BEYOND BROADCASTING?
To What Extent are Digital Technologies Enabling Progressive Uses of Media in a Post-Broadcasting Television Landscape?

Alison Pope
T2371005
BA (Hons) English and History
(University of London, 1996)

Submitted for the degree of MA in Humanities.
September, 2007

No part of this dissertation has been submitted for any other degree or qualification at the Open University or any other university or institution. I confirm that this entire work has been prepared by myself.
A837 RESEARCH DIARY FOR 2007

<table>
<thead>
<tr>
<th>Date of contact with tutor</th>
<th>Type of contact and topic discussed; changes agreed (if any)</th>
<th>Dates: TMAs submitted and received</th>
</tr>
</thead>
<tbody>
<tr>
<td>19/02/07</td>
<td>Telephone conversation. Introductory discussion outlining ideas.</td>
<td></td>
</tr>
<tr>
<td>25/02/07</td>
<td>Telephone conversation. Advises focusing on emancipatory characteristics of media and choosing between popular music and television. Decide to focus on television.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TMA01: Research Proposal Feedback advises using Hans Magnus Enzensberger alongside Walter Benjamin.</td>
<td>28/02/07 08/05/07</td>
</tr>
<tr>
<td>12/04/07</td>
<td>E-mail. Discussing concerns about chapter structure.</td>
<td>12/04/07 24/04/07</td>
</tr>
<tr>
<td></td>
<td>TMA02: Initial Chapters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TMA03: Chapters on Digital Television and Internet Television</td>
<td>04/06/07 11/06/07</td>
</tr>
<tr>
<td>10/07/07</td>
<td>Telephone call to discuss plans for a tutorial.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TMA04: Full complete draft</td>
<td>17/07/07 30/07/07</td>
</tr>
<tr>
<td></td>
<td>Advised expanding introduction and conclusions and use of theory in chapter 2. Because of length decided to restructure from 4 to 3 chapters and concentrate on applying theory and evidence more explicitly to a discussion of emancipatory media and implications for broadcasting of digital media. Removed some general theory and history to fit length.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TMA05: Final Draft</td>
<td>24/09/07</td>
</tr>
</tbody>
</table>

Name of student: **ALISON POPE**  
Name of tutor: **CHRISTOPHER PAWLING**  
Personal identifier: **T2371005**  
Staff ref. number: **00157457**  
Signed: **A. Pope**  
Signed: **C. Pawling**  
Date: **24/08/07**  
Date: **26/8/07**

*Photocopy this page. With TMA 05 (your complete dissertation draft), include a signed copy of this diary – to be counter-signed by your tutor. Then include a photocopy of the signed Research Diary in both copies of your dissertation when you submit them, plus the top copy of your diary.*

Printed in the United Kingdom by The Open University
This study is an attempt to explore the changes digital technologies are having on the experience of watching television. When new technologies are introduced, revolutionary claims are often made for the new media they help form. A frequent claim is that new media are more ‘progressive’ than older media forms, and encourage more democratic participation in the production and circulation of media content. This study aims to compare this claim with evidence of how viewing experiences are actually changing in practice. A further aspect of my inquiry is to consider the implications of this for broadcasting as currently constituted.

In the opening chapter I situate this study within a tradition of radical critical theory. The work of Walter Benjamin provides the theoretical starting point, through his analysis of the progressive potential of the new media of mechanical reproduction, such as film and photography. I also draw on the ideas of Hans Magnus Enzensberger, to revisit the progressive potential of the media in the context of post-war television. Enzensberger also provides the theoretical basis for my definition of progressive and repressive media. I then explore the concepts of ‘determination’, ‘hegemony’ and ‘remediation’, as applied to cultural theory, to understand processes of media formation and diffusion and the relationship between media, technology and society in particular contexts, such as post-war society, and the so-called ‘network society’ of the 21st century.
From this theoretical foundation, I then explore two aspects of the current television landscape. Firstly, I examine whether the digital television platform is increasing choice, enabling ‘personalisation’, (the ability of viewers to create their own individual viewing experience), and encouraging interactivity. I conclude that this is the case to some extent, but the significance of these developments may not be as great as first claimed. I then look at the convergence of television with the internet to assess opportunities for viewers to become more involved in the production and circulation of media content. Whilst there is more evidence of progressive media practices on this platform, such as the collaborative video sharing site YouTube, I also note that these experiences are not universal, and attempts are being made to constrain the more emancipatory aspects of the new media. This is not helped by the left’s failure to encourage culture that is both progressive and popular.

In conclusion I argue that a more progressive use of the media is experienced by some people in contemporary advanced industrial societies. There are, however, many people who are excluded from the new media for voluntary or involuntary reasons. By stressing continuities in cultural development, alongside the changes, I take issue with the idea that these transformations are introduced by digital technology. There are more complex processes of determination involved, and longer trends to unpack, but digitisation does accelerate and intensify many of these. Finally, I remain unconvinced that we are in a post-broadcasting age. I argue that alternative ways of viewing television are co-existing with broadcasting, rather than replacing it.
BEYOND BROADCASTING?
To What Extent are Digital Technologies Enabling Progressive Uses of Media in a Post-Broadcasting Television Landscape?

Alison Pope
T2371005
BA (Hons) English and History
(University of London, 1996)

Submitted for the degree of MA in Humanities.
September, 2007

No part of this dissertation has been submitted for any other degree or qualification at the Open University or any other university or institution. I confirm that this entire work has been prepared by myself.
CONTENTS

INTRODUCTION 1

CRITICAL THEORY AND MEDIA CULTURE FROM MECHANICAL REPRODUCTION TO DIGITAL REMEDIATION 8
  Media in the Age of Mechanical Reproduction 8
  Revisiting the Emancipatory Potential of the Media 14
  The Cultural Turn 18
  Technology and Society 22
  Media in the Age of Digital Remediation 26

DIGITAL TELEVISION: FRAGMENTATION, INTERACTIVITY AND FLOW 30
  Going Digital 30
  Proliferation: An Illusion of Abundance? 33
  Fragmentation and Narrowcasting 36
  Analysing the ‘Self Select Menu’: Interactivity and Consumer Choice 38
  The Consumer as Producer? 45
  How Progressive is the ‘Self Select Menu’? 47

INTERNET TELEVISION AND THE NETWORK SOCIETY 49
  Extending the Network 50
  Remix or Replay TV? Radical Potential and it’s Suppression 54
  Cathedrals, Bazaars and Commons 64
  From Broadcasting to Multicasting 67

TELEVISION BEYOND BROADCASTING? 71
  A Digital Revolution? 71
  The End of Broadcasting? 73
  A Progressive Media? 74

BIBLIOGRAPHY 78
TABLE 1: Emancipatory and Repressive Uses of the Media  15
TABLE 2: Digital Television Adoption 1999-2007 (% UK Households) 31
TABLE 3: Channel Market Share Comparison 36

FIGURE 1: The ‘Circuit of Culture Model’ 20

FIGURE 2: Channel 4’s Big Brother Interactive Service, BBC Multiscreen broadcast of the Commonwealth Games and Sky News Active  42

FIGURE 3: Sky Sports Active 42

FIGURE 4: Current TV Screenshot  60
INTRODUCTION

In 1927 the British Broadcasting Corporation (BBC) was incorporated, marking the beginning of institutional broadcasting in the UK. Forty years later, in 1967, television was well established as a broadcasting medium and was further enhanced by the introduction of a colour service. The late 1960s also saw the emergence of multi-channel broadcasting, remote control devices, and the introduction of the Video Cassette Recorder (VCR). Forty years later, another major shift in broadcasting is discernible as digital technologies and social trends redefine television once again. The launch announcement of the iPlayer, the BBC's digital media player, was accompanied by the type of revolutionary rhetoric that often heralds new media.¹ In this study I intend to explore the extent to which this rhetoric is matched by an actual transformation in television viewing practices.

My secondary concern is to examine the idea that the shift to digital broadcasting is progressive, both in terms of how television has been determined as a cultural technology, and how television is politically implicated in the structures of power. This involves unpacking the decisions and circumstances that give television its forms, practices and role in creating meaning and identities, unravelling how dominant ways of seeing the world are organised, and assessing the potential for alternative practices and formations.

This analysis will draw upon several key dichotomies that have structured debates about media culture. Firstly, the tension between ‘pessimistic’ and ‘optimistic’ views on the quality of television, and its ability to offer both ‘authentic’ culture and alternative political goals to those ‘commodified’ and ‘normalised’ by powerful elites. Secondly, there is the opposition of structure and agency. This opposition describes the opportunities individuals have to be active participants in media culture, and conscious of media influence, as opposed to passively manipulated by it. A third dialectic, is the relationship between technology and society, and the role each plays in determining the other.

I will look at arguments against seeing technology as abstracted from social transformation, to support the view that technology develops according to the opportunities and constraints of particular societies at particular times. Finally, I will discuss the opposition between ‘old’ and ‘new’ media as an ultimately sterile distinction that obscures more complex negotiations of what Raymond Williams terms ‘dominant’, ‘emergent’, and ‘residual’ forms and practices. I will use the concept of ‘remediation’ to highlight how technology is constantly redefined within media ‘ecosystems’.

My thesis is that technological innovation enables alternative television production and consumption practices, that may have radical implications in the

---

challenge they pose to broadcasting and dominant representations, but that social, economic and political factors constrain the extent to which these can be realised in practice. These constraining forces are successful in either marginalising oppositional practices, or in incorporating alternative practices in ways that negate the threat they pose to established hegemonic elites and value systems. Lynn Spigel argues that anything that is new or different is immediately fetishised as potentially radical, but new technologies can be used as strategies of consolidation as well as subversion.

I will begin by locating these questions within critical theory, starting with the work of Walter Benjamin, who posed similar questions of the new media of mechanical reproduction, such as photography and film. Unlike many of his contemporaries, Benjamin was optimistic about progressive uses of the media. He argued that the view of both conservative and left intellectuals, that mass media could only degrade both art and popular audiences, ignored the potential of new media forms to transform and politicise art: by releasing art from the specialist rituals of exclusive cultural practices and helping the techniques and language of cultural production and consumption become more widely accessible. The work of Hans Magnus Enzensberger, who revisited Benjamin during the 1970s, questions why these progressive uses had not materialised. He outlines examples of repressive and emancipatory uses of the media, and argues that these are determined by how media is formed and used, rather than inherent within media technology. A key argument of his is that the reluctance

---

of the left to engage with popular culture, and therefore define these forms and uses in politically progressive ways, limits the extent to which any emancipatory potential can be realised. By only focusing on a critique of commercial exploitation of the media, Enzensberger describes how the left fails to provide any radical alternative.

To further consider the engagement of the left with media culture, I will then trace attempt to articulate dialectical approaches to cultural materialism that emerged from neo-Gramscian reworkings of classical Marxism. I will also review important work in theorising the relationship between culture, technology and society, that attempts to define methodological approaches which try to avoid a simplistic determinism of cause and effect. Finally, I will explore how new media theory is relocating this social theory to specific reflections on mediation, in order to make more sense of media-saturated and hyper-realised societies.

From this theoretical foundation, I will then consider the evidence for changing experiences of television reception as the UK moves towards a fully digital service. Chapter 2 considers trends such as the explosion of multi-channel services, Personal Video Recorders (PVRs) and ‘red button’ interactive services, in asking how far control has moved to the viewer and whether this improves the television viewing experience. Chapter 3 considers the convergence of digital television with other communication technologies, such as the
internet, to assess opportunities for consumers to become collaborators in television production.

I will attempt to locate these technological developments within changing social contexts, as theorised by Raymond Williams and Manuel Castells. Williams related the post-war growth of television to wider transformations in an industrialised and increasingly urban society. These social trends combined wider mobility with increasingly private and self-sufficient domestic spaces, a paradox Williams calls ‘mobile privatisation’. Existing technology, such as railways or the cinema, did not resolve this mobility between private spaces and public infrastructure in the same way as new applications of technology, such as automobiles and television sets, and new institutional formations, such as broadcasting. The latter are examples of technologies that are experienced privately, but depend upon centralised infrastructures in order to connect public and private spaces. The model of centralised transmission and private reception has been the dominant mode of television distribution for such a long period that it seems the only way of conceiving television. However, this was a result of the limits and pressures of these particular social formations, rather than inherent in the technology.

Manuel Castells argues that the end of the twentieth century has seen a new technological paradigm that is a significant factor in a major transformation of

---

the material basis of society.\textsuperscript{7} Within this paradigm the concept of the ‘network’ is increasingly important: as a technological architecture, as an economic model, and as a way of organising societies and communities. One aspect of this is that culture is increasingly dislocated from space and time, and ordered by ‘flows’ not situated in places.\textsuperscript{8} Castells is not arguing that we no longer live in physical places, but, that in advanced capitalist societies, a ‘space of flows’ overlays our physical environment. This space of flows consists of a global electronic communications network and the information that circulates within it; it both connects and transcends the physical locales that form the network ‘nodes’. The globalisation of soccer is a good example: the televising of games all over the world allows clubs to develop media profiles, and therefore fan bases, that extend far beyond their local support. These flows are becoming as important for social organisation, the distribution of power, processes of production and the construction of identities, as a rooted ‘sense of place’ has traditionally been. However, some argue that it is precisely because global, multi-nodal social networks may be replacing the dominance of a centre/periphery model based on national territories, that broadcasting will remain, in some form, as an important cohesive force within localities.\textsuperscript{9}

Within the network society, power is more dispersed than under centre/periphery hierarchies, creating opportunities for democratic participation, but


\textsuperscript{8} \textit{ibid.} p. 375.

also allowing concentrations of power to act as network ‘hubs’. Castells argues that those who control the flow of information, the ‘switches’ in the network, are incredibly powerful. For example, I will consider how media companies are merging into large conglomerates, controlling vast media empires, in order to diversify their business interests and consolidate their positions of influence in this more distributed model.\textsuperscript{10}

Future directions in television are uncertain, but the emerging ecosystem will be determined by the limits and pressures applied by the particular conditions of our advanced capitalist society. This will demand new ways of theorising television as a text, as an industry, as a commodity, and as a broadcasting medium. This thesis will begin to map this terrain that is being explored as television intersects with digital technology within the context of Western ‘network societies’.

\textsuperscript{10} Castells, p. 471
This chapter will review selected aspects of critical theory to set out the academic foundation I wish to draw upon in my analysis. The work of Walter Benjamin provides my starting point for excavating key theoretical positions that relate to the emancipatory potential of the media. His optimistic approach towards new media and political opportunity orients this study. I will trace the development of this theoretical lineage through the work of Hans Magnus Enzensberger and Raymond Williams, towards recent work on neo-Gramscian cultural theory, to consider how critical theory is responding to the problems of classical Marxist positions and engaging with contemporary culture. I will also consider the model of ‘remediation’ provided by Jay Bolter and Richard Grusin to theorise the particular logic and characteristics of digital media.

Media in the Age of Mechanical Reproduction

Walter Benjamin (1892-1940) was a German literary and critical theorist. One aspect of his work is an analysis of the cultural effects of rapid industrialisation and mechanisation in the early 20th century. This was most explicit in two essays: ‘The Author as Producer’ and ‘The Work of Art in the Age of Mechanical Reproduction’. It must be remembered that Benjamin’s pre-occupations are

2 Walter Benjamin, Illuminations, trans. by Harry Zorn (London: Pimlico, 1999), pp. 211-244. This essay was first published in Zeitschrift für Sozialforschung, V, 1 (1936)
closely tied to the socio-political context of Fascism, Soviet Communism and state totalitarianism experienced by the European Intelligensia in the 1930s. This theory cannot, therefore, be uncritically transposed to a highly globalised, ‘post-industrial’ society, at the start of the 21st century. However, in this chapter theory is considered not as a linear progression, (although presented as a chronology), but as a process of layering: each new perspective superimposes itself on the pre-existing conceptual terrain creating new constellations. Some aspects of older perspectives may decline in validity, but other aspects continue to resonate. Benjamin’s insights into the relationship of media, technology and society, and his debates with more pessimistic contemporaries from the Institute for Social Research, notably Theodor Adorno, provide a useful foundational perspective, if used with this awareness.

Many of Benjamin’s contemporaries in Europe and America between the Wars castigated the industrialisation of popular culture, describing it as shallow, commercial and passive entertainment that posed a threat to higher forms of culture. Conservative, and some radical critics, argued that ‘mass culture’ was responsible for the destruction of an organic culture that was held in nostalgic esteem.\(^3\) Although politically progressive, the Marxist influenced critical theorists of the Institute for Social Research argued similarly about the corrosive effects of mass culture. In their eyes, mass culture destroyed not a glorious past but the potential for a glorious future as realised by the revolution of

\(^3\) John Storey refers to this as the ‘Culture and Civilization’ tradition. It included figures such as Matthew Arnold and F.R Leavis and continued later in America with critics such as Dwight MacDonald. John Storey, *An Introduction to Cultural Theory and Popular Culture*, 2nd edn, (Harlow, England: Longman, 1997). pp. 21-44
the proletariat. They argued that mass culture was ideologically ‘affirmative’ and promoted cultural conformity by using standardised formula to fix representations and structures of power. This not only denied an ‘authentic’ culture, but also devalued the ‘subversive negativity’ of authentic culture by commodifying it. In searching for a reason as to why revolution was inhibited they seized on the culture industries as manipulating the mass public into accepting the status quo.

Benjamin diverged from these positions by identifying the opportunities for reinvigorating society that emerged through the breaking down of traditional conceptions of art. Following Russian revolutionary film-makers, such as Vertov, Benjamin became more interested in considering the specific influence of new technologies and media forms, particularly film, as dynamic forms of expression that could change the nature of art, and artistic production itself, through its visual language and new techniques, such as montage. Arguably, he became too guilty of assuming that because technical production allowed new political and social possibilities, these would be unconditionally realised. This debate between Benjamin’s position, that mass culture democratised authentic culture in progressive ways, and Adorno’s view, that mass culture institutionalised the reproduction of bourgeois ideologies, sets up the persistent dichotomy of optimism/pessimism.

---

4 Storey, Introduction, pp. 107-109
5 e.g. Man with a Movie Camera, (1929).
Benjamin considers the concepts of authenticity and authority (something he calls 'aura') in a world of increasing technical reproducibility. In tracing a lengthy history of mechanical reproduction that ‘advanced intermittently ... but with accelerated intensity’, Benjamin notes that things have always been reproducible, for example books or prints of paintings, but argues that the destruction of the aura of art under these intensified conditions is something new. Reproduced art does not have the authority that comes from the presence of the original in space or time. Reproduction can transplant an original into the environment of the consumer and provide a perspective on reality that is untethered from physical limitations. For example, photography can be used to reveal things the eye cannot distinguish without the mediation of technology.

Film is an attempt to depict reality through illusion: it’s reality only exists if the spectator is aligned precisely with the partial, but privileged, position of the camera. From any other perspective the artifice that is necessary for film to create an illusion of reality is exposed. The camera hides the apparatus of collective production from the viewer to create a coherent and unified refractive reality. Through mediation, the representation of reality becomes increasingly artificial: ‘an orchid in the land of technology’. For Marxists, like

---

Benjamin and Vertov, the artifice of the detached eye of the camera was the only way ‘real life’ could be revealed. However Jean Baudrillard’s later theories of simulation suggest that reality, and representations of that reality, become detached through mediation. It is increasingly difficult to conceive that progressive uses of media expose a ‘true’ reality freed from dominant ideology. Instead, I will shortly look at how later Marxists situate this struggle for ‘meaning-making’ within representation itself.

Benjamin describes this process of technical reproduction and the destruction of ‘aura’ as a ‘shattering of tradition’: a ‘liquidation’ of ways of seeing the world and the way art is displayed.\(^\text{13}\) No longer located within ritual, art becomes more accessible and, therefore, more political. One of Benjamin’s most progressive suggestions is that the boundaries between producer and consumer become more permeable. He suggests that at any moment consumers could become producers: the difference between a producer and a consumer becomes functional, or contextual, because the artistic expertise involved depends on competence not the enforced ritual of class-based cultural hierarchies and languages.\(^\text{14}\) In fact, it is the role of producers to incorporate readers, or spectators, as collaborators,\(^\text{15}\) for example the use of Soviet factory wall newspapers.\(^\text{16}\)

\(^{13}\) \textit{ibid}, p. 215
\(^{14}\) Benjamin, \textit{Illuminations} p. 225 and Benjamin, \textit{Understanding} pp. 89-90
\(^{15}\) Benjamin, \textit{Understanding}, pp. 96-98
\(^{16}\) \textit{ibid}, pp. 89-90
Whilst these ideas of shattering and liquidation are destructive, their potential for a redemptive politics is in using new techniques of production to recreate new forms from the pieces: for example, using techniques of montage to assemble films from individual scenes. This process of joining together can deepen our perception and recreate unity,\textsuperscript{17} contributing to the shock effect of film.\textsuperscript{18} This ability of new media to shock perceptions prevents the viewer being reduced to a passive dupe. In fact, it is precisely because the viewer can be a critic, whilst being entertained, that Benjamin saw in film the potential to mobilise the masses.\textsuperscript{19} Additionally, the process of film-making is increasingly a collective act where various areas of expertise, including the technical skill of the working class, is combined to create the finished product. In these ways, both cultural consumption and production are more widely accessible, contrasting with the emphasis placed on specialist producers and expert critics in high culture.\textsuperscript{20}

Benjamin is not entirely naive in assuming there are no obstacles to progressive uses of media technology. The focus on directors as auteurs and the cult of the star system makes this collective apparatus more opaque and reaffirms the primacy of specialists. He recognises that technically reproduced art remains more radical possibility than actual revolutionary practice, as long as “movie-makers” capital sets the fashion.\textsuperscript{21} The expense of film-making de-

\begin{itemize}
\item \textsuperscript{17} Benjamin, \textit{Illuminations}. pp. 229-230.
\item \textsuperscript{18} \textit{ibid}. p. 231.
\item \textsuperscript{19} \textit{ibid}. p. 233.
\item \textsuperscript{21} Benjamin, \textit{Illuminations}. p. 224.
\end{itemize}
manded mass distribution and industrial production for films to be economically viable. These economic imperatives, and the organisational structures of this industry, limited progressive uses of mechanical reproduction. A key question to pose of digital technology, therefore, is can it change these economic limitations and political manipulations to facilitate an accessible media culture capable of releasing the potential Benjamin envisaged?

**Revisiting the Emancipatory Potential of the Media**

Firstly, however, I want to revisit this question in the context of a changing post-war electronic media ecology. In 1936, the year Benjamin first published ‘The Work of Art in the Age of Mechanical Reproduction’, there was a public run-off between Baird’s mechanical television system, and a fully electronic system developed between American, British and German interests. The mechanical system lost. Already the seeds of a new electronic media landscape, dominated by television, were germinating, but it would be another twenty years before this landscape became established. Marshall McLuhan is perhaps the most celebrated cartographer of this new media age. However, I want to discuss the German critic, Hans Magnus Enzensberger, who attempted to address these powerful developments in media technology from within the Frankfurt School tradition, and the concerns of a New Left politics. Writing in 1970, Enzensberger reviews the technological developments of the previous twenty years, and revisits Walter Benjamin, to reconsider this question of the democratising potential of media technology in new social contexts. Enzens-
berger questions why there is little evidence of alternative uses of the media during the electronic media age.

Enzensberger is sharply critical of the role of the left, in failing to engage with the media in order to realise it's democratic potential. He argues that the tension between empowerment and constraint is a contradiction not just at the heart of the media industry dominated by monopoly capitalism, but also in the relationship between the bourgeoisie, including intellectuals of the left, and the masses. Enzensberger dismisses the traditional critique of the media as manipulative as being a self-evident distraction. There is no such thing as unmanipulated writing, filming or broadcasting. At issue is who is able to manipulate the media and to what purposes. A progressive media politics is not the pursuit of a 'pure' unmanipulated media; on the contrary, it must make everyone a manipulator.

<table>
<thead>
<tr>
<th>REPRESSIVE USES OF MEDIA</th>
<th>EMANCIPATORY USES OF MEDIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrally controlled programming</td>
<td>Decentralized program</td>
</tr>
<tr>
<td>One transmitter, many receivers</td>
<td>Each receiver a potential transmitter</td>
</tr>
<tr>
<td>Immobilization of isolated individuals</td>
<td>Mobilization of the masses</td>
</tr>
<tr>
<td>Passive consumer behavior</td>
<td>Interaction of those involved, feedback</td>
</tr>
<tr>
<td>Depoliticization</td>
<td>A political learning process</td>
</tr>
<tr>
<td>Production by specialists</td>
<td>Collective production</td>
</tr>
<tr>
<td>Control by property owners or bureaucracy</td>
<td>Social control by self-organization</td>
</tr>
</tbody>
</table>

TABLE 1: Emancipatory and Repressive Uses of the Media

23 ibid. p. 58.
24 ibid. p. 64.
Like Benjamin, Enzensberger asserts that technology is potentially ambivalent about the politics of its use, so the contradictions that artificially separate consumption and production are not immanent within media technology: ‘Electronic techniques recognize no contradiction in principle between transmitter and receiver...the technical distinction between receivers and transmitters reflects the social division of labor into producers and consumers’.25

He argues that the primary use of media devices for uni-directional distribution, as opposed to bi-directional communication, is a structural issue not a technical limitation.26 There is nothing to stop receivers becoming transmitters: ‘The development from a mere distribution medium to a communications medium is technically not a problem. It is consciously prevented for understandable political reasons’.27 Enzensberger envisages here the potentiality of a system, like the internet, whose switching mechanisms make each node both a transmitter and a receiver. However, it is not sufficient to achieve this technologically, it must also reproduced in a social context through opportunities for productive consumption.

This is where Enzensberger suggests the left has failed, as much as commercial interests have triumphed. By focusing only on the negative aspects of media culture, and neglecting to pursue progressive alternatives, intellectuals leave a vacuum that can only reinforce and reproduce existing patterns of

25 ibid, p. 59.
26 ibid, p.53.
27 ibid, p. 53.
domination. Enzensberger uses examples such as the Beatles and Andy Warhol to show how the media can be used radically, and rock festivals to demonstrate the mobilising power of the masses, but without any explicitly progressive political purpose. He argues that mass culture does not promote ‘false needs’, but provides false resolutions to real needs. A genuinely revolutionary approach to mass culture would realise these needs truthfully not deny them totally. As bad as the denial by the bourgeois left that popular culture can be ‘authentic’, is the unimaginative uses made of media culture by socialist states. Enzensberger describes how East European regimes used television to read out Party communiques for hours on end, and notes that the emancipatory potential of the media is as threatening to Soviet regimes, as much as capitalist hegemony. Enzensberger follows Benjamin in suggesting that the resolution to this problem is for progressives to engage with the process of technological mediation: to become ‘accomplices’ rather than resisters, and embrace the very practices they condemn.

---

28 ibid, p. 67.
29 ibid, p. 67.
30 ibid, p. 64.
31 ibid, p.62.
32 Kellner, p. 128.
33 Enzensberger, p. 68.
34 ibid, p. 52
35 ibid, p.64.
The Cultural Turn

I now want to consider another model for understanding the limits placed on the radical potential of the media, by examining the tension between structure and agency, as theorised through ‘hegemony’ and Marxist revisionism in cultural theory in the second half of the twentieth century. Antonio Gramsci articulated hegemony as an explanation of why, despite the oppression of the working classes by capitalism, revolution had not materialised. He argued that domination is achieved not through coercion but through a high degree of consensus, as the dominant class successfully incorporates subordinate groups into the dominant structures of power, despite acts of resistance. This idea, that power operates through contested acts of negotiation, has provided fertile theoretical territory.\(^\text{36}\) Hegemony itself should not be seen as fixed or monolithic, but should be considered as particular patterns of social organisation that are negotiated, and re-negotiated in changing contexts.\(^\text{37}\)

Hegemony has been extracted from class politics and applied to culture as part of a ‘cultural turn’ in critical theory. Although multi-stranded and subject to debate rather than a coherent whole, this turn examines culture as a constituent part of society rather than simply reflective of other economic or political processes. Popular culture is described as ‘a key site for the production and reproduction of hegemony’.\(^\text{38}\) Applying hegemony to cultural theory also


\(^{38}\) Storey, *Inventing* p. 51.
enables a synthesis of approaches which argue that popular culture is imposed from above (Structuralism), and those that emphasise popular culture as emerging from below (Culturalism). NEO-Gramscian cultural studies argues that popular culture encompasses both influences in a contradictory interplay, that reaches a ‘compromise equilibrium’, before being re-negotiated as conditions change. This synthesis was an important part of the work of the Birmingham Centre for Cultural Studies led by Stuart Hall. They extended the work of Gramsci, and also incorporated Louis Althusser’s idea of ‘interpellation’ (people being ‘hailed by’ or drawn into a particular ideological discourse), to consider the extent to which we are free or constrained when making cultural choices. This is important when considering whether any emancipatory potential within media technology can be accessed.

Hall uses the term ‘articulation’ to explain the process of ideological struggle that takes place when making meaning within cultural practices and texts. He argues that meaning is not immanent within a text or practice but is a form of social production. Representation is the practice by which the world is made to mean. Meaning is encoded and decoded by producers and receivers but there isn’t a neat fit between these positions. Hall shifts us away from the linearity of the passive mass communication model, where meaning is imposed by producers on receivers in an uncontested way, to a situation where meaning is

39 ibid, p.51.
40 ibid, p.51.
42 Storey, Introduction, pp. 128-129.
articulated, disarticulated and rearticulated in a dynamic flow of meaning-making.\textsuperscript{43} However hard dominant groups may attempt to fix meaning, it is always the subject of struggle. This returns us in some ways to Benjamin's conception of the author as producer and the idea that at any moment the roles of producer and receiver can be altered, with authorship the catalyst for further acts of production and reinterpretation.

Hall's work culminated in the development of the 'circuit of culture model'. This model argues that a full cultural study can only be understood by considering the articulation of five moments in cultural formation: representation, identity, production, consumption and regulation. No process is privileged: it is the contingent and contested relationships between moments that enables a full analysis.\textsuperscript{44}

\begin{figure}[h]
\centering
\includegraphics[width=0.6\textwidth]{circuit_of_culture_model}
\caption{The Circuit of Culture Model. Source: Paul Du Gay and others, Doing Cultural Studies The Story of the Sony Walkman, (London: Sage, 1997)}
\end{figure}

\textsuperscript{44} Paul Du Gay and others, \textit{Doing Cultural Studies The Story of the Sony Walkman}, (London: Sage, 1997). p. 3
This is significant as it prevents one particular moment, for example production, being the only determining factor. In this model, production can determine any of the other moments, but may itself be determined, for example, by how a cultural object or practice is used or regulated. It also does not matter where on the circuit you start. There is not the assumption of linearity, with production being the starting point that ends with consumption. What is important is to examine how each moment applies pressure and sets limits that determine the others. This allows an understanding of how dominant cultures of ‘practices, meaning and values’\textsuperscript{45} negotiate with emerging alternative or oppositional practices, through processes of ‘incorporation’ and ‘appropriation’\textsuperscript{46}.

‘Appropriation’ is the subversion or reformulation of produced forms or meanings in the moment of consumption. It emphasises consumption as an active or productive process, where consumers decode meanings within texts and negotiate their own interpretation.\textsuperscript{47} Appropriation questions assertions that mass cultural forms, such as television, are simply, and only, passive. In their studies of viewer engagement with television genres, theorists such as Henry Jenkins\textsuperscript{48} and Ien Ang\textsuperscript{49} point to the opportunities for consumption to be an active process. By contrast, processes of ‘incorporation’ are useful for understanding how dominant positions adopt alternative practices to limit their

\textsuperscript{45}Williams, \textit{Problems}, p. 38.
\textsuperscript{46}ibid, pp. 40-41
\textsuperscript{48}Henry Jenkins, \textit{Textual Poachers: Television Fans and Participatory Culture}, (London: Routledge, 1992)
\textsuperscript{49}Ien Ang, \textit{Watching Dallas}, (London: Methuen, 1985)
subversive implications. Responses can include embedding alternatives in existing forms and practices, such as programme makers including fan communities within official websites, or applying regulatory or technical constraints to radical uses of media culture. For example, I later look at how copy-protected video-on-demand services are being provided by broadcasters to legitimise and control the practice of sharing content over the internet. Mapping the particular negotiation of dominant and alternative practices is a methodological approach that can hopefully avoid some of the pitfalls of overly determined and totalising perspectives.

**Technology and Society**

I now wish to analyse more fully this idea of determination in order to negotiate the relationship between technology and society. Some critical approaches argue that technology is developed first and then causes certain ‘effects’ in society. In other perspectives, technology is developed as a reflection of social conditions. Raymond Williams theorises these two positions as ‘technological determinism’ and ‘symptomatic technology’. In the first position, technology develops autonomously according to its own internal logic and structures. It causes certain effects within society and these effects would not occur via other means.\(^{50}\) It is easy when rejecting this position to fall into the opposite trap of thinking that technology is entirely determined by the social conditions that surround its use.\(^{51}\) In this second position, technology is seen as a symp-

---


\(^{51}\) *ibid*, p. 7.
tom of changes within society that are constituted by other forces. The technology is incidental, if it was not invented then the transformations within society would still manifest in other ways.52

Williams argues that these contrasting positions are ultimately sterile, because they extract technological change from the complexity and contingency of social practice, where technology develops both intentionally and unintentionally and both shapes and responds to social change.53 He argues that technology is not autonomous, although it may seem this way if ‘we fail to identify and challenge its real agencies’.54 One of the difficulties when studying technologies and institutions that have become familiar, as with television broadcasting, is that it is often difficult to see their development as the result of specific historical conditions and decisions. Alternative choices may be obscured leaving the impression of a logical development instead.

For example, the term broadcasting was first applied to wireless transmission in 1922,55 and was initially a one to one communication system. That others could ‘overhear’ the transmission was initially perceived as a fault, but gradually became the raison d’être of broadcasting, as this signal ‘leakage’ was exploited to establish wireless as a one to many mode of transmission.

---

52 ibid, p. 7.
53 ibid, p. 7.
54 ibid, p. 122.
instead. Media companies began to coalesce around this centre/periphery model for transmitting entertainment and information, where a few producers transmit the same content to many consumers. Raymond Williams situates this institutionalisation of broadcasting in the post-war contradiction between wider geographic mobility, and increasingly private domestic living spaces: a paradox he calls ‘mobile privatisation’. In the growing urban locations people increasingly lived in private domestic spaces, yet travelled more widely to their places of work or to visit their extended family. This resulted in private spaces that seemed self-sufficient, but that were sustained, and disrupted, by the ‘outside world’. Connections to this wider society were provided by new forms of transport, such as the automobile, and communication, such as radio and television, that better served this ‘at once mobile and home-centered way of living’ better than earlier, more explicitly public-centered, applications of technology such as the railway and cinema. Williams describes the financial institutions, cultural expectations and technical developments of broadcasting, as determined by and determining this particular social complex.

It is worth noting that the formation of broadcasting institutions varies between countries, from the public service tradition in the UK, to the more commercially led development of broadcasting in the USA, according to the inflections of their respective social conditions. A dialectical approach needs to

---

57 Williams, Television. p.20.
58 ibid, pp. 20-25.
harness theory to this materialism of specific examples and contexts, otherwise, as Williams argues, we ‘cancel history’ and are limited to pure idealism.\(^{60}\) Instead, we should consider the determination of technology as the setting of limits and applying of pressure.\(^{61}\) These operate to facilitate or constrain particular developments, according to constellations of technological, social, political and commercial demands.

Brian Winston refers to these pressures as ‘supervening social necessities’ and argues that they operate as the accelerators of technological adoption.\(^{62}\) Examples of these accelerators of technological change may include the industrial capacity that encouraged the manufacture of the television set as a consumer durable after the Second World War, or the UK government’s commitment to turning off the analogue transmission infrastructure by 2012. By contrast, limitations ‘suppress radical potential’ and act as brakes on the diffusion of technological innovation.\(^{63}\) This may mean that a particular technology may ultimately fail, be delayed, or be adopted not as intended, but as a spin-off. Examples of this include deciding to use increasing television capacity to expand the number of channels delivered, rather than improve the quality of the television picture, which delayed the introduction of high definition services until the 1990s. The decision of the Federal Communications Commission in the United States to stop issuing television broadcast licenses either side of

\(^{60}\) ibid. pp. 122-123.
\(^{61}\) ibid. p. 124.
\(^{62}\) Winston. pp. 7-8.
\(^{63}\) ibid. pp. 8-9.
the Second World War, is an example of artificially delaying the diffusion of technology to allow the commercial marketplace to adapt.

**Media in the Age of Digital Remediation**

Following the post-war analogue media age, broadcasting technology has become increasingly digitised. At a technical level this means that content is stored and transmitted as ‘bits’ of data, rather than as analogue signals. As digital technologies develop, addressing what makes them distinctive and how they affect mediation has been approached by a growing literature on ‘new’ media. As with earlier reactions to mechanical reproduction, responses often split into a polarised debate over whether the new media are a ‘good’ or a ‘bad’ thing. There are theorists who embrace the possibilities of digital media, and argue for an overly utopian vision of digital democracy and participation in social and political life.\(^{64}\) By contrast, other critics consider digital technology as retrograde and dystopian (as in Huxley’s *Brave New World* where people are too distracted by technology to notice the oppressive conditions of the world around them, or through Orwellian panoptic surveillance and suppression).\(^{65}\)

These utopians/dystopians relocate the cultural optimism/pessimism debate from the class politics of high/low culture to ‘techno-fetishism’.\(^{66}\) By this I mean that these perspectives abstractly consider technology as encouraging

---


positive or negative social effects simply by existing. As Williams warns, this is a reductive approach that ignores how technologies are defined by their use and application within particular social conditions.

Jay David Bolter and Richard Grusin outline an approach to thinking about media that attempts to both avoid old dichotomies and reconcile new contradictions. On the one hand we desire immediacy: the absence of mediation, or at least the illusion of transparency, and a direct connection with authentic experience. However, we are also stimulated by the proliferation and foregrounding of processes of mediation, (Bolter and Grusin call this ‘hypermediacy’). These conflicting desires seem to suggest inconsistent imperatives: ‘our culture wants to both multiply its media and to erase all traces of mediation: ideally, it wants to erase its media in the very act of multiplying them’. This is similar to Walter Benjamin’s view that contemporary masses ‘desire to bring things “closer” spatially and humanly, which is just as ardent as their bent toward overcoming the uniqueness of every reality by accepting its reproduction’. With digital mediation this reproduction is not just accepted, it is embraced.

To reconcile this paradox Bolter and Grusin offer the theory of ‘remediation’. Remediation is the inability to separate media from an unmediated reality, and

---

68 ibid, pp. 31-44.
69 ibid, p. 5.
70 Benjamin, Illuminations, p. 217
forms of mediation from each other. Increasingly any medium cannot be defined in isolation because the boundaries between it and other media, and between media and reality are collapsing and are increasingly connected: ‘media technologies constitute networks or hybrids that can be expressed in physical, social, aesthetic, and economic terms’. These networks are complex interactions where both media and reality are ‘refashioned’, ‘repurposed’ and ‘renewed’, in fluid, rather than sequential, configurations. Remediation does not necessarily explain the totality of media experience nor, as Bolter and Grusin stress, is it exclusive to digital media, but they claim it as a distinctive feature of digital mediation. This is an approach that allows a more nuanced analysis of the actuality and interconnectedness of changing media ecosystems. When theorised in this way, the division between old and new media is blurred, and replaced with more fluid reconfigurations of emergent, dominant and residual practices in a constant process of remediation.

In this chapter I have tried to give some sense of a progressive critical theory and its application to popular culture and the media. I have used Walter Benjamin and Hans Magnus Enzensberger to explore definitions of progressive media. I have identified neo-Marxist applications of the concepts of ‘hegemony’ and ‘determination’ to culture, technology and mediation as key frameworks for analysing the circulation of culture within societies and markets.

72 ibid, p. 19.
73 ibid, pp. 55-62.
74 ibid, p. 11.
75 Raymond Williams, ‘Base and Superstructure in Marxist Cultural Theory’, New Left Review, 82 (1973), 3-16
These approaches encourage a view of changing media ecosystems, not as a linear chronology, but as the layering of hegemonic arrangements, related to historically specific social conditions, and providing different negotiations of opportunity and constraint.
DIGITAL TELEVISION: FRAGMENTATION, INTERACTIVITY AND FLOW

In this chapter I consider whether viewing experiences are changing as digital technologies are adopted in the UK, particularly whether some aspects of production are moving into the moment of consumption, incorporating viewers as collaborators. I am aware that, following the circuit of culture model, concentrating my analysis on the moment of consumption means this study can achieve only a partial understanding of television’s transition. Further work is needed to examine television from the other moments in the circuit and join up the growing literature and research in these areas. I will focus on changing experiences of viewing that promise increasing choice and personalisation, fragment the mass audience, and threaten existing conceptions of broadcasting, but I will question how significant and progressive these are in practice.

Going Digital

There are currently four platforms for digital television viewing available in the UK:

- Satellite (DVB-S)
- Cable
- Terrestrial (DVB-T)
- Asymmetric Digital Subscriber Line (ADSL)

Of these, satellite, cable and terrestrial have been available since 1998 whilst ADSL, which enables the transmission of television content via telephone lines,
is a more recent option, and remains in the minority with limited availability and less than 50,000 subscribers.\textsuperscript{1} In 1999, the first year the Independent Television Commission (ITC) reported on digital services, 18% of households received digital television (11% via satellite, 4% via terrestrial and 3% via cable)\textsuperscript{2}, rising to nearly 80% by 2006.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline
\hline
Satellite & 11 & 21.5 & 24.2 & 28 & 29 & 31.3 & 33 & 34.7 \\
Cable & 3 & 14.8 & 14.8 & 10 & 10 & 10.2 & 13 & 13.3 \\
Terrestrial & 4 & 4.2 & 5.2 & 4 & 14 & 20.3 & 28 & 30.4 \\
ADSL & 0 & 0 & 0 & 2 & 2 & 0.1 & 0.2 & 0.2 \\
Total & 18 & 40.5 & 44.2 & 44 & 55 & 61.9 & 74.2 & 78.6 \\
\hline
\end{tabular}
\caption{Digital Television Adoption 1999-2007 (% UK Households).\textsuperscript{3}}
\end{table}

The available data indicates varying choices between different segments of the television population. According to Ofcom, there are two main strands to this variable experience of digital television: involuntary reasons, such as availability, affordability or lack of confidence in how to use technology, and voluntary reasons where consumers choose not to adopt digital television. There is also a marked generational trend. Those aged 16-24, or households with children, are more likely to adopt digital television and other home entertainment devices than the oldest generation or households with no children. According

\begin{flushleft}
\textsuperscript{3} Sources: Independent Television Commission and Ofcom Annual Reports
\end{flushleft}
to recent statistics, as adoption increases there is less of a divide between
digital ‘haves’ and ‘have nots’, but there are demographic differences in the
choice of platform. Older or more affluent groups tend to adopt terrestrial
services, while younger and less affluent groups prefer satellite and cable
services.4

The pace of change has certainly been rapid: it took analogue television
forty years to achieve 73% UK household penetration whilst digital television
achieved this in eight years.5 The UK government has committed to the
phased removal of the analogue signal, between 2008 and 2012, completing
the transition to digital platforms.6 It does not necessarily follow, however, that
television has become a new medium. Whilst the transformation of the un-
derlying technology is clearly happening, it remains to be seen whether there
will be significant changes in content, practices of consumption and produc-
tion, modes of distribution, organisational forms and regulation. The evidence
for a transformative shift to a new generation of media needs to be more
closely examined and consider all the above aspects. To begin to approach
this task, I will now consider one aspect: the idea that digital television pro-
vides consumers with more opportunities for interactivity and more freedom to
exercise choice.

<http://www.ofcom.org.uk/research/cm/cm06/> [accessed 28.04.2007]
5 Ofcom, The Communications Market 2006, p. 30
6 Tessa Jowell, Speech to Royal Television Society Cambridge Convention, (Cambridge, September
2007).
Proliferation: An Illusion of Abundance?

The process of digitisation increases television capacity further, allowing more channels and services. Theoretically this proliferation of content and services could provide viewers with increased choice. It is debatable, however, whether the variety and quality of content is increasing, or whether the same content is simply being reproduced in different ways and at different times. At issue is whether increasing channels and services represents an extension of television viewing, or simply an expansion.

In 1950 there was a single television broadcasting company in the UK, the BBC, broadcasting a single channel, to a fixed schedule for approximately 4 hours per day.7 In 1954 the launch of the Independent Television Authority ended the BBC's monopoly and the multichannel era began when ITV started transmitting in 1955 in London, and nationwide by the early 1960s.8 Two further technological developments occurred by the end of the 1950s which helped service proliferation: firstly the use of VHF improved sound quality and the development of recording technologies for storing content reduced the dependency on live broadcasting.9 1950 also saw the development of ‘Lazy Bones’ an early prototype version of the device that was to come to signify user centered control: the remote control.10 Colour television was introduced

---

8 ibid, p. 33.
9 ‘The History of the BBC’, BBC <http://www.bbc.co.uk/heritage/story/history_text.shtml> [accessed 27.05.2007]
10 ‘Five Decades of Channel Surfing: History of the TV Remote Control’, Zenith Corporate History <http://www.zenith.com/sub_about/about_remote.html> [accessed 27.05.2007]
between 1967 and 1969, and in the 1970s an interactive text service was introduced for the first time.

These examples are intended to illustrate a tradition of service innovation and channel proliferation over a long period. Digitisation has not introduced channel and service expansion, but it has dramatically accelerated it. In 1998 Sky Digital was launched with a portfolio of 140 channels, and by May 2005 370 channels were available for transmission across all available platforms. It should be noted, however, that not all of these channels carry programming in a traditional sense. Some are interactive channels and some are ‘time-shifted’ channels. These are channels that broadcast exactly the same content schedule as another channel but one hour later.

In 2005 there were 1.4 million hours of television content broadcast, 160 hours of broadcasting for every hour. However films, shopping, music and games were responsible for 700,000 of these hours. Of the remaining 713,227 hours, 87% were broadcast on digital only channels, with 6% on the main national terrestrial networks, and the remainder on regional programming. Only 131,066 hours were originally produced, first-run content: approximately a third of output on BBC One and ITV is repeated content and the proportion is

---

12 'The History of the BBC'
slightly higher on digital only channels.\textsuperscript{16} Some channels are now being used to carry ‘High Definition’ services: the same programming but utilising the extra capacity to display higher quality pictures to compatible sets.

Significantly, most consumers think that television standards have stayed the same or got worse: only 10\% in 2005 thought television had got better. Those who thought it had improved cited the range of programmes and services. Those who thought it had got worse (42\%) pointed to the volume of repeats and a lack of variety.\textsuperscript{17} So, whilst digitisation increases capacity this is not necessarily perceived by viewers as translating into a wider range of programming or an increase in quality. Viewers are offered more choice over how (standard definition of higher definition) and when (first run, repeated or ‘time-shifted’) programming is watched, rather than a proportionate increased in the content available for selection: this paradox has been described as the ‘scarcity of abundance’.\textsuperscript{18} Additionally, proliferation in the moment of consumption is not matched in the moment of production. Whilst channels have increased, broadcasters have conglomerated. The large broadcasting organisations such as the BBC, ITV, Channel 4, Five, Virgin Media and BSkyB are all increasing their channel portfolios. Individual channels may see reduced market share but this is often cushioned by growing share for new channels offered by the same broadcaster. Proliferation can therefore also be seen overall as a strategy of consolidation, as well as diversification.

\textsuperscript{16} \textit{ibid}, p. 227.
\textsuperscript{17} Ofcom, \textit{The Communicatons Market} 2005. p. 262.
**Fragmentation and Narrowcasting**

Having a greater choice of channels is the most common reason for acquiring digital television.\(^{19}\) Despite this, BBC One, the initial UK television channel, remains the preferred channel.\(^{20}\) However, like the other terrestrial channels and networks it has seen its market share eroded by digital only channels. The combined viewing share of digital channels (26.2%) overtook that of BBC One (24.7%) or ITV1 (22.8%) for the first time in 2004.\(^{21}\) This trend seems to be continuing, with combined digital channels increasing their market share to 33.3% in 2006, compared with 22.8% for BBC One and 19.6% for ITV1. A comparison with 1998 indicates that ITV1 has suffered the most precipitous fall in the digital era.

<table>
<thead>
<tr>
<th></th>
<th>BBC One</th>
<th>ITV1</th>
<th>Other channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>29.5%</td>
<td>31.7%</td>
<td>12.9%</td>
</tr>
<tr>
<td>2004</td>
<td>24.7%</td>
<td>22.8%</td>
<td>26.2%</td>
</tr>
<tr>
<td>2006</td>
<td>22.8%</td>
<td>19.6%</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

**TABLE 3: Channel market share comparison.\(^{22}\)**

Comparing single terrestrial channels against combined digital channel viewing does not provide a full picture. Because of the sheer volume of digital

\(^{19}\) Media Literacy Audit: Report on Adult Media Literacy, (London: Ofcom, 2006). p. 32  

\(^{22}\) Source: BARB
channels the market share of any individual digital channel is extremely low. In April 2007 BBC One recorded 19.4% audience share, whilst the most watched digital channel was Sky Sports 1 with 2.4%.

An early initial study on consumer responses to the multichannel environment suggested that viewers found it difficult to differentiate between many of the additional channels and bemoaned the effects of increased competition on the output of established channels such as ITV1 and BBC2. This was only a small qualitative study, but it is interesting that, despite the impression that having more choice means having more power, this group actually felt disempowered by the perception that they are now treated as consumers of media products, rather than as an audience for broadcasting.

Whilst channels and programming hours are increasing, the number of hours of weekly television viewing by individuals remains reasonably stable. This supports the view that beyond the terrestrial networks, multi-channel proliferation is associated with niche narrowcasting, rather than the traditional model of mass broadcasting. With a growing choice of viewing options, the experience of digital television is increasingly fragmented and heterogeneous.

---


25 ibid, p. 23.

and this must be considered alongside more general trends. However, Jostein Gripsrud argues that there remains some requirement for a few centralised channels, with authoritative editorial controls, to support social cohesion and a functioning public sphere. The market share of BBC One, in particular, seems to support this and suggests that narrowcasting will co-exist with broadcasting, rather than replace it.

**Analysing the ‘Self Select Menu’: Interactivity and Consumer Choice**

Narrowcasting describes how content is transmitted to niche demographics as part of the ‘de-massification’ of the broadcast audience, but increasingly, fragmentation goes even further to create highly personalised television experiences. Lisa Parks calls this ‘flexible microcasting’, the process of allowing viewers ‘to fashion their own package of media content’.

**Choosing When to Watch**

One aspect of this process is that viewers are increasingly able to control the timing of their viewing experience by making use of video recording devices and Video on Demand (VOD) or Pay Per View (PPV) services. These services enable the viewer to watch programmed content not at scheduled times, but at a time of their choosing, commonly known as ‘time-shifting’. In 1998, 85% of households had a video cassette recorder (VCR) (between 92 and 95% in

---


multichannel/digital households). This figure has remained stable throughout the past decade, despite the rapid diffusion of DVD players. As VCRs with analogue tuners cannot be used for recording content from television after digital switchover, it is likely that this figure will start to decline and the number of digital Personal Video Recorders (PVRs) is expected to rise.

PVRs are devices that record directly to a hard disk rather than using a consumable medium, such as a cassette, for storage. They also provide additional services such as recording a whole series at the touch of a button or the ability to ‘pause’ live TV. Ofcom reports that some viewers are unsure whether they have a PVR or not, suggesting again that beyond a certain point having more options can degrade the ability of consumers to make choices, rather than enhance it.

The ease of use of the additional functionality in PVRs does seem to increase time-shifting. Whereas playing back pre-recorded content is the most common activity for VCR and DVD owners, PVR owners mostly use it for recording programming they would otherwise miss. Ofcom estimates that the average weekly time-shifted viewing is 2.2 hours compared to live viewing of

---

29 Cumberbatch, pp. 7-9.
32 Ofcom, Ofcom and Digital UK Switchover Tracker Survey Switchover Progress Report, p. 16.
19.4 hours and watching pre-recorded content for 3.2 hours.\textsuperscript{33} Whilst this is not yet a significant proportion of viewing, many of those who are regular users of time-shifted viewing say they would find it difficult to return to ‘linear’ television.\textsuperscript{34} ‘Video on Demand’ (VOD) or ‘Pay Per View’ (PPV) is even more time-agnostic. These services allow the viewer to select a programme to watch from a library of content at any time. Services vary between paying for one off items on an individual basis, such as sporting events or films, or subscribing to services that allow any content to be selected at anytime for a regular subscription. Ofcom estimated in 2005 that 46\% of cable and satellite viewers had purchased an item via Pay Per View.\textsuperscript{35}

\textit{Pressing the Red Button}

Viewers have been encouraged to provide feedback to television broadcasters for many years - the BBC’s Points of View is an example. Like a letters page in a newspaper, this programme started in 1961 and read out letters about television programmes from viewers. Their latest initiative is to allow viewers to become ‘Points of View reporters’, by sending their feedback via video.\textsuperscript{36} This allows viewers some form of response, but by communicating outside the medium of television: the television platform itself remains unidirectional.

\textsuperscript{33} Ofcom, \textit{Media Literacy Audit: Report on Adult Media Literacy}, p. 33.
\textsuperscript{34} Ofcom, \textit{BBC iPlayer Market Impact Assessment}, p. 30.
\textsuperscript{35} Ofcom, \textit{The Communications Market 2005}, p. 253
Other feedback mechanisms include allowing viewers to telephone programmes to enter competitions, or vote to decide a programme’s outcome. There have been recent problems with these types of feedback, as investigations suggest that in some cases votes didn’t count towards the final result, or the competition had already been decided.\(^\text{37}\) This suggests that the power of the viewer in these cases is illusory. The relationship between consumer and producer remains asymmetrical because the editorial and auditing processes are opaque. Viewers can have their say, but broadcasters still decide what is heard. More transparency will be needed to convince viewers that they are truly empowered by these forms of interaction.

Viewers are increasingly invited to interact through the television platform itself, by pressing a button on a remote control, (this has been normalised as the ‘red button’), to access extra services such as text, multimedia, information or features relating to the programming currently being viewed. In some cases the aim may be to promote participation and engagement: for example to provide lyrics to sing along to, or to answer questions alongside contestants in a game show; in other cases the interactivity is simply further proliferation of the programme content by ‘simulcasting’ different viewing choices without needing an additional channel. During the 2004 Olympics 8.96m people, 58% of the available audience, used the interactive service, with over half using it for more

than 25 minutes. These provide good examples of remediation: making events both more immediate and adding elements of hypermediacy through enhanced visuals.

FIGURE 2: Channel 4’s Big Brother Interactive Service, BBC Multiscreen broadcast of the Commonwealth Games and Sky News Active. Source: BSkyB

Some services enable the viewer to appropriate practices of production. For example, when major events are being broadcast, such as sporting events, the viewer may prefer a different event or a different view from that selected by the producers. A good example of this is Sky Sports Active.

FIGURE 3: Sky Sports Active. Source: BSkyB

This service allows the viewer to study statistics about the game and participants, to select camera angles, watch replays and highlights, follow a par-

---

ticular player, or select alternative commentary, including commentary provided by fans rather than specialist experts. The viewer adopts the role of the producer, selecting from available content and camera angles. It is also an example of using non-specialists to contribute to television production. It is, however, perhaps too complex a task for many viewers as only 38% said they were confident selecting alternative matches or viewing angles when watching sport, compared to 67% who feel confident using interactive services generally. 39 This indicates that gaps in digital media literacy may dilute the potential of some services.

There is also the emerging possibility of users intervening to decide the narrative trajectory of a dramatic programme. This is described as ‘semantic television’ or ‘shape-shifting’. 40 There are already examples of adding different endings or deleted scenes to film DVDs, exposing the editorial decisions made in the creative process. Shape-shifting doesn’t merely reveal these production mechanisms to the viewer, but allows the collective audience to displace the professional editor. This is an example of innovation that moves towards Walter Benjamin’s idea of incorporating viewers as collaborators. 41

Raymond Williams argues that planned flow, (the sequence not just of programming, but of the interruptions within and between programmes), is ‘per-

39 Ofcom, Media Literacy Audit, p. 34.
haps the defining characteristic of broadcasting’. If this is the case, then the increasing ability of the viewer to ‘disrupt’ flow, by breaking formal flow back into its constituent fragments and then reassembling them in their own sequence, indicates a significant challenge to broadcasting on four levels: (a) as a technology; (b) as a distribution model; (c) as a cultural form and (d) as a text. The personalisation of the television experience relocates flow to the moment of consumption by providing greater scope for multiple modes of reception, multiple formations of identity and meaning-making as viewers assemble their own television ‘texts’. It should be noted, however, that this movement from broadcaster-controlled flow, to viewer-controlled flow is not something introduced by digital technology, but began with the introduction of the remote control device, although the exponential growth of digital services magnifies the extent and impact of this shift.

Overall it is those in the 25-34 age group who are most likely to use interactive features, with just over half interacting with television, although 34% of all those able to access interactive services have done so. This is significant enough usage for interaction to be more than a niche activity, but it hasn’t yet achieved mainstream adoption, either because of media literacy gaps or lack of interest. Interactive services do provide viewers with further opportunities for choice and personalisation, but it is important to note that these choices

---

44 Ofcom, *Media Literacy Audit*, pp. 36-37.
are limited, and the evidence of viewer enthusiasm for these services is mixed.\textsuperscript{45}

\textbf{The Consumer as Producer?}

Through techniques of ‘time-shifting’ and ‘shape-shifting’ viewers are able to appropriate some aspects of television production and flow. However, consumers are much more limited in the extent they can engage in the actual production of video content for transmission. The television platform remains, to a large extent, uni-directional and asymmetrical: it does not yet incorporate the ‘principle of reversibility’,\textsuperscript{46} that is a feature of a progressive, collective media.

At present, viewers have only limited opportunities to submit video to broadcasters for selection by professional editors. One example is \textit{Video Nation} a BBC television concept that existed before digital television, and continues to date, transmitting short personal diaries produced by members of the public. Originating in 1993, the project was inspired by the Mass Observation projects of the 1930s. The aim of Mass Observation was to create an ‘anthropology of ourselves’, to document ordinary life as actually experienced.\textsuperscript{47} \textit{Video Nation} has received over 10,000 tapes and broadcast 1300 short films.

\textsuperscript{45}Raymond Williams argues that these are more accurately reactive rather than interactive services as the range of choices is pre-set (Williams, \textit{Television}, p. 133).


\textsuperscript{47}‘Original Mass Observation Project’, \textit{Mass Observation: Recording Everyday Life in Britain} \texttt{<http://www.massobs.org.uk/original_massobservation_project.htm>} [accessed 08.07.2007]
about the lives of ordinary people organised into films.\textsuperscript{48} Another example is the BBC’s \textit{Your Shout!} feature, which encourages football related footage to be captured and sent via mobile phones.\textsuperscript{49}

With the increasing affordability, availability and ease of use of personal video cameras (camcorders), it is easier for amateur producers to engage in video production. The difficulty for non-professional producers is not creating video content, but finding a way to distribute it on the television platform. Amateur producers are prevented from being more involved collaborators in television production because of this asymmetry in the mode of circulation. Alvin Toffler argues that this is a rupture in the relationship between consumption and production that occurred alongside industrialism.\textsuperscript{50} This separation, and the movement from an economy based on production for use, to an economy organised by production for exchange, necessitated the formation of markets (whether capitalist or socialist) to facilitate exchange, giving huge amounts of power to those controlling the markets.\textsuperscript{51} The emergence of user-generated content, and the appropriation of some practices of production within the moment of consumption, are examples of a healing of this rupture, suggesting more permeable boundaries between the moments of consumption and production as advocated by Walter Benjamin. Toffler calls this ‘the rise of the

\begin{thebibliography}{99}
\bibitem{48} ‘Video Nation History’, \textit{BBC} <http://www.bbc.co.uk/videonation/history/index.shtml> [accessed 25.05.2007]
\bibitem{49} ‘Your Shout!’, \textit{BBC Sport} <http://news.bbc.co.uk/sport1/hi/football/football_focus/4229268.stm> [accessed 25.05.2007]
\bibitem{51} \textit{ibid}, p.42.
\end{thebibliography}
prosumer’. In the following chapter, I will ask whether the interaction of the digital television platform with the internet provides a more enabling platform for this trend.

**How Progressive is the ‘Self Select Menu’?**

In this chapter I have considered how technology is influencing changing experiences of viewing television. Increasing proliferation and personalisation offers viewers more choice, and the ability to configure their own television texts and schedules. The benefits of this are that consumers are increasingly able to move away from broadcaster-determined ‘set menus’ to ‘à la carte’ selections; by contrast the overall limitation of the self select menu is that, however broad the choices become, the menu is still determined by the platform. Within the digital television platform, media companies still retain control over television distribution reinforcing the uni-directional and asymmetrical relationship between broadcasters and viewers. Digital television expands and consolidates established practices and organisations as much as it extends or diversifies choices. In addition, these practices emphasise individuation and group viewers into demographic ‘ghettos’: excessive privatisation at the expense of a functioning public sphere is not necessarily progressive. There is also evidence that some viewers are not media literate enough to exercise their viewing choices, or are simply not inclined to. The evidence that the digital...

---

television platform enables emancipatory experiences of viewing television is therefore mixed.
INTERNET TELEVISION AND THE NETWORK SOCIETY

This chapter moves from considering television as a distinct and autonomous medium, to examine how increasing convergence, between television and the internet, invites new intersections of practices and forms. This convergence disrupts dialectics of old and new, public and private and the self and society and enables activities to become even more time and space agnostic. The intersection of video and the internet, henceforth referred to as IPTV (internet protocol television), threatens to dislocate television from the familiar set in the domestic home and disrupt the formal sequence of channels that has characterised broadcasting, prompting uncertainty surrounding the definition of television. This uncertainty is fascinating as it provides the opportunity to consider a medium in the processes of re-definition, and observe the negotiation between structure and agency that will determine television’s form in the coming decades.

Following an overview of internet technologies and the network society paradigm, I will introduce examples of experimental IPTV services to consider both the radical potential of IPTV to develop television in alternative and progressive directions, and the possibility that these alternatives will be successfully incorporated into a reformed broadcasting hegemony. As these examples are so indeterminate, they can only suggest possible directions; whilst any
conclusion about television’s future would be tentative, it is worth stating what the key factors may be in shaping this future. Further studies will need to monitor how IPTV eventually evolves.

**Extending the Network**

Within television, the term ‘networks’ refers to the institutional formations that control television franchises; more recently however, networks are being used to conceptualise both an increasingly pervasive communications architecture, and new models of social relations. The internet is the most overt technological manifestation of these trends. It is a global, decentralised, open network of computing devices, that originated during the second half of the twentieth century, emerging from within a complex relationship of computing innovation, defence needs and academic desires, before gradually gaining traction as a space for social and commercial activity. In itself the internet is just a collection of devices bound together by protocols, but when these are used to transport content it becomes something else: a new medium formed by and fashioning its constituent media. It is a realisation of the ‘networklike communications models built on the principality of reversibility’ anticipated by Enzensberger.¹ It is also contributing to, and responding to, the reordering of time and space within the paradigm of the network society as theorised by Manuel Castells.

---

Castells argues that this network-based information technology architecture relates to a similar transformation in social conditions that is reconfiguring relations, between economies, societies and states.\textsuperscript{2} Those within this transformation are experiencing new modes of identity formation, changing senses of place and time, and converging media forms. Space is ordered by flows, as well as places, whether these flows be of technology, capital or symbolic exchange.\textsuperscript{3} This paradoxical tension, between the ‘space of places’ and the ‘space of flows’, redefines further the ‘mobile privatisation’ of post-war society as described by Williams, and is likely to demand the reconciliation of the boundaries between public and private in different ways.

Privatisation was the primary logic of the older centre/periphery social model and technology was used to negotiate a connection between public spaces and private places; in the network society the emphasis is more on constant mobility, or ‘hypermobility’.\textsuperscript{4} as private activities are ‘dislocated’ from domestic environments, and are increasingly embedded within public spaces,\textsuperscript{5} through devices such as mobile telephones and personal music players, for example. Additionally, air travel and the internet provide newer transportation and communication technologies that enable people to physically travel further, without being disconnected from family life, or explore more, without even leaving

\begin{flushleft}
\textsuperscript{3} ibid, pp. 411-412. \\
\end{flushleft}
home: the ability to simultaneously stay ‘at home’ and ‘go places’, or to ‘go places’ and still be ‘at home’, is increasing through the connections afforded by digital communications networks. However, it is important to note that many are excluded from these practices, or find their choices limited: these trends are not universal, and potentially represent a new digital class hierarchy.

Because the internet acts like a meta-medium, the devices used to interact with it aren’t as specialised as for other media: for example radios, television sets and cinema screens. Increasingly the content of the internet can be accessed by these, as well as computers, mobile telephones and even kitchen appliances. Several companies have experimented with delivering television via mobile phones, featuring television packages, digital radio, a programming guide and red button interactivity. Sky offers several services via phone, including their programme guide and television packages for an extra subscription. It is now possible to programme a Sky+ PVR by mobile telephone. This indicates that a mobile telephone can be used not just as a reception device but also as a remote control that works even outside the home. There are devices emerging that shift content between platforms, allowing a consumer to purchase content from one platform and remediate it it to another. Examples

---

6 Morley, (quoting Scott Lash and Jonathan Friedman), p. 309
7 ibid, p. 3 and p. 371
of this include ‘Slingbox’,\textsuperscript{11} which relays broadcast content from television tuners to mobile phones, and ‘Apple TV’ which sends content purchased on a computer to a television set.\textsuperscript{12} The network is pervasive and immersive. If remediation is the inability to separate mediations, and distinguish mediations from reality, then the internet fulfils and extends this.

This device proliferation raises questions about what television actually is. Is it simply any transmission of video content, or to what extent can television only be constituted within specific organisational and social formations? This is perhaps most clearly evidenced in regulatory licensing. Whether the UK method of television licensing, based on our existing definition of television sets, continues to make sense in a content-rich, globalised television landscape, and the implications for public service broadcasting, are critical questions for the future. Television reception is being incorporated into an increasing range of devices extending television beyond the traditional set. The internet is not replacing television, it is absorbing it.\textsuperscript{13} It must be remembered that the evidence discussed in Chapter 2 still indicates that the dominant television experience is in the home via a television set, but for some, particularly younger generations, alternative techno-social paradigms are emerging that offer a different experience of television. In the next section I will consider some examples of these.

\textsuperscript{11} Sling Media <http://uk.slingmedia.com/page/home> [accessed 31.05.2007]
\textsuperscript{12} ‘Apple TV’, Apple <http://www.apple.com/appletv/> [accessed 27.05.2007]
\textsuperscript{13} Castells, p. 370.
Remix or Replay TV? Radical Potential and it’s Suppression

The trends identified in the previous chapter of proliferation, personalisation and participation, are not only continued, but are accelerated and intensified by IPTV services. In this section, I want to consider whether IPTV goes beyond the limitations of digital television, to truly expand choices, enable bi-directional participation, and change practices of production and circulation in ways that allow viewers to become interactive and intertextual collaborators.

The conjunction of inexpensive creation tools, such as computers and software, and the openness of the internet, is enabling the growth of user-generated content, sometimes termed ‘generativity’.14 Tim O’Reilly used the term ‘architectures of participation’ to describe systems, like the world wide web, that are designed to accept, and join up, user contributions.15 Low production costs reduce the economic need for a mass audience and enable different models of cultural production, information sharing and meaning-making to emerge. Yochai Benkler describes this as the ‘wealth of networks’.16 Time magazine considered this so revolutionary, that they nominated ‘You’ (the individual) as their person of the year for 2006.17 In Chapter 1, I discussed how

---

the expense of film-making limited the opportunities for non-specialists to participate in productive processes. In Chapter 2, I identified access to distribution networks as more of a problem, than actually producing content. The comparatively low costs of the internet make both production and distribution much more accessible as the following examples illustrate.

**WebTV**

YouTube (http://www.youtube.com), is the most popular example of web based video sharing and exhibits many of the trends I have been discussing, enabling anyone with reasonable technology and media literacy to contribute to a video ecosystem. It is blurring the boundaries between professional and amateur, both in the production of content, and in the organisation of channels and schedules: ‘empowering [people] to become the broadcasters of tomorrow’.\(^{18}\) Additionally, by storing each video clip as a discrete ‘bit’,\(^{19}\) YouTube provides an architecture and tools for video to be easily remediated elsewhere.

When the individual watches a clip he/she can rate it, save it to his/her favourites, add it to a playlist, leave a comment about it, embed it on his/her own site, create a video response to it, see more from that user, or watch a related item. The tagline for YouTube is ‘Broadcast Yourself’, so it features a kaleidoscope of user-generated content from personal diaries to creative remixes.

\(^{18}\) ‘About YouTube’, YouTube <http://www.youtube.com/t/about> [accessed 19.05.2007]

\(^{19}\) See Nicholas Negroponte, *Being Digital* (London: Hodder and Stoughton, 1995) for a discussion of the digital shift from ‘atoms’ to ‘bits’. 
Communication flows are bi-directional and the relationship between consumers and producers is symmetrical, with each user adopting different positions on a continuum of consumption and production according to their context and functional requirement. This encompasses a whole variety of experiences, that viewers can appropriate as they like, from conventional channel viewing, to using YouTube as a form of asynchronous video communication, or public debate. It also allows a range of voices to be heard, enabling alternative perspectives to interrupt, or intervene in, dominant discourses. These expressions of diversity fit with Enzensberger’s model of emancipatory uses of the media, and Benjamin’s desire for users to become collaborators.

This does not mean that all uses of YouTube are emancipatory, as existing elites are incorporating YouTube to consolidate their positions. Political parties are attempting to re-engage with younger voters, for example the Labour party have a channel, and there is a channel for the 2008 American Presidential election. YouTube is being used as a feedback mechanism to allow individuals to submit videos of questions to presidential candidates, that will be selected by CNN to be played to candidates and answered in live television debates.

---

20 ‘Labour Vision’, YouTube, Online Channel <http://www.youtube.com/labourvision> [accessed 01.06.2007]
21 ‘You Choose 08’, YouTube, Online Channel <http://www.youtube.com/members?s=po&t=w&g=-1> [accessed 01.06.2007]
YouTube also includes bite-sized clips from programmes featured on television, published by broadcasters. This is another good example of broadcasters engaging with potentially liberatory practices to ‘trail’ programmes, and hook viewers back into television viewing, (the BBC have a dedicated channel for example). Whilst YouTube has struck content deals with a number of broadcasters, Viacom have resisted this type of engagement: they have engaged YouTube in legal action over copyrighted material uploaded by YouTube users in what could become a test case between a traditional broadcaster and an internet video service.

YouTube is popular. A Wall Street analysis in 2006 found that content was growing by about 20% every month, used about 45 terabytes of storage and had served over 9000 years of content in its first year. Analysis by Delft university indicated that 70% of YouTube users are American and half are under 20, indicating that this type of service is mostly experienced by a younger demographic within a particular cultural context. It should also be noted that YouTube content is short: each clip is a matter of minutes. This type of video will not replace television programming, but one could argue that it provides an alternative to it. Future studies will need to examine further the impact of web-based video to determine its ongoing significance: is it just a fashionable

---

23 http://www.youtube.com/profile?user=bbc
26 ibid.
craze or does it mark an ongoing change in the way video content is consumed?

**Video on Demand**

Earlier I discussed the consolidation of media companies: this enables them to 'bundle' media subscriptions (combining television, telephone and internet services in a single package), and expand their channel portfolios as strategies of consolidation in the face of audience fragmentation. In a similar way these companies are acting to contain the challenge to their control of broadcasting posed by PVRs and web based video sharing. Major broadcasters are launching internet based, on-demand 'replay' services that allow you to watch programming that you may have missed. These services will act almost like a 'permanent PVR'. Viewers won’t have to worry about remembering to record something because the full catalogue of broadcast content will be available to select from at any time.

Most of the major broadcasters and platform providers in the UK are either providing or planning internet-based catalogues (e.g. the BBC[^27], ITV[^28], Channel 4[^29], Five[^30] and Sky[^31]). The BBC iPlayer is perhaps the most significantly awaited of these services. It has taken four years to develop, partly because of negotiations with commercial providers and regulatory bodies which have de-

[^27]: 'BBC iPlayer', BBC [http://www.bbc.co.uk/iplayerbeta/](http://www.bbc.co.uk/iplayerbeta/) [accessed 31.05.2007]
[^29]: '4OD', Channel 4, [http://www.channel4.com/4od/home.html](http://www.channel4.com/4od/home.html) [accessed 31.05.2007]
[^30]: *Five Download* [http://download.five.tv/](http://download.five.tv/) [accessed 31.05.2007]
terminated the development of the service as much as the underlying technology. This type of service is interesting because it begins to incorporate time-shifting into the broadcasting paradigm. By making time-shifting less private, access to programmed content is widened for the user, but opportunities to reassert control of flow are opened for the broadcaster. In the way they organise the content within their catalogues, and promote connections and links between them, broadcasters may be able to remediate the idea of planned flow, not as a linear sequence, but as a way of associating content to manipulate viewer choices in an on-demand landscape.

Most services only make content available for replay viewing for a specified period after broadcast (usually between 7 and 30 days). After this the content will be wiped by digital rights management (DRM) software. To obtain a copy that can be viewed over an extended period, viewers will either have to record the programme themselves, or purchase the programme as a commodity either online, or as a DVD. This provides another way of controlling time-shifting within a new broadcasting hegemony. Content is located within a life-cycle that progresses from scheduled broadcast, through time-shifted viewing to commodification. Whilst this provides viewers with more consumption choices, the production and distribution chain remain controlled by major broadcasters, potentially limiting the emancipatory potential afforded by increased choice and access.

---

Hybrid Television

Current TV (http://www.current.tv), is an example of a television service that is attempting to negotiate the convergence of television and the internet, and of specialised producers and active consumers. It accepts the fragmented audiences and segmented content of the networked media ecosystem and works within this paradigm. It describes itself as ‘a TV network for the internet generation … created by the people who watch it.’

![Current TV Screenshot](http://www.current.tv)

**FIGURE 4: Current TV Screenshot. Source: http://www.current.tv**

The content on Current TV is created by CJs (Current Journalists), split into ‘Pods’ and scheduled as themed playlists. Users can upload and submit their content via the Current TV website. They can also participate in editorial decisions by ‘greenlighting’ pods that they like and sharing comments. It is not just programme segments that users can create: anyone can submit advertisements called VCAMs (Viewer Created Ad Message) in response to creative briefs.

---

33 ‘What is Current TV?’, *Current TV*, Online Video <http://uk.current.com/about> [accessed 15.05.2007]
34 ‘Watch & Vote’, *Current TV* <http://uk.current.com/watch/home.htm> [accessed 18.05.2007]
35 ‘V-CAM=Viewer Created Ad Message’, *Current TV* <http://uk.current.com/make/vc2/vcam> [accessed 18.05.2007]
Current TV is based on an expectation of participation, but the content is not entirely produced by users. Approximately 30% is ‘viewer created content’, or in Current TV terminology ‘VC2’ (Vee-See-Squared), with the remainder produced by Current TV staff. This quota is an increase on their initial estimate that 5% would be user-generated, because the quality of submissions they received was so high (although there is no indication of how Current TV assess quality). This seems to contradict fears that if you lower the barriers to entry then the quality of the content is reduced and the assumption that user-generated content will remain mediocre. Current TV uses it’s team of ‘Vanguard Journalists’ and community opinion (the greenlighting process) to provide quality assurance; it also provides training advice to content producers to try and lift the quality of content. This helps progress user-generated content from ‘digital eyewitness’ to journalism and allows a greater range of local voices to emerge. For example, Current TV enables voices from within war zones to broadcast short documentary films, describing the experience of war from their perspective. These may contrast with representations of conflict in mainstream news broadcasts.

The most popular pods are transmitted not just via the web, but also via television as Current TV is the first internet based television channel to also...
have a presence on digital television platforms (in the USA and UK), and this sets it apart from the other IPTV offerings. Producers get paid if their pod is selected for television broadcast. Current TV’s hybrid model seems to offer a balance between the democratisation of production and maintaining some division between producers and audiences. It embraces most of the characteristics of digital media to transform production, channels and schedules, without rejecting these structural frameworks entirely.

**Textual Poachers/Textual Gamekeepers**

The examples I have discussed so far all concern the production and circulation of video. The internet can also be used to expand the diegetic frame of television by creating more opportunities for fan participation in intertextual, multimedia narratives. Henry Jenkins, drawing on Michel de Certeau, discusses how media fans operate as nomadic ‘textual poachers’, appropriating television texts to create their own meanings, that may support or subvert meanings encoded by the show’s producers, and be expressed through practices such as fan conferences or sharing creative writing and artwork.\(^{41}\) Whilst the relationship between producers and fans is unequal, Jenkins highlights the struggle for control of television worlds, characters and narratives between the ‘proprietors’ and the ‘poachers’. This struggle allows re-readings of texts to emerge, often to rework the text to fit more marginal identities: for example, projecting alternative

sexual orientations, such as bisexuality, onto characters such as Star Trek’s Captain Kirk.\textsuperscript{42}

Jenkins describes the use of videotapes and fanzines to create fan communities that pre-date digitisation. Once again, the internet intensifies these trends, rather than creating them, by enabling sharing and group discussions to be more immediate and geographically dispersed. What is perhaps new, is the use made by broadcasters of this fannish behaviour by incorporating it into official web sites. Broadcasters are realising that deepening the engagement viewers have with a television show provides a way of exploiting commercial opportunities, and maintaining viewer loyalty. Interactivity is not just empowering, it can also be economically valuable. These social and textual interactions between producers and fan communities expand the idea of what constitutes the television text.\textsuperscript{43}

For example, for their series Lost about a group whose plane crashes on a mysterious island, ABC have produced an official site which does the following: features extra video clips that suggest clues about the island, provides elaborations on the back stories of the characters, provides access to downloads of previous episodes, offers photos and podcasts (audio magazine programmes) for download, ‘leaks’ behind the scenes information on the show’s production, as well as supporting fan discussions and creativity.\textsuperscript{44} ABC include

\textsuperscript{42} \textit{ibid.} pp. 28-32.
\textsuperscript{44} \textit{Lost Official Site}, <http://abc.go.com/primetime/lost/index> [accessed 05.08.2007]
a user-generated space where fans can contribute their own guide to the show, and actively encourage viewers to contribute their theories on the mysteries of the island. They have even created a ‘fake’ website for Oceanic Airlines, the fictional owner of the crashed plane. In contrast to unofficial fan-sites, these sites are heavily augmented with advertising, sponsorship and other commercial exploitations, but ABC would argue that the benefit for the fan is increased engagement with the show’s writers and producers. Whilst the show’s producers still retain ownership of the show, fans are increasingly invited to become ‘textual gamekeepers’, as well as ‘poachers’.

**Cathedrals, Bazaars and Commons**

These examples of user-driven appropriations and interventions, and broadcaster led incorporation, are indicative of the re-negotiation of broadcasting hegemony, as television shifts to digital technologies. The future direction of IPTV is technically ambivalent: it could be an open bi-directional system, or remain a relatively closed asymmetrical infrastructure. How content is licensed and circulated will have a key role in determining the television landscape that emerges.

Chris Anderson argues that, in a reversal of the mass market, the future of entertainment is in niche content and niche audiences. Instead of selling high volumes of a few items, there is as much value in selling small amounts of lots

---

45 *Lost Wiki*, <http://lostwiki.abc.com/?t=anon> [accessed 05.08.2007]
47 *Oceanic Airlines*, <http://oceanic-air.com/> [accessed 05.08.2007]
off things. This becomes economically feasible as the culture industries are less dependent on the materiality of supplying, and storing, physical commodities. Anderson calls this the ‘long tail’ effect.\footnote{Chris Anderson, ‘The Long Tail’, \textit{Wired}, 12.10 (2004) \url{http://www.wired.com/wired/archive/12.10/tail_pr.html} accessed [08.07.2007]} Back catalogues and user-generated micro-content become economically valuable without needing high volume circulation. A vast and varied portfolio of content is available in multiple ways to an equally vast, but differentiated audience. Alvin Toffler argues that as ‘prosumption’ develops, economies will transcend, but not remove, markets: ‘the willing seduction of the consumer into production has staggering implications’ because ‘the market is premised on precisely the split between producer and consumer that is now being blurred’.\footnote{Alvin Toffler, \textit{The Third Wave: The Classic Study of Tomorrow}, (New York: Bantam Books, 1981), p. 275-6.}

This suggests the possibility of multiple approaches to media distribution. In his essay on software development, Eric Raymond uses the metaphors of ‘cathedral’ and ‘bazaar’ to describe top down and bottom up approaches to production.\footnote{Eric Raymond, \textit{The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary}, revised edition (Farnham: O‘Reilly, 2001)} In the media context, the cathedrals are broadcasters, or vast media stores such as Apple’s iTunes Music Store,\footnote{‘iTunes Store’, Apple \url{http://www.apple.com/itunes/store/} [accessed 27.05.2007]} that licenses content from multiple broadcasters. The bazaars are community-based services such as YouTube, or Last.fm for music,\footnote{Last.fm \url{http://www.last.fm} [accessed 27.05.2007]} that enable the discovery and sharing of content through personal playlists and neighbourhood affinities. One potential limitation of narrowcasting is that it may homogenise media preferences, limit-
ing viewers’ selection to what they already know, resulting in cultural ‘ghettos’.\textsuperscript{53} In the networked environment, social media services enable a consumer to enjoy favoured content, whilst introducing into the familiar other content he/she might enjoy, based on those with similar but not exact tastes. On the internet your neighbourhood is not a physical space, but a place you inhabit with others based on cultural distinction. Bazaars can also be used to sell media at a different prices, depending on their popularity.\textsuperscript{54}

A third paradigm is that of a ‘digital commons’. This is an open media market, where content is shared freely, either because doing so creates value in other ways, or simply for altruistic reasons. Some musicians, like the Arctic Monkeys, give samples of music away because they recognise they can generate value, not by selling it but as an incentive to engage with the band in different ways: for example, by buying tickets for a live performance. The Creative Commons (http://www.creativecommons.org) is a movement advocating more flexible rights management, also known as ‘copyleft’, to enable digital media to be remixed more freely.\textsuperscript{55} It is a system that allows producers to selectively indicate in an accompanying license which re-uses of that symbolic object are permitted. However, it’s use remains marginal compared to the prevalence of copyright.

\textsuperscript{54} For example. Amie St (http://amiestreet.com/), uses this innovative approach to selling music.
From Broadcasting to Multicasting

Television ‘anytime, anywhere’ is joining the idea of television as a private, domestic activity, and therefore we need to look beyond broadcasting for a paradigm to adequately capture this experience. ‘Multicasting’ is a possible way of describing the changing modes of distribution considered in this chapter: a movement from a ‘few to many’ model to a ‘many to many’ model. Even if many examples discussed are still marginal, it is significant that broadcasting no longer has a monopoly on media distribution. However, whilst broadcasting itself may be challenged, there is less evidence that established broadcasters are being threatened; instead they are successfully adapting to these practices to retain a dominant position in the on-demand television marketplace. It will be interesting to see whether emerging television services, such as YouTube or Current TV, can contest the influence of a service like the BBC iPlayer.

It is also important to note that IPTV isn’t a technological nirvana that can be unconditionally or freely accessed by anyone, in any way, at all times. The internet may allow more possibilities but there are often technological, commercial, social, economic and regulatory barriers as to why these may not be, or cannot be, taken up by all users. Digital media requires encoding at the point of production and decoding at the point of reception. Because of the variety of codecs available, digital media can only be received and played if you have the right media player. This is similar to the competition between video cassette formats in the 1980s between Betamax and VHS. Digital media isn’t in practice as ‘device-agnostic’ as it could be. For example, the BBC iPlayer
will initially only work with Windows computers with particular media software.
The 'bits' of digital media have to be technologically encoded/decoded, before
the symbolic encoding/decoding of representation can happen.

Copyright and content protections are a major obstruction to an open and accessible online media market. The music industry is further advanced in this battle, seeing litigation between record companies and unauthorised music download sites. The determination of the record industries to control supply chains has resulted in protection strategies such as digital rights management (DRM) that restrict what consumers can do with a music file once they have downloaded it. In some cases these restrictions make the content less flexible than if purchased on physical media, such as a CD, so DRM is unpopular with consumers who want their media to be device-agnostic. To circumvent this disconnect between demand and supply, the strategy of some consumers has been to take advantage of the internet's decentralised infrastructure and use 'peer to peer networking', a way of connecting PCs without using centralised servers, to illegally share music between themselves and bypass commercial supply chain models. The general response of the record companies has been increased regulation that many consumers find excessive. This negotiation will also happen for video content: YouTube is already facing litigation from copyright holders when its users have placed copyright content on its site. Ashley Highfield, director of Future Media and technology at the BBC, said 'In an ideal world the BBC wouldn't have DRM on its programmes. We don’t live in an
ideal world’.\textsuperscript{56} This is a clear example of a technology determined according to specific social and commercial conditions, rather than its immanent potential.

There are other barriers of access to digital media both in terms of technological connectivity, and the consumer being equipped with the media literacy to cope. This is creating divisions between those who ‘get’ digital media and those who don’t, not just between affluent Western countries, and developing nations, but even within so-called ‘First World’ countries. Differences persist between generations and between more affluent and lower income groups. This disconnected population is describes as ‘the Fourth World’\textsuperscript{57} situated within an economic ‘techno-apartheid’.\textsuperscript{58} Digital inclusivity is a major component of digital switchover so access and affordability may become less problematic, but capacity issues may increase as more people use the infrastructure. The capacity to transmit content is increasing all the time through technical innovation but so is demand.\textsuperscript{59} Even with faster domestic broadband connections many users do not have unlimited internet bandwidth. This is one of the reasons why the ‘digital dividend’, (the free radio spectrum available when the analogue signal will be switched off, that can then be reallocated to meet new demands), is considered so important in the UK.


\textsuperscript{59} Iain Bruce, ‘Is the Internet Facing Gridlock?’, \textit{The Sunday Herald}, 11 March 2007 <http://findarticles.com/p/articles/mi_qn4156/is_20070311/ai_n18714016/pg_1> [access 05.08.2007]
In this chapter I have examined the emergence of the internet as a television platform, identified germinating services and considered changing models of supply and demand. I have considered how IPTV has the potential to include consumers as collaborators in a remix culture, enabling appropriations of, and interventions in, dominant television discourses. As a model of production, transmission and reception, IPTV has the potential to meet Enzensberger’s criteria for emancipatory uses of the media, discussed in Chapter 1. For some demographic groups, a more progressive notion of the media is being realised. However, I have also discussed how regulatory, structural and technological factors complicate an uncritical vision of the internet as an open and progressive platform. I have highlighted the continuing influence of established broadcasters and indicated how they are incorporating alternative television models into their strategies. The hegemony of broadcasting is challenged by alternative practices, but IPTV shouldn’t be seen as unconditionally and universally emancipatory.
TELEVISION BEYOND BROADCASTING?

In this study I have attempted to trace the contours of an evolving television landscape. I have located this analysis within a tradition of progressive cultural theory as providing one point of entry to a critical study of television. I have attempted to look beyond the revolutionary rhetoric of television’s new media visionaries to consider continuities, as well as change, and assess how the actual experience of television consumption is being transformed.

A Digital Revolution?

I have attempted to move away from a simple dichotomy of old and new media, and avoid the utopian/dystopian excesses of techno-fetishism, by examining specific examples of how forms and practices are being ‘remediated’. I have considered television’s growing dominance as a key technology within a post-war social transformation characterised by ‘mobile privatisation’, before looking at the move to digital television, and the convergence of television with other media, within the context of the network society. At each moment of television’s definition, new technologies have been ambivalent about their potential use, and I have attempted to show how it has been the interaction of social, political or economic factors that determines whether these shifts consolidate or challenge the status quo, not something that is immanent within technology itself.
Throughout, I have noted that many of the practices that might be considered examples of a progressive use of the media, such as viewer participation in fan communities, increasing personalisation, or practices of time-shifting, were happening before digitisation. Digital technologies have accelerated and expanded these trends, and has proved significant in lowering barriers to participation, by increasing the affordability, usability and availability of services.

These trends are more pronounced where television meets the internet, rather than within the more familiar delivery of television via the domestic set, which remains conditioned by existing habits of consumption and production, even though the technology it uses is being upgraded. I have suggested that networked digital media challenge uni-directional and asymmetrical broadcasting by formulating a de-centred and multi-directional media environment, where content and audiences are increasingly dislocated and fragmented, and yet easily reconnected in new configurations. This flexibility creates new challenges for content licensing and delivery within a remix culture, where user-generated content and value mingle with professional production. In response, existing broadcasters are launching their own internet-based services. I have argued that, in this environment, deciding how content is distributed will be a key site of struggle which will condition the viewing experiences available.
The End of Broadcasting?

Despite the revolutionary hype, the evidence so far suggests that the pace of change is variable and generational. It is too early to proclaim the demise of broadcasting as it remains the pre-dominant experience of television for most. Broadcasting is unlikely to be replaced, but it is being displaced as the only possible way of formulating television: viewing practices are increasingly varied, rather than uniform. Broadcasters, regulators and academics alike are considering not what is after broadcasting, but what will join it.

A younger generation of viewers are taking advantage of greater opportunities for creating their own viewing experience through practices of ‘time-shifting’ and ‘shape-shifting’, through deeper participation in television narratives and institutions, and by having greater access to methods of production and distribution. With various distribution routes available, and multiple sources of ‘generativity’, even the most traditional viewers must be treated as potentially active participants, not just passive recipients; the most literate viewers, are increasingly engaged as collaborators in the process of production. New methodological approaches for understanding television audiences, texts and political economies will need to investigate more fully the implications of this.

It is increasingly clear that the idea of the mass audience is splintering into multiple audience clusters. Despite this, there is continuing support for centralised broadcasters, as evidenced by the popular support for traditional
channels, such as BBC1, and the consolidation of media companies into conglomerates providing a range of trusted services and content. However, traditional broadcasting has to compete with other forms of ‘casting’, encompassing alternative distribution models, discourses and sources of creativity. Without extending and deepening viewer engagement, as opposed to simply replicating existing services to give an illusion of choice and increased quality, broadcasting may eventually wither, but currently retains a pre-eminent position, even in this more competitive media ecosystem.

A Progressive Media?

I have used Marxist theorists such as Walter Benjamin and Hans Magnus Enzensberger to argue for the progressive potential of media technologies. In addition, by considering the complex determination of media forms and uses, and locating the diffusion of technology within social contexts, I have drawn upon neo-Gramscian cultural theory to consider how cultural forms, such as television, are sites of struggle and negotiation. I have used the concept of ‘hegemony’, as formulated within cultural theory, in conjunction with models such as the ‘circuit of culture’, to address some of the sterile dichotomies that have polarised theoretical debates. My aim has been to understand how progressive uses of technology are both facilitated and constrained by the negotiation of structure and agency.

I have demonstrated that there are many examples of services which open up the potential for a radical reconfiguration of viewing experiences. Of
course, not in every case and not for everyone: digital media is not unconditionally progressive and it would be a false optimism and reckless understanding to disregard both the the limitations on agency and the resistance of existing structures. Some evidence suggests that many people are happy to be ‘captivated’ by television, rather than be actively engaged by it, and are unwilling to move beyond the traditional broadcasting paradigm. Additionally, the emancipatory potential of digital media is constrained by digital rights management, copyright, media illiteracy, the limitations of the technical infrastructure, and cost. It will be important that those who do wish to participate more fully have the means to do so, by having access to the necessary skills and technologies, otherwise a damaging divide between digital ‘haves’ and ‘have nots’ will remain.

In some cases, emancipatory practices have either been marginalised, or been successfully incorporated by broadcasters, who have consolidated their own positions whilst appearing to diversify the services and content they offer. For all the opportunities digital television offers to express diversity, established broadcasters have demonstrated their ability to align individuation and generativity with profits, rather than progressive politics. Of course, these are not mutually exclusive positions: progressive politics does not necessarily mean non-profitable, oppositional politics, and the aim of a progressive media should be to incorporate diversity into the mainstream, rather than leave it banished to the margins. I have argued that it is partly a failure of the left to admit that what is popular or profitable can be authentic or progressive, that has also con-
strained emancipatory uses of the media, as much as the triumph of ‘shallow’
commercial manipulations. Like Walter Benjamin, Henry Jenkins challenges
the elitism of the Frankfurt School, by arguing that as technological reproduc-
tion diminishes the ‘aura’ of a work of art, the latter resonates instead through
its ‘social interactions’ and ‘creative reworkings’.¹ In this way culture is re-
leased from sacrosanct ritual and the domain of specialists, and is politicised,
through appropriations and interventions, by ordinary people.

It is important that media activism exists not just to oppose mainstream en-
codings and practices, but also to provide attractive and compelling alterna-
tives. Within the uncharted television landscape a progressive, profitable and
popular television could be realised, and is being in cases such as Current TV
and YouTube. For those who wish, and are able, to participate there are many
opportunities: for debate, for multiple voices to be heard to challenge main-
stream representations and ideologies, and for television to be an active site of
social interaction and identity formation for a range of communities.

In his book Understanding Brecht, Walter Benjamin comments: ‘If, at this
point, you look back at the melting-down of literary forms of which we spoke
earlier, you will see how photography and music join the incandescent liquid
mass from which the new forms will be cast; and you will ask yourselves what
other elements may likewise enter into it?’² At this point in time, as traditions

and audiences shatter, and forms and platforms converge, television is joining the incandescent liquid mass. Future studies will need to continue to investigate specific texts, practices, political economies and viewing experiences to investigate how television broadcasting is being re-cast as a result.

17977 words
September, 2007
BIBLIOGRAPHY

<http://media.corporate-ir.net/media_files/irol/10/104016/factbook/Factbook06 .pdf> [accessed 25.05.2007]

<http://www.wired.com/wired/archive/12.10/tail_pr.html> [accessed 08.07.2007]

Ang, Ien, Watching Dallas, (London: Methuen, 1985)


Bell, Matthew, ‘User Generated Profit’, Television, 44:3 (March 2007),
<http://www.rts.org.uk/magazine_det.asp?id=6423&sec_id=879> [accessed 05.08.2007]


Benjamin, Walter, Illuminations, trans. by Harry Zorn (London: Pimlico, 1999), pp. 211-244


Bruce, Iain, ‘Is the Internet Facing Gridlock?’, The Sunday Herald, 11 March 2007
<http://findarticles.com/p/articles/mi_qn4156/is_20070311/ai_n18714016/pg_1> [access 05.08.2007]


Ford, Sam, ‘Finnish Television Event Offers Users Chance to Choose Ending During Show by Text Message’, *Convergence Culture Consortium Weblog*, 20 December 2006  
<http://www.convergenceculture.org/weblog/2006/12/finnish_television_event_offer.php> [accessed 31.05.2007]


Gomes, Lee, ‘Will All of Us Get Our 15 Minutes on a YouTube Video?’, *Wall Street Journal Online*  
<http://online.wsj.com/public/article/SB115689298168048904-5wWyrSwyn6RfVfz9NwlK774VUWc_20070829.html> [accessed 01.06.2007]


Hilmes, Michelle, ‘Cable, Satellite and the Challenge of Digital Media (Digital Distribution, Intellectual Property and the End of TV as We Know It?)’, in *The Television History Book*, ed. by Michelle Hilmes, (London: British Film Institute, 2003), pp. 13-18


Kelly, Kevin, ‘We Are the Web’, *Wired*, 13.08, August 2005 <http://www.wired.com/wired/archive/13.08/tech_pr.html> [accessed 27.05.2007]


McMurria, John, ‘À la carte Culture’, FlowTV, 14 April 2006
<http://flowtv.org/?p=219> [accessed 28.05.2007]


Negroponte, Nicholas, Being Digital, (London: Hodder and Stoughton, 1995)


Procter, James, Stuart Hall, (London: Routledge, 2004)
Raymond, Eric, *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*, revised edition (Farnham: O’Reilly, 2001)


Sommerville, Emma, *Pressing the Right Button*, (London: BBC, [n.d])
<http://www.bbc.co.uk/commissioning/marketresearch/interactive_presentation.pdf> [accessed 31.05.2007]


Williams, Raymond, ‘Base and Superstructure in Marxist Cultural Theory’, *New Left Review*, 82 (1973), 3-16


**Web Pages**

Amie St <http://amiestreet.com/welcome> [accessed 28.05.2007]


‘Multichannel Monthly viewing summary April 2007’, *Broadcasters’ Audience Research Board (BARB)*
<http://www.barb.co.uk/viewingsummary/monthreports.cfm?report=monthgmulti&requesttimeout=500&flag=viewingsummary> [accessed 31.05.2007]

‘BARB 25 Years’, *Broadcasters’ Audience Research Board (BARB)*
<http://www.barb.co.uk/25years/index.php> [accessed 31.05.2007]

‘Annual % Shares of Viewing (Individuals) 1981-2006’, *Broadcasters’ Audience Research Board (BARB)*
<http://www.barb.co.uk/tvfacts.cfm?fullstory=true&includepage=share&flag=tvfacts> [accessed 31.05.2007]

‘Average Weekly viewing Trends: Network Individuals’, *Broadcasters’ Audience Research Board (BARB)*
<http://www.barb.co.uk/viewingsummary/trendreports.cfm?report=hours&requesttimeout=500&flag=viewingsummary> [accessed 31.05.2007]

‘BBC iPlayer’, *BBC* <http://www.bbc.co.uk/iplayerbeta/> [accessed 31.05.2007]

‘The History of the BBC’, *BBC*
<http://www.bbc.co.uk/heritage/story/history_text.shtml> [accessed 27.05.2007]

‘Points of View: Viewers on Camera’, *BBC*,

‘Video Nation History’, *BBC*
<http://www.bbc.co.uk/videonation/history/index.shtml> [accessed 25.05.2007]
‘Your Shout!’, BBC Sport
<http://news.bbc.co.uk/sport1/hi/football/football_focus/4229268.stm> [accessed 25.05.2007]

‘Telling Lives your Digital Stories’, BBC <http://www.bbc.co.uk/tellinglives/> [accessed 25.05.2007]

‘What is BitTorrent?’, BitTorrent <http://www.bittorrent.org/introduction.html> [accessed 01.06.2007]

BT Movio <http://www.movio.bt.com/> [accessed 1 June 2007]


‘VC2 Producer Training’, Current TV <http://uk.current.com/make/training> [accessed 18.05.2007]

‘V-CAM=Viewer Created Ad Message’, Current TV
<http://uk.current.com/make/vc2/vcam> [accessed 18.05.2007]

‘Watch & Vote’, Current TV <http://uk.current.com/watch/home.htm> [accessed 18.05.2007]

‘About the Democracy Platform’, Democracy TV,
<http://www.getdemocracy.com/about/> [accessed 01.06.2007]

Five Download <http://download.five.tv/> [accessed 31.05.2007]

‘About Us’, Freeview <http://www.freeview.co.uk/about> [accessed 28.05.2007]

‘The Freeview Family Tree’, Freeview
<http://www.freeview.co.uk/channels/?__SITE=public&p[0]=channels> [accessed 27.05.2007]

Freeview Playback <http://www.freeviewplayback.co.uk/> [accessed 31.05.2007]


Joost <http://www.joost.com/> [accessed 01.06.2007]
Justin TV <http://www.justin.tv> [accessed 01.06.2007]

Last.fm <http://www.last.fm> [accessed 27.05.2007]

Lost Official Site, <http://abc.go.com/primetime/lost/index> [accessed 05.08.2007]

Lost Wiki, <http://lostwiki.abc.com/?t=anon> [accessed 05.08.2007]


‘Original Mass Observation Project’, Mass Observation: Recording Everyday Life in Britain
<http://www.massobs.org.uk/original_massobservation_project.htm> [accessed 08.07.2007]

Oceanic Airlines, <http://oceanic-air.com/> [accessed 05.08.2007]

‘Sky Anytime on Mobile’, Sky Anytime,
<http://anytime.sky.com/about/mobile.aspx> [accessed 27.05.2007]

‘Profile’, BSkyB,
<http://phx.corporate-ir.net/phoenix.zhtml?c=104016&p=irol-mediaprofile> [accessed 31/05.2007]

‘Remote Record’, BSkyB,
<http://www.sky.com/portal/site/skycom/remoterecord> [accessed 27.05.2007]

‘Sky+’, BSkyB
<http://www.sky.com/portal/site/skycom/products/equipment/skyplus> [accessed 27.05.2007]

‘Sky TV Packages’, BSkyB <http://packages.sky.com/see/> [accessed 27.05.2007]

Sling Media <http://uk.slingmedia.com/page/home> [accessed 31.05.2007]

Stickam <http://www.stickam.com/> [accessed 01.06.2007]

USTreamTV <http://ustream.tv/> [accessed 01.06.2007]

‘Virgin TV’, Virgin Media
<http://allyours.virginmedia.com/websales/service.do?id=1> [accessed 27.05.2007]

‘About YouTube’, YouTube <http://www.youtube.com/t/about> [accessed 19.05.2007]


‘Five Decades of Channel Surfing: History of the TV Remote Control’, Zenith Corporate History <http://www.zenith.com/sub_about/about_remote.html> [accessed 27.05.2007]

**Video**

Current TV, ‘What is Current TV?’, Current TV, Online Video <http://uk.current.com/about> [accessed 15.05.2007]

‘Labour Vision’, YouTube, Online Channel <http://www.youtube.com/labourvision> [accessed 01.06.2007]

‘You Choose 08’, YouTube, Online Channel <http://www.youtube.com/members?s=po&t=w&g -1> [accessed 01.06.2007]

**News Releases**

‘From one channel to multi-media’, BBC News, 22 March 2001 <http://news.bbc.co.uk/1/hi/entertainment/tv_and_radio/1179212.stm> [accessed 27.05.2007]


‘Virgin Mobile to be bought by NTL’, BBC News, 4 April 2006
<http://news.bbc.co.uk/1/hi/business/4874694.stm> [accessed 27.05.2007]

<http://news.bbc.co.uk/1/hi/magazine/6449213.stm> [accessed 31.05.2007]

<http://news.bbc.co.uk/1/hi/business/6613931.stm> [accessed 01.06.2007]

‘BBC web downloads set to launch’, BBC, 27 June 2007,
<http://news.bbc.co.uk/1/hi/technology/6245062.stm> [accessed 08.07.2007]

<http://news.bbc.co.uk/newswatch/ukfs/hi/newsid_4640000/newsid_4647000/4647096.stm> [accessed 31.05.2007]

Douglas, Torin, ‘Wake-up Call Over TV Phone Scams’, BBC News, 8 March 2007
<http://news.bbc.co.uk/1/hi/uk/6432803.stm> [accessed 31.05.2007]

<http://news.bbc.co.uk/1/hi/entertainment/6898379.stm> [accessed 04.08.2007]


<http://media.guardian.co.uk/site/story/0,,2129301,00.html> [accessed 18.07.2007]


Press Releases

Apple Launches the iTunes Music Store, (California: Apple, 28 April 2003)

iTunes Celebrates Its First Anniversary; Over 70 Million Songs Purchased, (California: Apple, 28 April 2004)

Time-Shifted Viewing Accounts for 13.8% In Sky+ Homes, (London: BARB, 12 May 2006),
<http://www.barb.co.uk/news.cfm?fullstory=true&newsid=138&flag=news> [accessed 31.05.2007]

iMP Trial Shows Television Over the Net Could Revolutionise Broadcasting, Says BBC’s Head of New Media, (London: BBC, 5 April 2004)
<http://www.bbc.co.uk/pressoffice/pressreleases/stories/2006/04_april/05/imp.shtml> [accessed 27.05.2007]


Current TV Press Pack, ([n.p.]: Current TV, [n.d])
<http://uk.current.com/pdf/Current_Ekit.pdf> [accessed 18.05.2007]

<http://www.digitaluk.co.uk/en/news-media/resources/02/file/PRESS%20PACK.pdf> [accessed 25.05.2007]


Joost™ Launches Commercially, ([n.p.]: Joost, 1 May 2007)

BBC and YouTube Partner to Bring Short-form BBC Content to Online Audiences, ([n.p.]: YouTube, 2 March 2007)
<http://www.youtube.com/press_room_entry?entry=OVMEPAJuK7Y> [accessed 01.06.2007]
Legislation

<http://www.opsi.gov.uk/acts/acts1990/Ukpga_19900042_en_1.htm> accessed [27.05.2007]


Reports


<http://www.deloitte.com/dtt/cda/doc/content/dtt_tmt_TelevisionnetworksGLOBAL_042005.pdf> [accessed 27.05.2007]

<http://www.deloitte.com/dtt/cda/doc/content/dtt_MediaPredictions011107.pdf> [accessed 27.05.2007]

<http://www.digitaluk.co.uk/en/tracker/resources/02/file/Digital%20UK%20Ofcom%20Q4%202006%20Report%20FINAL.pdf> [accessed 31.05.2007]


<http://www.ofcom.org.uk/research/cm/cm05/> [accessed 28.04.2007]


Speeches