

present their individual views of Rapoport's work, I found little repetition. Instead, we get a real feeling for her diverse and systemic approach to art-making, her symbolic inclinations, how she has brought interactive elements into her works and the humor in her art. One element that stood out is her talent in bringing topical concerns (gender, religion, politics, and the role of technology in contemporary life) into her practice. Terri Cohn's introduction effectively places the artist conceptually and in terms of history through outlining Rapoport's artistic genesis and shows how her original ideas were also positioned within the larger framework of contemporary art and other systemic artists (e.g. Hans Haacke). Cohn writes:

It is essential to recognize that Rapoport's shift from creating autonomous objects to interactive installation work in real time and space was a consequence of her immersion in the zeitgeist of the 1970s. Her continued exploration of the world of digital media . . . underscores Rapoport's belief that themes, objects, and events is a continuum of intellectual and artistic exploration, one which has led her from Abstract Expressionist painting to interactive webworks. Her unique attraction to pairing polarities is central to her remarkable, decades-long artistic exploration and achievement (p. 14).

My favorite essay was "A Throw of the Dice: Between Structure and Indeterminacy," by Richard Cándida Smith. He met Rapoport while helping to organize an oral history project with alumni of the Department of Art at the University of California, Berkeley. Because of the nature of his project, his interview concerned her master's program and what she learned from her teachers. One of her professors was Erle Loran, a painter and the author of *Cézanne's Composition: Analysis of His Form and Diagrams and Photographs of his Motifs* (1943). Since this is one of my favorite expositions, I was interested to learn of the value she placed on the training even as she moved into building her own style and approach to artmaking. Even more fascinating were the ways she incorporated several of Loran's diagrams into her own work and narrative.

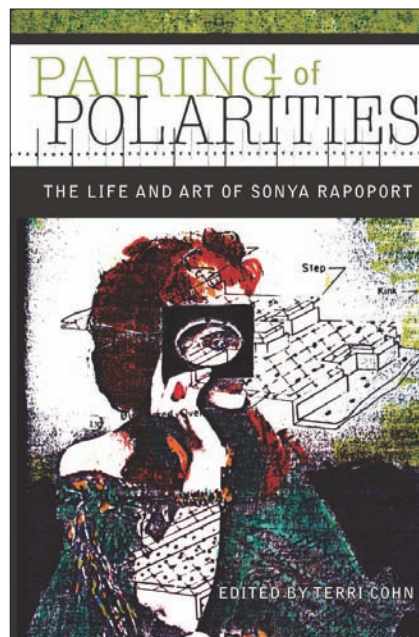
Pairing of Polarities documents a range of Rapoport's contributions. Her early drawings and collages often used the printouts of early computer databases as a backdrop to ideas in anthropology, natural sciences, chemistry and other fields.

We learn that she has exhibited

extensively throughout the Bay Area and internationally. Not only is she one of the early innovators who helped establish the San Francisco Bay Area as an international locus for hybrid practices; her work has extended far beyond her base. She has been included in major art and technology exhibitions including *Ars Electronica* (Linz, Austria), and the 2009 Venice Biennale's Internet Pavilion.

Perhaps the "takeaway" of the book is the degree to which many of Rapoport's interactive installations and computer-based works were ahead of their time. Not only was she talking about webs before the World Wide Web was created, she was also thinking systemically and intent on including interactivity in her work when static art was the norm. For example, today's World Wide Web recalls *NETWEB*, which Rapoport created at 80 Langton Street in San Francisco in 1980. As she explained (to Judy Malloy):

It was a geometric configuration of a spider web about 14 feet in diameter, reflected onto the floor from a slide projector attached to the ceiling. Six bisecting axes, the tick marks on each axis and the linear connections from tick to tick were projected on a star-shaped area of white contact paper. The image cards, now reminding me of today's provocative home pages, were placed in their positions on numbered ticks along their selected theme axes: EYE, HAND, CHEST, MASKING, THREADING, and MOVING. . . . Everything was interconnected by lines crossing the axes and joining similar tick positions on other themes (p. 43).



I have always admired the formal aspects of Rapoport's work and her drawings on computer printouts in particular. Given that these are often long and large, I would have liked a larger book format. That said, the reproductions were nicely done, well placed and conveyed the size and details more effectively than is often the case in trade paperbacks. The integration of the images and text was also effective. For example, an essay by Rapoport's daughter Hava conveys the integrative quality of her art and how her artwork and life worked in tandem. A photo of Hava and her husband, Elias Fereres Castiel, which is one of the artifacts in *Objects on My Dresser, 1979–1984*, reinforces this point.

This ability to integrate while retaining her own voice is evident throughout her career. Indeed, many of the writers mentioned the influence of her husband's work as she began to pioneer her approach to the art/science interface. He was a professor of chemistry at the University of California in Berkeley. Reading his scientific journals in the mid-1960s inspired her as she began to blaze her own path. Eventually she was appropriating computer printouts from his laboratory, bringing the periodic table of elements into her work and expanding into projects that intersect with science more generally.

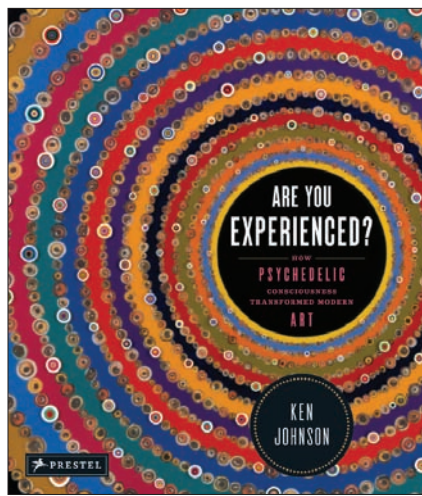
With the artist now in her 80s, it is exciting to see Rapoport's contributions receiving so much recognition. It will interest all who follow contemporary art and, in particular, those with an interest in the art/science/technology interface.

ARE YOU EXPERIENCED? HOW PSYCHEDELIC CONSCIOUSNESS TRANSFORMED MODERN ART

by Ken Johnson. Prestel, Munich, London, and New York, 2011. 232 pp., illus. ISBN: 978-3-7913-4498-0.

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When I was administered psilocybin in a neuroscientific experiment in 2005, I felt annoyed by the colorful geometric patterns and spinning fractals that came to surround me as the drug began to work. It seemed as if my brain could not do any better than imitate the gaudy aesthetics prevailing in psychedelic art. Since I found hallucinogenic



drugs interesting enough to write a book about their scientific investigation [1] but never acquired a taste for the artistic tradition associated with them since the 1960s, I have been looking out for attempts to derive alternative aesthetic forms from experimentation with hallucinogenic substances.

To my great delight, art critic Ken Johnson's new book *Are You Experienced? How Psychedelic Consciousness Transformed Modern Art* provides just that: A broad range of artwork not usually considered psychedelic is presented as a product of psychedelic consciousness. Johnson tries to capture a sensibility underlying contemporary art "in almost all of its various stylistic manifestations" (p. 10), from minimalism to op art and from feminist positions to Matthew Barney's *Cremaster Cycle* films. Drawing from personal acquaintance and interviews with many of the discussed artists, he shows how hallucinogen experiences inspired contemporary work in the tradition of abstract expressionism emphasizing the materiality of paint over illusionistic visual languages or how conceptual artist Adrian Piper relates her work on racism and xenophobia to her LSD-induced insights into "how much of 'ordinary' reality is nothing more than a subjective mental construct" (pp. 22–24, p. 138). The thesis of Johnson's book is that, since the mass consumption of lysergic acid diethylamide beginning in the mid-1960s, hallucinogenic drugs have altered the minds of so many people that practically all contemporary art has come to conform with a "psychedelic paradigm" (p. 218).

However, Johnson does not claim that all artists presented in his book have actually taken psychedelic drugs.

Most of the time it is not the artists but the art critic who ties their work to mind-altering substances—by describing a work of pop artist Ed Ruscha as appearing "funny-strange the way it can seem to stoned consciousness," imagining the paintings of Neo Rauch "as hallucinations of a dour Communist-era East German apparatchik," or speculating about whether Takashi Murakami's sculptures of Mr. DOB might have anything to do with Alexander Shulgin's synthetic drug of the same acronym (pp. 127, 146, 201). But, ultimately, whether it has doesn't matter. Johnson argues that psychedelic experiences diffused from those who really had them into those who did not: "You may never have taken LSD, but America has" (p. 11).

The problem haunting every page of *Are You Experienced?* is the fact that it puts so much weight on totalizing concepts such as "America" or Thomas Kuhn's notion of paradigms. Given that the existence of such all-encompassing and mutually incommensurable epistemic frameworks has been called into question in the history of science itself [2], it might not be wise to now import this idea into art history—as if art were a more unified field than science.

The book does not provide conclusive evidence for its claim that psychedelic consciousness transformed the whole of modern art, because, apart from Rauch, Murakami and a few others, the large majority of the artists discussed are American. In Europe, however, psychedelic drugs played a much smaller and also a different role during the 1960s. Embracing Marxist materialism, many students rejected the mysticism of Aldous Huxley and Timothy Leary so popular among U.S. hippies as yet another "opium of the people" and used hallucinogenic drugs for hedonistic rather than spiritual purposes [3]. And Japan might be a more different story yet. Moreover, America was divided, not just between the so-called establishment and the counterculture; and even the counterculture itself split up into different factions, not all of which aspired to "turn on, tune in, and drop out."

Johnson's spiral expansion of the genre boundaries recalls how the field was constituted when Robert Masters and Jean Houston first published their book *Psychedelic Art in 1968* [4]. In an interview, Abdul Mati Klarwein, one of the artists they took to represent the movement, later on remembered how he and others had come to be included:

They asked me, "What kind of psychedelics do you take when you're painting?" And I said, "I don't take anything when I'm painting. When I take psychedelics I get very horny, and I start going out to nightclubs and cruising." (laughter) So they said, "Well, we can't put you in the book." I freaked out, because I wasn't in any book yet (laughter), and I said, "But I get my ideas when I'm high." And they said, "Alright, we'll put you in the book." Next they asked me for the names of other psychedelic painters, and I gave them a whole list. . . . I called them all up right away, and I told them, "Tell them that you're taking psychedelics!" And they all got in the book [5].

But if the category of psychedelic art grew out of short-lived incentives of both the art and the book market of the 1960s, it might not be the best road to uncovering a unified sensibility allegedly underlying modern art for the past 50 years.

The contention of Johnson's *Are You Experienced?* might be better supported by his material had he argued for a profound transformation (but no "paradigm shift") of modern art by the countercultural upheavals instead of squeezing too many discrepant artistic positions into American psychedelia. However, his pioneering effort to trace the impact of hallucinogenic substances beyond album covers of the 1960s and Alex Grey's contemporary rearticulation of visionary art [6] opens up a whole new field of research that will, it is hoped, be explored further by scholars following in Johnson's footsteps.

References

1. N. Langlitz, *Newropsychedia: The Revival of Hallucinogen Research Since the Decade of the Brain* (Berkeley: University of California Press, forthcoming).
2. Peter Galison, "Trading Zone: Coordinating Action and Belief," in M. Biagioli, ed., *The Science Studies Reader* (New York: Routledge, 1999) pp. 137–160.
3. G. Amendt, *Die Legende vom LSD* (Frankfurt/M.: Zweitausendeins, 2008).
4. Robert Masters and Jean Houston, *Psychedelic Art* (New York: Grove Press, 1968).
5. M. Klarwein, "A Thousand Windows," interview by David Jay Brown, 1992 <www.mavericksofthemind.com/mati.htm> (accessed 6 April 2012).
6. Alex Grey, *The Mission of Art* (Boston: Shambhala, 2001).

3D DISPLAYS AND SPATIAL INTERACTION, VOL. 1: FROM PERCEPTION TO TECHNOLOGY

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