Computers and Art by Stuart Mealing (Editor)

Intellect 2nd edition (July, 2003). ISBN: 1-84150-062-3
Reviewed by John Knight, Director of User-Lab, Birmingham Institute of Art and Design.

This book surveys a crucial subject to teaching in art and design. It is relatively accessible despite the complexity of the topic. 'Computers and Art' should be of interest to art students, teachers and practitioners. Reviewers note the books 'open ended discussion', 'the philosophical and practical implications of having a computer in the studio' and [engaging the reader] 'with a series of ongoing debates'. The book has a wider constituency because these debates. The issues raised by the book include such fundamental questions as what is art and how is it created?

The book is 159 pages long and was originally published in 1997. This second edition has three new chapters. Since the first edition, the area of computers and art (computer art?) has widened in scope. This expansion has spawned subdivisions. For example, genres such as 'Net Art' have emerged. Since 1997, there has also been many more quality books published on the subject. For example, while 'Computers and Art' has a few monochrome illustrations, 'New Media in Art' by Michael Rush, is cheaper, more up to date and has many colour plates.

Rather than gloss 'Computers and Art' offers very personal, thought provoking insights into the subject. Stuart Mealing is the book's editor. He has collected 12 chapters from 'artists, scientists, critics, philosophers [and] educators (pp 006). Most authors make art as well as critiquing it. Only one author is a woman and there is a strong bias toward UK academia. Unfortunately, despite being a second edition there are a number of typos (e.g. pp 123) and no index.

Despite these drawbacks, the book succinctly covers all the topics and issues in computers and art. Three authors (Mealing, Whale and Burton) deal with the creative act and drawing. In these chapters computers are considered mainly as tools. Five chapters widen the focus. Diggle, Rieser, Buick, King and Brown investigate the qualities of computer art and consider interactivity, virtuality and artificial creativity. Landsdown and Noble look at graphical art. Both take a historical perspective where computers are seen as a dynamo for change. Brian Reffin-Smith brings all of these strands together in one exciting chapter about his own practise.

Ed Burton's chapter is called 'Representing representation: artificial intelligence and drawing. In combining practical application with philosophical currents it is perhaps typical of the book and suggests it may be a useful aid in teaching. Burton begins his chapter with Harold Cohen. Cohen has used computers as tools for making art as well as 'autonomous art-makers' (pp 035). Burton goes on to describe his own work in developing software that makes art. This chapter crystallizes the 'threat' of computers but also their possible limitations beyond being tools.

John Lansdown's 'Some trends in computer graphic art' offers a brief history of the subject and his vision of the future. This vision includes 'Algorithmic and mathematical

art' of the type of work produced by Harold Cohen. Lansdown also suggests 'New forms of representation' and raises the crucial issue of 'interactivity'. Lansdown also has a fourth prediction about the future:

'On the horizon, though is a fourth development of great promise: that is, the use of networking - the Internet and World Wide Web (WWW) - to produce multiple authored artworks.' (pp 053).

Jim Noble's chapter 'Fatal Attraction: print meets computer' takes a historical approach that links back to Marshall Mclluhan. Jeremy Diggle describes 'A Year and A Day'. This is a piece of 'computer art' created by the author that evolves through the interaction with the user over time.

Stuart Mealing has his own chapter which is called 'On drawing a Circle'. Mealing notes the qualities of traditional medium including the physicality of making marks, in contrast to the elusiveness of the virtual. He also touches on the metaphorical nature of the digital world or what he calls 'digital mimicry' (pp 010). Mealing is positive about the purity of the digital drawing and the promise of finding new ways of creating and representation.

George Whale also discusses drawing. He suggests that computers offer new tools for doing different kinds of work including 'remote collaboration' (pp 026). Mike King takes a more philosophical approach and looks to quantum theory and considers the nature of creativity. Like many contributors, King seeks more sophisticated functionality and interfaces to capitalise on the qualities of computers. King and Whale's chapters are valuable for their philosophical probing. They both point to the way that computer art can help to understand creativity and art.

Brian Reffin-Smith offers a very accessible, personal and idiosyncratic chapter.
He is passionate about the medium and 'won the first Prix Ars Electronica' (pp 130) in 1987 using an ancient BBC computer. This chapter is refreshing for its lo-fi approach, enthusiasm and first hand account of an artist using computers. This connection to practise is perhaps where 'Computers and Art' has an edge over its competitors.

Martin Reiser's chapter is very good and starts by looking at distance and draws on the work of Paul Virilio. This chapter considers a range of artistic possibilities enabled by computers. These promises include haptic interfaces, virtual reality and telematics. Some seminal works are described and key figures including Sherrie Rabinowitz are introduced. Reiser makes an important point about the potential of computer art to create a more publicly accessible art form than was previously possible through galleries and museums.

Paul Brown looks at the Internet and the potential for 'Network Art' (pp 102). His historical-definitional approach is useful in linking computers to wider art history. In particular, he contextualises computer art with the antecedents of 'Mail Art and Telecommunications Art' (pp 101).

Joanna Buick's chapter is called 'Virtual Reality and Art'. Buick does a good job in identifying (and critiquing) all of the issues in this area. She also offers a reasoned and critical perspective to the new technology and points to some ethical issues. Like many contributors she notes the potential for technology rather than human need to drive innovation. Richard Wright looks at the role of technology in artistic production. He also identifies a unique aspect of computer art that it is an inherently multidisciplinary endeavour. He is hopeful that new kinds of art can be produced and that connections can be made between art and science.

I was (almost grudgingly) won over by this book, despite its age and approach. The UK focus underplays the international character of the computer art community. There is also a bias toward computers used in traditional art practise rather than as media (or culture or subject) in themselves, for that matter. This excludes some vital work from non-traditional practitioners. For example, hacker communities and festivals such as ReadMe are left out. Furthermore, Margot Lovejoy's 'Digital currents: art in the electronic age' is a more contemporary, complete and vivid treatment of the subject. However, 'Computers and Art' offers a very personal approach. This is endearing and potentially more thought provoking for students, practitioners and teachers than its glossier counterparts.