The New Media Handbook

Andrew Dewdney and Peter Ride

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Notes on interviewees

Justin Bennett, artist (Netherlands/Spain); work includes 'Site' (2000) and 'Berlaymont Dreaming' (2004)

David Bickerstaff, Australian, based in London, is the Creative Director of Newangle Multimedia (UK) and a practising new media artist

Susan Collins, artist (UK) and head of the Slade Centre for Electronic Media, University College London; projects include 'In Conversation' (1997) and 'Fenlandia' (2004)

Ana Kronschnabl, independent producer and artist (UK); Director of Plugincinema.com

Joe Lister, web designer (UK)

Matt Locke, Head of New Media Innovation, BBC, and new media writer and critic (UK)

Rafael Lozano-Hemmer, artist (Canada/Spain); projects include 'Vectorial Elevation' (2000) and 'Body Movies' (2001)

Anne Nigten, Manager (Netherlands), V2_labs at V2_Institute for the Unstable Media, Rotterdam

Tim Olden, artist and Network Manager of Interaction Design, Royal College of Art (UK)

Nina Pope, artist (UK); work includes 'A Hypertext Journal' (1996) and 'Bataville' (2004)

Jane Prophet, artist (UK); work includes 'TechnoSphere' (1996) and 'Decoy' (2000)

David Rokeby, artist (Canada); work includes 'Very Nervous System' (1988) and 'n-Cha(n)t' (2001)

Rob Saunders, freelance programmer (Australia/UK)

Vivienne Stone, independent producer (New Zealand); formerly with Saatchi & Saatchi, New Zealand

Maria Stukoff, independent producer (UK); formerly Director of Media Training North West

Benjamin Weil, independent curator (USA); founder of äda'web and Curator of New Media at San Francisco Museum of Modern Art

Tim Wright, writer and producer (UK); projects include 'Online Caroline' (2000) and 'In Search of Oldton' (2004)

Sites relating to case studies

www.adaweb.com (Benjamin Weil) www.janeprophet.com (Jane Prophet) www.somewhere.org.uk (Nina Pope) www.onlinecaroline.com (Tim Wright) www.robsaunders.net (Rob Saunders) www.newangle.co.uk (David Bickerstaff) www.plugincinema.com (Ana Kronschnabl) www.saatchinzonline.com (Viv Stone) www.breastlink.com (Viv Stone) www.v2.nl (Anne Nigten) www.lozano-hemmer.com (Rafael Lozano-Hemmer) homepage.mac.com/davidrokeby/home.html (David Rokeby) www.inconversation.com/ (Susan Collins) www.ucl.ac.uk/slade/sac (Susan Collins) www.bmbcon.demon.nl/justin (Justin Bennett) www.mtnw.co.uk (Maria Stukoff: Media Training North West) www.idea.org.uk/maria (Maria Stukoff) www.test.org.uk (Matt Locke)

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Part I

New media frameworks



1 Introduction

What kind of book is this?

his is one of a number of books in a series of handbooks produced by Routledge for students of the arts, media and cultural studies and social sciences. Existing titles include the mainstream media of newspapers, radio, advertising, television, photography, magazines and public relations. The Cyberspace Handbook in this series is a useful companion to this book. The style and approach of each book is different; there is no house style, but they have in common the aim to articulate what is involved in the professional practice of contemporary media. To paraphrase the series editor, James Curran, the aim of the series is to provide comprehensive resource books that are something between a 'how-to-do-it' manual and a critical reflection of contemporary media. In the case of new media this is no easy task because, as the reader will soon discover, new media is, by its very nature, a hybrid practice involving a wide range of practical skills and intellectual resources as well as numerous competing critical commentaries. We have chosen to grapple with the essential diversity of our subject by combining critical commentary, descriptive and historical accounts with a series of edited interviews with new media practitioners. In doing this we hope that we provide a sufficiently broad selection of material to construct a kind of 'map' of some of the established and emergent 'territories' of new media practice.

Metaphors abound in new media, and critical commentary and reflection are, in our view, essential components of practice. 'New territory', 'emergent fields', 'uncharted space', 'new frontiers', a series of spatial metaphors, whose roots lie in an historical time-frame and discourse of physical geography, science and colonialism, which is itself the subject of other critical reflections. In uncovering the roots and sources for the spatialisation of human–computer interaction, the book draws upon a number of academic disciplines, most notably cultural and media studies.

Handbooks and guides have to be useful. The comparison with travel guides again springs to mind. Imagine that you are on a journey in a place unknown to you and you need to orientate yourself to the people, place and culture. In this place you need to get your bearings and find somewhere to stay. There are many ways in which you could set about doing these things, but a guide book is a good starting point. It is a feature of the moment we are in, and one we examine throughout this book, that more and

more people are 'travelling' in cyberspace and using the Internet rather than guide books to plan travel in the real world. The exponential expansion of the use of the Internet is not, however, making the printed book redundant, only changing the way we use books. This book is designed to help you find your way around an emergent subject and a set of complex, multimedia practices. It will, we hope, show the main contours of the new subject, locate the main centres of interest and even chart many of the routes and connections between them. But, like all guides and maps, it is important to recognise that this book constructs an order upon our landscape, which is inescapably partial and selective. The guide comes with built-in perspective. It inevitably has its omissions and, in relationship to the emerging field, its uncharted territories. This is only to be expected in a fast developing field such as new media. The mapping task is like trying to represent something that is in a state of flux, possibly like attempting to map the surface of the sea. The map provided in this book contains conceptual definitions, accounts of technologies and a selection of cultural practices based upon new media. The book is, thankfully, not the first attempt to do this, since new media is already being studied from a variety of different viewpoints and disciplines. We start the book by identifying some of the different ways in which new media is being approached by media professionals and academics.

Any book with the word 'new' in its title willingly draws attention to the period in which it was written. In the globalised world everything labelled 'new' quickly becomes the 'established' and, in a shorter and shorter space of time, is passed over as the old or obsolete. The reason for this is that in everyday use the term 'new' has become bonded to consumer products, from fashions, to films to food, and, as a label, means simply the latest. We can put this another way and say that the meaning of the word 'new' is currently defined by a consumer world in which novelty and the disposability of objects and things is now a norm. In such a world, 'new' has come to denote a kind of superficiality, the very opposite of things that have significance or depth. The term 'new', understood simply as novelty, is not the way this book uses it. In many ways our working definition of new media is neither about the current moment in time, nor about media as the latest technologies. In this book the term 'new', as we apply it to media, will refer to what people do with technologies and is, therefore, about the possibilities for, and realisation of, human thinking, feeling and communication in a new medium. The significance of the new for us, here, lies in identifying ideas, feelings and experiences that are, and can be, grasped and understood through a new medium in different and challenging ways. In this process some kind of individual or social communication occurs such that new insights and discoveries about ourselves and the world take place. This is a definition of the new that emphasises the social and cultural significance of change, a process that can also be defined as a paradigm shift in the mode of thinking.

One of the guiding principles of this book is that we resist any reductive notion of new media as novelty or fashion, in favour of the idea of new media as representing significant cultural and social change. In adopting this view we have found that we also need to provide an understanding of the historical and theoretical development of new media that emphasises the complex continuities in the technological developments associated with particular cultural uses of media, rather than understand new media as replacing what has gone before. The book is organised around the practices of new media as a direct consequence of attempting to understand new media as embedded in concrete cultural developments.

The invention and spread of the printing press in Europe from the 1450s led to the development of print culture. The spread of print media was the basis of new forms of reading and writing and the general diffusion of knowledge in a continuous process over the next 500 years. In the twenty-first century, long after print media could be considered as new, it continues to be a major means for communication of ideas, feelings and experience. While this book was produced with the use of computers, written with word processing software and edited, designed and laid-out on screen, its form and material existence is still words printed in black ink on bleached paper on pages in a fixed order and bound together with glue. Academic publishers still make their living from selling books, although they are interested in the possibilities presented by online publishing. At the same time readers in general do not want to sit and read text from a screen, nor download chapters or whole books for printing. Academics and teachers know that today's busy, cash-strapped students do not want to have to buy large quantities of books or spend long uninterrupted periods of time reading. Given an 'A level' or undergraduate assessment essay on the topic of new media, the majority of students will increasingly use online sources for their writing. The old medium of books continues in a world in which more and more knowledge or data are stored, transferred and accessed electronically. Culturally, reading and writing cross and re-cross the old and new forms. This crossing of boundaries and convergence of forms is the territory we explore.

Our approach

Within the broad theoretical approach outlined above, we can identify three things that mark this book out from the growing literature on the subject of new media. First, it looks at new media from the point of view of the practitioner. By this we mean that the book is organised around new media artefacts, their producers and production. It aims to stay close to the many issues that beset the new media producer, half of which are about making machines do what you want them to do and the other half about wondering why you are trying to do it in the first place. New media practitioners worry away, alternately, about technical detail and the personal and social implications of technology. This is why so many new media projects have technology as their apparent subject. Second, the book looks at the practitioner as primarily a creative, rather than technical person. We are not writing a computer or software manual and this is not a how-to-do-it, but more a how-to-think-it guide. The book's interest in hardware and software is from the point of view of how they are used creatively. This means looking at what people are doing with technologies as well as how they understand what they are doing. In this respect the case studies and examples always privilege the position of the creative producer working in specific cultural and institutional contexts. Most of the case studies and examples are drawn from people working outside of the corporate mainstream of new media commerce. We focus upon a range of independent producers because they illustrate many of the wider understandings and problems we discuss about what is characteristic about new media practice. The fact that we have chosen people working in contemporary cultural contexts, rather than in science or commerce, is again because we consider that their projects illustrate the links between ideas, forms and audiences. Many of our case studies point up the collaborative nature of the practice of new media and, interestingly, point to the fact that people collaborate across different specialisations.

Education and training

Because of this social approach to new media practice the book includes a chapter discussing the meaning of that much used and abused term 'creativity' and its relationship to craft skills. Traditionally, training arts practitioners was carried out 'on the job', so to speak, which involved a lot of watching and copying what other trained people did. This watching and copying was the way in which knowledge, skills and techniques necessary to production were acquired, in the process of doing, rather than being formally taught. At the height of analogue broadcast and print media, up until the end of the 1970s, media training was organised under a system of apprenticeships. Apprenticeships had a much longer history as a system of craft and industrial training in which the necessary knowledge and skills of a practice were passed on. Such training was done as an inseparable part of the process of production. Today, the widespread formal apprenticeship system has gone and has been replaced by training programmes that take place at a distance from the production process, mostly in colleges. The apprentice, working alongside the 'craftsman', or skilled operator in the production process, learnt by copying and doing. The apprentice would know that something had been done the right way and was of a high standard, as the artefact was produced and approved by those who were already trained. On-the-job training still takes place, but in more casual and, importantly, more short-term ways. Changes in the social organisation of industrial and commercial training reflect the global restructuring of industrial production. Today, products are no longer produced all in one place (the vertical factory system), they require much shorter turn-around time in consumer markets and involve ever greater levels of automation brought about by the introduction of new technologies.

When considering the training and education of a new media practitioner, we still have to take into account a differentiation of knowledge and skills in the production process itself. One of the biggest distinctions in conventional media production is that between so-called creatives and technicians. The production of media is still organised under a system in which labour is divided into separate specialist tasks. The system of media training reflects this division of labour in different ways. There is, first and foremost, a primary distinction between those who develop and define the content of programming and those who put programmes together. The first group (content providers) which includes writers, producers and directors, are deemed to be the creatives, and the second group, the film and studio crews who operate the equipment of production and post-production, are deemed to be technicians. Within each of these groups production is refined into further specialisations that reflect the degree of either technical or creative complexity – the differences between front-end and back-end programming, for instance, reflected in the interview with Joe Lister.

In contrast to the divisions of labour that operate in the industrial and commercial production of media, the production of art is conceived of as a holistic process under the direction and control of the artist. Novels, poetry, plays, music and works of visual art are still largely the products of individual creators, even if groups are then needed to technically produce or perform them. In most of these artforms it is assumed that the artist both conceives of the work and has the personal skills to produce the artefact itself. Even when an artform requires technical assistance, for example the large-scale public sculpture that needs industrial production techniques and is factory produced, the resulting work is valued and understood as that of the artist, rather than the result of a team of people.