Digital Media Studies

Peter Dean and Luke Hockley of the University of Luton's Media Arts Department cast a retspective eye over developments in the relationship between computing, teaching, and modern media

As a discipline film and media studies has found itself directly engaged with the world of computing. Initially this might seem surprising as historically the subject has had two quite different areas of interest, neither of them concerned with the computer. First, the subject has been concerned with mass media and their social and cultural roles. Secondly it has attempted to develop in students the necessary skills and abilities to use chemical and electronic audio-visual technologies as a means of self-expression and cultural communication. This decade is seeing a dramatic change in the technologies used for broadcasting and distributing audio-visual artefacts as digital technology takes centre stage. The development of the World Wide Web has provided another mass medium and one that for the first time gives individuals a direct voice through a powerful world wide broadcasting technology.

While the technology may be new the challenges that these developments pose the academic community of media and film scholars are not. Nor has the response to them been particularly new either. In their book *Learning the Media: an Introduction to Media Teaching* (London, 1987) Alvarado *et al* identified four key educational and intellectual traditions which have been combined to form the subject area that is generically refer to as Media Studies. (For our purposes this also includes film studies.) They termed them:

- Social
- Cultural
- 'Skills'
- Political

What this article aims to do is to take these traditional strategies for analysing the mass media and identify how they have been deployed in the analysis of developments in digital audio-visual technologies. Against this backdrop it will also examine how new technologies have been used in the teaching and delivery of the curriculum. This will show how traditional modes of analysis have been adapted by the different intellectual traditions within film and media studies. It will give create a map that is both geographical and conceptual and locate the role that the CTI has had in helping the subject discipline to reformulate itself.

Social

The contributions of sociology have been in three broad areas. Firstly it has examined how media organisations and their employees actually work, their structures and working practices, how these are informed by certain values and norms and the relationship of these to criteria of profitability and effectiveness. Secondly it has looked at a very broad range of ways in which the media may contribute to social cohesiveness or to social conflict. It has demonstrated the relevance of the concept of ideologies in studying mass media. Thirdly it has broadened our understanding of the ways in which people respond to these media texts.

During the 1960s the British Universities enjoyed a degree of intellectual freedom and one of the things to emerge from this was a more critical, often Marxist influenced sociology. Typical of the work of this period is James Halloran, Graham Murdock and Philip Elliott's book Deconstructions and Communications - Case Study (1970). It analysed how the media's preconceived framework of 'student violence' determined the reporting of a 1968 anti-Vietnam war demonstration even though the event itself was almost totally peaceful. A development of this approach is the studies that attempt to understand how people use communications technologies. In 1986 Jane Root published Open the Box (Comedia: London). The book linked to a television series for Channel4 examined the assumptions and attitudes that broadcasters embody. It also examined the uses to which people put television as part of their everyday lives. More recently the results of the British Film Institute's tracking study, which were published as TV Living (London, 1999) has developed this type of approach. Even though the study concluded in 1996 the results devote a mere 10 pages to the issues of digital and satellite technologies.

Better known, and probably more influential, is the work of the Glasgow Media Group who outraged the broadcasters and the Labour government with the publication in 1976 of Bad News. Based on a detailed content analysis of a number of broadcasts they suggested that the institutional process of news production lead to a highly partial and distorted view of relations within industry and society generally. This type of content analysis continues today and the teaching of this area is facilitated by CD-ROMs such as International Herald Tribune on CD-ROM, Newspapers on CD-ROM (The Guardian, The Times etc.) published by Chadwyck-Healey, the Official Index to The Times, 1906-1980. Regrettably what is lacking for these resources are the details of the page layouts and this means that the significance of image text juxtapositions cannot always be explored.

Cultural

Anxieties about the moral influences and effects of commercial films have been the strongest determinants of media teaching initiatives. It should therefore come as no surprise that this concern has also affected teaching about the cultural aspects of the media. The initial hope was that the harmful influences of popular films could be countered by teaching how to develop good taste and by encouraging a moral sense. The intention was, and remains, to develop in students an aesthetic sensibility concerning how to 'read' the screen. This position draws on an established British tradition that sees the aesthetic cultural forms of media artefacts in relation to social context and their mode of production. To an extent this finds its modern day embodiment in digital products such as the Marsha Kinder's *Blood Cinema* (Los Angeles, 1995) and Rabinovitz & Easley's *The Rebecca Project* (New Brunswick, 1995) CD-ROMs.

An interesting development of this type of work is the recent book by Richard Wise, *Multimedia: a Critical Introduction* (London, 2000). It provides a useful deployment of media theories and charts the historical development of the internet and multimedia. It also examines issues such as the rights of the individual to privacy, the ideological myths that surround cyberspace, and the cultural significance of digital special effects in Hollywood feature films.

Elements of this approach are integral to many of the undergraduate courses in the UK. Its influence can certainly be seen in the courses in the department where we work where students are encouraged to



Fig. I Home of the BUFVC's Newsreel project on the Web

develop aesthetic skills, analytical abilities, practical work and to see these in relation to the history of their disciplines and the social environment. However, digital products, rather than move these debates on, have tended to provide greater access to scholarly digital resources. For example the Joint European Filmography (JEF) has been funded by the European Commission's Media 95 Project and will, when it is launched in 2000, provide for the first time an accurate guide to the production and distribution of European feature films. The BFI has made part of its comprehensive SIFT (Summary of Information on Film and Television) database available in the Film Index International on CD-ROM. Since its inception in October 1990 the Internet Movie Database has provided a useful source of information, some of it a touch idiosyncratic, about feature films. From a starting point of 23,000 entries it has grown and currently includes about 170,000 titles and 2,500,000 filmography entries. (Since April 1998 it has been owned by Amazon.com to support its move into online video sales.) Other projects include the British Universities Film and Video Council's Newsreel project. This will create a database of newsreel stories and production information between 1910 and 1979. Other services already provided by the BUFVC are AVANCE, a database of over 20,000 audio-visual programmes, and The BUFVC Television Index which provides a selective index to television programmes broadcast on the five UK terrestrial channels.

The CTI Centre for Textual Studies has performed a useful function in providing a gateway to these types of products. The *Guide to Digital Resources* provides a helpful summary and appraisal of a range of digital media artefacts that can be used to enhance the learning experience for media studies students. The Centre has also had a coordinating role in bringing together different agencies such as the BFI and BUFVC with the academic discipline based community. In this respect the 1997 forum Computer-Assisted Film and Drama Studies hosted by the Centre for Textual Studies at the University of Oxford was a particular success.

Skills (or the Creative Tradition)

Given the enormous expansion of the media industries it is unsurprising that educational institutions throughout the world have created vocational courses to train students for work in the media. This is particularly so in the USA where Journalism and Film Schools proliferate. Until recent years there have been fewer such ventures in the UK and media industries have traditionally trained their own workforces.

However, as far back as 1919 the University of London set up a diploma in journalism which closed in 1939. The study of journalism was reintroduced in the British Universities with the creation of the Centre for Journalism Studies at Cardiff University in 1970. Another strong vocational tradition in the British education system is that of the art school. The fine art practical tradition of the art schools provided an ideal location for taking film (and television studies) seriously. But the general ethos meant that particular areas of work were, and still are, favoured over others. Where analysis took place the focus was on the avant-garde tradition of Europe not Hollywood of the mass media. At postgraduate level this approach was adopted by film making courses at the University of Bristol, Royal College of Art and the National Film and Television School which was created in 1971.

As just mentioned, more recently there have been major developments in this sector including the increased number of courses on offer and the increasingly held belief that theory and practice should be in some way integrated in the curriculum. Although the way this happens varies dramatically from course to course.

Reasons for change

- Variety of academic positions closer to industry (Media graduates now working in the media industries.)
- Economic depression means that training in industry was
 cut
- Government initiatives mass education, training for work, graduate qualities and transferable skills.
- Developments in digital technologies such as computer animation and the Internet.

The need for students following humanities courses to develop ICT skills as an integral part of the curriculum has been long established. During the late 1970s the provision of timeshare terminal access to mainframe and minicomputers (eg. DEC's RSTS system) allowed academic staff, students and researchers direct access to information processing rather than having to indirectly submit work to and receive results from a central data processing facility.

Whilst direct access to an online environment greatly enhanced the possibilities for using computers within the humanities, a lack of end-user applications meant that users would often have to create their own software to perform the required task. The availability of the BASIC programming language as a component of a timeshare environment allowed non-specialists to develop simple applications. However, the limitations of BASIC and the patchy programming skills of many end-users meant that it was not possible to produce the more sophisticated applications that users required. Despite its limitations this approach continued through the transition to microcomputers. In particular, many UK academics and students learnt to program the popular BBC Micro during the early 1980s.

The introduction of the Personal Computer in the mid 1980s severely curtailed application programming by end-users. The programming environments became much more complex and the raised expectations generated by the first graphical user interfaces meant that end-user-programmers could not keep pace. The Apple Macintosh was much easier to use but notoriously more difficult to program. Fortunately this coincided with the widespread adoption of application software designed to meet the most common information processing and handling tasks - word processors, spreadsheets and database management systems. Early applications such as WordStar, Lotus 1-2-3 and dBase enabled students to be much more productive and so humanities courses evolved to include the development of skills in using packages like these rather than learning programming. Subsequently, students have come to rely on programs such as Word, Excel and Access to fulfill their routine information handling needs. They have now been joined by browser and email software.

This trend continued and accelerated with the introduction of graphical applications packages as personal computers became more powerful. The emergence of affordable desktop publishing and digital image manipulation using packages such as Adobe PhotoShop broadened the range of possibilities open to students of the mass media. For the first time it was feasible for students to emulate some of the digital production processes used within the media industries. This began with the print media and photography but has since expanded to include digital video production, computer animation, interactive multimedia and web sites.

The crucial element of interactivity in these last two examples has brought the role of C&IT in the curriculum full circle. The powerful user interfaces that are central to CD-ROM and web-based productions are implemented using appropriate algorithms—computer programming. This is often referred to euphemistically as 'authoring' but many of the programming skills learnt by earlier generations of humanities students are now being revived and some of the developments in software engineering over the intervening 20 years incorporated.

The need to embrace similar digital technologies has promoted the integration of previously disparate branches of media production work. For example, the move to computer-based production by 2D and 3D animators and the move to digital acquisition and non-linear editing by video producers has thrown up a set of core C&IT skills required by both groups and is leading to some common curriculum development. Both these traditions can be seen as producing key components for multimedia-based productions and so it is possible to identify some vertical as well as horizontal integration. Nearly all of the production work in these areas requires access to digital audio production

as well and so the development of a common set of audio production skills is required, further blurring the boundaries between traditional production areas.

Conclusion

Film and media studies continues to be a diverse field. The pattern with most new academic areas is that as they mature they solidify into a clear and coherent subject. To date this has not been the case for media studies. Part of the explanation for this lies in the way that new technologies are reshaping the mass media and as this happens new structures of ownership, production and distribution are emerging. In parallel with this has been the development of low cost, high speed, desktop computing which has provided students with new creative opportunities. Finally the evolution of multimedia and the Internet has taken media studies into new subject areas.

The CTI Centre for Textual Studies has played a key role in ensuring that the subject discipline was kept fully appraised of the latest teaching and learning opportunities afforded by these technological developments. It has also prompted the universities into providing academics with the necessary skills to deploy these materials in an effective and appropriate manner. Finally the importance of the coordinating role of the Centre for Textual Studies should not be under estimated. Precisely because media studies is a diverse subject academic resources are often dispersed across institutions. The Centre has helped public bodies such as the BFI and the BUFVC communicate with each other and with the University sector. It is to be hoped that these functions will continue in the new subject-centre, Art, Design and Communication in Brighton.

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References

Alvarado M, Gutch R, Wollen T, *Learning the Media: an Introduction to Media Teaching*, Macmillan: London (1987).

Halloran J, Murdock G, Elliott P, Deconstructions and Communications - Case Study (1970).

Root J, Open the Box, Comedia: London (1986).

Gauntlet D, Hill A, TV Living, Routledge: London (1999).

Kinder M, Blood Cinema, Cine-Disk: Los Angeles (1995).

Rabinovitz L, Easley G, *The Rebecca Project*, Rutgers University Press: New Brunswick (1995).

Wise R, Multimedia a Critical Introduction, Routledge: London (2000).

Links

British Universities Newsreel Project Database

— http://www.bufvc.ac.uk/bufvcnews/bufvc_news_fs.htm

The Avance database — http://avance.niss.ac.uk:8080/

BUFVC TV Index — http://avance.niss.ac.uk:8080/tvindex.htm The online index begins at 1st July 1995 and concentrates on documentary programmes.

The new *Guide to Digital Resources* is currently in the process of being put online at http://info.ox.ac.uk/ctitext/.