Histories of the digital arts have their own distinctive concerns. These interests also deserve to be compared to more general historiographical discussions of history writing where there have been fierce debates about empirical analysis and theoretical developments allied to postmodern linguistic theory. Through this comparison, the ways in which history can be a creative process will be examined.

Keywords: Digital arts, historiography, virtual, Internet, exhibitions.

Introduction

In this paper I will examine current historical accounts of the digital arts and creative media industries. I am assuming that an understanding of the past offers creative engagement with the present. Beyond that, I wish to explore some commonly assumed binaries that have been given historiographical relevance in studies of the digital arts. This is not to propose an interpretation based on an absence of such conjunctions but to explore why and how they might be relevant. So besides past and present, I will discuss perceptions of the creative industries as a blending of art and design. The shifts between the physical and the immaterial and the local and the global, when mediated by web technologies, will then be examined.

Current Themes within Histories of the Digital Arts

Experimentation and an interest in the possibilities offered by new technologies are driving forces for creativity. The many forms of production, artefact or event are often described in terms that have ambiguous or short-term usage. For multimedia, which encompasses the work of designers and the creative media industries, a defining factor is convergence between traditional areas of activity and media such as photography, music, radio, film, television and animation. Interactivity is the means by which these converged media become an expressive medium.

To use the term digital arts may at first suggests a narrower definition of the engagement with technology. Many historians have defined sub-categories (new media, electronic arts) or themes (machine, interface, network). For example, Hans Peter Schwarz provided six categories for the Center for Art and Media Karlsruhe (ZKM); these were interface, interaction, media, games, AI and simulations. Other writers also introduce categories that are precedents to the work they finally discuss. There are also studies that address the field critically and focus on an understanding of utopian futures and ethics.

Some authors who attempt to survey the field choose to use socially defined moments to label the outcome of experimentation with, or through, technology. For example,
although Arjen Mulder and Maaike Post state that they document an approach rather than a social movement, they pin down their subject - electronic arts - through the visibility of such events as ISEA, DEAF (Rotterdam) and Ars Electronica (Linz).

Most commentators see the area as 'international' from the point of view of the contributors and of the audience. In terms of experiencing the work, this is only true in so far as the technology is available as a phenomenon of the industrialised and networked world. But concern for the future, which includes questions about the place of technology and global sustainability, have implications for the wider community. In this questioning the artist is seen as the catalyst for interrogation and understanding. As noted by Linda Cooper and Amanda McDonald Crowley, 'Artists have a trained and attitudinal capacity to make the social, moral and ethical ramifications of scientific and technological development more immediately apparent through their expressive media'.

Besides this continuation of art taking its context and meaning from the art gallery, museum and curatorial practice there are various ways in which our understanding of the technology suggests a changing conception of practice and new opportunities. Manuel Castells has described the widespread social and cultural differentiation shown by new forms of virtual community and increasing social stratification among users of the new digital technology. But, at the same time, there is an integration of all messages in a common cognitive pattern. We therefore have the convergence of 'high' and 'low' art in terms of media. Therefore, context and institutions again become the basis of categorisation. Writers and curators engaged in documenting net art uphold the value of the creation of digital archives but also stress that the context of net art must be preserved by drawing upon the discourses on the Internet/technology as part of the context of the artwork, thereby relying on its own institutions rather than inherit existing museum and gallery criteria for the legitimisation of artworks.

The process of documenting and analysing the historical significance of the digital arts therefore takes strength from recognising the defining moments of technological change as they become institutionally defined. There is also an associated preoccupation with methods of classification as part of the attention given to archiving.

Questions from Practice

Exhibitions and Internet projects focus attention on communication though an end product. However, if the process of production is considered, decisions about inclusion and exclusion, decision-making and value are highlighted. Engagement with the virtual suggests closer attention to symbolic language and classification criteria. The first example I will describe concerns the 'reading' of a map against the physical and the virtual. In my second example, process relates to database construction. Both examples lead to questions about total and partial viewpoints for the topics of physical/immaterial and local/global.

The aim of a website for the Forest of Dean Sculpture Trail [http://www.forestofdean-sculpture.org.uk] is to provide a visual archive of the sculptures, past and present, supported by contextual information about the work and the history of the project. It will evolve when updated with further information on new work or events. It is also a
way of publicising the Trail to potential visitors. The Trail was established in 1986 following initiatives by the Arnolfini Gallery, Bristol and similar work near Exeter, UK. It is run in partnership with the Forest Enerprise. The sculptures entice visitors to visit and learn about the forest as part of their leisure activities. Access is managed as well as encouraged through the Trail. Early concerns were over the relationship of the website to the forest itself, of its role to persuade people to visit rather than a replacement for that experience. However, the way the sculptures were first encountered virtually, through an interactive clickable map, also led to debate. Two versions of this have been so far been authored; one is quite diagramatic, the other uses a more naturalistic representation, based on a map used in the print publicity. Therefore, is it the archive or the place that needs to be 'represented'? How does this relate to conceptions of the local and the global?

Digital art exhibitions contribute rich clusters of information for historical analysis. Not just through the production of an event but also through a process of knowledge management. In many cases, as with the Net_Working exhibition [http://www.dshed.net/networking] at the Watershed, Bristol, UK, the methodology used is one of a collaborative practice through the network as well as within it. The product is a kind of database but one that is seen as having a 'future'. Within the chosen configuration of categories, how satisfying is the viewing experience? What is there within the experience that forms a meta-structure, framing a 'viewing' space that is distinct from the network? Considering the uses of the encyclopaedia may be relevant. As noted by Ranulph Glanville, the encyclopaedia is 'not just a body of knowledge (with claims at some approach towards completeness or wholeness), but also a body that has a structure which explicitly reflects a specific attitude to that knowledge'. Even if completeness is not essential, the idea of structure is, in the end, relevant to curatorial practice.

The Concerns of 'History'

Digital art is concerned with technology and communication; the creation of new forms of social organisation and technologically mediated digital artefacts. Historical understanding includes a critical understanding of relationships between the process, artefact and reception. When using digital technology, preference is currently given to the database as a defining form of knowledge management within artistic production. This underpins both the work of the artist and the work of the curator.

As with art and curatorial practice, historians have taken up the implications of new technology in imaginative ways alongside the continuation of conventions already in place. During the 1990s debates about historiography centred on a contrast between the development of empirical methods of analysis and theoretical developments allied to postmodern linguistic theory and interdisciplinary study within the humanities and social sciences. The ways in which evidence and documentation were understood and defined were central to these debates. There was also debate about the fictionality of history, which expands into discussions of narrative and memory.

These debates grew out of reflection on procedures. One area where historians realised this was in oral history where the use of testimony (mediated by analogue technology) gave a broader range of sources than hitherto used by historians, enabling greater engagement with the study of everyday life. To this was added myth,
metaphor and the imaginary. As Raphael Samuel noted in 1987: 'I think we should
look at how we ourselves are taking part in the creation of powerful myths and
traditions, and how these are not separate from the actual retrieval of the material past
and the retrieval of vanished mental states and our own need for the symbolic, and the
metaphorical and the imaginary'. In discussions of hypertext and multimedia similar
discussions surrounded the role of author and multiple readings of text.

In 2001, the publication of a 40th anniversary edition of E.H. Carr's What is History?
afforded further discussion of historical methodology. Patrick Karl O'Brien's account
'History and its Postmodern Critics' provides a useful overview of the area and makes
comparison to the 'provisional' nature of scientific knowledge. O’Brien draws
attention to the role of language, belief in 'things', and the fact that 'Histories are
written and as literary artefacts require deeper reflexion than they have traditionally
been accorded in historiographical manuals and in the day-to-day practice of history'.
His overview of constructions of narrative, models and taxonomies followed by an
account of story, discourse, rhetoric and emplotment illustrates the value of learning
from literary theory. Then follows a discussion of facts; where 'a bedrock of empirical
foundations are symbiotically related to the design of histories and seriously restrain
the influence of form over content' which brings us back to the previous remark about
the encyclopaedia. Digital exhibitions are themselves histories; but they also present
historical material (facts? in a structure?) for the future.

Further concerns about history writing often include discussion of the 'intrusion' of
digital media into well-rehearsed practices. Some authors worry that electronic
resources will dominate all other sources; others worry that that historians might
become marginalised if they fail to become technically proficient or keep up with the
developments of hypertext. The short account of current histories of digital art,
included in this paper, shows that there is a recognition of the importance of social
structures and context that surround both artists and curator. A recent study by the
Digital Library Foundation suggests that it is necessary to research the nature of
scholarly work in order to influence future developments of technology. Their report
exemplifies an approach that is user-centred but it also gives us information on how
scholars in the humanities find and use sources (data and evidence) and create texts.
The researchers found evidence of the multiple roles of texts; the importance of
derivative documents and noted the difficulty of distinguishing primary from
secondary texts.

Conclusion

In this paper I have considered definitions and thematic considerations that are
relevant to existing accounts of the digital arts. After relating this to practical
examples, I have turned to more general discussions of history writing. There are
parallel references to philosophy, literary theory, criticism and postmodernism. For
the writing of a history of the digital arts the debates about histories that include a
plurality of sources reminds us of the richness of connecting the virtual world to the
physical world and all other forms of 'document'.
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