

BOOKS

DRAWING IN EARLY RENAISSANCE ITALY

by Francis Ames-Lewis. Yale University Press, New Haven, CT, and London U.K., 2000. 196 pp., illus. \$27.50 (Revised edition in paperback). ISBN: 0-300-07981-8.

Reviewed by Wilfred Niels Arnold, University of Kansas Medical Center, Kansas City, KS, U.S.A. E-mail: <warnold@kumc.edu>.

The acceptance of drawing as a finished and free-standing art form took hold in Europe during the early fifteenth century. By the turn into the next century, crowds flocked into the studios of Leonardo da Vinci (1452–1519) and Michelangelo Buonarroti (1475–1564) to admire their respective cartoons of *Virgin and Child with St. Anne* and *Battle of Cascina*. Artists, architects and engineers from earlier times had obviously engaged in sketching and outlining as a means to an end in paintings, proposals or plans, but their preliminary efforts were either covered by pigments or enjoyed a limited life. That only a small number of pre-quattrocento drawings survive has been attributed by Ames-Lewis to a relative lack of appreciation by connoisseurs. The scarcity and expense of good quality substrates (panels and paper) and the necessity for recycling were also at play. The present volume abounds with fine quality reproductions of drawings by Filippo Lippi (1406?–1469), Giovanni Bellini (1430?–1516), Andrea Mantegna (1431–1506) and Pietro Perugino (1446–1523?), to name few. Drawing surfaces (parchment, vellum, paper), techniques (silver-point, pen and ink, chalk, brush) and devices (cross-hatching, tonal-modulation) are

explained in some detail in the text, and a three-page glossary is complementary. Chapters on the place of the sketch-book, the evolutions of figure and compositional drawings, and an epilogue on the legacy of the Quattrocento round out the book. A four-page bibliography is broken into sub-divisions, including “Works on Drawing,” “Museum and Exhibition Catalogues” and “Individual Draftsmen.” The index is useful, although a notable absence is the term “perspective.”

Readers with an affinity for Leonardo Digital Reviews might be disappointed, given the great advances in theory and application of three-dimensional rendering on a two-dimensional surface that were made during the fifteenth century. I was unable to find mention in appropriate chapters of the present book, not even under any of the three references to Albrecht Dürer (1471–1528), who learned from the Italian Masters but gave clarity and publicity to “perspective machines.” A decade ago I described the influence of similar apparatus on Vincent van Gogh (1853–1890). Last year, David Hockney rediscovered the camera lucida and, according to commentator Lawrence Weschler (*New Yorker*, 31 January 2000), continues to ponder the importance of mechanical devices for the old masters.

This book is a useful starting point for scholars and will be attractive in connection with focused graduate courses. Francis Ames-Lewis is professor of the history of Renaissance art at Birbeck College, University of London.

ARS ELECTRONICA: FACING THE FUTURE

edited by Timothy Druckrey. MIT Press, Cambridge, MA, and London, U.K., 1999.

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Ars Electronica started in Linz, Austria, in 1979 as a festival concerned with the

future of arts, technology, society and culture and their interdisciplinary crossings in the face of a new millennium. Over the past 20 years the festival has invited experts for debates on topics such as computers and culture, possible relations between the human (brain) and the computer (machine), sciences and arts, as well as other fields of synergy—most recently “Life Sciences.” The festival also provides the Prix Ars Electronica for computer animation, interactive arts, networks and digital music. *Facing the Future* is a book of collected essays that Timothy Druckrey has compiled together with Ars Electronica to historically, theoretically and also practically reflect upon steps toward developing and thinking the “digital” on the eve of the third millennium.

Starting from the themes of the annual festivals, the book covers two decades of ongoing preoccupation with a future that is regarded as an era of transformations and crossings based upon the development of microelectronics, thereby bringing about the “third industrial revolution.” The essays for this survey are taken from the festival’s catalogues and viewed together predominantly foster the idea of the “break,” the “shift,” the “new,” where the meaning of “going digital” is discussed in discourses on networking

Reviews Panel: Bob Adtlen, Fred Allan Andersson, Wilfred Arnold, Roy Ascott, Curtis Bahn, Marc Battier, Roy R. Behrens, Andreas Broeckmann, Annick Bureau, Mark A. Cheetham, Robert Coburn, Nicolas Collins, Donna Cox, Gary Crighton, Sean Cubitt, Shawn Decker, Sara Diamond, Victoria Duckett, Michele Emmer, Bulat M. Galejev, George Gessert, Thom Gillespie, Molly Hankwitz, István Hargittai, Dan Harries, Craig Harris, Josepha Haveman, Paul Hertz, Jack Ox, Eduardo Kac, Richard Kade, Douglas Kahn, Curtis E.A. Karnou, Nisar Keshvani, Rahma Khazam, Daniela Kutschai, Jim Laukes, Mike Legget, Carlos Lemus, Roger F. Malina, Jacques Mandelbrojt, Mike Mosher, Axel Mulder, Kevin Murray, Frieder Nake, Carlos Palombini, Christiana Paul, Robert Pepperell, Cliff Pickover, Patricia Pisters, Michael Punt, Harry Rand, Sonya Rapoport, Henry See, Edward Shanken, Rhonda Shearer, George K. Shortess, Joel Slayton, Christa Sommerer, Yvonne Spielmann, David Topper, Rene van Peer, Ron Wakkary, Barbara Lee Williams, Stephen Wilson, Arthur Woods.

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and Artificial Life, as well as in political terms of “Electronic War” and “Information Warfare.” Retrospectively it is interesting to note how the date 2000 has become a watershed—an almost magical barrier that quite literally divides life into “before” and “after.”

In this view, the festival’s own approach towards the future is especially marked. It stresses a techno-enthusiasm of increasing acceleration, concluding in a countdown—most dramatically when, in 1990, Ars Electronica was announced as “Millennium III minus 10.” While Ars Electronica should be credited with its concern to champion electronic arts on an international scale for over two decades, nevertheless the festival has been criticized for becoming commercial, with its increasing emphasis on the prize winners, while at the same time marginalizing the experimental approaches that are essential to the arts. Nonetheless, despite this albeit justifiable critical standpoint, it is commonly agreed in the media community that Ars Electronica has consistently taken up the key issues at stake and has presented sophisticated positions in theory and practices in a public forum. Against this background the reader of *Facing the Future* is invited to follow an emerging history of research and thinking that, step by step, demonstrates the development and changes in the discourse and the technology. To this end the themes of over 70 articles are organized around three sections: history, theory, and practice, each laid out in chronological order.

The history starts with Gene Youngblood’s discussion of video as visual art in 1984, where he points out the potential of the medium as digital video and videodisk, in clear distinction to cinema and television, since what matters in digital video is “simulation,” not “fiction.” At the end of the section, Friedrich Kittler analyzes the results of “digital simulation” where “information counts in war.” Kittler dismantles the techno-political perfidiousness in scenarios of “information warfare” where the global computer network allows for a new dimension involving the merging of espionage with communication. In between, Peter Weibel informs us, with considerable technical knowledge, about the integration of video and computer in the “digital image” and identifies precursors of “digital art” in the history of experimental arts. Hervé Huitric and Monique Nahas closely describe steps in computer programming

of visuals while Heidi Grundmann makes a well-informed contribution to the “language problem” (sound and noise) in radio arts. Kristine Stiles manages to look into the cultural phenomena of destruction in art without mentioning the works of destroyed architecture by Gordon Matta-Clark. Another series of contributions is concerned with robots (Hans Moravec), cyborgs (Hari Kunzru) and neurophysical experiments to connect brain and computer (Peter Fromherz). Also in the theory section are reflections on synergy effects of “mixing listening and seeing” (Daniel Charles) and on their history that, as Douglas Kahn points out, in particular refers to Russian avant-garde film, especially the work of Dziga Vertov.

The discussion of virtuality is led by experts in physics (most prominently Otto Roessler’s explanations of “endophysics” and Weibel’s elucidating analysis of scientific approaches towards the co-evolution of man and machine) and philosophy (namely Vilém Flusser’s concern with human capacities, such as memory). In the same section Manuel de Landa discusses the military and the market interests in computer networks and calls for a stronger consideration of economic history, including ecological perspectives. Against a background of artificial life, where identity, body and mind are shifting in time and space, Meltia Zajc discusses the physical experience of the body and how “life” aspects are “used” in media. The ways that artists’ projects encounter and deal with these serious matters are often more playful, as for example Steve Mann’s efforts to build a “personal information space” that he carries around with himself in a helmet equipped with a camera. Another striking example described in the “practice” part of the book is the *Human-Plant* growing project by Christa Sommerer and Laurent Mignonneau. Here, plants on a projection screen take the shape of evolving organisms in sympathy with real plants that are touched by the visitors, so that shape, color and position of virtual plants can be manipulated through contact with real plants. However, for some readers, textual accounts of the various artists’ projects may be insufficient; it would have been helpful if additional visual materials could have been provided, perhaps on a CD-ROM.

Since this survey is discourse-oriented we also need to consult Ars Electronica’s annual catalogues for more information

on the artworks. Druckrey’s editorial introduction highlights historical aspects of the implementation of technology into the arts by referring in particular to the activities of EAT (Experiments in Art and Technology) and the group of artists and engineers around Billy Klüver who initiated and organized collaborative projects in the late 1960s and 1970s, among them Robert Rauschenberg, Yvonne Rainer, Lucinda Childs and John Cage. Therefore, the aim of the editors to present a collection of essays under the rubric of “Facing the Future” is better understood in terms of a continuation and a conceptual extension of some historical roots into the future in order “to sustain a focussed assessment of the impact of computing on all aspects of culture and creativity” (p. 19). The book is surely a “must” for all those interested in new technologies and the latest media culture, because it not only represents what is and was going on, but also gives insight into the debates of the use of challenging technologies that also inflect our understanding of society, creativity and human intelligence.

THE ROBOT IN THE GARDEN: TELEROBOTICS AND TELEPISTEMOLOGY IN THE AGE OF THE INTERNET

by Ken Goldberg. MIT Press, Cambridge, MA, and London, U.K., 2000. \$40.00. ISBN: 0-262-04176-6.

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One of the common dissatisfactions with interactivity on the Web is that telepresence is not, well, presence. Certainly some of the more interesting new media projects have deconstructed our assumptions concerning presence and the sense of “really” being there. But, when it comes down to it, we are faced with the experience that you and I in our separate computer-hovels chatting over CU-SeeMe is not the same as you and I having drinks in a cozy bar. This difference has prompted talk of a qualitative difference between two essentially different modes of communication and interaction, each contingent upon a variety of factors (technology, class, cultural difference, race, geography, language, etc.). The “noise” that often comes through is not just technical, but can also be social.