, and paraphrases philosophers Andy Clark and David Chalmers to ask, “Where do you stop and where does the rest of the world begin?”—a question also raised (though Noé doesn’t say so) by William James. Another figure that seems implicit in Noé’s formulation is art historian E.H. Gombrich, whose theory of “making and matching” lurks unacknowledged behind Noé’s claim that “pictures are not so much the result of an applied aesthetic sense as they are its very precondition.” There is, he says, “no going back to a way of seeing that was before pictures.” Further, there is no going back to art before ideas about it. Delivering good news to a beleaguered field, Noé writes, “Art requires criticism.” Indeed, he states, “art is, really, itself, a critical practice”; he calls it a form of philosophy.

This is not the only sweeping claim Noé makes, despite his compunction about lecturing artists from on high. “I am not an art historian,” he admits midway, before asserting, “I’d lay a bet . . . that the strange-tools theory I am developing here in fact helps us make sense of all art everywhere.” Breathtaking though this may be, it is, arguably, less preposterous than the ideas about art put forward by such popular neuroaestheticians as Semir Zeki, whom Noé eviscerates. Zeki argues that knowing about brains allows us to see how their workings constrain art. But the laughable examples of such constraints cited by Noé (e.g., visual artists don’t work with ultraviolet light because humans can’t see ultraviolet light) don’t invite faith. Nor do the results of studies that use fMRI scans to show where in the brain the “art response” is located, sometimes by asking subjects for evaluations of various artworks on an “aesthetic intensity” scale of one to four. Evolutionary psychology’s attempts to prove that art-making is an adaptive behavior are similarly laid waste; all these efforts are as misbegotten, says Noé, as would be an attempt at a neuroscience of mathematics. In short, “neuroaesthetics is just another instance of neuroscience’s intellectual imperialism.”

It bolsters his credibility that, unlike Zeki and other scientists such as V.S. Ramachandran and Margaret Livingstone, Noé is on speaking terms with contemporary visual art, which he understands to be more than an emotional or perceptual trigger; he takes some time to assess such contemporary figures as Richard Serra, Tino Sehgal and Anri Sala.

Given its emphasis on organization as fundamental to consciousness, Strange Tools is surprisingly disorganized. But Noé’s concluding chapter tidily wraps things up, romping through the history of aesthetics from Plato and Aristotle to Kant and Heidegger before returning to Dewey and the insistence that art is experience. For all his digressions and more than occasional overreaching, Noé makes good on the promise to substantiate that claim.

JONATHAN FINEBERG IS not a scientist or a philosopher but rather an esteemed and unreconstructed art historian, and his latest book’s title, Modern Art at the Border of Mind and Brain, perhaps does him a disservice. Though Fineberg announces at the outset that we need art “to develop the circuitry of our brains,” the “border” his book explores is, mostly, not with pathbreaking neuroscience rather with Freudian psychoanalysis. And the artists who are discussed at length are mainly mid-20th-century masters.

“My methods are founded in a clinical discipline,” Fineberg writes in his first chapter, which looks at Motherwell’s work in relationship to his private life. Fineberg finds traces of trauma in Motherwell’s formal and procedural choices, including psychic automatism, and of an “almost obsessive attachment to a single recurrent shape or visual order” in Motherwell’s preference for working in series; alternative, art-based explanations are certainly on offer. Nonetheless, Fineberg is an astute observer of Motherwell’s painting, and is just as perceptively attentive to Miró and Calder, whose work he illuminates with the help of Freud protégé Ernst Kris’s belief that, as Fineberg puts it, artists make “regulated use of the repressed by the ego.”
Fineberg shifts gears in his discussion of art and cultural politics, focusing in part on Andrea Fraser’s notorious untitled work of 2003, in which she engaged in videotaped sex with a collector. We are “brought to a moment of disorganizing experience and insight,” Fineberg writes. Indeed, whatever else one might say about Fraser’s project, its “disorganizing” impact seems indisputable—and in striking contrast to Noë’s belief that art “organizes.” The notion of disruption, personal and social, also figures into Fineberg’s discussion of Christo and Jeanne-Claude, with asides on Theaster Gates and others.

In his final chapter, Fineberg compares Dubuffet’s insights into the creative process with those of a handful of neuroscientists, including Zeki (target of Noë’s contempt). Fineberg approvingly cites Zeki’s belief that studying art might help us understand the brain; neither offers much evidence for the reverse.

Fineberg concludes by noting that outstanding artworks, such as Dubuffet’s late paintings, take us back “to the elasticity of the child’s mind,” a return to his premise that what gives the “best works of art their privileged sense of authenticity” is “proximity” to unconscious material. The trouble here is the same that ultimately undermines Noë: what Fineberg says is surely true of some work, but it leaves lots out of the picture. Art sometimes brings us close to unexamined and primal feelings, and sometimes it works like philosophy, but, on other occasions, it functions more like journalism or fiction or political activism. Coming in too close can obscure its breadth, but stepping back too far can also falsify it, making art seem amenable to summary. Neuroscience necessarily aims for universal explanatory models. It speaks a language that differs fundamentally from that of art, and much is lost in translation.

**Books in Brief**

**GREGORY F. TAGUE**

*Art and Adaptation*

Why do we make art? In this short volume, Gregory F. Tague seeks to understand how material culture and artistic behaviors adapt over time. He examines different, often conflicting, evolutionary perspectives on natural and social selection in relation to cognition.

New York, Bibliotekos, 2015; 120 pages, $13.85 paperback.

**GREGORY MINISSALE**

*The Psychology of Contemporary Art*

Though many scientific studies elucidate our visual experiences of art, they do not account for the more recent artistic shift away from perceptual appreciation toward the conceptual. Here, art historian Gregory Minissale utilizes psychology and neuroaesthetic research to analyze artworks by contemporary figures such as Marina Abramović, Felix Gonzalez-Torres, Marc Quinn and Cindy Sherman.


**JOSEPH P. HUSTON, MARCOS NADAL, FRANCISCO MORA, LUIGI F. AGNATI and CAMILO JOSE CELA CONDE, eds.**

*Art, Aesthetics and the Brain*

The history of art spans the history of the human race, this volume reminds us, closely tying artistic appreciation to our identity. Leading experts on genetics, psychology, neuroimaging, art history and philosophy explore the cognitive science around art and aesthetics, with chapters on visual art, dance, music, neuro-psychology and evolution.

New York, Oxford University Press, 2015; 544 pages, $159.50 hardcover.

**G. GABRIELLE STARR**

*Feeling Beauty: The Neuroscience of Aesthetic Experience*

G. Gabrielle Starr applies neuroaesthetics to works ranging from a van Gogh painting and a Bernini sculpture to a Keats poem and a Beethoven piano variation to determine how the “sister arts” (poetry, painting, music, etc.) can address different senses but elicit the same set of feelings.