turies, Oettermann persistently ignores the comments of his predecessors on this point or dismisses them with an air of superiority. The panorama grows out of this tradition and is simultaneously her most elaborate representative. In order to support his contention of the singularity of the panorama, Oettermann especially argues the position that the panorama represents an aesthetic reaction to the supposed discovery of “horizon” in the eighteenth century (p. 13). This presumption is quite incomprehensible because city vedutas, coastal panoramas and bird’s-eye view maps date all the way back to the fourteenth century—at a time in which Francesco Petrarca ascended Mont Ventoux and “like one who is paralyzed” relished the Mediterranean panorama between the Alps, the Rhone and the Gulf of Marseilles.

The panorama as medium unifies two diametrically opposed aesthetic experiences. Oettermann justifiably throws out the aesthetic-sublime effect of the horizontal perspective, which conjures up a feeling of an obscure power of the gaze. On the other hand, he fails to grasp the central function of immersion, which rises out of the suggestive power of the absolute image. This point is all the more pertinent when regarding spaces in which the illusion was expanded through the use of figures and natural accoutrements in the interior of the room leading directly up to the observation platform. This faux terrain functioned as a three-dimensional element in the illusion. Battle cries and other, predominantly orchestra-effected sounds increased the poly-sensuous suggestion. In the Panorama of the German Colonies, opened in 1885, the proprietors intended to recreate the fighting, atmosphere and haziness of tropical regions with artificial fog and wind effects, thereby appealing to the skin and noses of the visitors. This kind of “‘transposing into the image,” this immersion, encapsulates the incipient essence of the idea of the panorama. The panorama attempts to break the inner distance separating observer and image; it attempts to intensify the influence exerted by the image upon viewer reaction, thereby incapacitating the observer. Oettermann fails to reflect upon this strategy of immersion, especially as employed in the suggestive politics of the battle panoramas, which make up a third of all known panoramas.

In the 1880s, the “dark side” of the panorama had reached its peak. As in the case of the Panorama of the Battle of Sedan, opened in the center of Berlin in 1883 by Moltke, Bismarck and the Kaiser himself, the suggestive potential of the panorama was exploited in order to purposefully manipulate the emotions of hundreds of thousands of people, making them more susceptible to state propaganda.

Today, our eyes are used to following a steady acceleration; thus, we can hardly appreciate the effect that a still panorama picture had on observers at this time. Many witnesses attested that for the first few moments the deception was so strong that the luminous scenery was experienced as a real battle. The Berliner Tageblatt reported, “It is as if one were standing amidst the awful battle.” With the calculated precision of illusion, the picture and the three-dimensional interior concentrate and fix upon the onlooker, who is devoured by the image. The mechanism of shattering the inner distance of the image, which demanded emotional participation, always claimed the central role in the history of these image-machines. Oettermann interprets the panorama as a “‘pictorial expression or symbolic form of a specifically modern bourgeois view of nature and the world,” of a society going through the process of democratization (p. 7). With the return of the panorama in the 1980s as a medium for the glorification of politically important battles and for the fostering of national unity in notoriously authoritarian societies—among them, North Korea, China and Iraq—one must recognize Oettermann’s glorifying analysis of the panorama as untenable.

In the context of current developments in the fields of new media, the panorama becomes worthy of attention precisely because of its problematic aspects. On this point, one finds a decisive parallel with virtual reality: virtual reality employs currently available means and technologies but is, at its core, characterized by the search for interface. It is an attempt to affect directly and physically as many senses as possible. As the extent to which the virtual illusion can act upon the senses increases and as the potential for interaction of observer and image becomes more comprehensive, the suggestive power of the digital image in the process of immersion will increase drastically and create a sustained suspension of the distance between image and observer. As interfaces become less perceptible, more natural and physically intimate, they will further expand the illusion of the unbound image; the power of distance that contributes to the construction of the subject will disintegrate. By creating an illusion and affecting all the senses of the human body, virtual reality reveals itself as the technically developed heir to illusion as it made itself felt in its paradigmatic predecessor, the panorama.

The publishers of The Panorama deserve recognition for interfacing the debate around new media by publishing works about its media-archaeological predecessors, in the form of this wonderfully formatted book.

**PERCEPTION AND IMAGING**


Reviewed by Roy Behrens, 2022 X Avenue, Dysart, IA 52224-9767, U.S.A. E-mail: <ballast@netins.net>.

Vision and art are inseparable, even more so if, as Paul Klee observed, “Art does not render the visible; rather, it makes visible.” Written by a well-known photographic engineer and educator who taught for more than three decades at the Rochester Institute of Technology, Perception and Imaging is an encyclopedic handbook of concepts and experimental findings related to art and visual perception: attention, gestalt organizing principles, visual memory, color, ambiguity, contours, subliminal images and so on. While addressed mainly to photographers, it describes and amply illustrates a wide range of ideas about art, design, advertising, semiotics and visual communication.


**BODIES OF SUBVERSION: A SECRET HISTORY OF WOMEN AND TATTOO**


Reviewed by Mike Mosher, 302 Easy Street #19, Mountain View, CA 94043-3716, U.S.A. E-mail: <mikemosh@well.com>.

Women as artists. Women as art galleries. Women as artworks. These are all topics covered in Bodies of Subversion, Margot Mifflin’s richly illustrated book on women and tattoos, from the nine-
teenth century to the present. At its most sociological, the book explores tattoo parlor workplace discrimination and tattoo contest nudity issues, and many artists and tattooed women are interviewed in the United States, Spain and Argentina (a study could also be done on Japan). Yet it is the book’s pictures that indelibly etch themselves upon the reader’s memory.

Early sideshow attractions claimed forcible tattooing, rarely the case but all the more enticing to the fantasies of some male spectators. Betty Broadbent entered a beauty contest (the world’s first televised one!) at the 1939 World’s Fair with legs and arms covered in tattoos of cowgirls, flags and foliage. There are personal histories here of women who married the male tattoo artists who decorated them and then took up the trade and of circus fat women who grew skilled in the electric pen. Today, a tattoo is sometimes obtained as a mark of pride for a survivor of breast cancer, calling attention to the woman who survived and the courage she found within.

The book’s subjects show us their skin’s rich gamut of imagery, ranging from a bee-dance, dual portraits of Malcolm X, abstract zigzags and “automatic writing” to illusionistic zippers and bones. Imagery from northwest Native American cultures has been adapted to women’s tattoos, as have been figures from the paintings of Gustav Klimt and by illustrators Tenniel and Beardsley.

Sometimes the motifs put on the skin are violent, and Mifflin does not neglect to mention the heartbreaking “Property of . . .” tattoos often found on outlaw bikers’ girlfriends. For all the sexual stereotypes of tattooed sailor men wearing nude or hula-dancing women, inkwork now gracing women’s bodies includes graphic testaments of lesbian commitment, spiritualized Yoni-goddesses and the curiously inarticulate Stephanie Farinelli’s hundred mechanical penises. Mifflin has found much variety in what Barbara Kruger has called “skin as signage”—but what does all this skin really say?

I treasure junior high school memories (from the days of hippie “body paint”) of drawing Peter Max–like stars, planets and flowers with watercolor markers on the arms and legs of female classmates. Nowadays, in the classroom I sometimes look upon particularly inked or pierced students and wonder how they will look as senior citizens.

The series of full-body photographs of Elisabeth Wienzirl in her forties, sixties and eighties show a smiling person quite comfortable with herself and time’s effects on her intrinsically embellished flesh. In almost every photograph in Bodies of Subversion, these painted people who are so used to being gazed upon proudly gaze back.

The visual relationship of tattoos to the medium of comics may deserve its own book, but imagery of the wicked queen from Disney’s animated film Sleeping Beauty and even the “%*?” that signifies profanity in cartoons appears on bodies shown here. Among the individualistic women tattoo artists interviewed is Jacqui Gresham of New Orleans, whose female African-American patrons especially relish the black Betty Boop figures she has developed. Even drawn with devilish horns, batwings, tail and pitchfork, this visual meme (both baby-like and very sexual) from the 1930s has been newly re-ethnicized to be taken up by a new community, an example of cultural fluidity in the tradition of the bootleg black Bart Simpson T-shirts appearing on the streets of New York a decade ago. Bodies of Subversion inspires the reader to see new connections in cultural studies, women’s studies, art and design, while introducing us to a gallery of illustrated people who would be interesting to meet.

TO LIGHT SUCH A CANDLE: CHAPTERS IN THE HISTORY OF SCIENCE AND TECHNOLOGY


Reviewed by Wilfred Niels Arnold, Dept. of Biochemistry and Molecular Biology, Univ. of Kansas Medical Center, Kansas City, KS 66160-7421, U.S.A. E-mail: <wanold@kumc.edu>

While attending a meeting on the history of medicine some years ago, I was attracted to a program title on the interactions among painters and physicians in early nineteenth-century London. The paper, which was based on a Ph.D. thesis, was read from a prepared manuscript but, to my surprise and disappointment, no slides were employed. Had they been lost on the way to Baltimore? No, the speaker elected not to use any illustrations because “scholars in history did not expect them.” A signifi-