

University of Warwick institutional repository: <http://go.warwick.ac.uk/wrap>

A Thesis Submitted for the Degree of PhD at the University of Warwick

<http://go.warwick.ac.uk/wrap/2424>

This thesis is made available online and is protected by original copyright.

Please scroll down to view the document itself.

Please refer to the repository record for this item for information to help you to cite it. Our policy information is available from the repository home page.

***Your Window-on-the-World: Interactive
Television, the BBC and the Second Shift
Aesthetics of Public Service Broadcasting***

by

James Bennett

A thesis submitted in partial fulfilment of the requirements for the
degree of Doctor of Philosophy of Television Studies

University of Warwick, Department of Film and Television Studies

June 2007

Acknowledgements & Declaration	4
Summary	5
List of Abbreviations	7
List of Illustrations	8
Introduction	9
Section 1: From window-on-the-world to new media: The emergence of digital television	25
Chapter 1: From scarcity to plenty: Digital television's pre-history	27
Scarcity: Television as window-on-the-world	28
Availability: Active audiences and textual conundrums	37
Flow	40
Segment	43
Viewing strip	45
Supertext	46
The polysemic text	48
Plenty: Aesthetics in a multichannel landscape	51
1989 – 1998: The evolution of multichannel television	56
Conclusion	61
Appendix of images for Chapter 1	64
Chapter 2: Plenty to excess: Television as new media	65
What is digital television?	70
Digitality	70
Convergence	73
HDTV	76
Interactive television: Television as new media?	80
New media theory: Remediating television theory	93
(Inter)Active audiences: Communities and the public sphere	102
Aesthetics and textuality	108
Conclusion	115
Appendix of images for Chapter 2	117
Chapter 3: Public service broadcasting, the BBC and the period of excess	120
The formation of digital television	123
Reformulating public service broadcasting, principles for a digital age	133
Platform choices: Digiboxes and the landscape of taste	146
Conclusion	159
Appendix of Images for Chapter 3	162
Section 2: From windows to portals: Interactive television and the BBC	163
Chapter 4: ' <i>Your</i> window-on-the-world' – Rationalising viewer mobility and the emergence of interactive television	165
'Touch my button babe'! Spectacle, masculinity and the advent of UK interactive television	173
Interactive Television as window-on-the-world	181
Gendered mobility: Just popping out to see the neighbours	189
Conclusion	196
Appendix of images for Chapter 4	201
Chapter 5: Viewer mobility, spectacle and the BBC as public institution – Organising the navigable space of interactive television	206
Mobility and natural history: From Museum-goer to screen-viewer	208
Balancing spectacle and education: Mobility and the aims of natural history display	215

Spectacle and public institution: From the museum to the BBC	222
Conclusion	238
Appendix of images for Chapter 5	241
Chapter 6: Fragment – The public service value of choice in interactive applications.....	248
The public service landscape: Fragmenting footholds.....	253
Textual forms of interactive television: Fragment.....	260
Interactive news: universalism, civic value and education ... choice?.....	267
Interactive sports applications: Fragmenting the nation	278
Conclusion	282
Appendix of images for Chapter 6	285
Chapter 7: Interfacing the UK – Building Digital Britain.....	289
Remediating the nation: (Inter)active audiences, the public sphere and the digital divide	297
Bringing the past to life: (Digital) immigrants and the (digital) nation	305
Conclusion: Extending the national	322
Appendix of images for Chapter 7	331
Conclusion: Interactive television, the BBC and the period of excess	336
Bibliography	346
Filmography.....	371
Tele-ography.....	371

Acknowledgements & Declaration

I am grateful to the AHRC for having provided me with financial support over the final three years of my study. I am incredibly grateful for the financial support, in terms of teaching opportunities and flexibility. the department of Film and Television Studies at the University of Warwick has offered across the course of my study. I must also thank the Department of Applied Social Sciences at London Metropolitan University for their support over the final year of the thesis.

Warwick's Film and Television Studies department has provided an immensely supportive and intellectually stimulating environment to work in throughout my doctoral and masters study. Whilst it is the sense of community and sharing that the department fosters that is of uppermost value, I would like to thank some members in particular. The department secretaries Elaine Lenton and Tracey Bale have been central to maintaining a welcoming and enjoyable department. I must thank Ed Gallafent, Richard Dyer, Victor Perkins, Jose Arroyo and Ginette Vincendeau for their input, thoughts and contributions to my 'side-projects' throughout the period of study. I would also like to especially thank Charlotte Brunsdon for continually reminding me of what my 'main project' was and helping me in invaluable ways in shaping my thoughts on it, including supervising me at the start of the PhD. As part of the department I've also been fortunate enough to enjoy being a part of the Midlands Television Research Group and I'd like to thank all of their contributions to my development as a television scholar, particularly Helen Wheatley whose thoughts on my project and sharing of ideas has always been incredibly generous.

The postgraduate community at Warwick has been no less central in my experience of the PhD and I'd like to single-out Dr Iris Kleinecke-Bates and Amy Holdsworth for their thoughts, insights and friendships. However the warmest thanks here must go to my long-suffering friends Dr Tom Brown and Dr James Walters (who both beat me to it), without whom the PhD experience would have been inconceivable.

I owe my parents immeasurably for providing me with the intellectual curiosity necessary to start on a PhD and the support and love to finish it. I also owe my brother and sister for lending me their time to read through a final version of the thesis and their support across great geographical divides. To Mike and Andi I also owe the lovingly lent IT Suite, support and space to work in during crucial moments of the writing process.

I have been incredibly fortunate to have a supervisor as supportive and encouraging as Rachel Moseley. It is only through her rigour, insightful comments and flexibility with my continually changing enrolment status that the thesis has been completed. I am immensely grateful for her supervision and friendship.

Above all else I owe my fiancée, Niki. It is impossible to have imagined a more inspirational, supportive, patient and understanding partner with whom to have enjoyed a house full of thesis fun.

Declaration

I declare that this work is all my own and has not been submitted for a degree at any other institution.

Summary

The impetus for this project was to consider how the digitalisation of television stood as an important moment to re-evaluate key concepts and debates within television studies. To this end, my focus is on public service broadcasting and television studies' textual tradition. I examine how linear models of the television text are challenged, usurped and at times reinforced by interactive television's emergent non-linear, personalisable forms. In so doing, I am concerned to analyse interactive television's textual structures in relation to the BBC's position as a public service broadcaster in the digital television age. Across these two concerns I aim to historicise the moment of digitalisation, drawing on longer positionings of television's technological and cultural form as a "window-on-the-world".

An introduction is followed by section 1 of the thesis that includes a review of key literature in the field, focusing particularly on work on the 'text' of television studies. The chapters in section 1 mix this review with an historical argument that understand the current digital television era as one of "excess", placing television at the boundaries of new and old media concerns that can be usefully understood through the presence of a dialectic between television's position as window-on-the-world and its emergent position as "portal". Section 1 demonstrates how this dialectic is called up by the prominence of discourses of "choice" in new media practices and textualities and, more importantly, the debates about public service broadcasting's role in the digital age. As I go on to show in section 2, this dialectic evidences a tension between the 'imaginative journeys' television's window offers and the way in which these are then 'rationalised'.

The second half of the thesis maps out emergent textual forms of interactive television by analysing the way choice and mobility are structured, providing a series of case studies in non-fiction television genres. Chapter 4 demonstrates the persistence of key discourses subsumed within the window-on-the-world metaphor in the formation and "everyday-ing" of interactive television, elucidating key institutional and gendered tensions in the way these discourses are mobilised in the digital age. In turn, Chapter 5 connects the kinds of mobility promised by interactive television's window to longer historical practices of public institutions regulating spectator movement. Chapter 6 examines how television's window has been explicitly remediated by interactive television, placing it within the "database" ontologies of computing. Finally Chapter 7 demonstrates the way in which television's window increasingly comes to function as a portal through which to access digital media spaces, such as the Internet.

Across the chapters I am concerned to connect the textual and discursive form of each case study to the academic debates and public service concerns of the various applications' generic identity. Although I am interested in the challenges television's digitalisation poses to both public service broadcasting and traditional television studies approaches to the text, a more important motivation has been to re-affirm the role of both in the digital television landscape. Thus through close textual analysis that connects aesthetics with production and regulation, the thesis aims to demonstrate the relevance of television studies and the BBC, as a public service broadcaster, as an "old media" becomes a "new" one.

List of Abbreviations

<i>Barwise Report</i>	<i>Independent Review of the BBC's Digital Television Services</i> (Chair Patrick Barwise).
BBC	British Broadcasting Company, 1922-26; British Broadcasting Corporation, 1927-present
BSB	British Satellite Broadcasting
BSkyB	British Sky Broadcasting
CGI	Computer Generated Imagery
CBBC	BBC's Children's television
CNN	Cable News Network
DCMS	Department of Culture, Media and Sport
DVR	Digital Video Recorder
EPG	Electronic Programme Guide
<i>Green Paper</i>	<i>Green Paper – Review of the BBC's Royal Charter: A Strong BBC, Independent of Government</i> . London: HMSO.
HDTV	High Definition Television
<i>Hutton Report</i>	<i>Report of the Inquiry into the Circumstances Surrounding the Death of Dr David Kelly C.M.G.</i> (Chair Lord Hutton), London: HMSO.
ITC	Independent Television Commission
<i>Lambert Report</i>	<i>Independent Review of BBC News 24</i> . (Chair Richard Lambert). London: HMSO.
MGM	Metro-Goldwyn-Mayer
MTV	Music television
NTL	National Transcommunications Limited
Ofcom	Office of Communications (successor to the ITC)
<i>Peacock Report</i>	<i>Broadcasting in the 90s: Competition, Choice and Quality: Report of the Committee on Financing the BBC</i> . (Chair Alan Peacock), London: HMSO.
<i>Pilkington Report</i>	<i>Report of the Committee on Broadcasting</i> . London: HMSO.
UHF	Ultra High Frequency
VCR	Video Cassette Recorder
<i>White Paper</i>	<i>White Paper – A Public Service For All: The BBC in the Digital Age</i> . London: HMSO

List of Illustrations

1.1	Advert for ITV digital terrestrial platform
2.1-2.4	Examples of the BBC's typology of interactive applications
2.5-2.8	Videographic 'clutter' in interactive applications
3.1	Advert for Freeview digital terrestrial platform
4.1	Advert for OKTV interactive platform
4.2	<i>SkySportsActive</i>
4.3	<i>SkyActive</i>
4.4	Photo shoot from <i>Arena</i> magazine for interactive television
4.5	<i>SkyNewsActive</i>
4.6	<i>SkyActive</i> rebrand
4.7	<i>SkyActive</i> video menu
4.8	BBC Freeview promotion
5.1	<i>Walking with Beasts</i> ' title sequence
5.2	Floor plans for the American Museum of Natural History
5.3-5.5	<i>Walking with Beasts</i>
5.6-5.7	<i>Walking with Cavemen</i>
5.8-5.9	<i>The Life of Mammals</i>
6.1	Different uses of the same interactive application's structure: <i>Wimbledon</i> , BBC News multiscreen and <i>SkyNewsActive</i>
6.2	Text-driven, first iteration of the BBC's news application
6.3-6.4	BBC Athens Olympics application
7.1-7.2	<i>Dunkirk</i> 's 'Eyewitness Notes' application
7.3-7.5	<i>Dunkirk</i> 's 'Eyewitness Stories' application
7.6	<i>D-Day</i> 's main interface
7.7	Promo for BBC's <i>Peoples' War</i> website

Introduction

This thesis examines the development of interactive television in the UK, focusing on its use in non-fiction programming to examine a number of interrelated key concerns in television studies¹. First, the thesis is concerned to interrogate the place of the BBC as a public service broadcaster in the digital age, using interactive television as a locus to discuss its changing industrial strategies, policy remits and purpose. In turn, my second interest is to “pin down” the interactive television text for the purpose of such an analysis. Thus I am interested in the challenges and opportunities interactive television’s malleable, personalisable forms pose to both traditional television studies’ approaches to the text and the BBC as a public service broadcaster. These concerns are therefore intimately related to the thesis’ methodology, which combines textual analysis with an examination of regulatory discourses and a limited study of the production context within which these interactive television forms have emerged. Finally, I aim to historicise the development of interactive television. That is, whilst its advent may indeed pose challenges to notions of the television text and public service broadcasting, interactive TV’s cultural form is not simply technologically determined by the moment of digitalisation. Rather we are best to understand it as part of longer formations of television itself. Thus, across the course of the thesis I trace the development of interactive television against longer histories of television as a “window-on-the-world”. As I go on to show across the course of the thesis, this oft-cited metaphor subsumes within it competing discourses about television: from live

¹ It is beyond the scope of this thesis to engage with the use of interactive television in narrative fiction, which has its own concerns in terms of genre, public service debates and histories. A growing body of work takes narrative fictions as its central concern, which this thesis will intersect with at various moments (c.f. Creeber, et al 2007; Evans, 2007; Gray, 2006; Strange, 2007).

immediacy to hybridity, from discourses of the national and public to associations with the private and intimate. Most importantly this metaphor and its association with the television screen confers, as diverse histories such as Freidberg (2006), Spigel (1992, 2001a) and Jacobs (2001) have shown, an imaginative mobility on the audience. How interactive television marshals this mobility and the associated window-on-the-world discourses remains a central concern of the thesis throughout the different case studies.

The inter-connection of these concerns is best related through a brief detailing of the project's genesis. This came from watching the BBC's first interactive "application"² *Walking with Beasts* (BBC/Discovery, 2001). *Walking with Beasts* promised to 'deliver some of the benefits [interactive television's] evangelists have long been promising' (BBC News, 15/11/01). Rhetoric such as this positioned the application as part of a wider discursive movement to announce digital television, specifically through interactive TV, as part of a spectacular renewal of television's technological and cultural form. However the application's structure, which provided multiple streams of audio-visual content to select from, navigate and explore, posed a number of challenges to both the BBC's status as a public service broadcaster and the notion of the text as an analytical category.

Walking with Beasts' application allowed for the creation of a personalised experience of the text, created by choosing when to switch between streams of content labelled 'mainstream', 'facts', 'evidence' and 'making of', as well as an additional audio-commentary. Yet this experience was still one of, ostensibly, watching '*Walking with Beasts*'. The interactive application therefore offered manifold experiences, differing not only from

² Throughout the thesis I use the term application to denote the interactive text and 'programme' to refer to the linear form of broadcast television.

the broadcast programme (and, as such, raising concerns of a “digital divide”), but also according to the individual’s personal choices. This suggested that as digital, interactive television developed it would no longer be possible to talk of the programme as the unit constituting the ‘common sense view’ of the television text (Brunsdon, 1998: 105). In turn, *Walking with Beasts* was suggestive of the way television’s digitalisation was acting as a double-edged sword for pre-existing regulatory, business, production and public service practices in television. On the one hand, this dispersed text was indicative of the increasing fragmentation of the audience itself across the proliferation of channels and viewing options in the digital environment. Digitalisation’s increase in bandwidth had not only diced the audience into a multichannel landscape to the chagrin of advertiser- and licence-fee-funded broadcasters alike, but also fundamentally undermined the “scarcity” rationale for public service broadcasting. On the other, *Walking with Beasts* was symptomatic of the possibilities digitalisation offered broadcasters for engaging the audience in new and distinctive ways (making them ‘viewers’ as I will come to below), including delivering content in ever-more personalised ways. Finally, for all the discursive positioning of *Walking with Beasts* as a spectacle of new technology, the application’s opening voiceover addressed the viewer in the familiar terms of television’s window-on-the-world, inviting them “to explore” a “fascinating world” via an imaginative journey into the spaces television’s window offers (*Walking with Beasts*, 2001).

That interactive television provides a useful locus for examining the problematics for both television studies and the BBC’s public service role in the digital age is borne out by two important points. Firstly, the UK’s interactive television market is consistently positioned as a world-leader (c.f. DCMS, 2006; BBC, 2004), and it is arguably through the peculiar

relationship of commercial and public service rivals that interactive television has become one of the defining features of the digital landscape. As the take-up of digital television continues to grow (currently over 70% of UK households own at least one digital television set) and the analogue signal is set to be switched off in 2012 (Ofcom, 2006a), these new properties of television as a digital media become increasingly urgent areas of investigation. Importantly, the growth of the UK's interactive television market has been intimately related to the BBC. Whilst interactive television commenced with Sky's³ coverage of a Premier League football game in 1999, *Walking with Beasts* was the first programme to offer its interactive application across all three platforms on which digital television is carried in the UK: satellite (BSkyB), cable (predominantly Virgin/NTL) and digital terrestrial (Freeview). At the time of commencing research on the thesis, this was the only application that was widely available. However as Mark Thompson (BBC Director General) noted in 2004, over the intervening three years interactive television has developed to the point where it has become *de rigueur* in UK television programming (quoted in Brown, 2004). This is particularly true of the BBC where, as Jana Bennett (BBC Director of Television) explained, 'interactivity is now fully embedded into our approach to making and commissioning television' (Speech given to MIPTV and Milia conference: 30/03/04). This has led the BBC to invest heavily in the emergent interactive television industry, spending £17.1million on interactive services in launching over 150 applications in 2004-05 and £18million in 2006 (BBC, 2006a).

This has not been the case with all of the UK's major television broadcasters: Channel 4 pulled the plug on its red-button interactive

³ I use the term "Sky" to denote my reference to the Corporation's position as a broadcaster and the term "BSkyB" to reference its status as a Corporation and platform operator.

services in 2006⁴, whilst ITV have exhibited an extremely cautious approach to the platform, using it only where direct revenue can be generated through voting applications. In contrast, BSkyB have continued to invest in their interactive offerings. Although their corporate data doesn't list the investment in interactive television separately (because of its association with costs in production and content acquisition), BSkyB claim to have generated £91million in revenue from its *SkyActive* portal in 2006, excluding a further £37million from its *SkyBet* service (BSkyB, 2006). Across the industry the use of interactive television services has increased year-on-year since 2001, with Sky claiming that over one million people visit their "interactive entertainment portals" (*SkyActive*, *SkyGamestar* and *SkyVegas*) each week (*New Media Age*, 31/08/06: 1), and the BBC reporting an increase from 9.6million 'hits' in 2005 to 13.9million in 2006 for all its interactive applications (BBC 2005a, 2006a). This is suggestive of not only the increasingly commonplace status of interactive television, but also the importance of the relationship between the BBC and BSkyB in shaping this landscape. As Greg Dyke (former Director General of the BBC) famously described it, the two '800pound gorillas' of BSkyB and the BBC increasingly dominate and define the UK's digital television landscape. In turn this dominance, particularly in the field of interactive television (where interviews with practitioners revealed a heavy culture of 'borrow', 'steal' and 'compete' between the two corporations), explains the thesis' focus on applications from Sky and the BBC⁵.

My second interest in analysing the BBC through a study of interactive television lies in the way this proliferation of "red button" applications, a term that relates to the way in which they are accessed via

⁴ This despite pledging a commitment to greater integration of interactive production practices in its 2001 programming policy statement.

⁵ Interviews conducted with Patrick Dalzell, BBC Senior Executive Producer of Interactive Sport, (22/03/04) and Tom Williams, BBC Creative Director of Interactive Television (1/09/04).

pressing the red button on the television remote control, places television at the intersection of old and new media forms. Whilst the ‘interactivity’ on offer is extremely limited, red button applications do allow for the navigation and personalisation of content to different degrees. As the BBC’s explanatory literature suggests, iTV applications allow ‘you [sic] to do other things with your television – join in with programmes, see extra news stories and sports coverage ... even play games, go shopping, place bets and use email’ (www.bbc.co.uk/digital/tv/tv_interactive.shtml, site visited 2/08/06). The (inter)activity on offer here requires us to re-conceptualise not only what the television text is, but also its audience. That is, in discussing interactive television there is a need to distinguish between the position of the traditional television audience and those who use interactive applications. The choice between the term user and viewer here is problematic: the former for its connotations of activity and engagement and the latter for the passivity it connotes. By “pressing the red button” the television audience does not automatically become removed from their traditional “viewer” position, which is at different times already both active and passive. Yet interactive television does suggest a different, and possibly new, subject position. To this end, I prefer Dan Harries’ solution to this in-between-ness in coining the term “viewser”:

the experience of media in a manner that effectively integrates the activities of both viewing and using ... entertainment value is not only measured by what they see and hear, but also by what they do and the ways in which their activities have a direct impact ...
(Harries, 2002: 172).

As a result, I use the term viewser to refer to the audience where it is “using” an interactive television application and the term “audience” to denote viewers of the traditional, linear television text.

The distinction between the terms user, viewer, audience and viewer is in turn related to digital television's technological and cultural form. As Charlie Gere's study of digital culture suggests, to speak of a technology as digital is 'to call up, metonymically, [a] whole panoply' of connotations. Chief amongst these is the idea of interactivity and its association with computing (2002: 11). How we understand interactive television therefore, is intimately bound up with the ontological distinction between liveness and "real-time" engendered in the two technologies of television and the computer, between broadcasting and algorithm. As Philip Auslander has argued, television has become *the* dominant referent of liveness, replacing even live performance itself (1999: 23). Thus, whilst television may no longer be live in an ontological sense, ideologically it functions as the live medium *par excellence*⁶. This liveness contrasts with the real-time ontology of digital technology's data structures and algorithmic processes, which allow for the 'calling up' of information 'on-demand' (Manovich, 2001: 223).

In turn real-time data structures of computing have been pivotal in the emergence of the "portal" as a programming strategy for aggregating content and users in new media forms. As David Marshall and Rob Burnett explain, portals 'customize [sic] the user's relationship to information with an organized homepage structure ... [they] are organized access points that allow the user to move outward' through a selection of choices on offer through hyperlinks or hypermedia (2003: 91). Portals, as Karen Buzzard details, have become the dominant business model of the Internet acting as 'a one-stop gateway to the web', which attempt to keep the user on the site as long as possible (2003: 198). However, as theorists such as Buzzard,

⁶ As Stanley Cavell reminds us, on television there is 'no sensuous distinction between the live and the repeat or replay' (1982: 86).

Boddy (2002) and Caldwell (2002, 2003) have noted, these strategies are simply the remediation of old media, television practice onto the web. My use of the term portal therefore draws on this new media terminology, but as with such work, does not draw a fundamental dichotomy between new and old media. Nevertheless the notion of portal remains important for the way in which it contrasts to the broad vistas associated with television's window-on-the-world, swapping the freedom of exploration and journeying for a rationalised mobility and set of choices that contain the viewer within the individual text's confines. It is my contention then that interactive television does not simply remediate these web and new media portal practices, but does so in a way that is entwined with its position as a window-on-the-world. Of course, the association of the window with television's liveness and the portal with digital technology's real-time remains an important distinction: by calling up the portal and window in different ways, the interactive applications under discussion in the thesis put television's liveness, its ontological and ideological baggage constantly into play. How, as Caldwell puts it, each of the applications masters the metric of time that is the fundamental concern of television programming is of crucial importance to how we understand both the text and public service implications of interactive television (2003).

As a result, across the thesis I argue that a tension, or dialectic, emerges between the positions of television as a window-on-the-world and television as a portal. This distinction is particularly helpful insofar as it returns me to my initial concern in analysing the public service value of interactive television. In its position as portal, "choice" becomes a key criterion for consumer and public service value, operating at both the level of regulation and the individual text. As Bob Franklin's (2001) overview of British television policy demonstrates, from Thatcherism's de-regulation of

the industry in the early 1980s to the current moment, television policy has generally focused on the market as a fundamental organisational principal. In so doing, policy has tended to re-cast television's audience as consumers rather than citizens, placing a primacy on choice in the process – both that supplied by the market and that which the BBC should, and should not, provide. This vision of the digital landscape has been strongly promoted by not only the BBC's commercial rivals, but also by Barry Cox the Chairman of the Digital Television Stakeholders Group and government-appointed “digital tsar” of the UK's switchover programme. Cox proposes that the moment of digitalisation is a chance to recast the television landscape in the image of a high street retail store:

our homes [would] become an electronic retail outlet, the equivalent of a video version of WH Smith. ... we would have the ability to choose – and pay for – what we wanted from that wide range (2004: 28).

This discourse of choice has then been intimately related to the possibilities of interactive TV: to choose from different commentary tracks and extra material, as in *Walking with Beasts*, through to the selection of camera angles in *SkySportsActive's* (BSkyB, 1999 -) football coverage through to choosing who to vote for in *Big Brother* (Endemol/C4, 2000 -) and what products to buy on Sky's interactive entertainment portals. Fundamentally, red button interactive applications have simply offered choice rather than “interaction” with the broadcaster or content-provider. As such, the difference between window and portal indicates the shift in concern from the programmed flow of broadcasting, to the “viewer-flows” of interactive TV. This is not a fundamental dichotomy between old and new, good and bad, choice and determinism, consumerism and public service. Rather, as Friedberg's exhaustive history of the virtual window in Western culture has demonstrated, the window is both ‘an opening, an

aperture for light and ventilation' as well as frame, 'its edges hold a view in place' (2006: 1). Thus the views from television's window, and the journeys on offer through it, have always been framed and rationalised in important ways. Furthermore, the metaphor of the window is constantly recalled and re-circulated by interactive television's discourses and aesthetics, even as it remediates the portals of new media.

This dialectic between window and portal, between television's position as old and new media, is one I argue can be best understood by paying close attention to the texts of interactive television themselves. Whilst there has been a burgeoning of scholarship on the area in the United States (c.f. essays in Spigel and Olsson 2004; Caldwell, 2003; Boddy, 2004b, 2004c; Dawson, 2007), in the UK interactive television has been relatively under-theorised. Studies have been limited to Lury's introductory overview (2004), Harrison and Wessels' study of localised forms of interactive television (2004)⁷, Hanley and Viney's call for regulation of EPGs (2003) and Holmes' excellent, but incidental, study of interactivity in *The Salon* (E4, 2003-2004) and voting in reality TV music programmes (2004a, 2004b). In contrast to the lack of interest in the new forms of programming emergent in the digital age, the BBC itself has been the subject of intense academic and political scrutiny. The most important and comprehensive of these is Georgina Born's anthropological study of the BBC and its relationship with regulation and the government, *Uncertain Visions: Birt, Dyke and the Reinvention of the BBC*. Whilst her insights are illuminating, her close scrutiny of the organisational structure of the BBC has a widely divergent interest from my own and interactive television is, at the most, a peripheral concern.

⁷ Harrison and Wessels' work usefully picks up on the BBC's local interactive services and their use in delivering high levels of community interaction. I return to their work in my review of literature and Chapter 7, for now I merely wish to note my divergent interest in applications that have a national, rather than local, availability.

Born's work, like other discussions of the BBC during this and subsequent periods (c.f. Collins, 2002, 2006; Iosifidis, 2005; Steemers, 1998, 2004), has little interest in the texts and aesthetics of digital television. Such critical work certainly has its place within television studies and might logically be applied to a discussion of the BBC's interactive television provision. However, such an approach might also risk failing to address the texts with any degree of specificity or rigour. In such approaches the text becomes denigrated as a site of meaning because it is either so aesthetically uninteresting as to warrant close scrutiny, whereby television becomes 'an instance or site [rather] than a text' (Brunsdon, 1998: 99), or so amorphous and personalised that we should simply 'throw up our hands and say: "but it's all so ephemeral/pastichey/without reference/intertextual that there's nothing to analyse"' (123). Undoubtedly these regulatory debates and discourses are pertinent to understanding the role of the BBC, but understanding and closely scrutinising the amorphous texts of interactive television is a pivotal task of television studies if we are to understand the place and purpose of public service broadcasting in the digital age.

To this end, I prefer John Caldwell's approach to understanding the 'second shift aesthetics' of digital media (2003). Caldwell's approach provides a framework for analysing not only the structures and boundaries of the looser texts of interactive television but also thinking about how these connect to industrial practices (c.f. Caldwell, 2002, 2006)⁸. Caldwell's work posits that new media forms, rather than obliterating the need for programming strategies, have made 'the need for content programming in the digital era even more compelling' (2003: 135):

⁸ As Caldwell's wider work notes, 'it is impossible to talk usefully about new media in terms that are primarily or solely formal, artistic, phenomenological or psychological. There is a greater degree of interdependence on much broader forms of industrial and institutional practice' (2002: 56).

Second shift practices attempt to bring new forms of rationality to unstable media economies ... Instead of the linear textual compositing model inherent in supertext/flow theory, TV/dot-com synergies now must learn to master textual dispersals and user navigations that can and will inevitably migrate across brand boundaries ... program [sic] flows to tactics of audience/user flows (136).

Caldwell goes on to demonstrate how an approach grounded in both textual analysis and industrial background can address these issues, pinning down a text for analysis and investigating how the text addresses and attempts to order, or “herd”, the viewer’s navigation of the application, programme or site. Whilst Caldwell’s work is interested in the commercial structuring of user-flows, my work concerns the second shift aesthetic practices of the BBC as a public service broadcaster.

I achieve this by taking an historical approach to television and its study. As such, the chapters in Section 1 extend, revise and review the history of television, its study, its aesthetics, regulation and place in everyday life in light of the move to digitalisation. Section 1 engages in a dual task of providing a review of literature and an historical argument that traces a movement from television’s window-on-the-world position to the development of interactive television’s remediation of the window as a portal, offering personalised choice and rationalised mobility. These two concerns are interwoven by an examination of the changing purpose, rationale and remit of the BBC as a public service broadcaster. As such, my interest in both reviewing literature and developing an historical argument is to demonstrate that television increasingly comes to lie at the borders of old and new media theory, history, production and technology. An approach sensitive to the medium must therefore engage with work from both television studies and its related disciplines, as well as from new media studies.

Chapter 1 maps its review of television studies' approaches to the text and understanding of television as a cultural form onto John Ellis' periodisation of television's history as a series of epochs, defined in terms of scarcity, "availability" and "plenty". In turn Chapter 2 looks to the new period of television's history, which I term "excess", to examine digital television as a new media, "post-broadcast"⁹ form. I go on to remediate key theories from new media studies to develop and adopt an approach that is sensitive to the continuities and ruptures that television's digitalisation creates. Finally, Chapter 3 investigates the immediate regulatory and technological environment of the period of excess, detailing how the BBC's public service broadcasting principles, aims and objectives have been reformulated at the start of the digital age. The chapter concludes with a discussion of Freeview's pivotal role in the development of digital television.

The concerns set out across section 1 are picked up by section 2, where the thesis offers a series of case studies on interactive television that analyse the textual form, public service value and re-circulation of historical discourses. Whilst Chapter 4 demonstrates the persistence of the window-on-the-world metaphor in the formation of interactive television, the remaining chapters are concerned with how the experience of interactive television is organised, rationalised and structured by second shift programming strategies. These chapters explicate a dialectic between the understanding of television as a window, opening on to broad vistas and journeys (for those who cannot travel), and the remediation of this through the more personalised journeys of the portal, which respond to viewer choices within the boundaries of the individual text.

⁹ I discuss the use of this term further in Chapter 2.

It is worth making a brief point about the use of the terms portal and window-on-the-world here in relation to television's digitalisation and the use of metaphor in television studies. As theorists such as Jostein Grisprud (1997), Matt Hills (2007), Sue Thornham and Tony Purvis (2005) have noted, the use of metaphor in understanding and placing television as an object of study is a widespread practice. However as they caution, metaphors are rarely wholly accurate and need to be treated with a large degree of suspicion, attesting as much to their aptness as to the fact that television 'has never quite been a stable object of study, and therefore cannot undergo wholesale destabilisation' by digitalisation (Hills, 2007: 43). To this end, I have attempted to place my use of the metaphors of portal and window-on-the-world in relation to industrial practices, aesthetic and historical discourses of television. The portal of digital television's interactive screen does not simply replace the window, rather it repurposes, remediates and constantly recalls and re-circulates television's window-on-the-world positioning.

Section 2 opens with Chapter 4's analysis of archival research from magazines, newspapers and promotional advertising, to argue that not only has the formation of interactive television been discursively shaped, validated and promoted within the window-on-the-world metaphor that accompanied television's initial inception into everyday life, but also that the mobilisation of this metaphor has important implications for issues of gender and public service broadcasting. Chapter 5 focuses on the BBC's first ever interactive application to be available on all digital television platforms, the CGI natural history documentary *Walking with Beasts*. This chapter outlines a textuality of "organised viewings", positioning this new form of television within a longer lineage of public institutions' concern to

organise the spectator's mobility in relation to the didactic aims of natural history display.

Chapter 6 examines the tension between the rhetoric of choice that has accompanied the emergence of television's window as a portal and the public service remit of universalism, civic value and education. In so doing, I propose that such interactive applications promote choice as a public service value that is both problematic for how public service obligations are fulfilled and how television studies conceives and understands the television text. Thus, whilst Chapters 4 and 5 look to longer histories in television's form, Chapter 6 draws on new media scholarship to understand the interactive, non-linear television text as "fragmented", linked to the webportal structures of Internet sites. Finally, Chapter 7 looks at how interactive television has functioned as a portal to drive older audiences, figured as "digital immigrants", into the online world whilst simultaneously retaining an interest in the traditional public service remit of bringing the nation together. The applications for history programmes under discussion here are demonstrative of the "everyday-ing" of interactive television I set out in Chapter 4, evincing a close relationship with the aesthetics and concerns of history programming. As such, they seek to achieve the aims of 'bringing the past alive' (Wilson, 2003) in order to use the past as a platform to stride into the digital future.

Across the case studies I am concerned to interrogate individual applications in relation to the demands of their specific genre and the institutional context of the BBC at the time of their production and airing. Thus, the second shift aesthetic textualities I propose remain specific to both the genre under discussion and the institutional context of the BBC's public service broadcasting obligations. Ultimately, this is a study concerned with the texts of digital television and what they can tell us

about key concerns within television studies. It seeks to examine what the 'texts' of interactive television are, and in turn, how these fulfil the BBC's public service broadcasting remit in the digital landscape. Finally, the thesis asks how both of these concerns fit within longer histories of television's cultural form.

Section 1: From window-on-the-world to new media: The emergence of digital television

Like the frame of the architectural window and the frame of the painting, the frame of the moving-image screen marks a separation – an ontological “cut” – between the material surface of the wall and view contained within its aperture ... Theorisations of televisual space and the television “viewer” require many of the same distinctions between the mobile/immobile, mediated/real ... The frame becomes the threshold – the liminal site – of tensions between the immobility of a spectator/viewer/user and the mobility of images seen through the mediated “windows” of film, television and computer screens (Friedberg, 2006: 5-6).

Friedberg’s assertion that the window has been a key metaphor for understanding the screens of moving image technologies aptly suggests that the ‘frame becomes the threshold – the liminal site – of tensions ...’. How we understand the digitalisation of television’s window-on-the-world in relation to interactive television is a site of such tensions, whereby the broad vistas of television’s window increasingly becomes a portal of rationalised and personalised mobility. The chapters here work with a dual purpose to interweave a review of literature with a historiography of television that traces this movement from window-on-the-world to the development of interactive television’s portals. Thus, across Chapter 1 I examine these window-on-the-world discourses in relation to television studies’ understandings of the television text and traditional definitions of public service broadcasting. Chapters 2 and 3 detail how new media theories can help us understand the interactive television text and the new public service broadcasting landscape where choice, which as we shall see in section 2 of the thesis is supplied by interactive television’s portals, is a primary concern.

Chapter 1: From scarcity to plenty: Digital television's pre-history

Chapter 1 places the current digital switchover programme in the UK within a longer history of television's form. The chapter has two concerns. Firstly, to act as a review of literature of the relevant television studies' scholarship that informs the thesis' approach and understanding of digital television. Secondly, the chapter sets out to historicise the digitalisation of television against longer regulatory and discursive developments. As such, I 'map' distinct concerns of television studies' scholarship onto John Ellis' periodisation of television history into epochs of scarcity, availability and plenty.

The first section commences with an examination of television's early history, drawing out competing discourses inherent within the prevalent positioning of television as a window-on-the-world. Starting with this period of scarcity is pivotal to firstly the "social shaping" of digital television as a new media technology I take across the thesis, whereby window-on-the-world discourses are re-circulated at the moment of digitalisation. However, it is also vital to an understanding of the emergence of public service broadcasting as a regulatory response to the need to 'promote and protect' the broadcasting airwaves as a scarce resource. This is a rationale that has fundamentally been undermined by the development of a vast, excessive multichannel environment through the digitalisation of television. In turn, it is by paying attention to the continuities of discourses and understandings of television across its history that we can appreciate the importance of a continuing role for public service broadcasting and the BBC in the digital landscape, countering any

technologically determined approach that ties their worth to scarcity of bandwidth.

The chapter's remaining sections then continue this dialectic between detailing the historical development of the television landscape and paying close attention to the relevant television studies' concerns that have characterised the epochs of availability and plenty. As such, my discussion of the period of availability concentrates on a number of different accounts of the television text that emerged during the late 1970s and 1980s as the number of television channels steadily increased. The final section then examines the emergence of a concern with aesthetics within television studies during the period of plenty. This section also details the regulatory decisions and policy discourses that characterised the development of a multichannel environment in the UK as they have shaped the place of public service broadcasting in the current digital landscape. Thus in discussing the period of plenty, I demonstrate the importance of discourses of consumerism to the shaping of the digital landscape. I argue that these have been pivotal in the BBC's reconfiguration of some of its public service value in terms of choice, which I then trace across the following chapter and individual case studies in the thesis' second section.

Scarcity: Television as window-on-the-world

The wavebands available in any country must be regarded as a valuable form of public property; and the right to use them for any purpose should be given after full and careful consideration (Sykes Committee, 1923 [quoted in Scannell, 2000: 46]).

Ellis' depiction of television's first period of history focuses on television's inception into everyday life: scarcity, implying as it does both

the limited availability of television to audiences apparent in its early years and the availability of bandwidth spectrum on which the television signal could be carried. This conception is the most fundamental of starting points for my review, as the characterisation of the airwaves as a scarce resource resulted in their regulation 'in the public interest' and the advent of public service broadcasting in the UK. This technological rationale has also therefore been the starting point for pre-eminent attacks on public service broadcasting, arguing that the excess of space on which to transmit television signals created by digital technology negates any need for close regulation. As both the immediate discussion of the period of scarcity below and the argument across the thesis suggests, such understandings are technologically deterministic and obscure the cultural rationale and position of both public service broadcasting and television's place within the home and wider society.

As a starting point for thinking about digital television's cultural and ontological form as part of a longer history, it is apt to turn to the widely circulated metaphor of television as a window-on-the-world. Bolter and Grusin's influential *Remediation* posits successive developments in visual media as intimately related to an illusion of immediacy. They argue that media forms either seek to create immediacy through 'a unified visual space' or rather than such a 'window-on-the-world ... [representation is] "windowed" itself – with windows that open on to other representations or other media' (1999: 34). As such it is a particularly apt metaphor for discussing television's historical form, which has at various times (often simultaneously) both made conscious displays of its own mediation – John Caldwell's notion of televisuality (discussed below) and the forms of interactive television the thesis examines – and suppressed its mediating presence, promoting an ideology and aesthetic of liveness. This window-

on-the-world logic therefore links the current moment of digitalisation to the moment when old technology, analogue television, was new. In particular, as case studies in section 2 of the thesis articulate, interactive television – as with many developments in television’s digital form – increasingly shifts our understanding of television from window to portal: whilst the discourses of window-on-the-world remain prominent, the journeys on offer become more personalised, rationalised and, in important ways, restricted.

As Anne Friedberg has so exhaustively demonstrated, the metaphor of the window and its importance to histories of vision conceals within it competing and complex discourses and aesthetic forms (2006). Thus beyond simple immediacy, this metaphor arguably subsumes within it key discourses and fantasies about television that have remained prevalent across its history. As Jason Jacobs’ excellent history of early British television drama production suggests, three key discourses were constructed around television during the pre-war period in Britain, whereby live immediacy was coupled with discourses of intimacy and hybridity (2000: 28). Jacobs demonstrates how these discourses formed a complex understanding of television whereby the simultaneity of transmission and reception create a relationship of authenticity, reinforced by the privileging of the close-up and direct address as devices of intimacy. These tactics were complimented by television’s value being placed on its relay ability: to act as a hybrid of other media forms, such as opera, newspapers and national events, by allowing the viewer live access to them through television’s window. In turn, television’s window-on-the-world live immediacy promised the viewer a kind of ‘imaginary transportation’ between the home and the spaces television opened out on to (Spigel, 1992: 111). The association of television with mobility has linked

television to other nascent technologies across its history and to ones that preceded it. As Jacobs argues,

Early television itself was also promoted in terms of mobility – from the “transport” of images to the home, to the invitation to journey *from* the living room with the broadcasters to distant events and locations’ (2000: 25).

This discourse of mobility has been a key trope in television’s window-on-the-world function, facilitating television’s negotiation of competing positions of private and public, active and passive viewing. I return to these discourses throughout the thesis’ examination of interactive television, focusing on the relationship between the perceived and virtual mobility offered by television’s window-on-the-world and issues of gender and public service broadcasting.

Whilst discourses of liveness, intimacy, mobility and hybridity have constantly been understood as integral to television’s form, I want to also set out how this window-on-the-world position has also included discourses and desires for the medium to be interactive. William Uricchio suggests that television has long been ‘thought of as a fusion of film and radio which ... might profitably be repositioned within a trajectory of technologies which sought to connect two distant points in real time ... such as the telephone and telegraph’ (2002: 222). This is evidenced by the very origins of television, which positioned television not as a broadcast technology but as a response to the need for, and interest in, communications technologies. Jostein Gripsrud’s brief survey of the application of the term ‘television’ to developing technologies suggests that television may have developed along two lines separate from its current broadcast form: a grass roots experience, where people broadcast to each other; or an extension of the cinema (Gripsrud, 1998: 17-21). The reasons for its development as a broadcast technology, far from being

technologically pre-determined, surround the playing out of a number different interests and discourses, such as interactivity, commercialism and masculinity. As Lynn Spigel (1992, 2001a, 2001b) and William Boddy's (2004a) work attests, developments in television's technological form have often been associated with masculinity, frequently through an association with spectacle, and this is re-circulated in the promotion of red button interactive television in the UK.

Brian Winston demonstrates that the advancement of television as a broadcast technology was concurrent with the suppression of this interactive possibility, chiefly due to a failure to find a military rationale for its development (1998). In addition, the already established economic model of broadcast radio was quickly transposed to television. Discourses of gender are of particular import here, as it was arguably through an address to a female audience that television's technologically passive form developed. Of course, as I go on to discuss, the audience of television – particularly female viewerships – have always been interactive. However as Boddy shows, television's adoption of the economics of broadcast radio in the US effectively worked to keep out the 'amateur male hobbyist' of early radio, popularly imagined as 'boy in the attic tinkering'. These hobbyists had previously 'fished' for signals in the ether, seeking out two-way communication with other amateurs. Boddy's history demonstrates how, whilst certain discourses of interactivity and mobility were recruited, the imagined consumer was squarely targeted as the domestic female audience in charge of the domestic purse strings (2004a).

Whilst the discourses of commerce thus shaped the American radio and television landscapes, it was the concern to protect and promote the airwaves as a scarce resource that led to the development of public service broadcasting as television's pre-eminent form in the UK. However, the

discourses of consumerism remain important here for the way in which they are returned to in the current digital landscape where commercialism has an increasing influence in the UK (discussed in relation to discourses of choice in Chapter 3). As Boddy's account of the development of digital and interactive TV services in the US illustrates, promotion has often attempted to imagine interactivity as transforming television 'from scorned and degraded to good cultural object' by reinventing the 'pacifying, even feminising (in)activity of consuming television with fantasies of (masculine) agency and power' (2004a: 70). As I demonstrate in Chapter 4, whilst we see such discourses re-circulated in a UK context, the everyday-ing of interactive television is intimately related to both discourses of gender and the institutional backdrop of the UK's digital landscape.

The imagining of television as an interactive medium was explicitly linked to the window-on-the-world metaphor by the pioneering 1950s cartoon for children, *Winky Dink & You* (CBS, 1953-57). *Winky Dink & You* is widely credited as the first interactive television programme and has become a touchstone in histories of interactive television because of its widespread success, running for 5 years on a major US network CBS (c.f. Boddy, 2004a, Lury, 2005, Spigel, 1992). For my purposes here, *Winky Dink*'s significance is the way in which its "call to action" asked audiences to use 'Magic crayons [to] make magic pictures on a magic window' (theme song). This reference to television's window was further reinforced by the way the programme allowed children to complete story narratives or animation detail by drawing over the TV screen with the tools purchased in a special *Winky Dink* kit. This kit contained rub-off crayons, an erasing cloth and the 'all important "magic window", a piece of tinted plastic that, when sufficiently rubbed by the child's hands, stuck to the television screen' (Lury, 2005: 125), allowing the child to draw over the screen to

perhaps sketch a bridge over a cliff edge to allow Winky Dink to escape a chasing tiger. This made television's screen a permeable window (an aperture as Freidberg posits), allowing audiences to make imaginative journeys into the diegesis of *Winky Dink*.

However as Jeffrey Sconce demonstrates, the journeys on offer through television's imaginative interactivity were not always so unproblematic. Sconce's history of television as a "haunted media" suggests that whilst discourses of television as a window-on-the-world imagined audiences as able 'to travel the globe in search of new, exciting and exotic vistas', its 'ideology of liveness' similarly asked audiences

to regard the TV as a portal into a dynamic, exciting and perpetual present on the other side of the screen ... In these new discussions of television's uncanny "powers", the medium's distinctive "electronic elsewhere" became instead an "electronic nowhere" (Sconce, 2000: 12-30).

Sconce's positioning of the television as portal into 'electronic nowheres' therefore demonstrates the persistence of a tension between television's position as a window-on-the-world and this metaphor, whereby the latter often connotes a more contiguous and problematic journey.

I want to close my discussion of these prevailing discourses by returning both to Ellis' work and the prominence of liveness in the discourses of television's window-on-the-world metaphor. As I have suggested above, television's liveness and its association with mobility positioned it as negotiating the binaries of public and private spaces. In this closing discussion I want to, in turn, link these discourses with the way in which television has been figured in terms of the national and conceptions of public service broadcasting. As Karen Lury has effectively critiqued, 'a crude reading of Ellis' *Visible Fictions* might suggest that in terms of aesthetics, television is like cinema, only smaller, less complex and less

interesting' (Lury, 1995: 115). Whilst Lury is discussing Ellis' earlier work, his conception of television's form as "witness" and "working through" in his 2000 *Seeing Things* demonstrates little change in his attitude to television, effectively relegating television's role to the window-on-the-world logic I have sought to problematise: interesting only insofar as the material which is relayed through it¹⁰. Thus Ellis suggests that the viewing condition of witness began with photography, particularly its appearance in newspapers. Initially this was limited to an 'I told you so function' so that 'scene of the crime' photos enabled readers to be 'their own Sherlock Holmes' (Ellis, 2000: 17-19).

However, the connection between Ellis' conception of television as witness and his theorisation of working through demonstrates how powerful and pervasive the discourses of liveness have been in constituting the medium. In Ellis' conception of witness, liveness is twinned with authenticity, not only its representations, but the relationship between institution, text and viewer as well: television's 'I told you so' function engendering a trust in the audience's relationship with its institutions. In turn, the visual codes of liveness were developed to address the domestic setting in which they were received, imbuing the medium with a sense of intimacy linked to its closeness with everyday life. In this logic, Ellis' process of working through is connected to the idealisation of television as promoting social cohesion by representing issues to the national body: television works through important issues for its audience until finally exhausting it. Whilst there are problems with Ellis' conception of working through, particularly as it relates to the fragmented audience of the

¹⁰ Ellis' concession to intent watching of television amounts to no more than a sentence, which he then seeks to overturn by suggesting that such intent watching is designed to be paid to short segments aimed at providing an instant overview: 'It is perfectly true that television can be watched in a more intent way, but its styles of visualisation and narration do not assume that it will necessarily be so used' (Ellis, 2000: 100).

multichannel landscape he posits it in relation to, the concept links television's window-on-the-world liveness, its bringing of far distant places and issues into the domestic context, with an intimate address that speaks to a communal viewing experience. Despite Ellis' concept being more nuanced than this explanation, it is useful here for the way in which it demonstrates television's continued connection to daily life, which has been consistently articulated with the national and public service broadcasting (c.f. Scannell, 1989, 1996, 2000; and Scannell and Cardiff, 1991).

As Scannell and Cardiff point out, television's penetration and co-temperance with the everyday life of citizens resulted in public life being made knowable by virtue of an unobtrusive temporal sequence of events that gave structure and substance to everyday life (1991). In some sense, therefore, the technology or cultural form was broadcasting and, as Raymond Williams argues, 'content developed "parasitically" ... state occasions, public sporting events etc' (1992 [1975]: 25). In particular, this meant a regular procession of public rituals, celebrations and festivities that provided the BBC with a backbone of content, which in turn, defined national stability and continuity. Thus to return to the opening quote at the beginning of this section, a concern with nation that implicitly linked television's form to window-on-the-world liveness was inherent in the manner in which public service broadcasting's role and purpose developed as a regulation of a scarce resource for the benefit of the nation's citizens. This centrality of the national has increasingly come under threat as television moved into the era of availability and will continue to be pressurised by developments in the current era of excess. However, in tracing the various discourses that went into establishing television as a medium during this period of scarcity, I hope to have shown that it was

not so technologically determined as to reduce its position to *merely* a window-on-the-world. In turn, the case studies in the thesis' second section demonstrate how these discourses of liveness, intimacy, mobility, hybridity, public and private life, and interactivity coalesce around a negotiation of the role of public service broadcasting in the digital age.

Availability: Active audiences and textual conundrums

Ellis characterises availability as being defined by post-Fordist models of production and, in turn, the development of new global distribution systems that – in the form of satellite, cable and the VCR – were ‘harbingers of [a] new development of consumerism, one that brought increasing choice’ (2000: 63-64). The era of scarcity of resource and of penetration was replaced, therefore, by greater broadcast and non-broadcast coverage of populations – and interrelationships between them – as well as greater resources for their transmission. But this was not simply a matter of technological improvements in the resources available for transmission, both regulatory discourses and aesthetic practices impacted and were impacted upon by changes in the move from scarcity to availability. In particular, television’s landscape became increasingly characterised as a marketplace, leading to a predominance of discourses of choice and consumerism. In turn, these discourses and understandings of the audience have been used as both an attack on and defence of the BBC, which as I suggest throughout the remainder of the thesis must be negotiated with public service broadcasting’s traditional conception of the audience as citizen.

I set out these discourses of choice and consumerism in my discussion of plenty below, as for my purposes here, the period of availability marked an increasing academic concern with television’s

textuality. In discussing these textual accounts of television's form, I want to continue to trace some of the discourses I have identified in the preceding section, particularly those concerning the perceived activity or passivity of the audience. In so doing, my discussion not only pre-figures my concern to examine interactive television's textual form, but also recognises the importance of feminist scholarship to these debates. There is not space here to do justice to a comprehensive review of the feminist scholarship that challenged the prevailing assumptions about the (female) audience's passivity, and indeed patriarchal society itself. However, its importance must nevertheless be acknowledged for it has been pivotal in constituting, as well as being part of the discourses in search of (which include feminism, cultural studies and marketing as strange bed-fellows), an active audience.

Lynn Spigel's recent survey of the field is again illustrative, and it is worth quoting her at length here. She suggests that

... early work in British cultural studies set an agenda for television scholars in the years to come. Rather than thinking about audiences as faceless mobs with scientifically predictable responses and behaviours, television studies has used a more anthropological ideal of audiences as cultures ... Beginning in the late 1970s, feminist critics from film/literary studies and from British cultural studies focused particularly on the "everyday" aspects of television (especially soap operas), and many were and continue to be interested in the internal contradictions that its hegemonic operations impose. In particular, feminist critics have explored the way television reinforces patriarchy while also providing women (or the female consumers TV addresses) with pleasurable ways to fantasize against the grain of patriarchy (Spigel, 2004: 9).

Spigel's astute overview demonstrates the importance of feminist scholarship in constituting the television audience as both always active, and in important ways, constrained. Such scholarship has therefore been foundational in the way we understand 'interactive television'. The rest of this section focuses on a discussion of television's textual form, the play

between activity and passivity in these various models bearing out the debt television studies owes to feminist scholarship.

To return to Charlotte Brunsdon's observation regarding the centrality of the project of defining the television text to television studies' work, she suggests that:

Most innovatory work in television studies has been focused on the definition of the television text and this debate could be seen as one of the constituting frameworks of the field. The common-sense view points to the individual programme as a unit, and this view has firm grounding in the way television is produced (Brunsdon, 1998: 105).

However as Brunsdon goes on to note, the experience of television tends to transcend these boundaries with television's messiness becoming a challenge that textual studies of television have attempted to account for. As such, the radical element of such textual models '... is the way in which [they] transgress common-sense boundaries like "programme" or "documentary" and "fiction" to bring to the analysts' attention the common and defining features of broadcast television as a medium' (Brunsdon, 1998: 106). In Nick Browne's words, this involves understanding the television text as 'a unique sort of discursive figure very different from the discrete unity of film. Its phenomenology is one of flow, banality, distraction, and transience; its semiotics complex, fragmentary and heterogeneous' (Browne, 1984: 176). The better of these, termed 'first shift aesthetics' by Caldwell, are grounded in industrial practice and, as such, are constituted in relation to historically and culturally specific moments of television's form (2003).

By examining all of these textual accounts in detail, my overall argument is twofold. Firstly, as a platform for engaging with the challenges of the non-linear, malleable form of the interactive texts discussed in the

thesis, the review of these different models of the television text suggests that television studies is already, to a degree, well-equipped to deal with the challenges posed by the texts of digital television. However, my second concern here is to point to the problematics that each of these models encounters, both in and of themselves and in relation to the task of accounting for a non-linear text. As such, while these models provide a useful platform for engaging with interactive television's textuality, I suggest that it is necessary to relate these models more carefully to the work on new media texts; a task I undertake in Chapter 3. Overall therefore, the examination of these textual forms works as a rejoinder to the arguments of Holmes (2004) and Brunsdon (1998) for the retention of the text as a locus for television studies' scholarship in a digital television landscape.

Flow

Writing in 1975, Raymond Williams suggested that television's textual form was not one of the individual programme/text – as in cinema's filmic form – but rather amounted to an aggregation of a variety of texts, planned by the channel/broadcaster and traversed by the viewer. Williams argued that this 'phenomenon, of planned flow, is ... perhaps the defining characteristic of broadcasting, simultaneously as a technology and as a cultural form' (1992 [1975]: 86). The historical specificity of flow is important to note, as many of the problems with its possible application in a digital environment stem from this. Williams' analysis was of a broadcast television landscape of availability, which examined a US context that was populated solely by the big networks. In this sense, flow is a product of complex interrelationships between industry and audience where the definition of the text itself is the site of negotiation and exchange. As Feuer argues, this is a historically specific result of industry practice whereby,

“flow charts” are constructed by network execs ... flow, as a seamless scanning of the world, is valorised at the expense of an equally great fragmentation’ (1983: 16). Thus, as television studies has developed an increasing concern with aesthetics and individual programmes, one of the most common criticisms of flow has been the way in which it diverts attention from the individual text (c.f. Corner, 1999; Caldwell, 1995, 2003; Jacobs, 2001; Feuer, 1983; Gripsrud, 1998).

The historical specificity of flow is therefore one of the major problematics to take into account in its usefulness for analysing digital television, where not only is the landscape a multichannel one, but where interactive applications can present multiple streams for viewers to navigate. As Uricchio recognises, the challenge to flow commenced with the development of a multichannel environment and the remote control with which to navigate it (Uricchio, 2004: 170-1). However, the developments of these digital environments has led to a reinvigoration of the term flow to describe and analyse the movement of users across the options on offer in new media environments. Indeed, such an understanding of flow is apparent in Rick Altman’s use of the term to describe television’s place within the household flow of *activity* that surrounded the medium (1986). The development of the term user-flows therefore has inverted some of the connotations of passivity that attached to Williams’ analysis of flow. As Alison Griffiths and Gripsrud have argued, these connotations of flow posit television as something that ‘washes over us’ (Griffiths, 1996) or a tide to be swept along with (Gripsrud, 1997: 28-29). These different uses of flow have increasingly led to the problematisation of Williams’ term. As John Corner perceives it, an excess of theoretical baggage has been placed onto the theory of flow, from its suggestion of passivity, to its reformulation as active user-flows through to

its use to analyse an undeclared internal organisation of television at an ideological level. Corner thus cogently and persuasively argues that such serial mis- or overuse of the term requires us to abandon the concept as we move into a digital television landscape (Corner, 1999: 64-69).

This is tempting; however, it is equally tempting to hold on to the metaphor for a variety of reasons. As William Uricchio goes on to argue, whilst flow is ‘obviously a loaded term’ used to ‘support very different arguments’, in so doing it has helped to ‘chart shifts in the identity of television’ and ‘to map various undulations in the terrain of television studies’ (Uricchio, 2004: 164-5). I want to draw on Uricchio’s argument here for the continued, but proscribed and delineated, use of the term flow for three reasons. Firstly, as I have set out in the introduction, my concern is to map the second shift aesthetics of the BBC’s use of interactive television to fulfil public service broadcasting remits. As John Caldwell argues, such an approach entails examining the shift from ‘program [sic] flows to tactics of audience/user flows’ (2003: 136). As a result, I use the term viewer-flow, as a way of articulating the *constrained* movement of users through the non-linear, malleable environments of interactive television. Whilst this focus is primarily concerned with the navigation of interactive television applications, I similarly discuss the relationship between TV and web as one of managing such viewer-flows in Chapter 7, drawing particularly on Will Brooker’s work on “overflow” (2001). Secondly, this notion of viewer-flows helpfully connotes a sense of the mobility that is on offer to the viewer of interactive television: able to move across the choices and streams on offer of interactive applications. As such, it connects the forms of interactive television under discussion in the thesis to the window-on-the-world discourses I have outlined above and return to in Chapters 4 and 5. Finally, as Max Dawson has recently

recognised, the use of the term flow in analysing television's textuality is most productively thought of in relation to John Ellis' theory of 'segment', to which I turn now (2007).

Segment

Similarly to Williams' analysis, Ellis' theory of segment posits that television has 'little to do with the single text', instead occurring at a level smaller than the individual programme (1992[1982]: 118). Ellis sees television's textual form as consisting of

small sequential unities of images and sounds whose maximum duration seems to be about 5 minutes. These segments are organised into groups, which are either simply cumulative, like news broadcast items and advertisements, or have some kind of repetitive or sequential connection, like the groups of segments that make up the serial or series (Ellis, 1992[1982]: 112).

Ellis' conception of television's cultural/textual form relies on the denigration of the image and its importance to television as an apparatus: always positioning television in relation to, and inferior to, cinema. The conception of segment is foundational to Ellis' understanding of television as a *mere* window-on-the-world (witness) and viewers' engagement with the medium through the attention of the "glance". Similarly to the criticisms detailed of Williams' above, Ellis' segment has contributed to a widespread deficient understanding of the television text; for example, he suggests that there is no essential difference between reception of 'fact and fiction programming' (113).

However, this is not to suggest that the idea of television existing in segments is, in itself, inherently problematic. Indeed Ellis' articulation of how segments interrelate might be particularly apt for describing the experience of navigating non-linear forms of interactive television in which the audience often encounters short fragments of television text, the

selection of one stream of content not necessarily following logically from the one watched immediately preceding it: 'The aspect of the break, of end and beginning, tends to outweigh the aspect of continuity and consequence' (148). It is only through the audience's familiarity with television's sign system that segments are combined and made meaningful. Ellis' work therefore anticipates the control that viewers have over the interactive text, which as Dawson has suggested, might profitably be thought of in relation to Jane Feuer's work on the 'dialectic of segmentation and flow'. As Dawson surmises:

Feuer writes, ... 'Williams should more accurately say that television possesses segmentation without closure, for this is what he really means by flow' (15-6) ... [whilst for Ellis' concept of segment] the 'breaks' between segments do not outweigh the continuity across them, but exist in a perpetual state of tension with the television text's quality of flow (2007).

As Dawson goes on to note, Feuer's conception is useful for the way in which it recognises that much of television is not meant 'to be watched "as a totality", but rather consist of segments that can be individually or cumulatively consumed' (ibid). This is particularly true of the way in which segments tend to exist within the wider meta-structures of interactive television's hypertext forms that I discuss in the case studies. As I'll go on to discuss, these structures provide a unifying, if individuated, experience of the segmented nature of many interactive television texts that allow us to retain the notion of the text as an analytic category. However, what needs to be made apparent here is the mobilisation of the term flow as a second shift category, whereby it refers to the 'viewer-flows' of the interactive viewer. This dialectic between segmentation and flow therefore profitably links the first-shift aesthetic theories of television studies' work in the period of availability to the second shift aesthetics of the period of excess, which I discuss in the following chapter (again demonstrating the

continuities of form and theory across television's movement from old to new media). Thus, in Chapters 5 and 6 I use the term segment to discuss the small units of programming that interactive television's streams are broken into and their relationship to their meta-structuring textualities, which I term organised viewings and 'fragment' respectively.

Viewing strip

The term organised viewings mediates Newcomb and Hirsch's 1983 discussion of television as a "viewing strip". Their conception of the viewing strip attempts to provide a model that mediates between the role of broadcast provision and individual choice. As such, it proposes a television text that is constituted by activity at both ends of the production-text-audience continuum. In this sense Newcomb and Hirsch see television in terms of a "cultural forum" whereby individual programme meanings, messages, forms, aesthetics and understandings are complicated and compounded 'by the history of the medium itself', (the episode, the serial, the series, the genre, the schedule) (Newcomb and Hirsch, 1983: 49). Furthermore, such texts are complicated by the viewer themselves 'bringing values and attitudes, a universe of personal experiences and ... concerns, to the texts', allowing the viewer to 'select, examine, acknowledge and make [sic] texts of his or her own' (52-53). Thus, the viewing strip represents an attempt to 'grasp the way in which each individual negotiates their way through the "flow" on offer [suggesting] different individuals might produce very different texts or viewing strips' (Brunsdon, 1998: 107).

Although Newcomb and Hirsch's model is explicitly concerned with thinking about the multiple interpretations and ideological function of the multifarious television text, it has nevertheless proved a useful formal model for understanding television's textual form. Indeed, its strength lies

in its recognition of the television text as a site of ‘dense, rich and complex’ meanings that are constructed by the interplay of text selection by the viewer, text provision by the broadcaster and the cultural (and historical) milieu within which they are produced/received (Newcomb and Hirsch, 1983: 53). Their recognition of audience activity implicitly acknowledges the debt television studies’ approaches to the text owe to feminist scholarship, but is also important for my study of the interactive television text here for the mode of engagement that such a model presupposes. As Brunsdon argues, ‘implicit within this notion – although not a prerequisite – is the remote control, allowing channel change and channel-surfing ... [as well as] audience agency’ (Brunsdon, 1998: 107). As Uricchio has noted previously, the remote control marked the first shifts from paradigms of programming flows to those of user/viewer-flows. As such my discussion of organised viewings in Chapter 5 draws on Newcomb and Hirsch’s understanding of the centrality of the remote control to the audience’s navigating, selecting and combining of different channels, or in this case streams, of content on offer. As with their concerns to think about the institutional and ideological implications of such a text, in theorising organised viewings in relation to natural history programming I am concerned to relate this textuality to wider concerns and longer histories of public institutions to regulate the spectator’s navigation of natural history display.

Supertext

Nick Browne’s excellent interpolating of the television text with domestic temporality has been surprisingly absent from discussions of the most prominent form of digital television to receive academic attention: the DVR, such as TiVo and Sky+. “Supertext” relates the textual form of

television to the schedule and, in turn, the rhythms of everyday life that both reflect and determine ‘the form of a particular television programme and conditions its relation to the audience’ (1987: 27). The time-shifting and personalisation of the schedule allowed by DVR devices would seem to fundamentally undercut Browne’s model. As such, neither Boddy’s (2004a, 2004b) nor Uricchio’s (2004) account of such devices addresses the idea of the television supertext. Instead, in Uricchio’s case, preferring to concentrate on flow. However, I would like to suggest that supertext continues to provide useful insights into the textualities of digital television.

Similarly to Newcomb and Hirsch’s work, Nick Browne’s supertext recognises that any discussion of a television text must occur in relation to economic and social processes. As a result, he suggests that the discussion of individual programmes or discrete textual units is problematic as ‘the limits of the text “proper” and its formal unity – apt to be broken at any moment by an ad or a turn of the dial – is suspect’ (176). Instead, he proposes a television supertext that ‘consists of the particular program [sic] and all the introductory and interstitial materials’ situated within the milieu of the “megatext”, which contains ‘everything that has appeared on television’ (176-177). Because Browne’s impure idea of the text condenses the political economy of television, it may prove apt in assessing the way in which viewer-flows are structured by interactive texts. That is, it can help us identify the individual’s personalisation of the non-linear text as structured by a wider mega/supertext operating with economic imperatives to herd their navigation. As such, supertext bears the closest correlation with the second shift model that I adopt across the case studies of the thesis. Indeed, my use of the term application to describe the structure of interactive television might be thought of as akin to its super or metatext. However, the limitation of Browne’s work for my purposes is its complete

bondage to the temporality of broadcast television. Thus, whilst I suggest in Chapter 4 that television's place within the everyday rhythms of the household might remain important in addressing particular viewers of interactive texts, overall most interactive texts form part of a wider desynchronisation of everyday life. Thus, in order to avoid calling up such connotations in my discussion of interactive television, I prefer the terms application and second shift aesthetics to denote these complex texts' super-structure.

The polysemic text

Throughout the 1980s, particularly in cultural studies, there was an apparently endless struggle to position the audience as active. John Fiske has been the most obvious target for criticism of those accounts that sought to position the audience as incessantly active and resistive, his work often polarizing 'the debate over the degree to which popular media reproduce dominant ideology ... versus the degree to which the media provide people with the "tools" ... to make their own culture ...' (Spigel, 2004: 10). Meaghan Morris' condemnation of Fiske's 'circular populist polemic' aptly summarises the problems with his 'incessantly active audience' by arguing that his work has been central to a banality within cultural studies that substitutes 'the people' as 'both a source of authority for a text[ual reading] and a figure of its own critical activity' (1990: 23). However, despite my agreement with many of these arguments regarding Fiske's position, I want to briefly engage with his ideas here not just for the sake of a comprehensive review of literature, but also because of the possibilities created by the multi-layered, interactive text and the processes involved in engaging with such texts.

Fiske argues that television is pervaded by the semiotic excess of the text, which he relates both to the possibility of resistive readings and, more interestingly for my purposes, the increased prominence of videographics and the process of “zapping” via the remote control. Fiske goes on to suggest that the process of zapping ‘allows the viewer to construct a viewing experience of fragments, a postmodern collage of images whose pleasures lie in their discontinuity, their juxtapositions, and their contradictions’ (Fiske, 1987: 105). Fiske recalls Palmer’s study of the viewing processes of children who engage in what he terms a ‘systematic switching’, distinguished from channel searching or bored zapping, which further extends the possible understandings and applications of segmentation that I discussed above (105). The usefulness of segmentation here is its relation with the viewing process of zapping: whilst flow and segment are generally understood to connote passivity, here segmentation can be invoked to recognise the way in which not only does interactive television itself often operate in short sequences, but that these are created as much by *active* viewsing processes as they are by industrial imperatives. Whilst the second shift aesthetic approach I adopt throughout the thesis avoids Fiske’s celebration of the inherent pleasures of the postmodern image, interactive television does create an increasingly videographically and semiotically excessive televisual image. In particular, the idea of a viewing experience of fragment is conjured up by the windowed formats of the interactive applications discussed in Chapter 6. These create juxtapositions and relations between image, aural and textual dimensions that are both internally segmented (for example, interactive news contains loops of news headlines, which retain broadcast television’s segmented form: domestic, international, sports news etc) and serve to further fragment the overall viewing text.

However, despite the ostensible plurality of readings and experiences that might be derived from such interactive texts, their interactivity remains structured in a way that remains amenable to textual analysis. Such texts operate on a level of structured polysemy that enables a discussion of what can be legitimately read into/from the text. Because interactive and multi-channel television involves a greater relationship of the remote control to the programme text and its form, this polysemy must be understood in conjunction with the processes of viewing and textual construction. Thus, as with Stuart Hall's seminal encoding/decoding argument, it is important to recognise that 'polysemy must not ... be confused with pluralism' (1980: 134).

Providing a thorough overview of the usefulness of such concepts of segment, flow and supertext in the context of broadcast television, Brunsdon asserts that 'these attempts to think about continuousness might be usefully supplemented by the deployment of the notion of "mode of address", which allows us to specify, at a formal level, the way in which the television text is always constructed as continuously there for someone' (1998: 118). She points to Tony Bennett's and Janet Woollacott's reading of the James Bond intertext, which suggests not that the text itself is wholly inconceivable but rather is constituted through a series of recognitions, conscious or not, that are a political as well as critical matter (Brunsdon, 1998: 123). Brunsdon's argument for the retention of the text as an analytical category is therefore grounded in the practices of television itself, its repetition and regularity and, in particular, the need to consider the mode of address which television, its programmes and textual forms, adopt towards the audience and viewer.

Essentially this is the challenge posed by what Lisa Parks details as the transition of television from a broadcast to a post-broadcast form,

which I return in more detail in Chapter 2 (2004). Several fundamental shifts in the television landscape around the turn of the millennium have upset the effectiveness of the above frameworks' ability to provide a workable, free-standing and comprehensive model of television's textual form. The introduction of the remote control, the VCR, cable and subscription services have all, prior to the advent of digital television, posed significant problems for the study of the text by television scholars. Interactivity is simply another such challenge, posing not a radical break but rather an extension of the above chronology of attempts to develop, or rework, existing models to meet the challenges posed by the evolving television landscape. Retaining the text for television studies' discussion of the apparatus as more than a site, or instance, of this or that cultural/social/ideological function or effect has both proved and remained an important impetus in the field – complicating television's window-on-the-world. Thus the textual formations discussed across the course of the thesis attempt to configure interactive television in relation to its aesthetics, production and reading practices as well as the import of the ideological, cultural and social functioning of television.

Plenty: Aesthetics in a multichannel landscape

“What is television?” This question has preoccupied practitioners and students alike since the medium struggled into existence. The question becomes more rather than less insistent as the medium evolves (Ellis, 2000: 400).

For Ellis, the period in which he was writing *Seeing Things* was one both of an abundance of television, but also of uncertainty as to how to understand that period and where it might lead. In this final section, I want to pay particular attention to the industrial and regulatory developments that caused Ellis to categorise the future of television as uncertain. As a

result, I necessarily begin to focus down on to the UK television landscape, tracing the start of digital television's period of excess in 1998 back to the start of multichannel television, with the launch of Rupert Murdoch's Sky satellite television service in 1989. In examining this period my aim is to pick out the discourses of choice and consumerism that I indicated began in the period of availability and have structured the subsequent periods of both plenty and excess. In turn, these have challenged the scarcity rationale of public service broadcasting institutions, such as the BBC, which I set out at the start of this chapter.

However before examining this period directly, it is important to recognise that the earlier commencement of multichannel television in the US had, by the mid to late 1980s, been associated with an increased interest, from both industry and academy, in matters of television style. John Caldwell's authoritative account of this period in *Televisuality* is worth acknowledging here for two particular contributions it has made to television scholarship. Firstly, Caldwell's work demonstrated the overall importance of stylistics to various, if not all, forms of television production. If not always synonymous with quality, he argued, these at least demonstrated the need to take television's own aesthetics seriously, and on its own terms. Related to this, the second importance of Caldwell's work was the explication of this style, "televisuality", within which the concept of the "videographic" is of particular relevance to my concerns. It is worth quoting Caldwell at some length on the understanding of televisuality as a stylistic moment borne out, and part of, historical changes within television's technological, production and audience formations. Discussing the change of television in the 1980s, Caldwell argues that television shifted from approaching broadcasting

... primarily as a form of word-based rhetoric and transmission ... to a visually based mythology, framework, and aesthetic based on an extreme self-consciousness of style. This is not just to say television simply became more visual ... rather, in many ways television by 1990 had re-theorised its aesthetic and presentational task ... style itself became the subject, the signified (1995: 4-5).

Caldwell argues that this style was so self-conscious that it was an activity – a performance of style – rather than a particular look which could thus be extended to discuss the aesthetic of television as a medium. Televisuality, therefore, comprised an overarching approach to television as a medium comprising of six inter-related areas: ‘televisuality as a stylising performance – an exhibitionism that utilised many different looks’; ‘televisuality represented a structural inversion’; ‘televisuality was an industrial project’; ‘televisuality was a programming phenomenon’; ‘televisuality was a function of audience’; ‘televisuality was a product of economic crisis’ (ibid: 5-10). Thus televisuality was not simply about an abhorred commercial aesthetic but about a significant change in the television landscape that affected both commercial and independent producers; networks and public service broadcasters; and, audiences and academics alike.

Aesthetically, televisuality is marked out by two formal styles: the videographic, which in turn is contrasted to the cinematic style of television that had hitherto commanded the absolute rhetoric of “quality” in academic and critical discourse. As such, the videographic was not necessarily about traditionally conceived quality television, but about a distinctive style across a diverse body of television output, from MTV to CNN and from *Max Headroom* (Lorimar Productions/ABC, 1987-88) to *The Simpsons* (Fox, 1989 -). Thus Caldwell discusses the videographic as a style existing both pervasively, but also anonymously, particularly when contrasted to the attention given and solicited by cinematic style. Nevertheless, he rightly

asserts the videographic is a stylistic marker of a great deal of television output concerned with generating its own, distinctly televisual, look:

Videographic televisuality since the 1980s has been marked by acute hyperactivity and an obsession with effects. If MTV helped encourage the stampede to film origination in primetime, then CNN demonstrated the pervasive possibilities of videographic presentation. Starting in 1980 – and without any apparent or overt aesthetic agenda – CNN created and celebrated a consciousness of the televisual apparatus; an appreciation for multiple electronic feeds, image-text combinations (12-13).

Although Caldwell recognises that the videographic did not affect all television genres (particularly not traditionally conservative ones, such as the family sit-com), it was nevertheless pervasive. This was particularly true of genres that have tended to evince this style in their interactive incarnation; such as sports, cable news, music television, magazine shows, most reality programming, home shopping networks and the like. However, Caldwell importantly notes that the videographic, although present in the day-to-day – or what was traditionally conceived of as the “mundane” of television – was in fact about soliciting active viewer attention through a penchant for exhibitionism. As such, he argues that the academic desire to “activate” the audience is in fact ironic as

in fact the television viewer in practice has never been passive – nor even theorised as such by the industry. Broadcasters from the start did not see the viewer as a couch potato, but as an active buyer and discriminating consumer (250).

Thus *Televisuality* marked not simply a call to return to the text and an examination of its aesthetic worth and style, but also a reconsideration of how it implies an active and engaged viewer. As will be apparent in my discussion of interactive television in section 2, videographic stylistics are

now often cybernetically interactive, acting as hyperlinks that viewers use to navigate individual applications.

Televisuality was part of a sustained move away from reductive understandings of television's window-on-the-world position, which as with Ellis' notion of witness, depicted television as interesting and important only insofar as its relay function. Where previous scholarly discussions of television aesthetics had been restricted to quality, notably heritage dramas (c.f. Caughie, 2000), Caldwell's discussion opened up a plethora of texts for aesthetic investigation into meaning. For my concerns here, the notions and practices of televisuality and the videographic are of particular import for the way in which they foreshadow the stylistics of interactive television. Interviews with various producers of interactive television I have conducted across the course of my project have evoked a vehement denial of such forms being simply "hypertext" or Internet practices writ on to television. Whilst I want to account for the influence of convergent media forms on the development of interactive television texts, it is important to understand that such denials are bound up in perceiving interactive television aesthetics as the extension of televisual style. That is, even as Bolter and Grusin's influential *Remediation* correctly posits that television is defined by its willingness 'to entertain a wider range of visual and cultural styles and to remediate other media more vigorously and frankly than [its antecedents]', interactive television aesthetics are nevertheless as much extensions of televisual style as remediations of new media (1999: 188). It is against this backdrop of both academic and industrial concern with aesthetics and style that the following brief overview of important developments in the television landscape during the era of plenty, which I argue pre-figures that of excess, should be read.

1989 – 1998: The evolution of multichannel television

During the era of scarcity in the UK, despite the introduction of commercial broadcasting, the public service rationale that had influenced the development of television as a broadcast medium and cultural form had not been significantly undermined. Rather the introduction of ITV served to simply shift the safe oligopoly of the BBC to a 'cosy' duopoly in the 1950s with the introduction of commercial broadcasting in Britain. However, as Franklin's history attests, the purpose of public service broadcasting has always been in question since the Reithian tripartite edict of 'inform, educate and entertain' was established (Franklin, 2001: 14-16). Nevertheless it has been the development of a truly multichannel environment, first through analogue satellite and latterly through digital platforms, which significantly undermined understandings and regulation of television under the rhetoric of scarcity. This was not simply a matter of technological development: the advent of satellite, as with cable in the USA before it, was congruent with the election of long-term conservative leaders – Thatcher and Reagan respectively – committed to market liberalisation. The conceptualisation of the television landscape as a marketplace during this period recast the television audience, who had hitherto been addressed as citizens under the dominance of public service broadcasting, as consumers with a primacy placed on the consumer's right to *choose*. Thus, the promise of multichannel television marked the beginning of a sustained and unremitting attack on the value of public service broadcasting underscored by high profile re-iterations of Thatcher's characterisation of the BBC licence fee as a poll tax echoing throughout.

Andrew Goodwin's comprehensive history of television under Tory rule establishes the congruence between the then government's political standpoint and the development of the British television landscape in the

era of availability. Importantly, Goodwin notes how the incentive for developing the new technologies was reinforced by Thatcher's desire for an IT-led economic recovery, as both cable and satellite technologies provided significant opportunities for investment and development (Goodwin, 1998: 54 – 57). Thus, at the start of the 1980s, the impetus for developing new television technologies was particularly strong with the government intending to have adopted one of the new delivery systems by the middle of the decade. In particular, the report on direct broadcast by satellite (DBS) by the Home Office, *Direct Broadcasting by Satellite* (HMSO, 1981), urged quick action to develop a UK-based satellite television structure due to the footprint nature of satellite delivery technology. As Goodwin notes, a satellite's footprint (its broadcasting range) was 'essentially national in scope, although with some significant overspill ... [which] created concern for the Home Office' that external broadcasters may set up solely to transmit programmes to the UK, thus threatening the country's broadcasting ecology (Goodwin, 1998: 41). Despite this concern, the government prohibited the use of the licence fee by the BBC to develop satellite television. This decision, combined with a series of delays to the launch of a UK based satellite service by a consortium of British television and IT companies, the British Satellite Broadcasting group (BSB), resulted in the first satellite television service being instigated from outside the UK. Owned by Rupert Murdoch, who had hitherto been blocked entry to the UK's television market by legislation against foreign ownership of television services, Sky Satellite television commenced service from the Astra satellite launched from Luxembourg. Arguably this changed the face of British television, introducing subscription services and triggering the slow recasting of the battle for dominance of the television landscape from one between the BBC and ITV to one between the BBC and Sky: as John

Grogan (Labour Party MP) noted in 2007, this battle now sees Sky in the ascendancy, grossing 40% of television revenues compared to the BBC's 27% (*The Guardian*, 8/01/07).

The commencement of satellite television in the UK was therefore commensurate with prominent discursive positionings of the viewer as consumer, rather than citizen. Both Thatcher's government and Murdoch used their prominent positions to denounce the BBC, Murdoch both subsidising the launch of his satellite television service with his newspaper empire and using this platform to attack the BBC. By the end of the 1980s, this consumerism had gained significant regulatory support through the Peacock committee's recommendations – to be enshrined in the 1990 *Broadcasting Act* – that concluded:

British broadcasting should move to a sophisticated market based on consumer sovereignty. That is a system which recognises that viewers and listeners are the best ultimate judge of their own interests ... (Peacock, 1986: 133-134).

Although Peacock's recommendations represented a more favourable review of public service broadcasting than had been anticipated, the report saw consumer sovereignty as the ultimate goal. This consumerism was articulated within discourses of choice that have been pervasive in both the era of plenty's and the current era of excess' debates about regulation and public service broadcasting. As such, Peacock's report *Broadcasting in the 90s: Competition, Choice and Quality* set the tone and agenda for debates about regulation in the era of plenty. Arguably the BBC has attempted to position their provision within such discourses of choice in response. Under Lord John Birt's director-generalship, the BBC's 1991 review of commissioning *Producer's Choice* created an 'internal marketplace' for the provision and commissioning of programming. Furthermore, in the build up to the BBC's 1996 Royal Charter renewal, Birt sought to position the

BBC in terms of the market-failure approach I outlined in discussing Barry Cox's work in the thesis' introduction. As such, the 1992 review of services *Extending Choice* promoted the BBC as an institution capable of taking the 'higher ground'. It concluded that the 'BBC of the late 1990s should offer a range of distinctive, high quality programming services in each of the major genres', setting up the problem for the BBC of wide provision without impinging on the commercial interests of rivals (1992: 5) . At the final Charter settlement, the BBC published its first *Statement of Promises to Viewers and Listeners* – a clear recasting of the audience as consumers. I go on to trace the importance of choice in relation to public service broadcasting across the following two chapters and in Section 2 of the thesis demonstrate how uses of interactive applications by the BBC have often been to further this aim.

To conclude my overview of this period of plenty it is worth briefly returning to the development of satellite television and the resultant dominance of Sky in the UK television market. The supremacy of Murdoch's Sky satellite service as the predominant subscription television form in the UK at the start of digitalisation in 1998 was not assured simply by the pre-emptive launching of his Astra satellite in 1989. Whilst BSB eventually launched what was the officially government sanctioned satellite service the following year, the platform was effectively beaten out of the market by the tactics and financial muscle of Murdoch's Sky television. In a business model he was to repeat in 1998 with the launch of Sky's digital television platform, and across the globe, Murdoch used sporting rights and his cross-media ownership to subsidise his new venture, allowing him to give away equipment to viewers who took up subscriptions. As Murdoch himself articulates it:

We have the long term rights in most countries to major sporting events, and we will be doing in Asia what we intend to do elsewhere in the world — that is use sports as a battering ram and a lead offering in all our pay-television operations (quoted in Millar, 1998: 3).

The attempt by BSB to rival this equipment give-away and its failure to secure high profile rights to either movies or sporting events, crippled the consortium and forced its hand into a merger with Sky, with Murdoch at the helm. Besides the obvious echoes that the recent ITV/ONDigital debacle has with this story, the beginnings of satellite television are interesting for two further reasons for my purposes here. Firstly, satellite television marked another moment of recasting television as a medium with masculine discourses and sensibilities; the selling of subscriptions to Sky was primarily based on its ownership of rights to show to Premier League football. This positioned the target consumer as male (the advertising of its subscription services heavily reliant on a high quota of images of well-known football players, intercut with shots and dialogue from popular films) and, as Charlotte Brunsdon has demonstrated, working-class (Brunsdon, 1997). The positioning of satellite television within discourses of masculinity was heavily tied to the technological capacities of satellite television – a spectacle of a land of television plenty, where sports and movies occupied not just points on the schedule, but dominated entire channels. That the launch of Sky was linked to the re-branding of English football's top division as 'The Premier League' is of particular import in this context. The structuring of the top-flight into a smaller league, with less games but more high-profile clashes between big clubs and big stars combined with the greater presence of sponsors, particularly international corporations – such as Coca Cola and, of course, Sky – was intimately bound up in the selling of satellite television to a male

audience. However, as Rod Brookes has shown, the re-packaging of football as the Premier League also coincided with an attempt to make the game more family and female friendly (2002); television's positioning as a window-on-the-world again keeping one eye on the domestic viewing experience where alienating any members of the household from the television is a risky tactic.

The second reason for this story of Sky's dominance being of import to how the initial debates and structuring of the digital landscape played out, returns me to the issues of choice, consumerism and regulation I have discussed. The commencement of digital transmission in 1998 occurred in a radically different political landscape to that which had provided the bedrock for Sky's inception to the UK television market in 1989. The newly elected Labour government of Tony Blair was particularly interested to ensure that digitalisation offered a moment to ensure competition developed to challenge Sky's dominance of the multichannel landscape. This led the government to grant incentives and push the promotion of a digital terrestrial commercial competitor to Sky's satellite platform to be ready at the point Sky would begin transmitting digital signals. As we shall see in Chapter 2, the backing of a digital terrestrial platform as a necessary outcome of promoting consumer choice and sovereignty across the era of plenty's regulatory and business models was to be, at least partly, to blame for the early failure of the digital terrestrial platform.

Conclusion

It is appropriate to conclude with Ellis here, who surmises that the period of plenty is not one simply of uncertainty but, paradoxically, one in which the old pleasures of broadcast television can provide a hiatus from the pressures of "choice fatigue" and "time famine" that have been

introduced by digital technologies. That is, for Ellis television's broadcast form will persist due to its ability to offer a pre-programmed schedule that conforms to the routines and rhythms of everyday life and relieves us from the overwhelming promise of choice (Ellis, 1999: 169-173). Indeed, ITVDigital's advertising campaign in 2001 played with the notion of too much choice. In an attempt to make a selling point of the smaller range of channels on offer, the advert in figure 1.1, utilises ITV's brand value to suggest that whilst one might still get a sore finger from surfing the channels available, these are filtered through the ITV brand (its platform operating as a portal that opens only onto ITV's proprietary content and those of its content affiliates) to produce 'only the best' for the consumer (rather than Sky's rather undifferentiated 500+ channel environment). As I discuss in Chapter 7, in such an environment one of the BBC's most important – and successful tactics – has been to position itself as a “trusted guide” to digital content.

At the end of the period of plenty, it would seem easy to agree with Ellis' characterisation of television as in a state of uncertainty. Whilst the absence of a true competitor to Sky's dominance of the multichannel landscape certainly lent credence to this idea, I hope to have shown that the development of an era of excess had plenty of certainties to draw upon from the recurrent discourses articulated across television's history. That these certainties should return us to television's original positioning as a window-on-the-world is of fundamental importance. As Carolyn Marvin has suggested, new technologies have a special relationship to when old technologies were themselves new and the discourses inherent within the window-on-the-world metaphor provide useful grounding points for engaging with digital television that I return to across the thesis' body of case studies. As John Caldwell argues, contextualisations such as the one I

attempt across the chapters in Section 1 of the thesis, ‘debunk myths of digital as inevitably “emancipatory” or that “high-technologies” emerge from a kind of immaculate-conception of entrepreneurialism’. Crucially, this means that as new technologies emerge, the ‘critical capacity to engage with new media technologies will not similarly be rendered to its own ash heap of past trends’ (Caldwell, 2000: 3). However, as Caldwell himself acknowledges, the emergence of new technologies and televisual forms necessitates new approaches to theorising television. Thus in the following chapter I discuss television as new media, arguing that its digitalisation places television as a technology, cultural and textual form at the intersection of new and old media histories, theories and concerns that can be usefully understood through a dialectic between its position as window-on-the-world and portal.

Appendix of images for Chapter 1

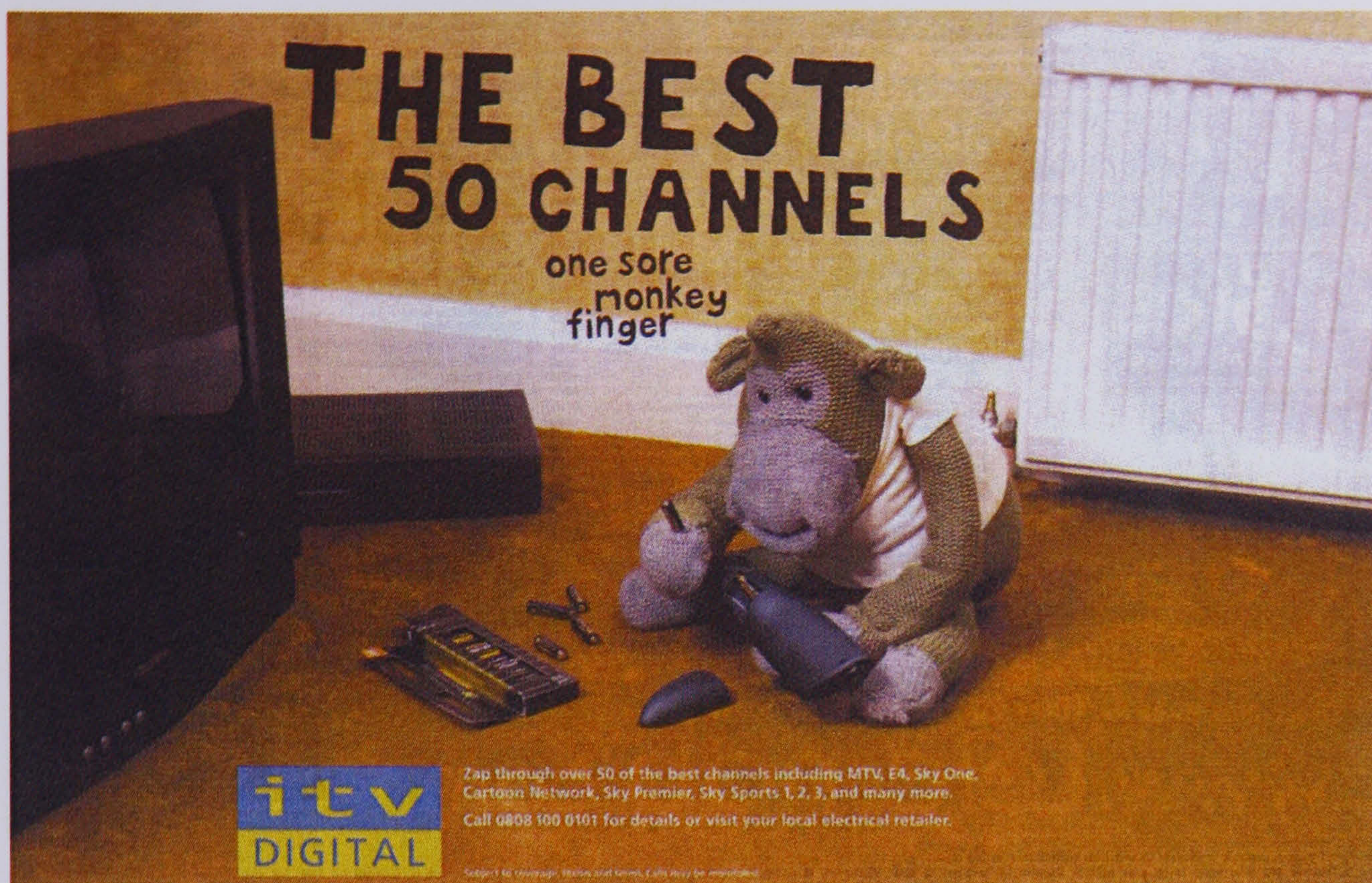


Figure 1.1 The ITV Digital terrestrial platform is promoted through a link to ITV's status as the 'nation's favourite broadcaster' so as to turn the platform's limited channel offering into a positive: the best, as selected by ITV.

Chapter 2: Plenty to excess: Television as new media

As with Chapter 1's periodisation, my account of this television epoch owes much to John Ellis' work in *Seeing Things*, and it is useful to begin my account of a new period of excess by prefiguring it with a brief account of where Ellis' period of plenty leaves off. Ellis' understanding of television as a medium for working through social issues suggests that in an era of plenty, neither digital delivery nor a multichannel landscape will kill off the vital social role of broadcast television. However, at the same time, Ellis recognises that new developments in television also move the apparatus away from the conceptions found in his discussion of plenty. In particular, he cites interactivity as 'likely to produce new forms of audiovisual material', which will 'begin to stretch broadcasting rather than replace it'. He finally concedes that 'this is not television as we know it or use it: it has nothing to do with working through. It will be a genuinely new development, a convergence with other ways of working with information' (2000: 174). For Ellis, interactivity doesn't fit within his analysis of television because of his restriction to broadcast television, particularly as defined by the process of scheduling and collective viewing.

As critics of public service broadcasting are quick to point out, television's digitalisation both technologically and culturally alters the broadcast rationale of television. Whilst the centralised system of broadcasting is largely retained across all digital platforms, the possibility of the television signal now carrying a return-path for interactive services, as well as the delivery of video-on-demand and near-video-on-demand content, creates a model of television that in some significant ways differs from the broadcast definition of the medium. The experience of television

is becoming asynchronous, both from the time of transmission and its collective experience at the point of reception. Thus I want to argue in this section that the period of excess is defined by the fundamental shift of television from a broadcast to a post-broadcast medium. As a result, I introduce the period of excess through a discussion of the aspects that are, perhaps, new about digital television as a new media form.

This period is what Glen Creeber and Matt Hills, writing in 2007, termed “TVIII”, borrowing from Mark Roger el al’s work on *The Sopranos* (HBO, 1999-). Their label refers to ‘television’s present state and beyond; a time of increased fragmentation, consumer interactivity and global market economies—what Ellis defines as “choice”’ (2007: 1), in a way that echoes my concerns with the choices on offer through the portals of interactive television in the period of excess. However, I prefer the terminology of excess here for its continuities with Ellis’ periodisation, and for the various connotations and theoretical under-pinnings I draw out across the chapter. As Creeber himself acknowledges, ‘[t]he wheels of TV Studies don’t need reinventing’ and my use of the term excess looks to build on previous work, rather than simply re-imagine it and remediate the “web2.0” terminology of the Internet to television practices (ibid: 3). In particular, Ellis’ periodisation is intimately linked to the place and purposes of public service broadcasting in the UK, something that is largely obscured by the approach in Creeber’s and Hill’s collection. Whilst Cathy Johnson’s insightful essay thinks about how the branding function of a programme like *The Sopranos* operates differently in the public service contexts of its screening on Channel 4 in the UK from its commercial origins in the US,

the essays are predominantly concerned with American programming and practices (Johnson, 2007)¹¹.

In contrast, my aim here is to unpick the technological and cultural developments in television's period of excess in relation to public service broadcasting and the BBC, tracing continuities in these developments with the key discourses noted in Chapter 1. However in order to give space for a full discussion of each aspect, I separate the discussion of digital television's technological form (again taking a social-shaping perspective) and deal explicitly with the issues of public service broadcasting in the following chapter. As such, I commence with a discussion of digital and, as an integral part of this, interactive television that serves to define the terms, corpus and object of study of the thesis. The final section of the chapter then reviews and evaluates the appropriateness of a range of new media studies' approaches, discussing these in relation to the television studies' work examined in Chapter 1 to suggest how we might start theorising the interactive texts of digital television. Across the course of this chapter I set out why we might understand these developments as constituting a new period of excess in television's history.

In labelling the current digital television landscape one of excess I am not describing a technologically determined account of television's form in the twenty-first century. Rather, I aim simply to draw attention to some of the challenges in accounting for changes in the experience of television, its technological and cultural form. As Roger Silverstone suggests:

To ask the question "what is new about new media?" is
... to ask a question about the relationship between

¹¹ I assert this despite the fact that Farrell Corcorane's work in that collection explicitly looks to engage with what the consequences of American media imperialism are. However Corcorane is not interested in a new era of television specifically, never placing his discussion in relation to the concept of TVIII, but rather the transnational production and distribution practices of television that have emerged with satellite television. Indeed, Corcorane's conclusion addresses satellite television, rather than digital or TVIII, suggesting that TVIII is an under-theorised concept (2007).

continuity and change ... which also requires an interrogation of some fundamental presuppositions in social science as well as a confrontation with some of its enduring paradoxes (Silverstone, 1999: 10).

Silverstone's comments not only point to the need to investigate some of the founding theories of television which I undertake here, but also as he goes on to suggest, recognising that this involves examining questions of power, freedom, history and communication: ' ... And we have to address these questions ... so that we are not blinded by excess. New media pose new analytic challenges, but also reinforce old ones' (11). Television's digitalisation draws our attention to some of these by explicitly making a new media out of an old media. Not only this, but television has often been positioned as *the* old medium that epitomises the passive audience: characterised by the "push" nature of content that is broadcast from centralised institutions and its one-to-many organisation that is perceived as leaving little to no room for user feedback. In contrast, new media are often characterised as interactive, flexible, on-demand, individual, personalised, "pull" technologies, with the web seen as the archetypal pull medium. As Jeremy Butler suggests, 'the web is fundamentally a pull medium. Nothing appears in one's Web browser until the user requests it' (Butler, 2002: 5).

However, more nuanced theories, such as Lev Manovich's *The Language of New Media* (2001), Uricchio's discussion of TiVo (2004) or Anna Everett's theorisation of "Digitextuality" (2003), problematise the old/new, push/pull media binaries by not only tracing the existence of (inter)active audiences for print and television media, but also more usefully suggesting how the seemingly personalised, limitless and liberatory spaces and forms of new media are often 'curtailed by corporate involvement in search engines' (Everett, 2003: 19), filtering technologies,

aesthetic and ownership structures. As Buzzard suggests, the predominant business model of the web has been the portal to aggregate users and content and ‘serve as hubs or gateways’ to the wider Internet (2003: 205). Under such structures, interactivity becomes rationalised as a series of choices to explore proprietary content, or as William Urrichio details in his study of TiVo, a selection from pre-filtered content (2004).

As Manovich argues, a common incorrect assumption about new media is that it is defined as discrete from old media by virtue of its digital technological base (2001: 49). Manovich goes on to call into question a further five common assumptions about new media, suggesting all are false:

- (2) All digital media texts share the same digital code
- (3) New media allows for random access
- (4) Digitization inevitably involves loss of information
- (5) Digital media can be copied without loss of quality
- (6) New media is interactive

In the discussion that follows, I focus on point 6 as it is most germane to my thesis on interactive television, returning to other points as they arise. For now, the usefulness in Manovich’s work is in his ability to convincingly rebut these assumptions by paying close attention to interfaces through a methodology that works “from the ground up”, drawing on programming and software operations as much as upon cultural traditions. In this chapter I therefore suggest that the formation of digital television is both marked out as new, particularly through the advent of interactive television, whilst at the same time fitting very much within the discourses, technologies, programming and aesthetic forms that have continually defined television. Thus in choosing the term excess for this new period in television history, I want to emphasise some of these continuities as well as draw attention to

the newness of digital television. I use the term excess therefore to connote the excess of content and choice available in an interactive, 500+ channel television landscape; the excess of regulatory and review activity over this period (discussed in the following chapter); and the stylistics of excess that call up the critical lexicons of postmodernism.

What is digital television?

As Charles Gere's tracing of digital culture suggests, digitality is a cultural form 'encompassing both artefacts, [and] systems of signification and communication' (2002: 12). However, it is worth starting out by noting the substantial changes to television's technological base that mark out the era of excess in technological terms from those that precede it before looking at the wider cultural implications. Thus in this section I deal with three issues concerning digital television's technological form: digitality itself and how it applies to television; convergence; and HDTV.

Digitality

Technological accounts of how digital transmission works are abundant in the field of new media (c.f. Harries, 2002; Lister et. al, 2000), which at its simplest level involves the conversion of information into a binary code, a series of 'on/off' pulses commonly represented as 0s and 1s. Digitalisation allows for the transmission of data that is both greater in quantity and more malleable for both producer and audience alike. However, for my purposes Karen Lury has recently provided a working account of how digitalisation affects television more specifically. She draws two distinctions between the analogue and digital transmission of television. First, that 'digital images are based upon a conversion of "real world" information (the transmission of light) into the language of

computers (binary code, and ultimately, pixels)'. Secondly, unlike the analogue image, each pixel in the digital image can be remembered and revisited as opposed to analogue television's pan and scan system. In relation to Lury's first distinction, she makes the important point that the transmission of digital code means that 'the digital television image is still a temporal image (it is always in movement)' (2005: 12). Although Lury suggests elsewhere that the digital television image moves away from the connotations traditionally associated with the live, "real", image of TV, it is implicit in this definition that television remains live. Or rather, despite the foregrounding of the aesthetics of excess I detail below, television remains at least weighed down with this ideological and ontological baggage.

As noted in my introduction, digital television is distributed across the three platforms of cable, digital terrestrial and digital satellite, with the penetration of the latter two of these far outstripping that of cable. Both digital satellite and digital terrestrial work on a system of multiplexing, which not only facilitates the larger number of channels available on digital television, but also enables the sending of multiple streams of data to the end viewer as one "packet", called the "transport stream". Multiplexing has three important implications for understanding the economics, production, programming and regulation of digital television. Firstly, each multiplex contains a number of channels effectively crammed onto the single transmission frequency of one physical UHF channel. Secondly, this carriage capacity is instrumental in the delivery of interactive television. A multiplex can contain not only the broadcast content of a single "channel", but also interactive applications. These can range in complexity from the four videostreams discussed in Chapter 5's analysis of *Walking with Beasts* through to simple text stories (*Big Brother*, 2003-2004 series) and voting options (*Pop Idol*, 2001-2003) or interactive advertising. Finally, multiplexes

are proprietary. Freeview's bandwidth and technological limitations mean there are only six multiplexes available, which have been allocated by the government, with the BBC receiving two of these. This allocation has enabled the BBC to launch a raft of channels, which combined with the Corporation's positioning to measure its public value in terms of "reach" (discussed in Chapter 3), has ensured it retains a prominent place in the digital television landscape.

In contrast to this BSkyB's digital satellite platform, Sky, has almost unlimited multiplexes, which are all controlled by BSkyB. Because BSkyB is also the Conditional Access System operator for digital satellite, BSkyB is able to determine the place of particular channels on the all important EPG (whereby channels are listed in numerical order, making early slots more likely to attract audiences who don't roam too far from the pre-existing terrestrial channels). Conditional Access Systems are the technologies that allow the home audience's set-top-box to send and receive information on digital satellite services, but more importantly, are the point at which *what* is transmitted is determined. As a result, Conditional Access Systems might best be thought of as a filter, or bottleneck point, where the owner of the Conditional Access Systems can determine what information is let through, where and how it is received. Control of the EPG and terms of access to the platform, therefore, raises the possibility for a Conditional Access System owner to discriminate against third party programmers in order to favour its content affiliates (for a more detailed discussion of Conditional Access Systems, see Galperin, 2004). As such, Conditional Access Systems represent an important iteration of the new media portal, acting as a gateway that doesn't simply enable their controller to determine audience and viewer access to content, but also determines independent producers' access to viewers and audiences in digital environments. I return to this issue in my

discussion of interactive audiences at the end of this chapter and in Chapter 7's examination of history programming, but it is important to note at this point that the BBC, as a public service broadcaster with a remit of universal provision, may have an important role in facilitating access of both producers and licence-fee payers to the spaces and opportunities of digital television. For producers, such systems are governed by EU Directive 94/47, which requires Conditional Access System operators to offer their services to broadcasters on fair, reasonable and non-discriminatory terms (Art. 4d). As Chapter 3's discussion of the public service formation of the landscape details, BSkyB's Conditional Access System charges and conditions have remained a thorny issue since the inception of digital television, with various companies falling out with BSkyB over this issue, refusing to pay charges or be carried on the platform.

Convergence

As Manovich suggests, convergence isn't a predetermined result of digitalisation. Indeed, as my discussion of television as a window-on-the-world suggested, hybridity has always been a key element of television form. John Caldwell's work is suggestive here of how digital convergence renews this element of television's window: television is a 'hybrid ... media art form ... regularly seen – even in the digital age – as a combinatory medium; a venue in which historically discrete art forms are aggregated into and presented as part of a complete whole' (Caldwell, 2004: 55-6). Such a conception moves beyond an understanding of television as a mere relay-er of other art or media forms and constitutes it as an amalgam of these: a convergence with other media technologies¹². We must therefore

¹² This hybridity of television is perhaps most usefully attested to in Raymond Williams' account of the medium, which posited it as akin to:

think of convergence as a more complex term, referring to television's history of hybridity and the cultural implications of this, which are in turn reinforced and renewed by the adoption of increasingly shared programming languages of digital technologies. In this regard, Henry Jenkins has noted a distinction between media and cultural convergence, whereby the former constitutes a 'structured interactivity' in contrast to the latter's understanding of fans' practices of community, participation and appropriation (1992, 2002, 2006). The problems with Jenkins' work have been aptly noted elsewhere (c.f. Brooker, 2001) and I do not want to engage with this further here: the approach I'm taking in this thesis is explicitly concerned with the way interactivity is structured by the second shift aesthetic practices of media owners and I am thus necessarily more interested in a political economy view of media convergence.

As Graham Murdock demonstrates, convergence can be "unpacked" into three aspects: convergence of cultural forms; convergence of communications systems; and convergence of corporate ownership (2000b). The latter of these is aptly epitomised by recent mergers between cable-operators NTL and Telewest, and in turn, their merger with Sir Richard Branson's Virgin. With Sky's recent purchase of a controlling stake in ITV, the digital landscape has increasingly come to be dominated by such multimedia behemoths. However, the BBC is not immune from such charges itself. Both the recent Ofcom review leading up the 2006 Charter renewal and the government's *Report of the Independent Review of BBC Online* (DCMS, 2004) on the BBC's online services pointed out that the muscle of the BBC's television arm was effectively allowing it to "colonise"

... having read two plays, three newspapers, three or four magazines, on the same day that one has been to a variety show and a football match. And yet in another way it is not like that at all, for though the items may be various the television experience has in some important ways unified them (Williams, 1992[1975]: 95).

online space. The fear that the BBC's online presence will adversely impact on commercial rivals has resulted in Ofcom having been granted new jurisdiction over the corporation in the 2006 *White Paper* to assess the market impact of any new BBC service (although paradoxically, Ofcom is not technically a regulator of the Internet).

Of course, the convergence of media ownership also facilitates the convergence of media forms, supplying content across as many distribution outlets as possible, repurposing and linking content across these sites but drawing them together under one experience: the portal. As John Caldwell's and Karen Buzzard's work suggests, this is not simply a new media formation. Buzzard convincingly argues that portals 'function like the mass circulation magazines or TV networks: they are sites that meta-aggregate content and offer a range of services in order to be the home page for as many users as possible' (2003: 205). Similarly, Caldwell argues that old media forms bring practice, experience and industrial business models to the development of new media, spreading 'the gospel of "repurposing content" and "migrating content" to this or that "platform"' (2002, 63). Caldwell's work is primarily concerned with the commercial nature of this repurposing, arguing that the television industry has effectively taken its ability to make money out of "clutter", to the Internet and the web's technological and economic potentialities back to television. However, within the British television landscape this strategy is most evident in the BBC's 360 degree commissioning strategy announced in 2005, which brings with it public service rather than commercial models. As Niki Strange argues, the "multi-platform project" represents a new and complex form of cultural convergence, creating a text defined by its intertextuality that is concurrent across media sites and interwoven by particular discourses (Strange, 2005). Such moves demonstrate that it is

increasingly difficult to analyse television as a singular and separate media form. Whilst the case studies of Chapter 7 are not direct products of the BBC's 360 degree commissioning policy, my discussion there examines the relationship between the linear broadcast television programme, the interactive application and, in turn, how these act as portals to drive viewers to proprietary, but public service-imbued, online spaces.

This cultural convergence is also importantly apparent in the audiences of such new media forms, who now take the reading competencies learnt from one form to another. The ability to read and use an interactive television application isn't solely contingent on understanding web-aesthetics, as influences such as teletext and ordinary television videographics remain pertinent, but the form relies largely on a hybridised reading strategy of the viewer. To these forms of convergence I would note two further structures that are worth explicitly articulating. Firstly, convergence is also apparent in the regulatory framework that governs the new media-scape of which digital television is part: in the UK the formation of Ofcom, one über-regulatory body to deal with all forms of media communication except the Internet (which remains largely unregulated), aptly represents this shift. Finally, digital television must also be conceived of as a site of convergence in relation to the bodies of academic work that touch upon it – television studies, cultural studies, new media studies, visual culture studies, postmodernism and film theory to name but a few.

HDTV

As Terry Flew suggests, the advent of digital television was often marketed in terms of offering a 'significantly enhanced picture and sound quality ... a "cinema-like" viewing experience' through HDTV (Flew, 2002:

111). However, HDTV has largely been absent in the debate about the form of digital television in the UK and only now, in 2007, is it being slowly rolled out. Galperin's history argues that the failure of MAC-satellite systems in the early 1990s suggested that HDTV was a cul-de-sac, and as I discuss in more detail in the following chapter, Sky's multichannel business model has been the important driver of digital television (Galperin, 2004: 135). In 2006 both Sky and the BBC have commenced cautious HDTV trials, with the high-definition transmission of the Premier League again being an important drawcard in selling the technology to consumers¹³.

Returning to the difference in multiplexing capacity between digital satellite and digital terrestrial noted above, it is important to note here that any move to make HDTV an industry standard will impact on the carriage capacity of Freeview, reducing the number of channels available as HDTV channels take up more bandwidth. This is likely to make the Freeview platform less popular with consumers speeding up the technological obsolescence of the medium, which as I discuss in the following chapter, may have important implications for the place of the BBC and its position within the UK's digital landscape. The debates and implementation of HDTV are largely still to come as television moves further into the period of excess and, as such, HDTV has not played a significant part in my study. Thus by the time "critical mass" was reached in 2002, when 45% of UK homes had digital television (*Broadcast*, 20/12/02: 2), the answer to the question "what is digital television?" had been largely defined as: first and foremost, multi-channel; largely subscription; tiered in content access (with

¹³ In contrast the promise, if not the actual implementation, of HDTV has largely characterised the move to digital television in the United States. Galperin's astute analysis suggests that HDTV has largely been used as a bargaining tool by the American television industry to secure the existing players dominance in a digital environment, rather than opening it up to massive competition. However, the current moves to create a HDTV standard for DVD players' by major electronics companies, particularly Sony and Panasonic, combined with its support by the American Motion Picture Association suggests that a move to make television sets HDTV capable as standard may be imminent

sport and movies dominating the hierarchy); interactive; and finally, of better sound and vision quality.

Despite many of these features representing a continuation of trends apparent in the period of plenty, significant shifts are apparent in the digitalisation of the television landscape. These are perhaps best accounted for by understanding the period of excess as marked by television's shift to a post-broadcast medium. Whilst this term has problematic connotations for thinking about how public service broadcasting operates in a period of transition, when there is a divide between the have and have-nots of digital that require us to recall that not all audiences are living in a post-broadcast television experience, the usefulness of Parks' work lies in her explication of the term's meaning. Parks suggests we might think of the digital era of television as post-broadcasting not to 'refer to a revolutionary moment in the digital age but rather to explore how the historical practices associated with [broadcast technologies] have been combined with computer technologies to reconfigure the meanings and practices of television' (2004: 134). Central to Parks' concerns has been the development of increasingly on-demand, personalised and niche/narrowcast forms of television, which she terms "flexible microcasting". Her work suggests that flexible microcasting is 'organised around social distinctions', whereby a degree of control is passed on to the viewer over 'television's temporality, not only in terms of timeshifting content but also by enabling the viewer to determine the schedule and regulate its flow' (135-7). Red-button interactive television in the UK, through the way in which they privilege choice (discussed below), forms part of this change in the television landscape to a post-broadcast medium whereby television increasingly offers up a menu for the audience/viewer to select from.

This is in marked contrast to the flow of broadcast television's scheduling practices, which John Ellis has suggested was 'where power lies in television' (2000: 130-48). As Ellis recognises, digital television's EPGs and timeshifting technologies replace the 'time patterns of broadcasting' with 'personal attempts to escape them' leading to desynchronisation of the television experience. However, whilst Ellis suggests that the broadcast schedule of television will remain an important answer to a world in which too much choice leads to "time famine" and "choice fatigue", I would argue that, in fact, it is of greater importance to pay attention to the way in which these choices are structured. As William Uricchio's work on the metadata used by filtering technologies of DVRs like TiVo suggests (2004), we need to shift our attention to questions of gatekeeping, whereby content-owners clearly limit the choices on offer and restrict user/viewer-flows to their proprietary content. As Buzzard suggests,

Apparently, the future will be determined by those who control the first screen to be seen on whatever device of the future is tuned in (i.e. computer, TV or some combination thereof), whether it be called the homepage, portal site, electronic programming guide, system interface or "first boot" (2003: 206).

This issue is picked up in my review of John Caldwell's work on second shift aesthetics below, where I advocate that a methodology sensitive to the industrial-textual structuring of dispersed viewer-flows is crucial to exploring interactive television (itself just one site for investigating the relationship between choice, ownership and aesthetic structures).

Importantly, post-broadcast television does not represent a radical shift to an on-demand model of the medium. Digital television remains imbued with the ideological and ontological baggage of liveness, but we must read these in relation to the properties of new media it now overtly displays. As

Ellis surmises, these new properties will stretch rather than replace broadcasting entirely (174).

Interactive television: Television as new media?

In this section I want to concentrate more explicitly on interactive television as that which, ostensibly, marks out digital television's "newness". Whilst digitality, its antecedent multichannel environment, the possibility of HDTV and television's convergence with other media might have been at the forefront of selling digital television, interactivity has been no less important in demonstrating 'the condition of newness' that is necessary for a new media to destabilise the status quo and promote take-up (Uricchio, 2002: 219). As Georgina Born notes, the original blueprint for digital transition was envisioned by the government as not just providing lucrative sale of bandwidth, but also:

If it became universally available, digital television was seen as a platform to deliver universal Internet access, so mitigating the "digital divide". In the government's eyes these developments would in turn help to combat social exclusion and political apathy (2004: 482).

The centrality of interactive services to the development of digital television is significant here and whilst such a dramatic vision of interactive capacities is yet to become a reality, the development of red button interactive applications has nevertheless become pervasive. Arguably, part of the reason for interactive television's success in the UK is precisely the way it has been figured within existing discourses surrounding television; in particular, television's window-on-the-world metaphor. As I suggested in the previous chapter's teasing out of discourses within this metaphor, television has always been an interactive medium. Thus, red button interactivity simply represents the most prominent and widespread articulation of this desire. In this section, I discuss the forms of interactive

television that make up the thesis' case studies, relating these to relevant work in new media studies, placing digital television as a medium that lies at the intersection of new and old media histories, theories and concerns.

Interactivity is often touted as one of the defining features of new media and the exposition of its meaning has had a great deal of attention from critical theory in a variety of disciplines. Lev Manovich, however, debunks the centrality of interactivity to our understanding of new media by suggesting that the term, as with the term “digital”, is too broad to be useful. The supposed radical element attached to new media's interactivity is the real-time ability to manipulate information on the screen – therefore to call computer media interactive is meaningless; it is simply the most basic fact about computers. More important for Manovich is to move beyond interpreting interactivity in terms of “interaction”, and think about the psychological aspects of interactivity (2001: 55-57).

Manovich's argument for interpreting interaction as having psychological aspects is useful for the way in which it eschews judging interactivity against a sliding scale in which face-to-face communication is posited as the ideal form of interaction (c.f. Kim & Sahwney, 2002). This view has informed a number of approaches that have addressed interactive media. New media scholars have struggled with how to adapt such a definition of interactivity to the properties of digital media, which often involve asynchronous forms of communication. As Rafaeli's foundational description of interactivity explicates:

interactivity is an expression of the extent to which in a given series of communication exchanges any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmission (1998: 111).

Scholarship that has addressed interactivity, particularly interactive television, has therefore recognised that positioning face-to-face

communication as an ideal is problematic. As Kiouisis suggests, ‘most interactive experiences are associated with technologically-mediated environments’ (2002: 363). As a result, definitions such as Jens Jensen’s, argue for interactivity to act as ‘a measure of a media’s potential ability to let users exert an influence on the content and/or form of the mediated communication’ (1999: 201). This approach is apparent in the only volume dedicated specifically to interactive television, edited by Jensen and Cathy Toscan, which proposes that interactive television is:

“two-way TV” in which the viewer can make programming choices and produce user input, in short: TV’s two-way street ... it is a combination of technologies that allows viewers, consumers, and users greater control over what they watch and when they watch it (Jensen and Toscan, 1999: 16).

Such an approach is rather celebratory as connoted by their collection’s title: *Interactive Television: TV of the Future, or the Future of TV?*. Whilst the anthology is not quite a technologically deterministic account, it problematically works with an ideal of interactivity that measures the worth of interactivity against viewer’s interaction and the ability to interact with, and physically alter, the text. That is, the extent to which the return path allows the text to be altered.

Terry Flew largely cuts through the problematics of defining interactivity – although ultimately succumbs to them – when he suggests that ‘interactive media are those that give users a degree of choice in the information system, both in terms of choice of access to information sources and control over the outcomes of using that system and making those choices’ (2002: 21). Flew’s emphasis on choice allows him to position diverse media forms as interactive to different degrees, so that video games provide interactivity through the combination of user choices and the skill of the individual player to produce different experiences, whilst the World

Wide Web invokes choice to take users down distinctive hypertext pathways (ibid). Whilst Flew goes on to complicate interactivity by associating it with interconnectivity and interoperability, his emphasis on choice allows for an understanding of interactivity that conforms with the views expressed by van Dijk's survey of interactive television producers, which found they generally thought of interactive television as 'freedom of choice for viewers or consumers' (2001: 454). This emphasis on choice is particularly useful for the fairly limited (from a communication studies' point of view) forms of interactivity that are subsumed in the UK's interactive TV landscape. Red button applications have generally been promoted in terms of providing the viewer with the ability to *choose*: to choose to opt in to extra coverage; to choose to opt out of the scheduled programming; to choose to watch another angle/sporting event/replay; to choose to watch a particular sub-genre of news; to choose to vote, and who to vote for ... to choose [their] life! On one level or another, to *choose* to "interact".

This brings us somewhat closer to a description of the kinds of interactive programming that I will be discussing, but is still perhaps not specific enough in delineating the forms of interactivity present in the UK's digital television landscape. One could, as Karen Lury does, take television studies' traditional concern with the active audience and define interactive television as including all forms that allow 'the touch of the viewer (pen to paper, feet on the studio floor, finger to telephone dial, finger to telephone dial, fingers to keyboard, finger to remote control)' to 'affect what is seen on-screen' (Lury, 2005: 166). To include all such programming would be an ill-conceived project, as Lury's introductory account of interactivity there suggests – failing to address what place interactivity has in the emerging digital landscape and how it is positioned and marketed by the industry,

experienced and used in its variously complex textual configurations. As a result, I want to relate Flew's and van Dijk's work on interactivity as something which promotes choice, to the industry's own marketing of interactive television and the text themselves.

The BBC explains interactive television as part of the wider revolution of digital television which makes it possible for the audience

to do other things with your television – join in with programmes, see extra news stories and sports coverage, check sports results, travel information and weather forecasts, even play games, go shopping, place bets and use email
(<http://www.bbc.co.uk/digital/tv>, site visited 2/08/06).

Similarly, BSkyB define interactive television as that which enables the audience to

interact with TV content, respond to an ad or access Internet-based services. For example, viewers can take part in a TV programme, play games, make purchases and even send text messages and emails, all through their television set
(<http://www.skyinteractive.com/sky>, site visited 02/08/06).

As discussed in Chapter 4, these definitions and marketing of interactivity have often been positioned as revolutionary and spectacular before giving way to more everyday connotations. Both BSkyB and the BBC, as well as Channel 4 and ITV, define interactivity in terms of the applications reached by pressing the red button on a viewer's remote control. These red button applications range from betting and voting, through to finding out more information about a series (replicating the web's ability to provide fans with back-stories and previews), through to selecting movies at home, emailing and online chat, news story selections, stock market data, online shopping or enhanced sports scores and statistics. At a general level they can be divided into the following categories:

- Enhanced television (e.g. *Walking with Beasts* discussed in Chapter 5)
- Interactive entertainment portals (e.g. *SkyActive* discussed in Chapter 4)
- Text Services (e.g. the replacement Teletext service provided by the BBC)
- Interactive advertising (the first example of which was an advert for “Chicken Tonight”, which allowed viewers to enter a competition and look at recipes through the interactive application. In 2005, Sky announced the platform’s 550th interactive advertising campaign).

I discuss the final three forms of interactivity primarily in relation to the discursive formation of interactive television in Chapter 4, with the remaining chapters focusing on the forms of enhanced television developed by the BBC in relation to the Corporation’s public service goals and remits¹⁴. BSkyB describes enhanced television as a ‘way for viewers to interact with a TV show or extend their experience of a show by viewing more than just the linear broadcast’ (ibid). Such applications offer the chance for broadcasters to encourage viewers to develop more engaged and involved relationships with their programming (viewing character bios, purchasing merchandise, choosing alternate commentary or accessing extra coverage that appends the programme’s transmission slot). As with new media’s portal structures, this adds brand value and keeps viewers on the channel’s proprietary content for longer periods of time. The BBC divides their enhanced television applications into four categories:

¹⁴ The notable exception being the news multiscreen service, which appends both the BBC’s and Sky’s schedules on all their channels – and in the case of Sky, all channels on its Conditional Access System platform.

1. Schedule Busters Live – These applications make the event bigger than the transmission slot. The BBC often use these for large live events with parallel action where interactivity allows viewers to choose the content they want, as exemplified by my discussion of Olympics and World Cup applications in Chapter 5 (figure 2.1).
2. Schedule Busters Near-Video-On-Demand – These allow viewers to access pre-recorded extra material related to individual programmes. Again the applications are designed to push the experience of the programme beyond the traditional boundaries of a transmission slot, by keeping the material available after the end of the programme proper; for example, *The Life of Mammals* (BBC, 2002-03) interactive game was made available at the end of the programme so as to ensure a longer engagement with the programme (figure 2.2).
3. Engaging Participation – The BBC markets these as ‘driving audiences closer to the programme’ (BBC Commissioning website, site accessed 23/04/05), by allowing the viewer to either play along (*Test the Nation*) or test themselves against the programme’s topic (figure 2.3).
4. Engaging Enhancement – Applications such as those designed for the BBC’s coverage of the *Last Night of the Proms* (BBCi, 2003 -) or *Shakespeare at the Globe* (BBCi, 2004 -) (figure 2.4), layer text information on screen for the viewer, such as programme notes or critical interpretation. Arguably these are some of the Corporation’s most clearly driven public service applications.

Regardless of the individual application involved, the streaming of data described above for interactive television has two important impacts on how applications are received, used and understood. Firstly, they allow the viewer to create personalised, navigable texts that remove the viewer from the mainstream of the channel's broadcast content and allow them to choose, to greater or lesser degrees, what appears in their screens: television becomes a pull media form. Secondly, the streamed nature of the data keeps the experience, in some important respects, live.

Three examples of different kinds of applications will illustrate how television's live ontology not only remains intact, but is reinforced. Firstly in an application like *Walking with Beasts*, where a mainstream narrative is supplemented by four alternate videostreams to choose from, if the viewer chooses to leave the mainstream and explore a supplementary videostream, they will not be able to rejoin the mainstream at the point they left its narrative: both streams occur live at the point of transmission and time spent exploring one stream is time that is missed on the others. In a different form of interactive application, such as text-based systems, viewers may be able to call up data in the application on-demand (in the real-time ontology of computing discussed below), such as a text-story on the Gulf War or a *Big Brother* contestant or, indeed, one of the games on Sky's Active application. However, whilst this data delivery might mimic the real-time of computers by responding to viewer choices by creating a personalised text, the broadcast transmission of scheduled programming continues live for the duration that the viewer is on the individual application: the viewer will miss whatever programming is occurring on the channel's broadcast stream during their exploration of the application. Even DVRs do not prevent the effect of television's liveness in this sense as

they can only record either the channel the viewer is on – in this case the interactive application – or an entirely different channel; for example, if I am watching and recording *Buffy the Vampire Slayer* (Fox, 1997-2003) on SkyOne and decide I want to enter an application associated with an advert I see, my DVR will interpret this transport stream as ‘SkyOne’ for the duration of my exploration of this application – it cannot return to recording the mainstream of a programme when the ad-break ends.

Thirdly, interactivity has often been associated with genres where a primacy on liveness is already in place, most notably sports and news, which as I go on to discuss, have also been major sites of investment for the development of interactive television. This is evidenced in the final demonstration of interactive television’s liveness, which concerns the developing production practices around its use. As Cathy Smith, the BBC’s new media archivist explained, with the launch of red button interactivity there was a real return to live production practice whereby there was ‘literally someone pressing the red-button down the hall during live transmission [to test if the application worked] ... people running up and down the hall, people talking on the phone to discuss the problems’, all of which required ‘a large investment in labour capital’ (Interview conducted (03/09/03)). Thus, in fundamental and important ways, television’s digital form remains live.

Although the interactive element of many red-button applications is extremely limited, they allow a personalisation of the text to a degree that, most importantly, allows the viewer to explore related – and proprietary – content of the mainstream channel content whilst remaining within the broad confines of the text’s, and thus channel’s, boundaries. In this regard, all interactive television applications can be regarded as a second shift programming strategy by broadcasters, now recast as content-owners and

gatekeepers. As such, the majority of interactive applications are designed as an extra revenue stream, which as John Caldwell suggested in 1995, begins 'to look suspiciously like a marketplace, pure and simple'. Thus, interactivity is as much a new technical, cultural or social phenomenon as a powerful discourse, which is designed to encourage 'suturing oneself via menus to existing channels or to interactive games, which are not interactive at all ... With cable and its cohort of developers at the helm interactivity means consumerism at its worst (1995: 260-61)¹⁵.

For BSkyB, the mobilisation of these discourses and commercial use of interactivity has meant that by the end of 2002, its interactive services were generating £14/year profit from each BSkyB customer, which in the final quarter of 2004 equated to £22million in total revenue. By the end of 2005, Sky's interactive entertainment portals were being visited by over 1million viewers a week (*Sky Interactive Press Release*, 20/12/05). In contrast, C4's projection of £100million/year to be raised by new media proved too much for its interactive television services, which has been mostly reliant on revenues from viewers voting on *Big Brother*. As a result, Channel 4 pulled the plug on their interactive television services in 2006. ITV have taken a more cautious approach to interactivity (as discussed in relation to the failed ITV digital platform in Chapter 3), launching its service in 2001 on a pilot basis to 'to assess their use and appreciation by viewers' (*Statement of Programming Policy*, 2002/03). Whilst ITV's interactive output has continued to grow, it has mainly been through applications that enable competitions and voting so as to secure dial-up revenue from viewers' set-

¹⁵ A 2002 report on the interactive television industry by Weapon 7, an interactive media company who specialise in producing interactive advertising for clients such as EMI, Microsoft, Adidas and Coca Cola, is indicative of how discourses of empowerment and participation are mobilised to such ends:

Television is no longer simply a passive one-way experience ... the ability to engage in a two-way dialogue ... iTV empowers viewers to effect and control content ... to participate: for example, to shop, email, vote, order samples or brochures, enter competitions etc (2002: 5).

top-boxes¹⁶. ITV's approach has been to carefully assess revenue-generating capacities of interactive television and the decision not to include a return-path on the Freeview platform has been key to ITV's, C4's and Five's failure to fully support interactive television and develop a wide-range of interactive applications. To a degree, this explains the bias in the thesis' case studies of predominantly BBC and Sky applications. Both the BBC and BSkyB have placed interactive television as an integral part of their digital television strategies, with each launching a separate interactive department in 2001, BBCi and Sky Interactive respectively, to deal with interactive television and such applications' links to a multiplatform commissioning and programming strategy.

Arguably ITV's cautious approach, and C4's dismissal of the interactive platform, demonstrates the value of a public service broadcaster that is able, and willing, to take risks in a new platform. This can be understood as a fundamental public service value performed by the BBC that has helped to promote Britain as a world-leader in interactive television. This may become more important as the platform develops to enable more Internet-like services to be launched (the 2004 launch of an NHS Direct enquiry and FAQ service being a particularly pertinent example of this potentiality). As I discuss in Chapter 7, the BBC's role in developing the platform positions the Corporation usefully to take up the role of gatekeeper, using interactive television as a portal to facilitate access to

¹⁶ The prohibitive costs of developing interactive applications has led to a general outsourcing of the production of interactive elements to separate companies or divisions. For example, even in the most highly successful reality television formats, where interactivity has perhaps become most consistently tied in as a revenue stream, the production of interactive applications is outsourced. Endemol, the most prominent production company in reality television, have used the BSkyB subsidiary SkyInteractive to produce applications for high profile programmes such as *Big Brother 5* (Endemol for C4, 2005) and *The Match* (Endemol for SkyOne, 2004). Similarly, the BBC's interactive television investments has included a substantial portion spent on independent commissions by leading interactive firms Wall-to-Wall (for example, *Who do you think you are?* (BBC, 2004 -)) and Flextech (for example, the interactive portal for the BBC affiliate UKTV (2004 -)).

digital spaces. In so doing, such a use calls up Burnett and Marshall's description of a portal as an 'organized access point that allows the user to move outward' (2003: 98). However rather than simply herding people to proprietary content, the portal function here works to drive digital immigrants online, helping to bridge the digital divide. However, the development of interactive television in the UK also attests to the value of the peculiar relationship between public service broadcasters and commercial competition, which now increasingly takes the form of a battle between the BBC and BSkyB. Thus whilst my focus is on public service broadcasting, it is important to note both the powerful and commercial nature of the discursive formation of interactive television – for the BBC (as I draw out in Chapter 4), whilst these are simply marshalled for slightly different purposes, the interest in viewer retention remains of paramount importance.

As discussed above, the limited multiplexes available on Freeview's digital terrestrial platform results in a substantial difference in the complexity of applications on offer across platforms. This difference is most obviously borne out in the news multiscreen applications discussed in Chapter 6. On digital satellite television, both the BBC's and Sky's interactive news applications allow viewers to access a screen that is broken into six or eight (respectively) smaller windows containing videostreams of particular news sub-genres: headlines, sport, weather etc. In contrast, on Freeview the BBC provides only two videostreams, whilst Sky does not provide any interactive news service at all. This reflects not only the limited carriage capacity of the digital terrestrial platform, but also the different broadcasters' investments in the different platforms and their relative obligations. Thus, BSkyB's decision not to transmit interactive applications on its Freeview channels can be read beyond simply one of

technological constraints, for the company could have purchased extra bandwidth at the commencement of Freeview's transmission¹⁷. Rather, it was a conscious business decision related to both the lack of a return path on Freeview for generating extra-revenue and BSkyB's decision to keep "premium" or "enhanced" services restricted to its proprietary, subscription-based, digital satellite platform. As a result, BSkyB hoped that Freeview would seem not only limited to audiences in terms of carriage capacity for channels, but also limited to viewers in terms of the digital revolution it offered audiences; thus encouraging customers to see Freeview as a stepping stone to BSkyB's pay services.

In contrast, the BBC's decision to launch interactive applications on Freeview can be read both in terms of a public service value related to the BBC's obligations of universalism, as well as the BBC's desire to promote Freeview as a viable competitor to BSkyB. The obligation of universalism posed significant problems to the BBC's development of its BBCi brand of interactive television services, as not only were Freeview interactive applications substantially limited and inferior compared to those on digital satellite, but there was also significant variation between different manufacturer's set-top-box's ability to handle interactive applications. Interviews with Patrick Dalzell (BBC's Senior Executive Producer of Interactive Sport) and Tom Williams (Creative Director of Interactive Television at the BBC) revealed there was a long debate at the BBC as to how to reconcile universalism with the different services across platforms and, more importantly, what standard to adopt for Freeview's interactive applications. From 2001's launch of BBCi's interactive television through to 2004, the BBC utilised a 'lowest-common denominator' approach (Dalzell,

¹⁷ This option is no longer available as the platform's space has effectively been used up by so many new channels starting up on Freeview, which led to a bidding war for the last few slots available in 2005-06, which was won by C4 for their More4 service.

interview conducted on 22/03/04), with a move to higher standards mooted after this point as set-top-boxes became increasingly more advanced. As a result, a median range capacity is used for the BBC's interactive television applications, meaning that the vast majority of Freeview households have no problem using the interactive services. Despite the resolution of this problem of access, it is worth noting that a digital divide does exist between Freeview viewers and their satellite counterparts due to the technological constraints of the former. The desire to offer universal access to such systems and, should uptake increase, offer HDTV to all audiences, means that a BBC-led Free-Satellite initiative still remains a possibility over the BBC's current Charter period. Indeed, the new BBC Trust has given permission for public consultation on the Corporation investing in a Free-Sat service. Regardless of the platform however, these forms of interactivity require new forms of engagement by television scholars that might profitably draw on work by new media scholars. Thus, I want to turn now to examining this interactivity in relation to new media scholarship.

New media theory: Remediating television theory

As my discussion of television theories of textuality in Chapter 1 has suggested, the theorisation of digital television can fruitfully draw on both old and new media work. Thus, my discussion below attempts to think about how academic theory can usefully converge the methodologies of film, television and new media. As a review of these theories, my central concern is to place the forms of interactive television I have discussed above within new media discourses. The discussion below is therefore divided into three sub-sections relevant to television's interactivity. The first is concerned with general theories of new media, most notably Jay David

Bolter and Richard Grusin's theory of remediation, as well as the work of Lev Manovich and others that returns to the question 'what is new about "new media"?'. This sub-section provides an overview of a body of work that I seek to both draw upon and distinguish my discussion of individual case studies from. In the second sub-section I deal with ideals of the (inter)active audience, particularly in relation to the notions of communities and the public sphere that are drawn upon in Chapter 7. Finally, I conclude the chapter by examining new media approaches to the textuality of interactive media forms, explicitly relating these theories to the forms of interactivity in the UK's digital television landscape that I discuss in the following chapters. In order to keep this review as succinct as possible, I have attempted to avoid entering into protracted debates about whether particular scholars are technological determinists or celebrants, instead looking to draw largely on work that considers the social shaping of technology and pointing out where there are limitations or divergences between my approach and those I cite.

It is worth opening by examining Bolter and Grusin's *Remediation: Understanding New Media*, which addresses television's place in window-on-the-world discourses and lineages of media technologies. They argue that new media technologies do not so much act as ruptures with preceding technologies, but rather remediate them: borrowing, imitating, repurposing, honouring, revising and attempting to improve and renew the old technology. This process of remediation leads to two contradictory, but mutually dependent logics: immediacy and hypermediacy. For Bolter and Grusin, Western culture 'wants both to multiply its media and to erase all traces of mediation: ideally, it wants to erase its media in the very act of multiplying them' (1999: 5). On the one hand, the logic of immediacy 'dictates that the medium itself should disappear and leave us in the

presence of the thing represented', giving us a more immediate, intense, real experience. On the other hand, hypermediacy 'makes us aware of the medium or media itself', asking us to take pleasure in the act of mediation (ibid: 15-34). Thus, 'although each medium promises to reform its predecessors by offering a more immediate or authentic experience, the promise of reform inevitably leads us to become aware of the new medium as a medium. Thus, immediacy leads to hypermediacy' (19).

Bolter and Grusin are careful to assert and demonstrate that this process of remediation has always been apparent in representational media technologies, rather than something that simply accompanies the move to digital media. As such, they see continuities and similarities between a painting by Saenredam, a photo by Edward Weston, and a virtual reality system, all of which attempt to achieve immediacy. Thus, 'whenever one medium seems to have convinced viewers of its immediacy, other media try to appropriate that conviction' (9). However, they do see remediation as 'a defining characteristic of the new digital media' and outline a 'spectrum of different ways in which digital media remediate their predecessors', which is dependant on the 'degree of perceived competition or rivalry between the new media and the old' (45).

At one extreme there is a transparency of remediation, whereby the new medium simply offers access to an old media form whilst simultaneously attempting to erase its own presence, such as a CD-ROM picture gallery. At the other extreme is remediation through absorption, which cannibalises the original media form, for example *Myst* or *Doom* as "interactive films". However, between these two extremes lie other forms of remediation. The first of these emphasises difference as an improvement, such as the digitalisation of encyclopaedias into DVD-ROMs. In contrast, aggressive remediation, such as the graphical user interface (GUI) of CD-

ROM and other database forms, have a complex hypermedia aesthetic that present old media forms within an interface that clearly draws attention to the new media form. Such an approach is evident in my discussion of the fragment form of interactive news and sporting applications in Chapter 5, which claim not simply to be “television only better”, but actually an extension of the aesthetics of televisuality that foregrounds its links with other new, digital media technologies. The final form of remediation, absorption, minimises the discontinuities between the two media types. Bolter and Grusin suggest that on the web television is largely remediated, particularly through webcams, whereby numerous sites borrow the monitoring function of broadcast TV by presenting a stream of live images of elsewhere. Such a definition recalls television’s early, and recurrent, positioning as a window-on-the-world. However, whilst Bolter and Grusin suggest television and the web are in an ‘unacknowledged competition in which each now seeks to remediate the other’, I would argue that this competition is very openly acknowledged with each media form seeking to fulfil the promises of the other (47).

That is, whilst remediation is an important aesthetic assertion of the continuities between media forms, Bolter and Grusin’s work fails to address the convergence of the political economy of media industries. As I have suggested in my previous discussion of convergence and the meaning of digital television, the economic and production relationships between television and the Internet is of fundamental importance to the future of television, particularly the BBC. Furthermore, their work fails to address two important aesthetic tropes on television: televisuality and quality television. The latter of these has been admirably dealt with elsewhere, particularly by television scholars such as Jacobs (2001), who have been keen to demonstrate television aesthetics as worthy of sustained critical

attention in the face of some strands of film studies' derision for the apparatus. Indeed, Karen Lury's recent work on the possibilities of digital aesthetics in the increasingly HDTV-production ecologies of American quality television demonstrates that the importance of this kind of aesthetic is only likely to be more apparent in a digital landscape (2005). Whilst a different concern to Lury's, across the course of the thesis I pay attention to interactive television's digital image to discuss their aesthetics in relation to notions of quality pertinent to debates about particular genres.

It is worth paying closer attention to the relationship between Bolter and Grusin's notion of hypermediacy and Caldwell's work on televisuality in correspondence with the aesthetics of interactive television. Arguably the combination of these two approaches is suggestive of the aesthetics of excess by which I characterise this new period of television. Caldwell's work shows how televisuality was the result of the US television industry's self-reflexive concern with the stylistics of television. Characterising *Miami Vice* (Michael Mann Productions for NBC, 1984 – 1989) as foregrounding the aesthetics of excess, Caldwell suggests such programmes were obsessed with 'excessive stylishness' to the extent that 'dialogue really did not even matter in many episodes'. Instead, the influence of 'extra-Hollywood aesthetics', such as MTV and postmodernism, replaced the 'zero degree style' of the 1970s. Caldwell goes on to argue that this style produced a television industry that promoted 'the television image as an image-commodity' (1995: 92):

Although televisuality may look merely like a performance of excessive style ... it also attempts to create visual analogues of feelings, products, surfaces, artefacts, and material pictures ... Rather than the "window on the world" concept ... contemporary televisuality flaunts "videographic art-objects" of the world; rather than the concept of the cinematic "fiction effect" ...there is no attempt to deny the video picturing process in the new television. Rather the

objectification of the televisual apparatus is dramatically evident in its appetite for the pictorial artefact, surfaces and images. The *new television does not depend upon the reality effect or the fiction effect but upon the picture effect* (152, emphasis in original).

As Lury has recently asserted, digital television takes televisuality's "picture effect" a step further, meaning that the 'apparently "appropriate" use of the television image, which relied upon its veracity and connection to the real' is potentially displaced by a celebration of style: rich, complex and diverse in the digital image (Lury, 2005: 12). Televisuality, therefore, marks a form of hypermediacy in the way in which it draws attention to the medium's own presence.

However, I would argue that in relation to interactive television the aesthetics of televisuality do more than simply draw attention to the mediating presence of television. Rather, they recall important aspects of the medium's window-on-the-world positioning. Caldwell's original conception suggests that televisuality functions in advertising to retain audience attention, whereby style 'becomes visually excessive and temporally hyperactive on network television' (1995: 94). This was largely achieved through a busy-ness of videographics: television's clutter. As is evinced by figures 2.5-8, this is similarly apparent in many interactive applications, particularly those with a commercial orientation to engage the viewer in spending money on voting, shopping or playing games. However, these applications turn traditional videographics into hyperlink aesthetics by, in varying degrees, becoming "interactive". The viewer selects individual videographics via the use of an onscreen cursor manipulated by their remote control. These videographics then essentially become hypermedia links that transport the viewer to a new page/space/stream that corresponds to the selected content. By adding the basic capacities of hypermedia to television's pre-existing videographic

aesthetics, digital television remediates web aesthetics and portal practices. However, through the ontology of liveness and intimacy associated with television's window-on-the-world status, this promises a more immediate experience than those offered by the hypermedia aesthetics of the web. As I demonstrate in Section 2, mobility remains an important trope of interactive television promotion. Thus, hypermediated videographics take television's window-on-the-world logic of transporting distant events to the viewer and fulfil its corollary promise of transporting viewers to distant – or at least markedly new – places.

Of course, in turn, the journeys on offer through interactive television rationalise this mobility according to second shift programming practices. This is suggestive of the way in which portal structures of second shift aesthetic practices continue to offer mobility. As Michele White argues, just as television remediates Internet design practices, so the Internet attempts to convince the user of its liveness. Whilst, as White herself acknowledges, her argument regarding television and the Internet's liveness is confusing, her work does point to the way in which metaphors of liveness and windows persist across both media, being neither unique nor a 'key aspect to either of these forms' (2006: 353). It is important to acknowledge the persistence of these metaphors across both media. However, whereas White often conflates the distinction between real-time and liveness in order to demonstrate the relatedness of discourses about liveness between television and Internet, my discussion maintains a separation between the ontologies of liveness and real-time in order to explicate the tension between the notions of portal and window. As a result, thought of in combination with the notion of televisuality, Bolter and Grusin's work on the way media remediate one another provides a useful starting point for thinking about the aesthetics of interactive television. In

particular, how interactive application's aesthetic style relate to the perceived immediacy and liveness of television and the more complex understanding of its window-on-the-world metaphor I have argued for.

Similarly to Bolter and Grusin's work, Lev Manovich's work usefully grounds current and future trends of new media within larger histories of media technologies. Whilst many of Manovich's distinctions create a dichotomy between new and old media forms, he prefaces this by suggesting that all new media 'interfaces act as "representations" of older cultural forms and media, privileging some at the expense of others' (2001: 16). He goes on to suggest that the representational capacities of old media, such as film and television, are opposed to new media's characteristics of simulation, control, action and information. As with Bolter and Grusin's work, Manovich does not accord television any weight in these histories. At times his account of the transitions in media forms reads as a development from print to cinema to new media with nothing in between. Manovich privileges cinema as *the* old media through recurrent reference to Dziga Vertov's *Man with a Movie Camera* (Russia, 1929)¹⁸ in his formulation of new media principles, leading him to view television as aesthetically uninteresting: merely a communication technology. However, Manovich also proposes that the representational technologies of old media are posed in contrast to the "communication" technologies of real-time, new media forms. Typifying the difficulty of positioning television within debates about old and new media, Manovich therefore inadvertently places television as analogous to new media forms: television's early imaginings already envisaged the medium as interactive, facilitating real-time communication. More problematically, recalling some of the deficiencies in

¹⁸ As Manovich suggests, '*Man with a movie camera* is perhaps the most important example of a database imagination in modern media art' (2001: xxiv)

other, earlier new media scholarship (c.f. Negroponte (1995) and *Wired Magazine*), Manovich's focus on a lineage that runs from cinema to new media fails to recognise television's formation as a window-on-the-world. Thus, whilst he acknowledges that the 'dynamic, real-time, and interactive' screen of new media is, 'as was the case centuries ago [still] ... a flat, rectangular surface, acting as a window into another space', he nevertheless cannot figure television within this trajectory, naively suggesting that 'perhaps future TV sets will adopt the window metaphor of a computer' (97).

However, despite these problems Manovich importantly and persuasively argues for an understanding of the interface as a cultural/aesthetic form in its own right – imposing its own logic on those media forms it contains: 'in effect, content and interface merge into one entity and can no longer be taken apart' (65-7). In the chapters that follow I attempt to build on Manovich's work by paying close attention to the interfaces of interactive television applications, moving beyond the technical aspects to think about the form, experience and socialisation of these technologies. However, my concern is also to trace window-on-the-world discourses from the preceding chapter that demonstrate continuities in television's ontology, which include its always, already interactive form. As Caldwell rightly observes, while many media theorists spend their time speculating on polar oppositions between push media (TV) and pull media (digital media and the Internet), fewer have recognised one increasingly obvious trend: television had long been making itself a pull medium (through interactivity), even as it merged and conglomerated in an unequivocal bid to make the Internet a viable push medium through the deployment of programming and advertising strategies (2004: 45-6). The position of interactive television as calling up both television's function as a

window-on-the-world and as a portal evidences the way in which new and old media strategies and aesthetics converge and are remediated by television. Thus, as a number of prominent television studies scholars suggested in a special issue of *Cinema Journal* (Boddy, et al, 2005), television is positioned at the boundaries of the distinction between new and old media theories and technologies, informed by and informing both. As Manovich argues, 'the computerization of culture not only leads to the emergence of new cultural forms such as computer games and virtual worlds; it redefines existing ones' (2001: 9).

(Inter)Active audiences: Communities and the public sphere

Television needed the computer to be free from the screen ... but their coupling, with major potential consequences for society at large, came after a long detour taken by computers in order to be able to talk to television only after learning to talk to each other. Only then could the audience speak up (Castells, 2000: 371).

Manuel Castells' ambivalent attitude towards television is indicative of its position within new media work: at once a precursor to new media technologies and their audiences, but as such, an inferior media form: old media. Castells' work is more productive than many in this area, dancing between this distinction he attempts to account for new media's (inter)active audience in contrast to the passive one that occupied the couch in front of the television. The dance is, of course, complicated by the fact that Castells must recognise that one audience is the other: the television audience are the same people who are the users of new media. Thus, whilst Castells acknowledges the cultural studies tradition of an active audience it is only through the return paths of new media

technologies that they become interactive: only then can the audience speak up.

Castells' characterisation is one that is indicative of the contradictions inherent in much of the work on new media's "virtual communities", which are often espoused as utopian models of society liberated by the possibilities of new media technologies. This contradiction can be found in Castells' careful attempt to avoid being labelled a technological utopianist/determinist whereby he contrasts new media with mass media, the former characterised by "decentralised and diversified" control, causing fragmentation, differentiation and individualised users. In contrast, his view of mass media is arguably very much informed by the Frankfurt School's pessimism, describing media forms such as television as having 'the content and format of messages ... tailored to the lowest common denominator' (2000: 360). Castells therefore sees mass media as concerned primarily with entertainment. Ultimately, in his efforts to avoid being labelled a technological determinist, or utopian theorist of new media, entertainment is the spectre he puts up as the possible future of a commercialised Internet that would dull its liberatory possibilities. What is interesting about this contrast is the way in which it figures a segmented, fragmented, diversified audience as one that can fulfil the notion of community – achieved through linking people with common interests, rather than the geographically "arbitrary" communities of broadcast technologies' mass audience.

Much of the work on virtual communities in new media approaches this possibility from a technological utopian and/or determinist viewpoint. It is important to recognise the impact that such a viewpoint has in informing this work on virtual communities as it tends to obscure attention to real-world conditions, inequalities and practicalities, often erroneously

assuming that we are all, or soon will be, online. Nicholas Negroponte's work is exemplary of such a viewpoint. In *Being Digital* he suggests that 'digital technology can be a *natural force drawing people into greater world harmony*' (1995: 230, emphasis mine). Such discussions, case-studies, examples and theories are often limited to examinations of hard-core Internet users, such as Sherry Turkle's study of gender-play and MUD-users (1996) or Howard Rheingold's work on social connection in the WELL (Whole Earth 'Lectronic Link) project of Californian early-adopters of the Internet (1993). Community, particularly in the form of a Habermassian public sphere, is foundational in such theories. Rheingold argued that electronic networks of communication allowed for a very different media experience: from the one-to-many model of broadcasting to the many-to-many, peer-to-peer interaction of computer users. Rheingold defined virtual communities as 'social aggregations that emerge from the Net when enough people carry on those public discussions [using the Internet] long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace (Rheingold, 1993: 5). The problem with studies such as Rheingold's and Turkle is not simply that they are overly optimistic, but that they are based on very small user groups, extrapolating from small case studies 'grander rhetoric that heralds the dawning of a new democratic order' (Street, 1997: 28). Arguably such a viewpoint is very much informed by the same perspective that Richard Dyer identifies as the "utopia" achieved by the film musical: the *feeling* that things could be better (1992). Furthermore, such an approach fails to take into account the importance of gatekeeping issues, ignoring by whom and how these sites are accessed.

Of course, in the context of new media's ability to compress time and space in the shifts of a globalising world, there are good reasons to pay close attention to the way such technologies can facilitate the

formation of communities of interest. However, television has always been similarly positioned as capable of facilitating communities particularly through public service broadcasting, such as Lord Reith's outdated notion of "making the nation as one man". Whilst digital technologies are often posited as renewing such promises, as Livingstone and Lunt's survey of 'talk on television' suggests, engaging civic participation is never simply facilitated by technological change:

there is no necessary connection between the development of mediated systems of communication and the development of a participatory democracy (Livingstone and Lunt, 1994: 12).

In relation to interactive television, this theme has been explored primarily through discussions of programmes like *Big Brother* (Endemol, 2000 -) and *Pop Idol* (ITV/Thames Television, 2001-2003) which, through giving the audience the opportunity to vote and influence the outcome, have been examined in relation to their potential to allow participatory forms of engagement by the audience. As Tincknell and Raghuram have correctly observed, the participation of *Big Brother's* audience through voting 'meant that the relationship between the "active" audience of cultural studies ... and the "interactive" audience of new media was, for perhaps the first time, visibly articulated' (2002: 211). As with other new media technologies, the possibility that interactive television will enable engagement and democratic participation has been the subject of both negative and positive pronouncements.

John Street provides a useful overview of the need to recognise how 'different media systems construct different opportunities for political engagement and different levels of thought' (1997: 11). Street draws on Schickler's and Langdon Winner's work to suggest that participatory forms of engagement, like the television phone-in, are 'conducive to prejudiced,

sloppy thinking, and to extremely simple views of the social and political process' (Schickler, quoted in *ibid*: 37). Street goes on to argue that:

the way information is presented and organized is correlated with forms of political discourse. In other words, the citizen's capacity to make political judgements is dependent upon the way in which political information is delivered and received (*ibid*).

Virginia Nightingale and Tim Dwyer have explored notions of participation, democracy and new media in relation to interactive television recently in their article 'The Audience Politics of "Enhanced" Television Formats'. Their work suggests that such participation through interactive television should be recognised as a commercial transaction. Discussing programmes like *Big Brother* and *Pop Idol*, Nightingale and Dwyer suggest 'voting, like other customisation options [of interactive television], involves a commercial transaction' through the viewer's payment of premium phone-line rates to have their vote registered (2006: 29). Similarly Su Holmes argues that whilst programmes like *Pop Idol* situate the audience as the arbiter of musical taste, 'encouraged to adopt a viewpoint at odds with official or expert opinion', their votes ultimately serve a conservative text that has capitalism at its heart (2004: 166). Nightingale and Dwyer are particularly scathing of the participatory models invoked by the voting applications. They argue that by seeking to depict results as "national outcomes", such applications engage in a neo-liberal rhetoric that erases the distinction between consumer and citizen through the mobilisation of nationalism. Thus as Holmes suggests, despite the debates about the potential for interactive television to engage the audience, to a degree all of these programmes are not so much demonstrative of 'increased levels of audience intervention ... as the increased level of self-reflexivity through which the audience is invoked, beckoned, and addressed' (2004: 164).

However, the debates here suggest that the BBC's attempts to facilitate participation and fulfil its commitment to "engage" audiences outlined in the *White Paper* will be an important site for discussions about public service broadcasting in the digital age. In particular, the BBC's national and inclusive basis (at least in remit and theory, if not in practice) makes thinking about how the public service remits of the BBC are discussed in terms of Habermassian notions of facilitating civic engagement in the public sphere an important and productive way for evaluating the public value of a digital BBC. The promise that an interactive BBC (BBCi) will fulfil such engagement is made explicit in both the Government's *White Paper* and the BBC's *Building Public Value*, which positions new media as opening up:

not just individual consumer pathways but new civic avenues and town squares, public places where we can share experiences and learn from each other, places where we can celebrate, debate and reflect (2004: 24).

Relating these promises and fantasies of a digital BBC to particular case studies in Chapter 7, I evaluate how these interactive applications draw on both new media ideals of a Habermassian public sphere, as well as the traditional public service concerns of defining the national. As such, these applications seek to imbue interactive television with the democratic potentialities of new media – allowing audiences to become viewers and participants within micro and national communities. In addition, I argue that they also extend both the opportunities of new media to groups who have been left on the wrong side of digital divide (the digital immigrant), offering television as a portal to the new spaces of digital media. In so doing, these applications rationalise the mobility on offer according to goals of re-formulating the national as an important category to the increasingly diverse and fragmented communities of twenty-first century

Britain. Thus the case studies in Chapter 7 evidence the dialectic between the position of television as a window-on-the-world and television as a portal. That is, on the one hand the interactive applications act as a portal driving viewers to the BBC's proprietary content. On the other hand, in so doing they open up a digital world for viewers to explore which, as a space digital immigrants have previously been excluded from, is infused with the broad vistas of television's – particularly public service broadcasting's – window-on-the-world.

Aesthetics and textuality

I have already dealt with the textual models developed within television studies and their limitations for approaching the non-linear, personalised texts of interactive television. In this section I want to examine the relevant theories of new media that deal with interactive textuality; namely, hypertext theory, Caldwell's second shift aesthetics and Manovich's work on database forms. All these works investigate non-linear texts that respond to user/viewer interactions, discussing how they pose significant problems to the way we both describe and theorise the text. Although digital textualities have made these problems more acute, the debt of hypertext theory to critical literary theory clearly demonstrates how non-linear forms pre-date the digital revolution and need not only technologies to realise them, but also specific terminologies¹⁹. Thus, hypertext theorist George Landow describes how Jacques Derrida conceived of a new kind of text, but did not have the terminology or devices to articulate it: 'he describes it, he praises it, but he can present it only in terms of the devices

¹⁹ Vannevar Bush's article, 'As we may think', which appeared in *Atlantic Monthly* in July 1945 is exemplary here and often cited as the origins of hypertextual, non-linear systems. In it, Bush presents his 'memex' model of computational thinking as a means of making stored knowledge more accessible. Similarly, George Landow traces hypertext back to not only critical theory but also suggests how footnotes mark one of the first hypertext technologies (1994).

– here those of punctuation – associated with a particular kind of writing’ (2001[1991]: 103). However, fundamentally my concern here is to trace how these works and textualities can be read in light of my call for the retention of the television text made in Chapter 1. Su Holmes has recently reasserted this argument, in one of the few pieces of television scholarship to tackle interactivity (2004). Her excellent analysis of E4’s textually complex *The Salon* (E4 2003-04) suggests that interactivity, even where it exists to the extent that audience members can literally enter the diegesis, does not require the abandoning of the text, but does require an acknowledgement of its shifting parameters. I suggest that the adoption of interactivity in television also requires television studies to cast its net wider into the related disciplines it draws upon in order to have the tools to successfully pin down the interactive text for analysis. Thus, the following review of new media scholarship necessarily establishes the framework upon which the remaining chapters build to develop a critical lexicon of interactive television

Hypertext’s theoretical and technological terrain has largely been restricted to computer-based media forms. In particular, the American West Coast computer counter-culture’s interest in hypertext technology and the application of critical theory to ponder the possible liberatory uses and impact of such non-linear forms. Thus founders of both hypertext and this counter-cultural movement, Tim Berners-Lee and Ted Nelson, ‘called upon people to seize and use computer power for their own benefit. Nelson imagined a new system of organising information, which he called “hypertext”, based on horizontal information links, which he called “hyperlinks”’ (quoted in Castells, 2000: 50). Hypertext, according to Nelson, is ‘*non-sequential writing* – text that branches and allows choices to the reader, best read at an interactive screen. As popularly conceived, this is a

series of text chunks connected by links which offer the reader different pathways' (quoted in Landow, 2001[1991]: 100). Its theory and terminology have utilised Roland Barthes' terms of *lexia*, *node*, *network*, *web* and *path*, which he deploys in *S/Z* to describe an "ideal textuality". Barthes' "writerly text", is one that 'has no beginning', but is rather 'open-ended, perpetually unfinished ... this text is a galaxy of signifiers, not a structure of signifieds' (Barthes quoted in Landow, 2001[1991]: 99). Thus, for hypertext theorists like Landow, 'hypertext fulfils "the goal of literary work [which] is to make the reader no longer a consumer, but a producer of the text"' (Barthes in Landow, 2001[1991]: 101).

The problem with ascribing these terminologies to the interactive television text primarily revolves around the distinction between the real-time and live ontologies of computers and television. As Mark Williams explains,

both terms are grounded in the capacity for electronic media to represent something at roughly the same moment it occurs. But each term, in significantly different registers, also designates a key dynamic of disavowal, in that each names an act of mediation but also the desire to experience this act as unmediated (2003: 163).

Thus, as I noted in my introduction, whilst television's liveness may now refer less to the ontological status of the referent, it functions nevertheless to describe 'what an electronic medium is representing at this moment' (ibid). In comparison, the ontology of the computer is one of data structures and algorithms, whereby real-time processing power allows information to be called up, on-demand by the user (Manovich, 2001: 223). As a result, the texts of new media technologies are capable of having the large structures, navigable spaces and open-endedness that are hallmarks of hypertext systems. Hypermedia systems, according to Halasz and Schwartz, 'provide their users with the ability to create, manipulate and/or

examine a network of information-containing nodes interconnected by relational links' (quoted in *ibid*: 40). The emphasis here is on the ability of the user to manipulate the text to the extent that we might assign their work as equally important in the creation of a personalised text. In comparison to these open-ended forms of hypertext on the web, interactive television applications are largely bounded both by time and space, which restricts viewer interaction to navigating a series of choices. As John Caldwell demonstrates, time is still the metric that broadcasters must master (2003).

Furthermore, hypertext's spaces differ not only according to the limitations of digital television's more simplistic technological base and smaller bandwidths, but also according to television's screen and viewing environment. As Nick Cohen (BBC's Senior Executive Producer of Interactive News) suggests, factors such as the remote control, used over a distance, as well as the lounge-room's set up and the television's cathode ray all lead to:

different design constraints as well as user mindsets [from the web]. Television lends itself, aesthetically, to sparse and simple designs with dark backgrounds and lighter texts, whereas the web has a dense aesthetic; lighter backgrounds but a lot going on (Interview conducted 1/11/05).

As a result, there is a need to develop new terminologies that deal with the specificities of the television experience and how it remediates the experience of interactivity from other new media forms. In my discussion of individual case studies I attempt to do this, not (solely) as an attempt to stake a claim in the digital landgrab of academic theory in new media studies, but rather as a recognition that convergence of both technologies and academic bodies of work means recognising similarities in forms, drawing on relevant work from other fields and not obliterating

distinctions. Thus, some might argue that the forms I discuss in the following chapters are simply descriptions of hypertext systems, pure and simple. Perhaps, but as my interest is in linking aesthetics with the political economy of television in the UK, specifically the BBC's public service status, such an approach would obscure the very importance of discussing interactive television as television, with its own histories, uses and understandings distinct from those of new media.

In this regard, a more useful approach to the non-linear and dispersed texts of digital media is proposed by Caldwell in his 'Second Shift Media Aesthetics: Programming, Interactivity and User Flows'. For Caldwell, analogue television text models, such as flow and segment, are "first shift aesthetics" where the goal of programming strategies like tent-poling and hammocking 'was to keep viewers engaged with a single network's proprietary, ad-sponsored "flow"' (2003: 134). Such programming strategies began to be undermined before the advent of digital media, with developments such as 'cable, the VCR, the remote control, multichannel television and finally the Internet all promot[ing] a fragmentation of the flow' (ibid). However, these programming strategies have been replaced by second shift practices that seek to bring 'new forms of rationality [to] ... master textual dispersals and user navigations' (136). Caldwell's industrially and textually sensitive approach investigates how such practices produce a loose textuality that addresses and attempts to order, or herd, the viewer's navigation of the application, programme or site. The introduction of interactive applications to television that allow viewers to choose between events and navigate individual paths through content, whilst ostensibly remaining on the same "programme", presents similar problems for any attempt to understand these texts through the linear models of existing television studies.

However, before we throw out these first shift textualities with the bath water, it is important to consider their usefulness in this new environment. Whilst these models may not effectively be able to grasp the non-linearity of an interactive application, importantly, as Brunsdon recognises, these textual forms are intimately related to the perceived absence of the 'central organising drive of the author, or ... the specific hierarchies of form given by an established aesthetic' (1989: 123). This is an absence made more conspicuous by the interactive text but not quite so new a challenge as it first appears. As a result, these first shift textualities still provide useful reference points for my discussion, but arguably the lack of authorial control that Brunsdon evokes was a gap filled by the place of the schedule, temporal flow and super-structuring of television. The challenge now is to work out the new structuring logics of interactivity, or in Caldwell's terminology, of the second shift aesthetics of the medium, in particular those of public service broadcasting.

It is worth finally briefly mentioning Manovich's work on databases. Manovich suggests that a key feature of new media is "variability", which comes to be ensconced in a database format. In turn, he suggests that the 'database itself [comes] to function as a cultural form in its own right' (2001: 37). For Manovich, the database is simply the collection of items on which the user can perform various operations – view, navigate, search, etc – and, as such, is a cultural form that long predates digital technology: the museum or library being readily recognisable antecedent forms. The database has become such a pervasive form that arguably, as Manovich suggests, it is possible to understand that all new media can be understood as either constructing the right interface on a multimedia database, or as defining navigation methods through spatialised representations (215).

As I argue in Chapter 6, the database form is particularly pertinent for a discussion of interactive television for the way that it privileges and foregrounds the element of choice. Whilst database structures may be organised in a variety of ways, some hierarchically, some relationally, some in a network, the privileging of choice always subverts the normal prominence of a linear narrative. As Manovich suggests, this leads to a tension between database and narrative: ‘as a cultural form, the database represents the world as a list of items, and it refuses to order this list ... therefore, database and narrative are natural enemies’ (225). As I suggested above, the organisation of interactive television as a series of video/data streams from which the viewer chooses fits well within this database logic, with its aesthetic to greater (such as the news multiscreen) or lesser degrees (such as *Who do you think you are?* (Wall to Wall for BBC, 2004 -)) foregrounding this structure. To this end, my description of the era of excess as one of post-broadcast television suggests how a database ontology is emerging in digital television, characterised by a primacy placed on choice, which I have linked to the notion of a portal. This linkage is helpful in understanding how this database logic must be negotiated with the more usual linear experience of watching television, its broadcast flow and the medium’s ability to generate ideological and ontological functions of liveness. However, it is not just liveness that poses particular challenges for interactive television applications but also the forms, requirements and experiences of particular genres. Thus the rationalised choices and mobility of interactive television is explored in relation to the individual case studies’ positions as examples of natural history, news, sports and history programming. Television’s digitalisation may make a new media out of an old one, but the continuities and

baggage of television's analogue form will be with the medium for a long time to come yet.

Conclusion

These new technological and cultural features of television suggest that we are entering a new period of television history marked by non-linear, desynchronised, post-broadcast experiences of television. As I have argued however, this does not mean a radical break with previous understandings of television. In particular, my periodisation of excess has sought to demonstrate continuities with television's broadcast, analogue past and to eschew the liberatory theories attached to new media formations. These are connotations that might attach to my use of the term excess to discuss the new emergent period of television's digital landscape. Work by theorists such as John Fiske and John Hartley have equated a postmodern aesthetics of excess with a liberatory understanding of the audience's relationship to the text. In such an understanding, the aesthetics of excess provide an audience 'with an excess of ... "positions" which nevertheless can be easily recognised' (Hartley, quoted in Fiske, 1987: 58). However numerous rebukes of Fiske's work, such as Meaghan Morris' arguments about the banality of excess (1998), remind us of the need to pay careful attention to the constraints or freedoms conferred on the audience. In my study here, these constraints are discussed through examining the rationalising of viewer-flows through second shift aesthetic practices. Thus whilst interactive television provides the viewer with the possibility of personalising the text, using it for their own purposes and meanings, this does not equate to Fiske's notions of a "semiotic excess" whereby there is 'always too much meaning on television to be

controllable by the dominant ideology' (1987: 91). To return to Stuart Hall's work, 'polysemy must not ... be confused with pluralism' (1980: 134).

Appendix of images for Chapter 2



Figure 2.1 2004 Athens Olympics application (BBC, 2004)

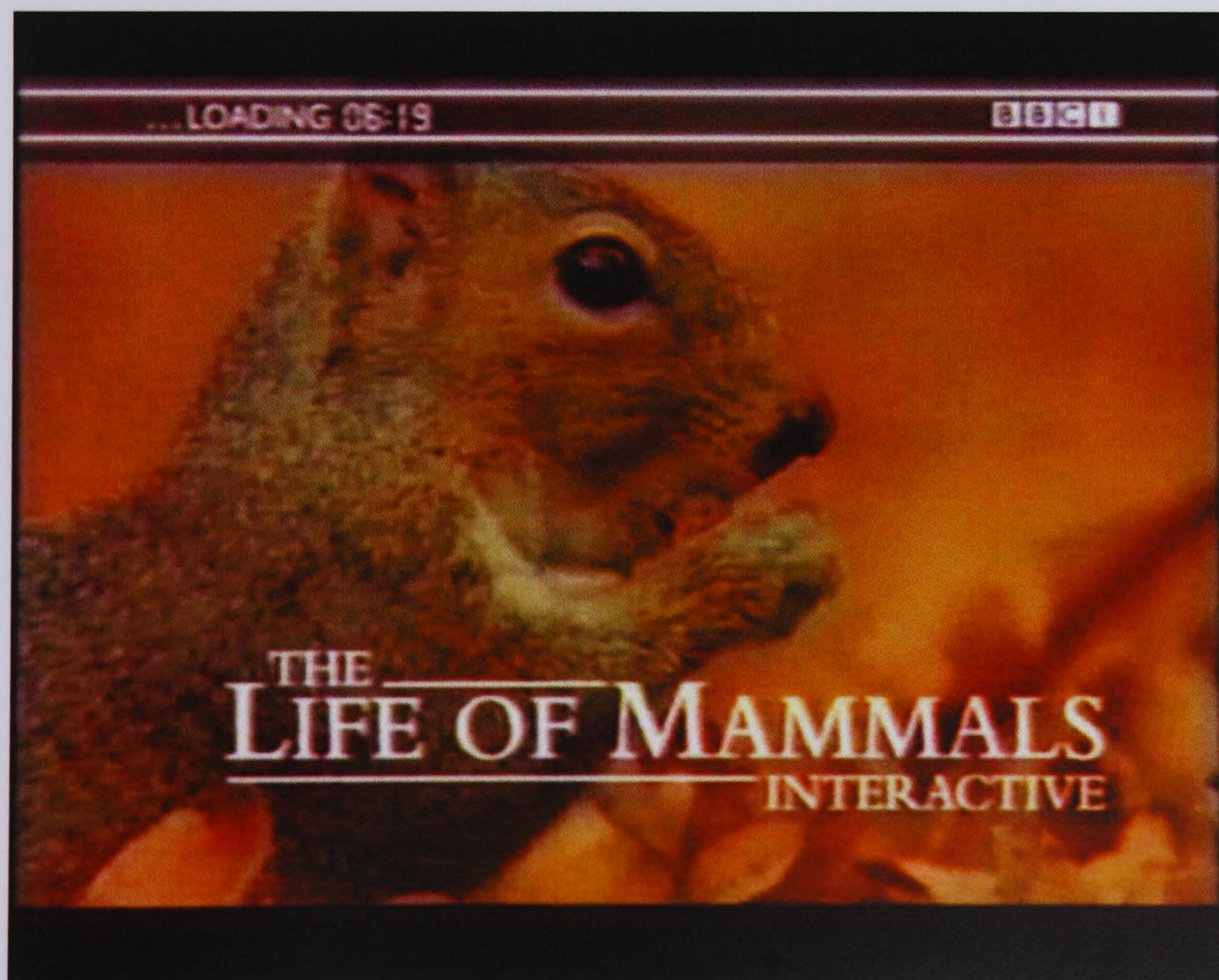


Figure 2.2 *The Life of Mammals* (BBC, 2002-03)

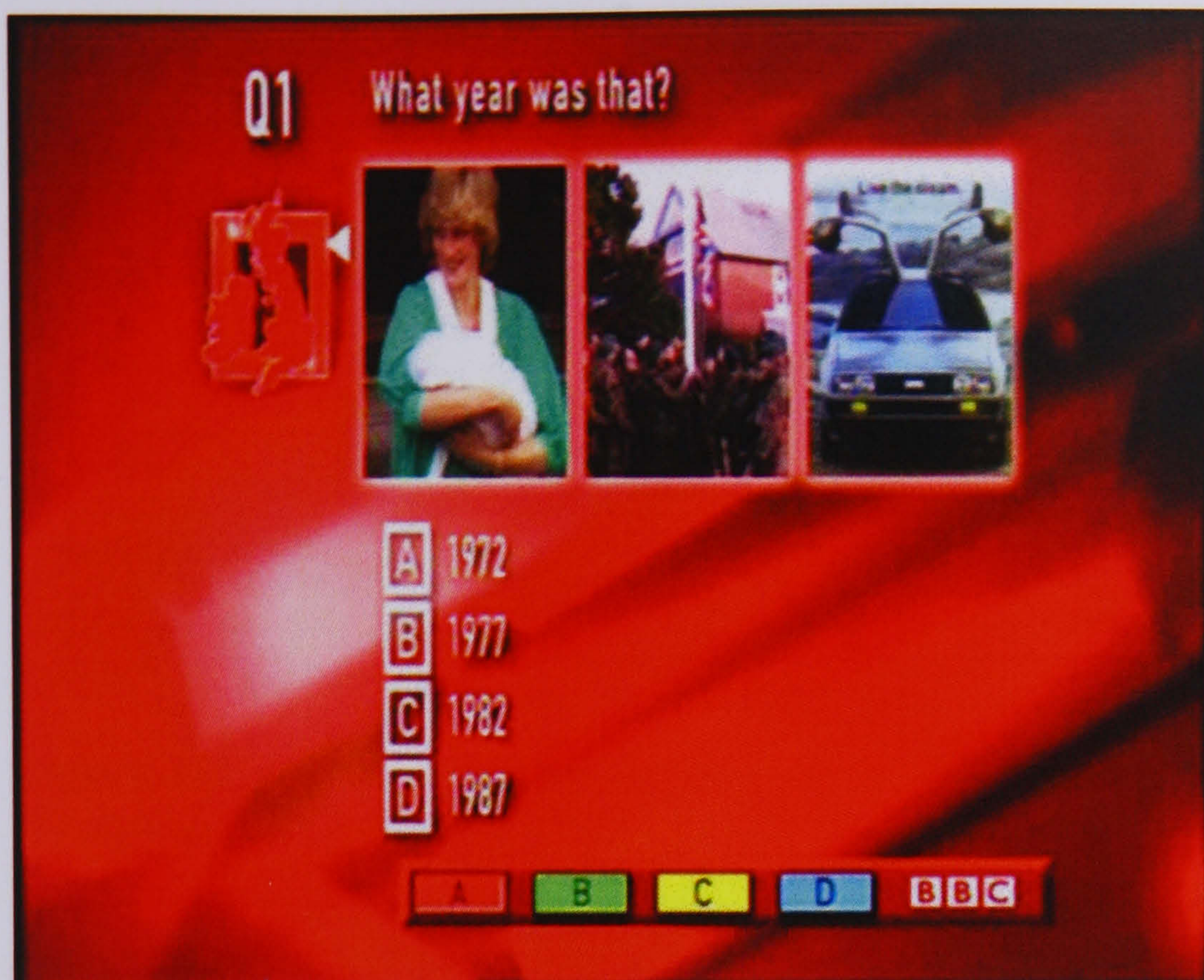


Figure 2.3 *Test the Nation* (BBC, 2000 -)



Figure 2.4 The cliff notes here for the BBC's coverage of a performance of Shakespeare's *Measure by Measure* (BBC, 2003) at the Globe Theatre privilege the viewer with interpretative information, which through their placement at the bottom of the screen and intermittent appearance doesn't disrupt the play itself.

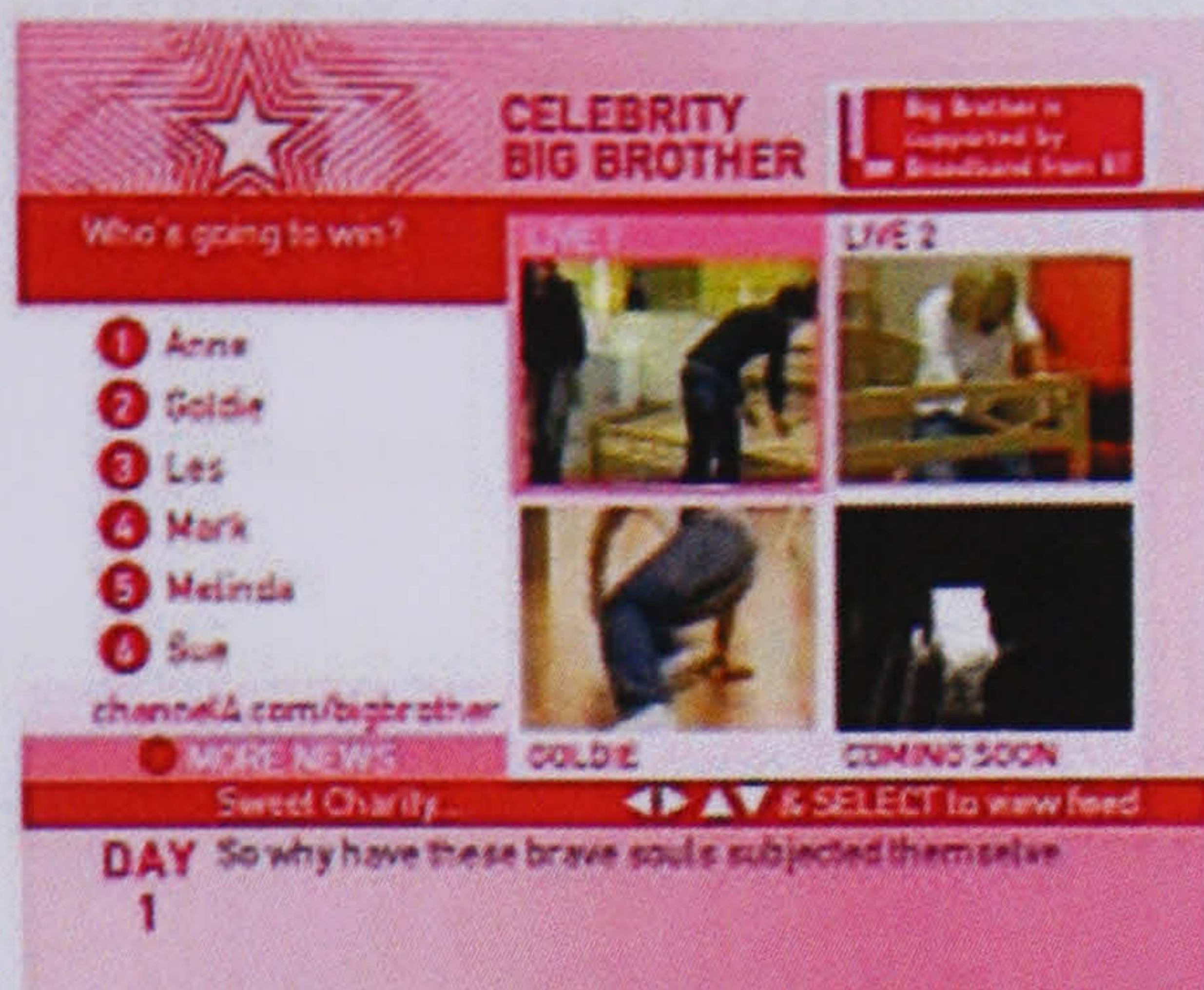


Figure 2.5 *Celebrity Big Brother* (Endemol for Channel 4, 2001 -)

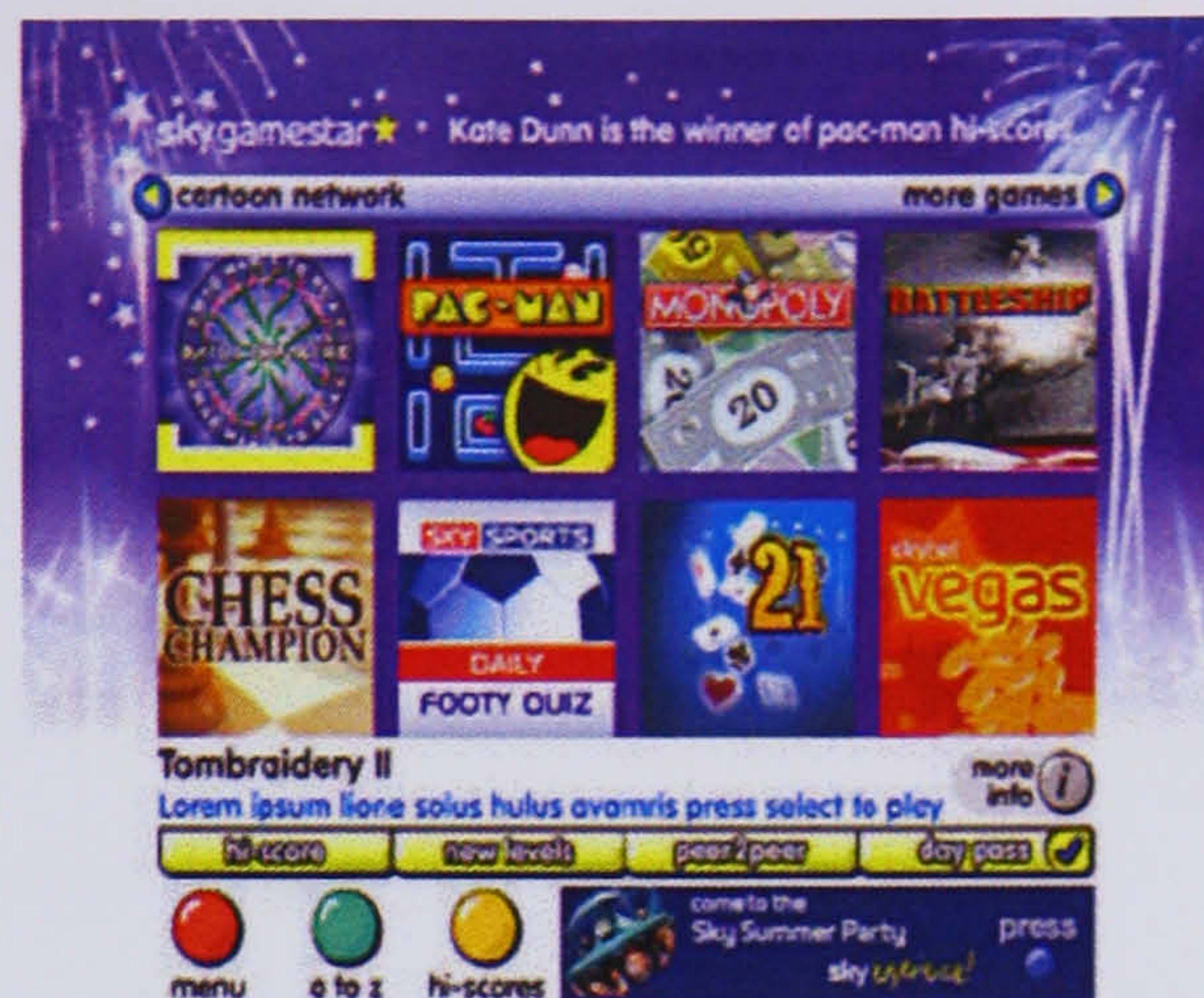


Figure 2.6 *SkyGamestar* (Sky Interactive, 2002 -)



Figure 2.7 *SkySportsActive* (BSkyB, 1999 -)

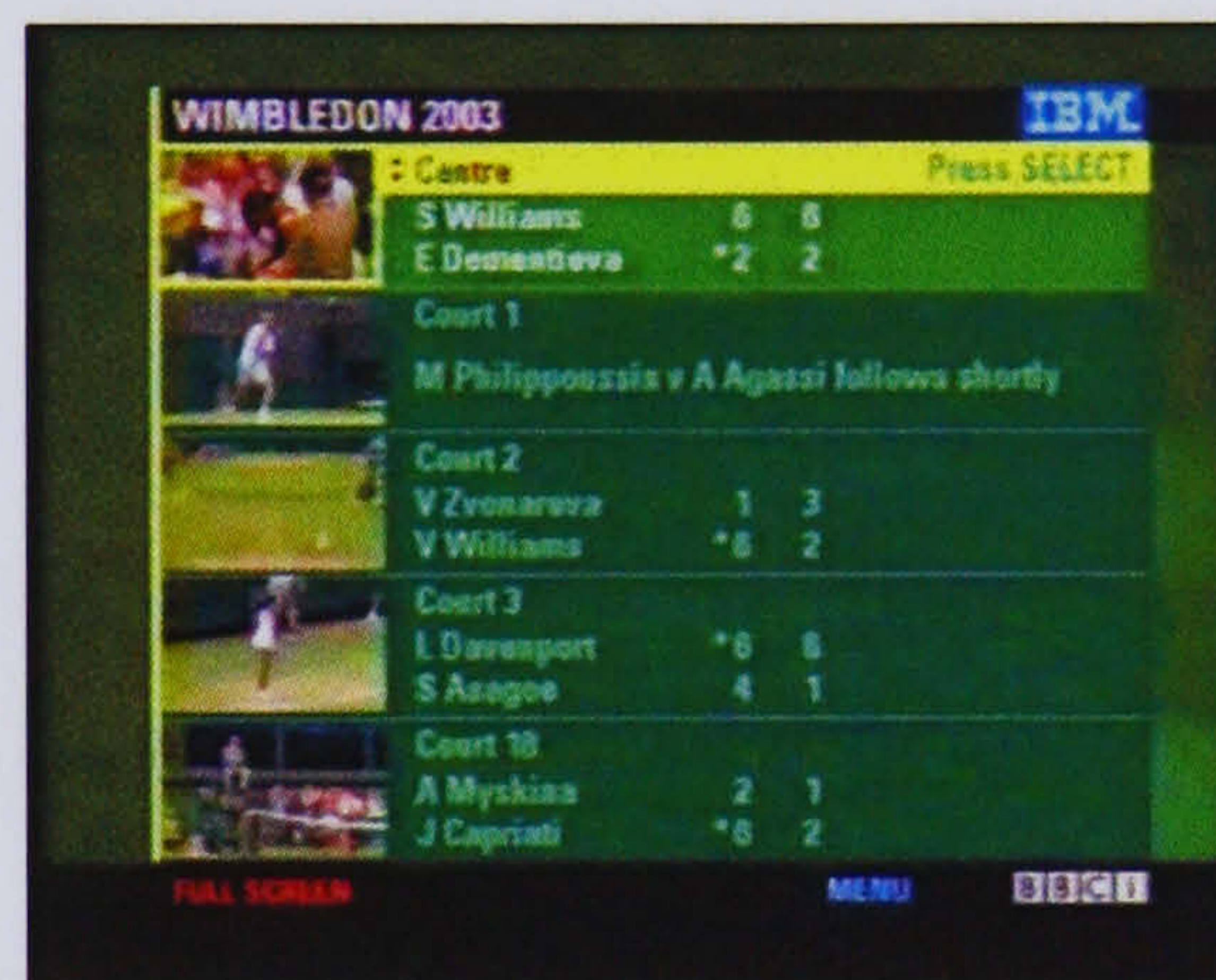


Figure 2.8 *Wimbledon Interactive* (BBC, 2000 -)

Figures 2.5-2.8 Interactive applications build on the ‘clutter’ of videographics, turning these into hypertext systems that allow the viewer to choose, navigate, vote and ‘interact’ in different ways.

Chapter 3: Public service broadcasting, the BBC and the period of excess

Chapter 3 investigates the immediate regulatory and technological environment of the period of excess, detailing the new public service obligations of the BBC in a digital environment. Across the chapter the government's relationship and regulation of the BBC and Sky is of pivotal concern, as it is this relationship that has largely defined the digital television landscape, particularly the development of its two predominant platforms: digital satellite and digital terrestrial. Thus in the first section of the chapter I discuss the government's approach to shaping the initial digital environment, discussing the failure of the first digital terrestrial platform, ON/ITV Digital, and its replacement by the BBC-led Freeview. This story is returned to in the chapter's concluding discussion of the marketing of digital television, returning to the issue of gender that I suggested in Chapter 1 is central to developments in television's technological form. However, as I suggested there, this is never a simple binary opposition between masculinity and femininity, but is intimately related to the institutional backdrop of the UK's television landscape. Thus drawing on Charlotte Brunsdon's (1997) pioneering study of satellite television in the UK, I demonstrate that the advent of digital television was positioned in terms of working-class masculinity that saw both Sky and ITV Digital competing for the same market. Across the remainder of the chapter I set out the public service criteria against which I discuss the thesis' case studies. The discourse of choice is again of paramount importance in this discussion, as the digitalisation of television was, and is, often posited as a choice in binary opposites, between public service broadcasting and the free market.

This is evident in Mark Booth's welcome message to Sky's new digital platform in the company's listing magazine, which assertively positioned the company as striding into the digital television age, confident in their position as market-leader and promising a revolutionary new television experience:

Dear Customers, The future of television has arrived – and we're honoured that you are here to share it with us ... Nothing comes close to SkyDigital television ... A service which offers a new dimension in choice and viewing control beyond anything you have ever experienced ... SkyDigital bring this [digital] revolution to the television, transforming not only the way you watch, but also how you use it ... The future of television is in new hands (Mark Booth, Chief Executive, BSkyB – October 1998: 2).

Booth's rhetoric continues to place a primacy on choice as the value of digital television, 'a new dimension in choice', which is inherent in the form of not only multichannel television but, significantly, interactive services as well: 'transforming not only the way you watch, but also how you *use* it'. In turn, Booth suggests that digitalisation both wrests control away from established institutions (sic the BBC) and places it in the hands of the audience. These discourses of choice and consumer empowerment are dotted throughout the discursive frameworks that have established the regulatory structure of the new digital landscape as well as the promotional materials from broadcasters that have positioned television as a new media apparatus for its audiences. As Booth's comments suggest, any transition from old to new media entails a moment of choice: of industry standards, regulatory frameworks, business models and for consumers, how they watch and whom supplies it. Booth's rhetoric recalls the characterisation of the licence-fee as a 'poll tax' and Barry Cox's re-imagining of digital television, freed of this burden, as 'an electronic retail outlet, the equivalent of a video version of WH Smith' (Cox, 2004: 28). Thus, the call to put the

future of television in “new hands” and supply the consumer/audience with choice aptly connotes how this period of excess has been marked by a sustained period of attack on public service broadcasting that is suffused with the rhetoric of digital technology’s liberatory revolution.

However, as I’ve suggested, the move to digital television is not such a revolutionary move and certainly does not entail any of the radical breaks suggested by Booth’s grandiloquence. Most obviously, the attacks on public service broadcasting are neither new nor appearing in radically different forms. Nevertheless, digitalisation does pose new challenges to existing institutions, regulatory frameworks and the way we study them. As a result, any defence of public service broadcasting must position its institutions and principles against this changing, and challenging, backdrop. The DCMS has recently articulated this challenge as requiring a new public service ethos, under which ‘inform, educate and entertain’ no longer go far enough. Whether the newly articulated vision of public service broadcasting represents a radical new set of impetuses for the BBC to fulfil is a moot point; the period of sustained attack on, and review of, public service principles has already begun. This was compounded in 2004 when the BBC lost Greg Dyke and Gavyn Davies, the Corporation’s Director General and Head of Board of Directors respectively, as a direct result of the *Hutton Report*’s white-washing of government action in the wake of a BBC story on government knowledge about weapons of mass destruction in Iraq.²⁰

As I go on to demonstrate in Chapter 7, the loss of Dyke and Davis came at a crucial moment in the run-up to BBC Charter renewal within which interactive television formed part of a robust response to the

²⁰ For a detailed discussion of the *Hutton Report* see Georgina Born’s *Uncertain Visions: Birt, Dyke and the Reinvention of the BBC*.

challenges of digitalisation. Fundamental to the timing of this blow and the BBC's response was the concurrent writing and publication of the internal strategy document, *Building Public Value*, which set out the BBC's obligations and role in the digital landscape. Despite most commentators agreeing that the new Director General, Mark Thompson, and Governor of the Board of Directors, Michael Grade, could not have provided a more vigorous defence of the Corporation's position in the lead up to Charter renewal, the government's final *White Paper* and licence-fee settlement have left the position of public service broadcasting and the BBC in a perilous position. This is most evident in the *White Paper's* requirement that the BBC investigates forms of subscription funding over the next Charter period. In addition, the decision to unhook increases in the licence fee from general inflation has squeezed the Corporation's financial capacity to exploit the opportunities of digital television²¹. Unfortunately therefore, the government's approach has tended to move increasingly towards deregulation and favouring the address of the audience as consumer. Thus television's new digital period of excess is likely to be the last period of public service broadcasting as defined by a universal licence-fee funded BBC.

The formation of digital television

Everybody here knows there's a revolution taking place in the world of broadcasting and communication: a transformation in compression, picture quality, interactivity, conditional access ... But it's not technology that will decide the ultimate success or failure of the digital revolution – it will be the range and quality of services, the ease with which viewers are able to navigate round the digital world and – of course – it will be price ... It's my job to make sure that it happens in

²¹ Such pressures will undoubtedly have an effect on the content and programming produced by the BBC, which as the CRESC group has demonstrated is already under increasing strain from the augmented programming hours required to fill its schedules in a multichannel, interactive environment (Froud, et. al., 2006).

the interests of the consumer (Chris Smith, Secretary of State for Culture, Media and Sport, Royal Television Society Lecture, 14/10/1998).

Chris Smith's announcement of the digital future largely echoes that voiced by Mark Booth in 1998 – characterising digitalisation as both revolutionary and as offering unprecedented choice to the viewer, figured as consumer. But it also interestingly employs some of the window-on-the-world discourses I have teased out in Chapter 1, characterising the digital television landscape as a world that must be navigated. Georgina Born's (2004) anthropological study of the BBC over the period of digitalisation details the regulatory and policy initiatives that have shaped digital television's first phase in great detail and I don't want to repeat her work here. Instead, I will concentrate on the period that has followed the publication of Born's *Uncertain Visions*, relating window-on-the-world discourses to pertinent debates about public service broadcasting and choice. In so doing, I suggest that television's window is increasingly drawing on portal practices that continue to circulate television's window-on-the-world discourses, such as mobility and liveness, but in ways that are rationalised, personalised and structured in important ways.

As I noted in my introduction, the place of the BBC during this period has been the subject of intense scrutiny and I try to not only update, but differentiate my work from others in this field. In particular, whilst Hernan Galperin asserts that the promotion of competition in this period resulted in something of a defence of public service broadcasting, I suggest that this might be too simplistic an account of the rise of Freeview as BSkyB's main competitor (2004). Galperin suggests that in both the US and the UK the switch to digital has been structured by government policy that has supported local commercial television and public service broadcasting

respectively. In particular, he argues that the development of a digital terrestrial platform to compete with BSkyB was specifically supported in order to allow public service broadcasting the best opportunity to 'compete in a platform with limited carriage capacity rather than among the hundreds of channels that digital cable or satellite would offer' (2004: 166). Whilst it is certainly true that the BBC continues to achieve higher audience shares in digital terrestrial homes (c.f. Ofcom, 2004b, 2004c, 2006a, 2006b), this is also true of all the main terrestrial channels. Furthermore, the final licence-fee settlement indicates a waning of support for public service broadcasting. Thus I suggest that the development of a BBC-led digital terrestrial platform has been the result of more complex interplays between the government, the BBC, ITV and BSkyB than Galperin's analysis suggests. I argue that Tony Blair's New Labour Government, caught between appeasing Rupert Murdoch and promoting competition, failed to adequately secure the latter by pushing the launch of a digital terrestrial platform that could not compete with BSkyB. The development of Freeview in the aftermath of this was then the result of the BBC's shrewd manoeuvring under the Director General-ship of Greg Dyke. It is this environment, coupled with the failure of ITV Digital to establish itself as a serious competitor to Sky, therefore that largely informs the BBC's promotion of itself in terms of choice.

In 1997 Tony Blair's Labour party swept into government, backed resoundingly by not only the traditionally leftist, Labour supporting papers such as *The Guardian* and *The Independent*, but also significantly Rupert Murdoch's *The Sun*. Widely recognised as, at the time, Britain's most circulated tabloid, many have argued that the switching of its support to the Labour party from its traditional Conservative position, was crucial to Blair's success. However, as BSkyB announced plans to roll out digital

television in 1998 this left the newly elected government in a difficult position. On the one hand, Labour's commitment to competition in many sectors had been specifically invoked for the television landscape. As Born demonstrates, 'a central government aim was to ensure pluralism by identifying a rival universal platform' (Born, 2004: 483). On the other hand, there was undoubtedly pressure to appease Rupert Murdoch in the wake of *The Sun's* support for Labour's victory. The need to promote pluralism led the government to grant incentives and push the promotion of a digital terrestrial commercial competitor to BSkyB's satellite platform to be ready at the point Sky would begin transmitting digital signals. However, as Des Freedman's extensive study of Labour government television policy implicitly suggests, these incentives were calculatedly limited (2003). In particular, the bandwidth made available for the new digital terrestrial platform OnDigital was extremely limited. This meant that not only was OnDigital's signal limited to covering approximately 30% of the country, but that its carriage capacity for channels and interactive services was similarly restricted. In comparison, when the digital terrestrial platform was taken over by a BBC-led consortium in 2002, bandwidth was increased threefold. As a result, when OnDigital launched just months after BSkyB's digital satellite platform, not only was Murdoch's service available to consumers all over the country, but it also offered hundreds of channels and interactive services (although these weren't available until 1999). This, combined with BSkyB's decision to refuse OnDigital permission to carry BSkyB's premium sports and movie services on the digital terrestrial platform until 2000 (in retaliation, ITV1 was not made available on BSkyB's platform), made OnDigital's service seem like a rather paltry offering (c.f. Iosifidis, 2005).

Whilst the need to promote consumer choice in the digital television landscape remains a laudable goal, the desire to push a new platform at a stage of its relative infancy was also part of the first digital terrestrial platform's downfall. As Born implicitly argues, the government's decision to push a terrestrial platform to promote consumer choice stood in stark relief to its failure to intervene in BSkyB's anti-competitive policies. These primarily revolve around two issues: Conditional Access Systems and ownership of football rights. As I suggested in Chapter 1, football rights have been key to BSkyB's model of subscription television since its launch of the Astra satellite in 1989. BSkyB's monopoly of the right to broadcast matches from the English Premier League remained unchallenged when digital transmission started and the New Labour Government came to power. Indeed, it has largely been down to European intervention rather than the UK government that BSkyB's monopoly has been put into question as anti-competitive. The European Commission has stipulated that from 2006 the English Football Association must sell rights to Premier League matches in six separate packages, of which any one broadcaster can only own a maximum of five²².

As discussed in the previous chapter, Conditional Access Systems effectively amount to a form of Caldwell's second shift aesthetics. Galperin notes that from a regulatory perspective, the concern is about the potential use of EPGs and searching devices 'by vertically integrated operators to escort viewers toward affiliated programmers and interactive TV service operators to the detriment of third parties' (2004: 11). In 1998 ITV refused to pay BSkyB's carriage charges in order to support its fledgling OnDigital initiative, in the hope that by making Britain's most popular channel (as it

²² That, in reality, this has translated to Sky owning all bar one package of games is perhaps less important than the fact that Setanta, who purchased the remaining package, will offer games on digital terrestrial television as well as satellite.

then was) only available digitally via OnDigital, it would drive consumers to this platform. Similarly, the BBC sought relief from the onerous charges imposed by BSkyB, who retaliated by threatening to move BBC3 and 4 to less prominent positions on the EPG. The issue remains ongoing, arguably culminating in the BBC's announcement of a "FreeSat" initiative under Greg Dyke to transmit the BBC's digital satellite in the clear and free from BSkyB's system. This looks likely to be fulfilled by an ITV/Channel4/BBC conglomerate at some point in 2007 but the desire for all of BSkyB's major programming competitors to work together demonstrates the ongoing importance of gate-keeping issues in the digital landscape²³.

In the context of the above discussion, we might read the government's push of digital terrestrial as a rival platform to BSkyB's satellite service as a tactic calculated to deflect attention from the failure to address BSkyB's anti-competitive practices. As a result, the New Labour Government was able to placate both those who wanted to see competition in the television market, as well as Murdoch by leaving his empire untouched and establishing a rival that had little real chance of succeeding in the first instance. Undoubtedly the failure of the OnDigital/ITVDigital platform was at least partly a result of the company's decision to over-bid for rights to Nationwide and Champions' league football rights, particularly when ITV had not secured carriage for these premium services on BSkyB's much more widely available service. The collapse of ITVDigital in 2002, therefore echoed that of the British Satellite Broadcasting group at the start of the 1990s, similarly brought about by Murdoch's exclusive ownership of important sporting rights (though as we

²³ Of course, with BSkyB's recent purchase of a controlling stake in ITV, even this tactic may come unhinged.

will see the battle between BSkyB and its competitors has a great deal to do with class formations as well).

However, press coverage's focus on the overpayment for football rights by ITV unhelpfully obscures both BSkyB's anti-competitive strategies and the government's failure to actively support a commercial rival to Murdoch. Freedman notes that during this period New Labour's consultation on media ownership rules took contradictory positions, both supporting the need for continuing restrictions and intervention as well as suggesting that they would be 'as deregulatory as possible' to promote competition. As Freedman astutely suggests,

not surprisingly, given the document's adoption of two contradictory positions ... the government simply proposed a further consultation period before committing itself to making any concrete decision that might open itself up to possible criticisms from either Murdoch or non-Murdoch interests in the UK media (2003: 177).

The killer blow in this story of course comes in the government's maintenance of a 'pro-competition', 'platform neutral' stance as ITVDigital writhed on its (admittedly largely self-inflicted) deathbed. Under the weight of debt from its football rights deals, ITVDigital began slowly collapsing in mid-2001, limping on until April 2002. During this period Freedman documents how Charles Allen, the Chief Executive of Granada, 'wrote to Tony Blair pleading for ... legislation allowing a merger between Granada and Carlton to rescue an ailing OnDigital' (Freedman, 2003: 180). However, the government maintained that a merger would be against its 'pro-competition' stance and was 'unwilling to intervene and rescue OnDigital for fear of showing that it favoured particular technologies or particular companies' (ibid). Ironically, after the collapse of ITV's digital venture the government allowed Granada and Carlton to merge in 2004.

This failure of the government to adequately support the new digital terrestrial platform at its inception, particularly in the form of regulating BSkyB's anti-competitive policies, has been made more obvious in the context of the launch of the BBC-led Freeview digital terrestrial replacement. When Freeview launched the government granted increased bandwidth and frequency strength, allowing the service to be received in approximately 75% of the UK. Thus a major problem for BSkyB's commercial competitor, the ability to reach a large audience, was instantly overcome when a public service institution took the lead role in providing alternate access to digital television. Whilst this platform is often figured in the BSkyB vs. BBC, 800lb gorilla battle picture of the new digital television landscape, positioning Freeview as solely a BBC service unhelpfully obscures BSkyB's part-ownership of the platform. To an extent therefore, Galperin's analysis of the development of digital television in the UK as resulting in an overall defence of public service broadcasting is correct. However, this is only true to the degree to which we can see that defence as fitting into a schema that saw the government, although keen to promote pluralism, reluctant to promote a robust commercial competitor to Rupert Murdoch's BSkyB.

Across the development of digital television there was a continuation of the rhetoric established by the *Peacock Report*, where in theory at least, consumer was king and choice was paramount. This rhetoric often conflates consumer choice with de-regulation whereby technological change is enlisted to argue for the abolishment of public service broadcasting, which according to critics such as Barry Cox (2004) and David Elstein could now be judged 'unnecessary', allowing the 'regressive burden of the licence fee to be eliminated' (2005: 70). As Elstein argues,

is there a continuing need for public service broadcasting when the original justification for its provision – spectrum scarcity – has disappeared, and the public has hundreds of TV ... channels from which to choose? (68).

The current government seems increasingly at ease with such viewpoint, requiring the BBC to investigate subscription funding over the next Charter period and, through Ofcom, refusing to ring-fence a slice of UHF-frequency on Freeview for the BBC and C4 to transmit HDTV on. This de-regulatory drive has been apparent since the *Communications Act* (2003), which removed barriers to foreign ownership of terrestrial channels (replacing them with a public interest test). As discussed in Chapter 2, the tendency for media ownership to converge in congruence with technological developments has resulted in a few large multi-national, or American, conglomerates having unprecedented control and access to national markets, as well as power at the negotiating table. As a result, the seemingly irresistible push of corporate, economic convergence in media ownership has ensured, to a large extent, that ‘in place of universal service committed to diverse representations and open debate, satellite TV [sic] offers subscription channels tailored to commercially viable interests and limited to those able to pay’ (Murdock, 2000: 127). Furthermore, in charging the BBC with driving digital Britain (discussed below), a task estimated to cost £600million, without promising to commit further funds to the task should this prove insufficient, the government is increasingly exposing the BBC to the forces of global markets whilst simultaneously requiring it to retain its public service obligations and, indeed, take on those shed by others.

There is not space to detail the decreasing public service obligations of the other terrestrial channels here, however it is worth briefly detailing Ofcom’s investigation into the diminishing public service obligations of

other channels. Ofcom's second phase review of public service broadcasting recognised that there was a strong chance that the 'compact' between commercial public service broadcast providers and society will be broken as the benefit of free/cut-price spectrum compared with the costs of providing public service programming falls (2004c: 27-32). In Ofcom's analysis, it is programming that is 'either expensive to produce, such as regional programming, or relatively unattractive to large audiences, such as more challenging programming' that is most at risk of being lost by the increasing market pressures of a landscape of digital choice (32). As Ofcom go on to suggest, the pressures to drop public service obligations are 'likely to be more intense for ITV than for Five' because of the more onerous obligations held by ITV and the benefits accrued by Five in becoming universally available for the first time through digitalisation. Similarly, C4's revenue model for developing innovative and challenging public service content will be challenged. As a result, Ofcom concludes that by 2012, 'the BBC will be the only significant PSB [sic] provider of any scale' (33). Thus, how the BBC's public service obligations are articulated, judged and measured is of increasing importance to the shape of the digital television landscape.

When the attacks on public service broadcasting are figured in terms of market forces and choice, it seems little wonder that the BBC has couched its defence in exactly the same terms. The influence on the BBC's approach to public service is clear when one considers its 1990s policy documents: *Producer Choice* (1991), *Extending Choice* (1992) and *The Future Funding of the BBC* (1999) in which former Board of Directors Chairman Gavyn Davis promoted the BBC as an institution capable of supporting 'the public policy aims of quality, diversity, *choice* and accessibility' (1999: 136, emphasis mine). Indeed, Patrick Barwise

concluded at the end of his *Barwise Report* that the BBC should focus ‘mainly on the extra choice [digital television] provides ... [in promoting] consumer uptake’ (2004: 94). As I go on to show in the following section and in Chapter 6, the figuring of choice in terms of public service value requires greater scrutiny. However, the success of Freeview has ensured that there is at least, in the short-term, competition and choice for consumers and citizens in how to access the spaces of digital television.

Reformulating public service broadcasting, principles for a digital age

Ellis suggests that the close of the twentieth century witnessed a massive increase in services by the television industry without a comparable increase in income. He argues that this was based on the hope that ‘television consumers will respond to the offer of more choice, convenience of access, and interactive possibilities by paying increased subscriptions’ (Ellis, 2000: 177). As such his theory of working through, discussed above, works as a passionate defence of public service broadcasting. In the digital age, Ellis suggests that it is public service broadcasters’ strength as brands that will enable them ‘to provide gateways to interactive services’ as a ‘necessary consequences of [their] key social position’ (ibid). Crucially, Ellis’ argument here moves beyond his more restricted approach to broadcast television, recognising that public service broadcasting’s place in a digital television age must entail a gatekeeping role. As Ofcom suggested in their *Looking to the Future of Public Service Television Broadcasting*, ‘it is not difficult to imagine ... the BBC positioning itself as a trusted guide to the digital environment’ (2004a: 40). I pick up on this role below and in more detail in Chapter 7, but I hope to show across the course of this thesis the continued role for public service broadcasting.

I argue that contrary to critics such as Elstein, public service broadcasting's rationale is not simply technologically driven by spectrum scarcity, but is cultural. Undoubtedly there is a need to re-articulate these public service values in light of the loss of such a fundamental rationale as scarcity and it is a difficult act that the BBC must perform in this environment. As Georgina Born usefully suggests in reformulating the old BBC dilemma of 'be popular, just not too popular': 'The BBC must indeed be popular, but it must be more' (2004: 474).

As formulated by the government, in its *Green Paper* and *White Papers*, and the BBC, in *Building Public Value* and various related documents, this challenge has been articulated in two intertwined ways. Firstly, by expressly drawing on the discourses of choice that have pervaded this period the BBC has been positioned as fulfilling consumer and citizen choice in a variety of ways. As I'll go on to discuss, this has been particularly evident in both the launch and success of the Freeview platform as well as the BBC's interactive services. Secondly, both the BBC and the government have attempted to reformulate the primary aims and purposes of public service broadcasting for the digital age. These are the criteria against which I judge the public service value of the various interactive applications I discuss across the thesis, exploring how these applications fulfil these requirements as well as both their limitations and those of the criteria themselves.

The publication of *The Future Funding of the BBC* in 1999 was arguably crucial in setting the BBC's agenda for positioning public service broadcasting in a digital environment. It suggested that in this environment there was a 'need to support the public policy aims of quality, diversity, *choice* and accessibility. Pluralism is not guaranteed in the multi-channel age ... public service broadcasting can counterweight private

concentration' (1999). The report usefully suggests that part of the BBC's role must be to provide 'universal access' to the 'information age'.

However, the report also more problematically suggested that the rhetoric of choice and consumerism would continue to have a prominent place in debates about public service broadcasting. Indeed, the report suggested that the BBC's place could be understood in terms of a market failure approach, providing programming and services the rest of the television market would not deliver. Subsequent reports by the BBC and Ofcom have continued to position the BBC in these terms, with Ofcom suggesting that the BBC's place should be assessed in terms of an 'efficient market outcome' (2006a). In *Building Public Value*, the BBC delineates the development of digital television into two periods, the first commercial, the second – implicitly commencing with Freeview's launch – offering the possibility of public service broadcasting. In so doing, the BBC contrasts the commercialisation of television and the forms of consumer choice on offer in the first phase with that made available by a second, public service, phase:

In the second phase, quality of content and choice of content will be key, and the opportunities to build substantial public value will be many and various. They will include new ways to involve people in civic processes and institutions, personalized learning tools, access to previously closed archives, new ways of connecting communities, more convenient ways to watch and listen to programmes, more localised content, tailored services for minority groups (2004: 9).

This delineation of the transition to digital enables the BBC to figure the early stages of the 'digital revolution' as 'leaving many untouched' because it has 'been driven largely by business models based on subscription' (50). Therefore, since the *Peacock Report* there has been a move within the BBC's own positioning to figure choice as a public service broadcasting value.

This is evident in the way the BBC has positioned itself as enabling “real choice” to the audience – of how to access the digital world, what services they can experience etc. As Andy Duncan (former BBC Director of Marketing and Communications) suggested a year after Freeview’s launch, the platform had become “the people’s choice” (speech to FT New Media Broadcasting Conference, 3/3/03). The importance of Freeview’s non-subscription base to the BBC is linked to the platform’s limited carriage-capacity, allowing for only approximately thirty channels, which has resulted in BBC channels achieving far higher audience ratings and reach in Freeview households than in those that subscribe to digital satellite or cable packages (c.f. Ofcom, 2006a). However, in terms of interactivity, choice is realised most explicitly by the promise to use interactive applications to bring viewers a choice of different coverage or experiences of the same event or genre. I explore the figuring of choice in these terms in relation to sports and news programming in Chapter 6, where I suggest that as a direct response to the need to reconfigure public service broadcasting’s role, choice stands as a largely problematic criterion.

However, previous to the BBC’s *Building Public Value* document, the ITC had already figured choice as a problematic criterion against which public service broadcasting could be measured. The 2002 ITC report chaired by Sir Robin Biggam, *Extending Choice, Securing Quality*, argued that while both choice and quality were seen as desirable, the ITC suggested they might not always be commensurate, concluding that ‘improved choice to the viewer and industry consolidation should not be at the expense of quality’ (2002). Of course, quality itself is a problematic criterion, as exemplified by the BBC’s response to Ofcom in *Building Public Value*. Here, choice again figures prominently in the discursive formation of the BBC’s role so that Ofcom’s assertion that in the digital age,

public service broadcasting ‘will no longer be needed to ensure that customers can buy and watch their own choice of programming’ (2004a) is met by the BBC’s firm rebuke that aligns quality with expenditure, away from choice. Thus, in *Building Public Value* the BBC assert that high quality British documentaries, dramas and comedies ‘will continue to be expensive to make’ (2004: 44).

Helen Wheatley has discussed the alignment of expenditure with quality and middle-class taste codes usefully in relation to the BBC’s co-production of *The Blue Planet* with Discovery (2001). She argues that we need to place such alignments of quality with expenditure within the experience of television flow is a useful reminder of the difficulties of defining quality. More usefully for my purposes, Niki Strange has recently suggested that we need to invert Wheatley’s analysis to think about the experience of user-flows in judging interactive, multi-platform content (2007). For interactive television, I suggest that quality is most often aligned to issues of “useability” that relate quality to how choices are structured for the viewer (c.f. Chapter 6). As Tom Williams (BBC Creative Director of Interactive Television) outlined, the BBC’s approach to quality in interactive applications was threefold, requiring originality, but also quality of execution and a robustness of application that ensured it is ‘100% useable’ (Interview conducted 1/09/04). However, we must also pay attention to the specificities of particular genres in evaluating quality in interactive television and I pick up on Wheatley’s arguments across the individual case studies.

Away from questions of quality, the centrality of choice in debates about the regulation and place of public service broadcasting in the digital landscape is that it has assisted in constructing the new period of excess as consumer marketplace. Michael Grade sums up this problematic in his

prologue to *Building Public Value* when he suggests that, at the heart of the BBC's commitment to public service lies a desire to renew the BBC's relevancy to the digital world, a 'world that contains the potential for limitless individual consumer choice'. However, he also notes that this choice also leads to the 'possibility of broadcasting [being] reduced to just another commodity'. The challenge for the BBC is to meet the potentialities of choice offered by digitalisation, whilst 'counterbalancing a market-driven drift towards programme-making' (2004: 3). At times, therefore, the BBC is happy to place choice as a public value, whilst at others it is keen to distinguish choice as a consumer value differentiated from the possibilities the BBC can offer. Across *Building Public Value*, this alternative is often pictured as a Habermassian public space in which the British public can use digital television services to connect with one another, providing a 'unique public space in which national debate can take place' (2004: 30).

As I suggested in Chapter 2, this Habermassian view of the digital environment has been widely discussed and advocated in the field of new media studies. It is also an ideal that a number of BBC interactive applications, such as those discussed in Chapter 7, attempt to mobilise by renewing and revisiting conceptions of the national. Of course, the fragmentation of the audience I have detailed problematises any readily defined concept of the nation. Such fragmentation is not simply the result of digital television's multichannel and interactive landscape. Rather it is intimately related to wider processes of globalisation that have seen the increasing movement of peoples and communications technologies across national borders, resulting in the emergence of complex national and other identities. Such identities problematise the role of the BBC in defining and bringing the nation together for shared experiences. To a degree this has been recognised by the BBC adopting a '100 tribes of Britain'

characterisation of its audience. These problems and approaches are discussed in more detail in Chapters 6 and 7, when I examine how the database and portal structures of interactive television have been utilised to form a notion of community and the national amongst an increasingly fragmented audience.

In the age of excess choice therefore, the BBC is attempting to position itself as a trusted guide to the new digital realm. Mirroring John Ellis' assertion that public service broadcasters' position will lie in their brand value, the BBC has asserted that

As media choice expands, we will work with others to ensure that people can easily find the content they want. We will develop consistent, easy-to-use navigational tools based on open standards, so that audiences can make the most of the ever-increasing choice of programmes and information available, whatever platform or device they choose to use (2004: 64).

As I've already suggested, this gateway function for the BBC will be a crucial role for fulfilling a re-imagined public service broadcasting responsibility in the digital age. Whilst its tying to a Habermassian notion of the public sphere may be problematic, it is a role that both the BBC and the government appear comfortable with, figuring prominently in the DCMS's reconfiguration of public service principles in its 2006 *White Paper*.

Essentially the Government *White Paper* has guaranteed the BBC's place as the cornerstone of public service broadcasting for the short-term future, granting a new ten year Charter but also suggesting both a mid-Charter review and a requirement that the BBC investigate subscription funding during this period. The implications of requiring the BBC to investigate other forms of funding have already been felt at the time of writing, with the Corporation investigating plans to include advertising on its website at the start of 2007 and commencing an advertising-led

partnership with Google/YouTube. Further, the *White Paper* has also suggested that the traditional public service remit of ‘inform, educate, and entertain’, will no longer be sufficient for the BBC in the digital age. The BBC will now have six core public purposes:

- Sustaining Citizenship and civil society
- Promoting education and learning
- Stimulating creativity and cultural excellence
- Representing the UK, its Nations, regions and communities
- Bringing the UK to the world and the world to the UK
- Building digital Britain

Whilst, ‘inform, educate and entertain’ will remain the mission statement of the BBC, these public purposes will be judged against criteria of being of high quality; challenging; original; innovative; and engaging across all genres, services and output. This means that all programmes, output and services should display at least one of these core purposes and I focus on the most relevant criteria in each of my individual case studies. Whilst I do not want to comment extensively on all of these newly worded public service obligations, it is worth briefly noting a number of points.

Despite the wordiness of these new definitions and purposes, there is nothing to suggest that, like digital television itself, this will represent a radical departure from traditional public service obligations and ideals. In the context of my discussion here the positioning of the BBC as a driver of digital take-up suggests that its commitment to principles of universalism will remain, if not become more, important. This has been evidenced by recent debates about the appropriateness of this criterion when it is linked to the financial cost of actually building digital Britain, which have not

materialised in a large hike in the licence fee. It is significant that the requirement to build digital Britain has now been articulated as a core purpose for the BBC, having originally been articulated as an ancillary purpose in the preceding *Green Paper* (DCMS, 2005). As Steve Barnett has recently suggested, the government's decision to make the BBC responsible for the task of digital switchover not only raises important questions about how this switchover is funded and what part of the licence fee is used for this purpose, but also arguably places the BBC as the potential scapegoat should logistical problems, delays, technical faults and financial shortfalls arise (Barnett, 2006). At the time of writing the final structure for funding digital switchover is yet to be agreed, however the creation of DigitalUK and current proposals are indicative of the potential problems for the BBC. DigitalUK is a not-for-profit company established by the terrestrial broadcasters (at the behest of the DCMS) to promote digitalisation of the country's final 25% of households in light of the government's plans to complete digital switchover by 2012. The lion's share of DigitalUK's funding comes from the BBC, with the remainder coming from ITV, C4, Five, SC4, Teletext, SDN and National Grid. The body is designed to impartially promote the different digital television platforms, particularly targeting groups defined as vulnerable by the DCMS, such as the elderly and disabled.

Whilst the public association of the BBC with this body is kept to a minimum at present, the requirement for the Corporation to drive digital Britain will not only result in an increase in their funding input but also increase public awareness of this link. Consequently, any failures in the digital switchover process are likely to be publicly attributed to the BBC. Thus whilst the development of the Freeview platform may have been instrumental in assuring a central role for the BBC and public service

broadcasting in the digital age, the 2006 licence-fee settlement and Charter obligations may work to undermine this achievement. Furthermore as I have suggested above, although the money directly attributed to building digital Britain will be ring-fenced, the question as to where additional funds (should they be necessary) will come from is, as yet, unanswered. As a result, should there be either horror stories of people left with no television signal in 2012 or a shortfall in the amount of money required to complete digitalisation, the BBC is likely to find itself in an extremely compromised position at a time where it will be gearing up for its first Charter renewal in a totally digital landscape.

Returning to the other new public service remits set out in the *White Paper*, arguably promoting education and learning replaces educate and sustaining citizenship and civil society replaces inform from Lord Reith's tripartite edict on the BBC's public services. Whilst there is no explicit reference to 'entertain' in these core purposes, the furore over its complete absence in the preceding *Green Paper* (DCMS, 2005) has been largely resolved by the government's reassurance in the *White Paper* that entertainment will remain important to the BBC's mission. However, this promise has been accompanied by a strongly worded caveat regarding the need for the BBC to remain distinctive. Whilst it is important for the BBC to produce distinctive programming, the *White Paper* is fuzzy on detail here suggesting only that it is 'wholly legitimate' for the BBC to 'to provide programmes aimed at a wide audience', but that entertainment should be only one quality to be achieved in reaching such audiences (11). The lack of clarity here suggests that the government intends this obligation to be read in light of discourse surrounding other Charter renewal documents, including that around the *Green Paper*, which specifically picked out lifestyle/infotainment programming as areas that the BBC should avoid:

genres implicitly seen as devoid of public service. However as the work of Brunsdon (2004) and Rachel Moseley (2000) has demonstrated, lifestyle programming can and does fulfil importance civic functions²⁴.

Finally, of central importance to my concerns here, there appears to be an institutional enshrinement of television's window-on-the-world function in the requirement to 'bring the UK to the world and the world to the UK'. The *White Paper* therefore re-circulates television's window-on-the-world position for the digital age as intimately related to the purpose and place of public service broadcasting: requiring the BBC to both supply audiences with the broad vistas of television's window, and viewers with a portal with which to access the new services of digital television. That is, firstly in requiring the BBC to bring the world to the UK the *White Paper* calls up public service broadcasting's traditional role in supplying audiences with an informed worldview, primarily through news and documentary. As I go on to discuss in Chapter 6, this is problematically fulfilled by the interactive news application's fragmented textuality. Secondly, and conversely, whilst this remit also obviously places an emphasis on the BBC to represent modern multicultural UK (bring the UK to the world), it is also suggestive of the journeying involved in acting as a portal, or gateway, through which audiences and viewers can gain access to digital spaces. I explore this in Chapter 7's discussion of building digital Britain, whereby interactive television acts as a portal to access a range of services, communities and formulations of the nation that the BBC opens out onto for digital immigrants. The enshrinement of this metaphor therefore shows the importance of the continuation of television's window

²⁴ This importance is further underscored by the recent ratings success and public debate that ensued from Channel 4's *Jamie's School Dinners* (Fresh One Productions for C4, 2005), which demonstrated that much derided genres – *Jamie's School Dinners* being essentially a reality TV/Docu-soap following a celebrity chef – have the ability to entertain, inform and educate.

metaphor and the way it functions in dialect with its new media capacities as a portal.

The BBC largely prefigured the DCMS' move to shift the public service goal posts on the digital television pitch by announcing not only new ways of measuring public value but also committing to measure every new service against such a test. In *Building Public Value* the BBC proposed five core purposes for the Corporation's role and various modes of assessing these: for the corporation to provide democratic value, cultural and creative value, educational value, social and community value, and finally global value. In turn, the BBC proposed to measure these values against individual, citizen and net economic value by examining programming against four performance criteria: reach; quality; impact; and value for money.

In the digital landscape, the move to judge public value against reach is arguably a shrewd move by the BBC shifting the emphasis from a direct measurement against 'ratings' to one that indicates the useage of BBC services. For example, although BBC3 and BBC4 have very low ratings figures with both channels rarely topping 1% of the audience ratings for any particular programme, the BBC's measurement of reach only examines how many people spend 15minutes or more on that service a week. Such a criterion enables the BBC to demonstrate millions of users/viewers/audiences of individual services on a regular basis. Whilst I discuss quality across the chapters in Section 2, the other measurements of impact and value for money remain rather vague in the BBC's terms. The former criteria is dotted throughout the *Building Public Value* document but is rarely defined beyond examining what impact the BBC's practice will have on the commercial sector. Indeed, it took until the settlement of the licence fee became imminent at the end of 2006 for Director General Mark

Thompson to define impact. He stated 'we're trying to go beyond immediate audience data to gauge the wider effects of our output – in terms of public response and participation, educational outcomes, critical reactions' (11/10/06). The impact of the BBC's interactive television applications and criteria such as public response and participation are discussed in Chapter 7. The final criteria of value for money and quality both link into the proposal to judge the BBC's services against individual, citizen and societal value. It is particularly important that the category of citizen remains in the BBC's remit, as it moves the channel beyond the mere provision of choice and addressing the audience as consumer. This criterion suggests that citizen value can be judged by considering the investment needed by another public body to achieve the same outcome through evidence-based tracking of audience use of BBC programming (e.g. enrolling in further education), international comparisons and expert panels²⁵.

The regulatory developments over the transition to digital television have, in many ways, been excessive and it has not been possible to account for all the developments here. Instead I hope to show how there have been significant shifts in the rationale for public service broadcasting that will be important for both my discussion of particular programmes here, as well as future television studies surveys of the field. Importantly, throughout this period interactivity has been implicitly invoked in re-imagining the television apparatus as a digital world, navigable, personalised and offering a plethora of choice. It is worth returning to Chris Smith's speech that I opened this discussion with at this point.

Coming soon after the dot com crash, interactivity was conceived as

²⁵ This final method for assessing public value suggests a useful dialogue may be opened up between academic scholars of television studies and the BBC whereby some of the economic and market-driven focus of government-sponsored reports might be tempered by more cultural analyses.

integral to the digital television project; a means of getting people online and spending money in e-commerce through a more familiar apparatus. Imagining the digital future, Smith explicitly aligns television's future with interactivity: a portal through which to access 'information, news, education and current affairs'. As with so much of the rhetoric involved in forming digital television's possibilities, the positioning of interactivity by Chris Smith here oscillates between references to news and information that position the viewer as citizen, and to references of entertainment and home-shopping that position the viewer as consumer. Smith's oscillation and confusion is therefore aptly suggestive of the challenge facing the BBC:

There's no doubt that digital television has the potential to harness the best of the old – the familiar strengths of television in entertainment, information and education – with the most exciting of the new: greater choice and individualised schedules, interactivity, home shopping, home banking, email, Internet access ... It has the potential to create a world where all sections of society have access to information, news, education and current affairs, erasing the difference between the knowledge-rich and the knowledge-poor (14/10/1998).

Platform choices: Digiboxes and the landscape of taste

Charlotte Brunsdon's influential essay 'Satellite Dishes and the Landscape of Taste' suggestively argued that along with pricing strategies and the sorts of content available, satellite television was positioned as although not explicitly working class, *explicitly not* congruent with the taste codes of "legitimate cultural capital". Brunsdon persuasively argues that the purchase of satellite television was both distinctly marked by, and a marker of, taste codes because of the effect that placing such, at the time, extremely large dishes on the side of one's house had. Thus, 'buying or renting a dish can ... legitimately be read as an act which signals desire, a

connection with something that these dishes are understood to mean, or connote, or promise' (1997: 151).

Here, almost as a necessary corollary to Brunsdon's work, I argue that Freeview has been pivotal in the extension of digital television to middle England and the different taste codes entailed there. Whilst the public service remit of the BBC has meant the extension of digital television to many new groups, excluded from the marketing strategies of subscription services, it has been primarily through the successful mobilisation of middle England – Tony Blair's "Mondeo-Man" – that Freeview has recorded such staggering growth from its launch in 2003 to a position of near market equality with BSkyB in 2006. Moving beyond a technologically determinist approach that would simply suggest that if satellite dishes were rejected by middle-class taste codes, then digital terrestrial television must necessarily be more amenable, I suggest how the role of the BBC and the marketing campaign for Freeview have been crucial in this positioning. In particular, I pick up on the nuances of Brunsdon's argument that suggests how the ownership of a satellite dish not only works as a visible sign of 'not being bothered to "like what it is better to like"', but does so specifically in relation to the ideas of 'citizen-making' and 'national broadcasting culture' that are bound up with public service broadcasting (ibid: 163). Finally, I conclude by detailing how the success of Freeview in mobilising middle England to build digital Britain has been influential in the strategies adopted by BSkyB to increase digital uptake after it stagnated somewhat in 2003/04.

Over the course of this final section, I suggest we can trace a brief continuum of digital television marketing and uptake that sees the introduction of On/ITVDigital align its strategy with that of BSkyB's working-class, satellite aesthetic through to the extension of digital

television to more middle and upper-class households. As Brunsdon's examination of newspaper reports on Britain's satellite television uptake suggests, class tastes were articulated through the construction of valued knowledge on a binary axis whereby television stood in distinction to architecture, 'evidently contrast[ing] between less and more culturally legitimate forms' (156). After the failure of ITV's service, the BBC-led Freeview consortium targeted the audience group that Brunsdon's work explicitly picks out as resisting multichannel television for class-taste reasons. As Pedro Iosifidis suggests, the 're-direction of digital terrestrial towards a primarily free-to-air system has proved compelling to many households which had negative preconceptions about pay television'. In particular, Freeview has appealed to affluent and older consumers (Iosifidis, 2005: 58-61). In such a history, On/ITV Digital's failure therefore relates as much to its ability to identify, target and successfully sell to a new market as it does to its expenditure on football rights and the Blair Government's precarious juggling act of appeasing Murdoch and introducing pluralism.

The launch of OnDigital in 1999 was accompanied by a great deal of fanfare but after slow early sales the platform's major shareholder, ITV, leant its brand name to the service in order to boost sales. A major marketing campaign featuring comedian Johnny Vegas, playing "Al", and Monkey, a small puppet friend that recalled the previously popular "Flat Eric" from Levis commercials a few years earlier, accompanied this move. In the series of commercials Al represents the confused laymen, uncertain as to what digital television is, how to use it and why to bother with it. Monkey acts as a counterpoint to Al's stupidity, demonstrating that digital television is so simple that even a puppet monkey can use it. However, for my purposes what is of interest in these advertisements is the way they tie

the platform to particular notions of masculinity that are linked to slobbery, football and, implicitly, a particular vision of a working-class audience. The series of adverts is set in a flat that sits uncomfortably between an ideal of a working-class home and a more upscale residence where cutting edge technology appears fairly 'natural' against polished wooden floors and low-key lighting. As Brunsdon, drawing on Ien Ang suggests, 'the upper class, instead of decorating and celebrating the television, enshrining it as the centre of family life, often give it a room of its own, and always leave it unembellished in its techno-austerity' (1997: 152).

However, two key aspects maintain the appeal to working class ideals and tastes. Firstly, in Al and Monkey's dialogue there is continual reference to 'the estate', where local lads may have attacked Monkey, and their home as a 'Des Res'. Shots of the Des Res' exterior are rife with iconic markers of lower-middle/working-class homes, such as white panel vans, Ford escorts and caravans parked outside new-built homes or 'average consumers' – played by Al and Monkey – hanging out in shopping centres. The second aspect that connotes this ideal of class is the way Al and Monkey's flat is defined by male slobbery, in particular, television watching: two large leather reclining chairs dominant the frame and the only food that seems to be available is crisps (indeed, in one advert the pair's preparedness to pay for digital television is defined against the cost of a bag of crisps). Of course, key to the connotations of class here are Johnny Vegas' associations as a 'working-man's' comedian, latterly epitomised in the Midlands-based film *Sex Lives of the Potato Men* (UK: 2004). These are carefully played up to in the advertisements, which feature Vegas' character referring to "our kid" in a voice that mugs to an ideal of Northern-working-class accents, which shortens vowel and consonant sounds. Further, Vegas is costumed as working-class not only

through the use of sloppy jumpers, tracksuits, football scarves, caps and various polyester fabrics, but also via his juxtaposition with Monkey. The use of Monkey as a contrast, decked out in silk robes and more refined clothing at various moments, allows ITV Digital to play off an odd-couple scenario that whilst aimed more directly at lower-class households, tries to not alienate other consumers.

However, the final emphasis on working-class cultures through the almost incessant promotion of football is pivotal to not only my description here, but also the demise of the ITV Digital platform as well. As with many of the technological revolutions in television, ITV Digital's marketing linked the new digitalisation of television to masculinity, particularly through football, which had most recently been articulated in the move to satellite television. As discussed in Chapter 1, the strong ties between Murdoch's Sky television service and football placed an emphasis on masculine forms of television watching. However, as Brunsdon's work on satellite dishes demonstrates, the association of satellite television with masculinity moves beyond the prominence of football in marketing strategies. She notes how, whilst satellite dishes might be literal extension to the home, they

also condense familial and cultural extensions. The several instances of male erecting, and indeed, inventing their own dishes further suggest that this new technology may have a particular place in the gendered division of labour (1997: 157).

Arguably, ITV Digital's campaign fits within this pattern of gender division, placing an emphasis on a particular representation of football that ties it to a "blokey", slobbing masculinity, where extricating oneself from the sofa is nigh-on-impossible, food takes the form of large bags of crisps and fashion is dictated by comfort and ease. Here, the gendered division of labour is not that of masculine activity; the male hobbyist of Boddy's

account of fishing for a signal in early television history (2004a), or that of Brunsdon's account, dashing up the ladder to erect a satellite dish (1997). Rather it is that problematic depiction of male laziness, passivity and slobbery that Lyn Spigel has successfully demonstrated accompanied television advertising throughout the 1950s. Spigel's work suggests that the "male adventurer" figure that associates television's discourses of mobility with masculinity was a response to the perceived pacifying effect of television. She discusses a range of advertisements that preceded this trend that represent a father figure either returning from work to dream of a night-in, with his feet up in front of the telly, or already in this position while a mother/wife figure cooks dinner/cleans/dreams of a night out. As Spigel suggests, this

inverted – or at least complicated – normative conceptions of masculinity and femininity ... the cultural ideals that demanded women be shown as productive workers in the home also had the peculiar side effect of "feminizing" the father (1992: 96).

Significantly, in the ITV Digital advertisements under discussion here there is an absence of the active female figure that is so formative in problematising the inactive, passive male couch-potato figure. Without the presence of such a figure, the campaign is able to celebrate male slobbery and the associated taste codes that invoke more telly as better telly, and both as the primary, if not only, form of entertainment desirable.

Here then the gendered divisions of labour are slightly obscured to allow male inactivity to appear unproblematic. This is further aided by tying male slobbery to the cultural *activity* of football supporting – indeed in one advert, Al's football fanatascism is depicted as such that he will go to great lengths to enjoy the game, including unplugging the digibox and taking it across town to watch with his nephew (though he remains chair-bound on this trip). Vegas' blokey masculinity is mobilised – such as is

possible with his large, slobbish frame – to keep football a prime selling-strategy in these adverts, even where it isn't the main focus of the individual advert. Thus in one advert, which heralded a desperate marketing strategy by the company to give-away a free monkey toy with each new subscription, a focus on football remains prevalent throughout. The advertisement opens with a deep-focus shot, tracking across Vegas' chair-bound frame as a door in the back of shot opens to reveal Monkey returning from the shops having nearly been mugged by two ladies "in a shop who claimed me as their own!". The opening shot depicts Vegas reading a red-top tabloid paper (again, with connotations of working-class taste codes) that is focused on sport: a large headline in centre of frame reads, Cup Shocker!, reminding the audience of the possibility of receiving football through ITV Digital. Similarly, when Al and Monkey appear as "average consumers" in a shopping centre to be interviewed by Des Lynam, he appears wearing football shirt and scarf and in one advert, Ryan Giggs appears in the pair's abode to demonstrate the fact that "Sky don't have all Man Utd, Liverpool and Arsenal's live competitive games. We do".

The focus on football is, through associations of slobbing masculinity, tied to a particular consumer group that might be attracted to ITV Digital for its slightly cheaper offering than Sky's packages. The emphasis across these adverts is therefore on content, sports and movies in particular. As such the campaign addressed the consumer group already catered for by SBkyB's satellite services, which had already been positioned falling outside middle class taste codes and legitimate cultural capital (Brundson, 1997). As my discussion of government policy suggests, the failure of this marketing strategy to identify a new consumer group alone cannot account for the demise of ITV Digital. However, the targeting of an audience in class and gender terms that was already well secured by BSkyB

and its battering ram of sports offerings was arguably a key element in the start-ups failure to establish itself as a serious competitor to BSkyB.

While BSkyB was able to successfully see off ITV Digital, the launch of Freeview has caused greater concern for the Murdoch-owned service. Freeview's arrival was accompanied by a dramatic increase in the number of households choosing to go digital, increasing the share of digital terrestrial digital households to 28% from 10.6% from its launch in 2002 until the start of 2006. In comparison, BSkyB's subscriber base has continued to slow, now representing only 30.3% of digital households with growth in the final quarter of 2005 limited to 0.3% whilst Freeview, Cable and now ADSL competitors recorded growth of 9.8%, 2.6% and 21.4% respectively (Ofcom, 2006a). The stagnation of BSkyB subscriptions through 2004 and 2005, which saw James Murdoch appointed Chief Executive of BSkyB and attempt new strategies such as a one-off fee satellite service, compared to the rapid growth of Freeview has obviously caused a great deal of anxiety for the media behemoth (arguably more so given the success of the free satellite service, which grew 8.4% in the same 2005 period and may soon be joined by a competing BBC FreeSat service (ibid)).

A recent interview with BSkyB's Mike Darcy, Head of Marketing Strategy, is illustrative here. At once dismissive and derisory towards Freeview, describing the platform as 'for the elderly and economically inactive', BSkyB's concern that Freeview has greatly benefited from the BBC's brand value is clear when he complains that the BBC promote Freeview at the expense of digital rivals, dubbing the corporation as guilty of 'structural non-neutrality' (quoted in *The Guardian*, 20/12/05). Further, Darcy's view that Freeview is 'simply not up to the job' because it caters for deprived markets is, of course, to miss the point entirely. The public

service ethos behind Freeview ensures that it is catering to this exact market and is inexorably linked to the brand value of the BBC as trusted guide, whose involvement with the platform adds an air of consumer confidence in the service: “Auntie’s” involvement guarantees against both high prices and consumer fear of digital redundancy (i.e. the fear that the change of pace is so fast, technologies will be quickly outmoded). This brand value is reinforced by the series of Freeview adverts that have screened on the BBC since the launch of the service. These adverts have moved away from an emphasis on content and the linking of digital technology to forms of masculinity and have instead stressed the ease of going digital, playing on television’s already hard won-easy domesticity. This is a process that I demonstrate is repeated in the following chapter’s discussion of the discursive formation of interactive television, which traces its everyday-ing from its spectacular inception.

Freeview’s initial advertising campaign, “Television, it’s evolving” addressed the consumer in a manner that attempted to negotiate the newness of the technology without usurping its domesticity and easy familiarity. The advertisement used a number of prominent British television personalities and actors who, through a direct address to camera, shot in mid-close-up, extolled the virtues of Freeview in very simple terms. The advert was given fanfare by using digital imaging technology to allow the ad to, rather than cut between speakers, replace one personality or star with another by each seemingly rip off a mask to reveal the next celebrity. Thus, in figure 3.1 Jon Simpson pulls off his mask to reveal Richard Blackwood. The balance of the astonishing newness of digital technology is thus carefully balanced by the familiarity of the faces that are being manipulated. Spectacle is therefore recuperated by familiar televisual devices: stock names, mid-close-up shots and direct address. Furthermore,

the advert explicitly relates digital television to the very birth of television in 1936, Terence Stamp's opening monologue looking back with faux nostalgia to a time when the UK television's second channel was introduced, BBC2, in comparison to the eight new BBC channels available on Freeview. Finally, in an effort to retain the ordinariness of digital television, and thus attract a wide general audience, the mask ripping scene occurs in a very public and open park, where the morphing of personalities into one another goes unnoticed by the many bystanders often kept in frame and into whom Terence Stamp mingles at the advertisement's close.

More generally, the easy domesticity of Freeview's plug-and-play technology is key to the platform's promotion. Andy Duncan argued that this was pivotal in the marketing decisions for Freeview as the BBC's market research had identified a core group of "refuseniks" who wanted 'something clear and simple', enabling the Corporation to 'cut through the apathy and negativity' (2003). During 2005, Freeview ran an animated campaign in which the TV set is rendered as the old, faithful family dog – depicted as an aged, but much loved, pet who is in need of learning some new tricks; supplied in the form of digital TV. In the first of these commercials a white, middle-aged father figure takes the television-dog, "Boxer", for a walk. In the background, people play with energetic digital televisions, which chase sticks and footballs with verve whilst Boxer mopes behind Dad. On their way home, the pair pass a television shop that contains a Freeview box. Boxer immediately becomes animated, and drags Dad into the shop and then home with the new box. On return, a female mother figure asks "Did he do everything?", playing on the idea of traditional dog-walking for the purpose of defecation, to which Dad replies "He does now!". Boxer runs about a newly furnished living room,

decorated with a white sofa, polished wooden-floors and clear tasteful artwork, as the couple discuss the move to digital. Answering Mum's concern that "I thought we were going to have to get a new telly", Dad replies "Oh no", and explains how with a Freeview box there is no subscription and "I just plugged it in, and he was away". The emphasis in this series of adverts is on the ease of going digital, so in a later advert, Grandma is given a Freeview box for her television. Here, the language of digitality is stripped back to Granny's jargon free monologue that re-brands the digi-box a "thingy-me-jig" and "plug-and-play" as "you just plug it in and ta da!". The promotion of digital television in terms of low-cost, ease and the domestic setting of the advert all help to move digital, interactive television away from the forms of masculinity promoted in the ITV Digital ads and those of spectacle that I discuss in the following chapter.

The move away from associations of digital technology with masculinity is made explicit in a final advert in this series. This commercial sees a middle-aged know-it-all man join the mother figure from the earlier advert. Dressed in turtle-neck sweater and trendy thick-framed glasses, the character admonishes "aye, Sis have you still got that old thing?", gesturing to Boxer in the corner of the living room. In response, she defends Boxer showing him all the new tricks the television can now perform through Freeview. Somewhat impressed, the brother acknowledges, "... that is good, make a great coffee table as well" and steps forward to put a coffee cup on top of the television set. At this point, however, Boxer jumps up and in a parody of *The Matrix*'s (USA, 1999) "Bullet-time" digital effects, knocks the man back on to the couch and through a series of martial arts moves fires a round of sofa cushions at him. Put in his place, Mum taps Boxer on the head and explains "Martial arts documentary, BBC3", as the cause of Boxer's new found martial arts skills. Thus, in these series of

advertises the spectacle of digital is aligned with a domesticity that is available to all, not just the male figures of the ITVDigital adverts or other marketing campaigns that have heralded new technologies to television's form. The importance of public service broadcasting's place as a facilitator of universal access to the digital landscape is here clearly invoked and, to a large extent, fulfilled. As Ioifidis notes, the BBC's domination of channels on the platform is significant in driving digital take up. These channels make up approximately a quarter of Freeview offerings and 'gain about 5.5% of Freeview household' audiences, whilst it stood at only 2.7% in all multichannel homes (Iosifidis, 2005: 66).

Although the shift away from explicit discourses of masculinity and illegitimate cultural capital might suggest a successful move to address a universal audience by Freeview, there is also a current in Freeview's marketing strategy that suggests a more middle-class audience is being targeted. In the advertisements thus far discussed, particularly the animated series, there is a much clearer address to an audience that might fit in the mould of BBC envisioned traditional audience: middle England's, home-owning, 2.5 children family who are concerned with issues of legitimate cultural capital. The attempts to digitalise this audience are clearly manifested in Freeview's 2004 ad-campaign that places the multi-channel choice of digital television as an art-gallery of screens through which the viewer browses and chooses. Presented by Nick Knowles, the advert features him taking in various art pieces where a television screen has replaced the painted canvas. The use of Nick Knowles, who presents holiday programmes and "artsy" sections on DIY programmes, clearly signals an address to a particular audience, whose taste and lifestyle codes are invoked by the space of the art gallery. Whilst other Freeview advertising campaigns address different and broader audiences, this advert

is of particular interest for the way it represents the digital television environment: as a space to wonder around, browsing and appreciating the offerings on display. Across Freeview's campaigns there remains a conception of the audience in traditional public service, familial terms. The adverts address an audience, who conversely to the satellite dish owner of Brunsdon's study, *does* want to be part of a national broadcasting system. Freeview's limited multichannel environment, dominated by BBC offerings, might be read as appealing to an audience who want to remain 'available for the ritual, citizen-making moments of national broadcasting', who wants to 'like what is better to like' but who, simultaneously, also wants to be part of the 'supranational entertainment space' that digital technologies offer; of course, without visibly declaring it to the public world in the form of a satellite dish (Brunsdon, 1997).

The address to middle England in adverts such as this, combined with the eradication of the need for a satellite dish, has helped mobilise a consumer group to go digital that the satellite dish and marketing strategies of Sky and ITVDigital had thus far failed to capitalise on. As the press coverage of Sky's initial launch suggested, the platform was unlikely to capture upper-class audiences without a significant shift in its marketing campaign:

But unless Sky changes tack and goes for a more upmarket audience, a satellite dish protruding from the front wall will do about as much for your standing in the neighbourhood as a visit from a rat-catcher (*Evening Standard* 12/07/1989 quoted in Brunsdon, 1997: 162).

As a result, Freeview's success in mobilising this audience combined with Sky's stagnating subscription rates led to the satellite provider attempting to explicitly address this consumer. In a series of adverts run in press outlets throughout 2004, under the tag-line "Sky: What do you want to watch?",

Sky launched a campaign that promoted content traditionally not associated with Sky, such as independent film, natural history programming, documentaries and high-end drama. In one advertisement, a glossy movie still from the film *Rabbit Proof Fence* (Australia, 2003) is overlaid with the question “Love independent film? Try the place you’d least expect”, in bold letters. The campaign explicitly acknowledges the working-class, masculine connotations that have been associated with the platform with statements such as “Sky is famous for many things, but you may not think of us first for independent film” and “Sky digital is well known for showing innovative new drama and comedy”. With a return to the window-on-the-world rhetoric that has characterised television’s history, Sky’s campaign attempted to manage its image by simultaneously suggesting that its services let you “see the world” whilst its products like Sky+ enabled this world to be tailored, controlled and suited to this audience’s tastes: one advert proclaiming “If you only watch a little TV, only watch the best”. In this way, both Freeview and Sky campaigns have attempted to mobilise the middle-class refusenik audience with more traditional representations of digital television that fit within the window-on-the-world discourse, but increasingly position the window as a portal to access personalised content that conforms to particular class-taste codes.

Conclusion

Just as the following chapter details how a similar pattern marked the discursive formation of interactive television, whereby spectacle quickly gives away to concerns with domesticity and a wider audience, the concerns, discourses, forms and debates that have pervaded the period of plenty continue into the period of excess. Section 2 of the thesis examines particular case studies of interactive television from this period within the

context I have outlined across the three chapters in Section 1. Before moving on to these studies, it is worth returning to the notion of uncertainty that I detailed at the start of this section. Arguably uncertainty has marked the commencement of the period of excess in two important ways. Firstly despite the success of Freeview as “the people’s choice” for switching to digital television, as Born and Ellis have noted, the BBC’s and public service broadcasting future in this period looks increasingly uncertain. The BBC’s first digital Charter will sustain the BBC’s position as the ‘cornerstone’ of the emergent digital television landscape, but this status is far from guaranteed beyond this.

Secondly, television studies itself is relatively uncertain in the object of its study. As Tara McPherson noted at the Society of Cinema and Media Studies conference in 2007, it is questionable whether television studies’ methodologies are the most appropriate tools for engaging with emergent programming and technological forms that see televisual content exist across platforms and in evermore-malleable forms (2007). John Corner provides an apt conclusion for how we might think about this issue here. Summarising a lack of preparedness within the field to deal with these newly emergent forms, he argues that television studies has

barely begun to make a full political social and cultural assessment of “television as we know it”, yet its very object of study is shifting towards “television as we knew it” with some speed. However, with such a modest amount of achieved scholarship concerning the ways in which television has changed political, social and cultural values, it is arguably not very well equipped to engage with “television as we will know it” or to offer much of a contribution to public debate about the different opinions (Corner, 1999: 121).

In asserting that this thesis contends to be an active engagement with television’s new period of excess, I am embarking on a process of pinning down the texts of ‘television as we will know it’. In the process, I aim to

reduce the uncertainty with which scholars have addressed this period and, against McPherson's polemic, assert the importance of television studies in establishing a methodological, critical and contextual framework for the study of interactive television. Thus by engaging both with the newness of digital television, and recognising that such an engagement must be grounded within the historical specificity of the moment and against a longer historical backdrop, I aim to equip television studies for the study of digital television.

Appendix of Images for Chapter 3

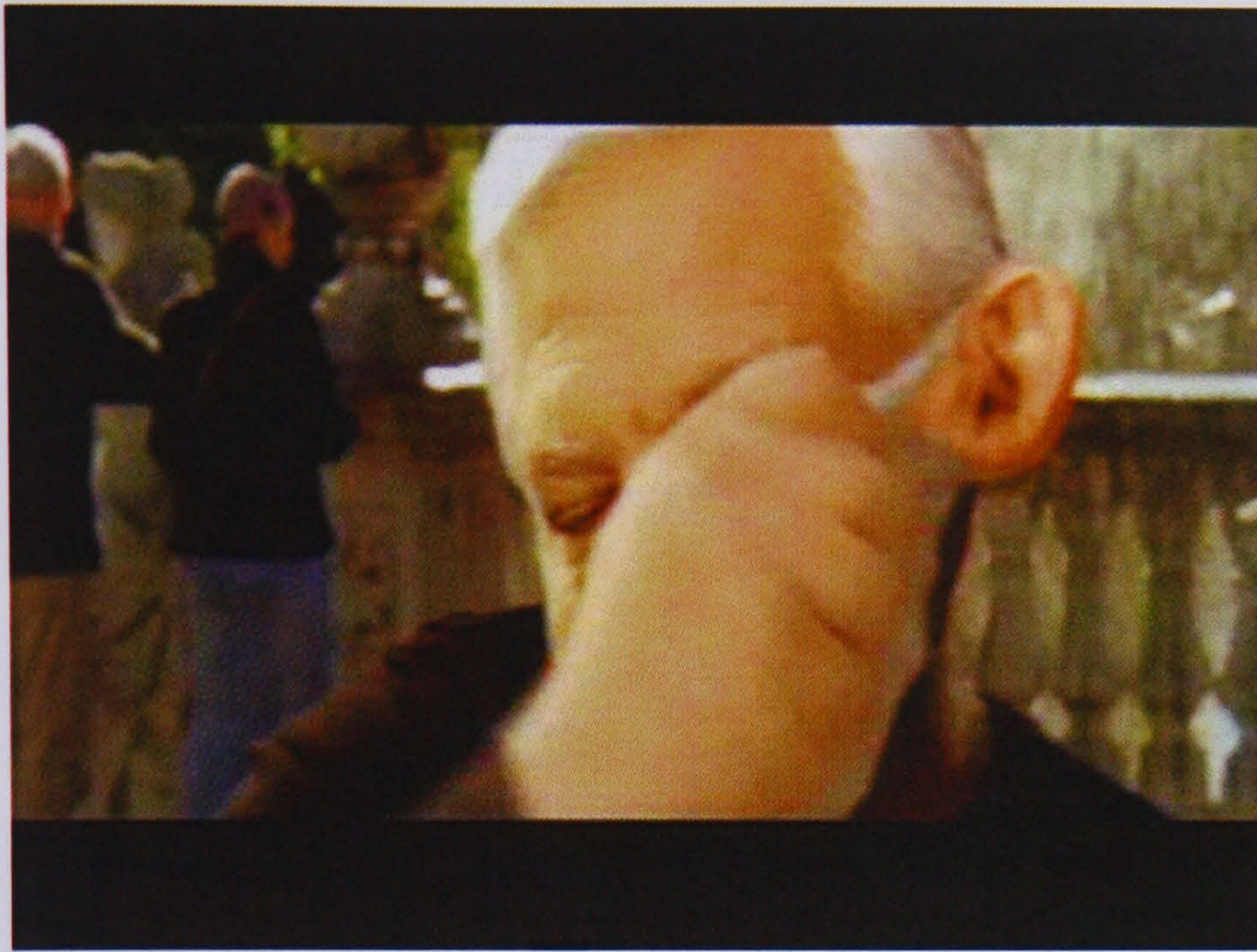


Figure 3.1 John Simpson “rips off” his face.

Section 2: From windows to portals: **Interactive television and the BBC**

The window's metaphoric boundary is no longer the singular frame of perspective – as beholders of multiple-screen “windows”, we now see the world in spatially and temporally fractured frames, through “virtual windows” that rely more on the multiple and simultaneous than on the singular and sequential” (Friedberg, 2006: 243).

Whilst interactive television's aesthetics often fracture the screen into multiple windows, unlike the real-time ontologies of the computer, television's liveness often keeps the experience of these texts ‘singular and sequential’. It is thus how this experience is organised, rationalised and structured by second shift programming strategies that is of central concern in examining how we understand the changing ‘metaphoric boundary’ of the window; that is, as the window becomes a portal. In the first chapter of this section I demonstrate the persistence of the window-on-the-world metaphor in the formation of interactive television, suggesting both how it has served to “everyday” interactive television as well restrict the mobility on offer according to gendered and institutional concerns. Similarly, Chapter 6 charts how window-on-the-world discourses continue to be re-circulated by interactive television but in ways that often obscure the restricted, personalised portal that is actually experienced by the viewer. In contrast, Chapters 5 and 7 examine the rationalities of interactive television's portal in more optimistic terms. Thus as John Street has argued, the moment of a new technology is often falsely polarised as a dichotomy ‘between choice and determinism, between activism and passivism’ (1997: 36); as my discussion over the chapters in this section demonstrate, this is a binary that television negotiates as its window becomes a portal. The portal

of digital television's screen does not simply replace the window, rather it repurposes, remediates and constantly recalls and re-circulates television's window-on-the-world positioning.

Chapter 4: ‘*Your window-on-the-world*’ – Rationalising viewer mobility and the emergence of interactive television

As I noted in Chapter 1, television has always been interactive in both technological and cultural senses. Television’s development since the pioneering *Winky Dink & You* has been littered with attempts to instil more formal and commercial interactive capacities into the medium. As John Caldwell has rightly pointed out, the use of phone-ins during television programmes represents one of the earliest forms of televisual interactivity, which is largely replicated by digital forms of interactivity. NBC’s *The Today Show* (NBC, 1952 -) began using phone-ins as far back as 1959, whilst the development of the Ceefax and Teletext systems of interactive text in the UK dates back to 1972. Indeed, the 1970s saw a relative flurry in developing interactive television with commercial interactive services launched on both sides of the Atlantic. In the United States Qube was launched in 1977 in Ohio, offering 30 channels divided between broadcast television, pay-per-view and interactive programming. Although Qube expanded to a number of other United States cities, its adoption was hindered by high prices and technological fragility, with it finally ceasing transmission in the early 1990s. In the UK, Prestel launched a television-PC interface that signalled the coming of technological convergence by linking the television set to a modem and phone-line. During the late 1980s and early 1990s, television programmes were broadcast in both the UK and Australia that allowed the audience to decide the outcome of story lines, phoning in to vote or suggest ideas as to what happens next. In the UK the BBC broadcast *What’s your Story* (BBC, 1988), a children’s show hosted by Sylvester McCoy that allowed the audience to ring in with suggestions of

what happened next. In Australia, Channel 10 aired the comedy *Let the Blood Run Free* (Network 10, 1990). Based on a long running stage show where the audience were able to decide how the story evolved by voting on a set of options presented to them, the programme represented a collectively 'personalised' text as it twisted and turned with the majority's decisions on narrative. Whilst the narrative remained linear, the ability to vote on storyline outcomes replicated the 'choose your own adventure' genre of books that is largely credited with influencing early interactive narrative forms on the computer screen (c.f. Manovich, 1999; Murray, 1997).

Finally, shortly before the commencement of digital television in the UK, two phone-based interactive television systems were launched in Scotland and the Midlands. The Midlands based OKTV service (1996) used a complicated phone-in system that required audiences to input programme codes and wait for applications to be delivered via a teletext like system. The promotional material for OKTV clearly tried to position this as a simple extension of television. The explanatory feature in *OKTV Interactive Magazine* represented the technology as simple to use via a promotion that depicted an elderly lady, Mrs Mack, guiding the reader through the process of interacting and voicing the audience's perceived concerns about new technologies:

I am sceptical about new fangled ideas, but I'll make an exception in this case. This remarkable piece of equipment can allow you instant communication with the powers that be and brings hours of entertainment in a jiffy.

However as figure 4.1 demonstrates, the quaintness of this address could not compensate for the extreme complexity of the system, which required the use of teletext, remote control, phone and, recalling Jeffrey Sconce's

work on haunted media, communicating ‘with the powers that be’ (2000). Despite the relative failures of all these attempts to create commercial interactive television systems, they demonstrate how television has always been figured as an interactive medium. As John Caldwell argues

Interactivity, then, was not a cybernetic product, but a way for programs to seal a relationship with viewers. Even if one did not actually call the number ... one knew it was there (1995: 260)²⁶.

Nevertheless, this history of failed attempts to launch formal, technological interactive television systems has meant that, to a degree, the relative success of red button applications in the UK has come as a surprise to many. In this view, television has popularly been thought of as a passive medium. As Jonathan Crary has shown, this is part of a longer and wider history in which successive technologies have been positioned as inherently invoking a passive state in their audiences (2001). Television’s positioning within these discourses has been repeated throughout its history. Its initial inception into everyday life was met by diatribes like Philip Wylie’s 1955 edition of *Generation of Vipers*, which extended his condemnation of radio as a pacifying and feminising influence to television. Similarly, in the UK the 1962 government *Pilkington Report* critiqued television’s triviality and the failure to produce challenging programmes. As late as 2001, the *Daily Mail* was proclaiming interactive television a ‘dead duck’, which with services like the interactive NHS Direct required too much of the ‘couch potato’, having to ‘fiddle around with the remote control on some tricky telly system’ (7/11/01: 14). Equally after Sky’s first interactive shopping and gaming portal, *Open*, began to fold under pressure from low financial returns the *Daily Mail* again declared

²⁶ The idea that interactivity can help ‘seal a relationship with the viewer’ is one that has increasingly been noted in the use of branding tactics in the period of excess (c.f. Johnson, 2007; Lury, 2005; Strange, 2007).

interactive television a technology unlikely to take-off (8/10/02). Most notably, during the dot.com boom and digital revolution of the 1990s, new media soothsayers such as *Wired Magazine*, continued to place television as inherently passive in contrast to the liberating potential of new media (c.f. issue 1.01 and 1.02). To an extent, such attacks are accompanied by a strand of new media scholarship that proclaims digital technologies' activation of the audience, re-imagined as users, as revolutionary (c.f. Negroponte, 1995).

However, since the launch of digital interactive television in 1999, the UK's interactive TV market has continued to grow in terms of the number of viewers and suppliers of content, with *New Media Age* reporting that over 90% of households had used interactive television by August 2006 (31/08/06: 1). Given the tendency to represent television as something of a pacifying agent, it is unsurprising that the advent of interactive television was accompanied by a great deal of fanfare and spectacle in its marketing. However as Tom Gunning's and William Uricchio's (2002) work on media histories suggests, new media technologies must not only proclaim their own newness, but also refer to existing provision and needs. Thus the introduction of a new media often involves 'examining [the] move from dazzling appearance to nearly transparent utility, from the spectacular and astonishing to the convenient and unremarkable' (Gunning, 2004: 39). My approach to spectacle here therefore relies on Gunning's work in this area, whereby it is associated with a newness that is designed to provoke astonishment and wonder:

A discourse of wonder draws our attention to new technology, not simply as a tool, but precisely as a spectacle, less as something that performs a useful task than as something that astounds us by performing in a way that seemed unlikely or magical before (2004: 45).

By promising to activate the passive audience of the television set, the discourses around interactive television highlight and define the medium through this 'magical nature'.

By tracing this everyday-ing of interactive television from the spectacular to the 'convenient and unremarkable' I aim to demonstrate the discursive shaping of interactive television as a new media technology, locating it within longer histories of television's position as a window-on-the-world. As I set out below, by suggesting interactive TV calls up television's window-on-the-world metaphor I want to not only link television's digitalisation to 'when old technologies were new' (Marvin, 1989) but also further tease out some of the competing discourses subsumed within this positioning. In so doing, I suggest that the metaphor has not simply been key in everyday-ing interactive television but key discourses subsumed within the metaphor, particularly surrounding mobility and the way in which television's window facilitates a negotiation of public and private/domestic spaces, attach differently according to gendered preconceptions. Thus whilst Karen Orr Vered has suggested a movement from window-on-the-world to a 'windows interface' with the advent of digital, interactive television, I argue that television's position as a window-on-the-world is constantly recalled, re-circulated and remediated by interactive TV (2002). That is, whilst the aesthetics of interactive television often evidence a fracturing of the television screen into multiple windows, turning the hyperactivity of videographic style that Caldwell notes arises in 1980s television into hyperlinks (1995), these are normalised, and ultimately pared down, by the persistence of window-on-the-world discourses.

Drawing on Gunning's (2004), Lyn Spigel's (2001a, 2001b) and William Boddy's work (2004a), I suggest that interactive television's initial

appearance is marked by spectacle that, as with wider developments in television's technological form surrounding its digitalisation, is linked to masculinity. I argue that the movement from spectacle to everyday is then not only facilitated by the prominence of window-on-the-world discourses, but these discourses also serve to normalise gendered conceptions of interactive television that link female viewers to domestic spaces, restricting access to the control and mobility on offer to the male viewer. Thus, whilst window-on-the-world discourses are explicit in this discursive shaping, the idea of television as a portal that I have traced in Section 1 of the thesis is implicitly apparent in the way mobility is rationalised. The link between technological newness, spectacle and masculinity is well-trodden ground in discussions of American television but is relatively under-explored in the UK. My focus on the UK's landscape here therefore reveals not only the continuation of this pattern but also the importance of the particular institutions involved in shaping the technology. As I outline below, the gendering of interactive television is not simply a straightforward binary between masculine activity, control and mobility and feminine domesticity but is rather intimately linked to the presence of both commercial and public service broadcasters within the British television landscape, especially BSkyB and the BBC. The discussion below is therefore first concerned with the association of interactivity with spectacle and masculinity before returning to my interest in television's positioning as a window-on-the-world.

This chapter is concerned with how marketing and industrial discourses have shaped and informed interactive television, drawing on archival research to examine the diverse semantic networks that have placed interactive television in a socio-technological *imaginaire* (Flichy,

1999: 34)²⁷. The discursive formation of a new media technology is as much built through regulatory moves and consumer uses, as it is the circulation of fantasy scenarios that accompany the launch of any new technology. As William Boddy argues,

Every electronic media product launch ... carries with it an implicit fantasy scenario of its domestic consumption, a polemical ontology of its medium ... The scattered public record of these self-representations, in the ephemeral forms of TV commercials, corporate press releases and trade press reporting, can offer insights into the larger contexts and implicit assumptions within which media firms operate (2004c: 191).

Boddy's work suggests these ephemeral forms of a new media's representation act within the larger context within which media technologies are received. As such, they cannot be read as determining how a new technology will be received. Rather, as Spigel's work on the initial figuring of television in everyday life suggests, these ephemera 'reveal an intertextual context ... through which people might have made sense of television and its place in everyday life' (Spigel, 1992: 2). Thus, in the social shaping of a technology's history I am taking here, the creation of a new medium is the result of a complex interplay between technological developments, planned uses fitting into evolving lifestyles and modes of working.

The semantic network of this socio-technological *imaginaire* encompasses mainstream press reporting, print advertising, television listing magazines as well as promos and the interactive applications on television itself. All of these representations are included in the discussion below; however, three sources provide a particular focus. Firstly, the bulk of the study is based on an analysis of promotional materials screened both on

²⁷ As such, I would like to highlight the importance of the British Library as a site of irreplaceable sources to the research in this essay.

television and existing as independent marketing documents, campaigns and television adverts circulated by Sky and the BBC. The second source of study is television listings magazines, particularly Sky's own *Sky* magazine (previously *SkyView*) and the BBC's *Radio Times*, as well as *TV Times*. As with the magazines listed below, these sources were examined over the first launch 18 months of digital and interactive television (August 1999 – December 2000) and over periods that coincided with significant events in interactive television programming (such as the BBC's first ever interactive programme *Walking with Beasts* in late 2001; the launch of Sky's *NewsActive* service in June 2000; and the re-branding of Sky's *Open* shopping portal as *SkyActive* in late-2002 and late-2004).

As part of my concern here is to discuss interactivity in relation to gender, the third source of materials comprises a sample of men's and women's magazines. These are drawn from the popular men's magazines *Arena*, *FHM*, *Loaded* and *GQ*, as well as from satellite television and technology magazines, such as *T3*, the unabashedly masculine technology magazine²⁸. As a point of comparison, *New Woman* and *heat* magazine were looked at over the corresponding period. The choice of *heat* and *New Woman* was based on the high circulation and availability of each magazine during this period, with *heat* being the highest selling weekly celebrity gossip/women's magazine during much of this period (c.f. Gough-Yates, 2002). Whilst the documents discussed below attest to the focus on masculinity in the way interactive television was figured at its inception, it is significant to note here that across these two women's magazines titles only two advertising campaigns related to digital television appeared, with only the most cursory mention of interactivity. Despite the

²⁸ The gendered address of the magazine is evident in the use of a scantily clad woman on each issue's front cover and the appearance of models throughout the magazine draped, as if adornments, over the 'sexy' pieces of technology featured.

fact that *heat* carried television listings for both free-to-air and cable and satellite digital services, the only advertising reference to interactive television came in 2001, when a full-page advert was used to promote Channel 4's *Big Brother* (30/6-6/7/2001). This concentrated on the ability of the audience to gain in-depth and extra knowledge about the contestants and, of course, vote them out through interactive television. In general, advertising in *heat* focused on digital television in terms of the channels and packages it offered, such as a 2000-01 campaign for Sky's digital music channels. Similarly, *New Woman* contained only one reference to digital television, which focused on the possibility of seeing Robbie Williams' naked torso if one were to subscribe to Sky and receive the company's free magazine, which came with a 'Free naked celeb poster book' (02/01). Of course the lack of promotional materials for interactive television in these magazines does not equate to a total absence of interest in the female consumer but rather, as we shall see, that gender attaches differently to interactive television's inception as a moment of spectacle to its later everyday-ing.

“Touch my button babe”! Spectacle, masculinity and the advent of UK interactive television

The negotiation of a technology's spectacular newness to its position of everyday familiarity is a complex process, which as the discussion below attests, is never simply a linear trajectory. In the interceding eight years since the launch of interactive television in 1999, different currents of promoting and positioning interactive television have been apparent, at once proclaiming their radical newness whilst at the same time positioning the technology within existing uses and discursive formations. Beverly Lyon's editorial introduction to *OKTV Interactive Magazine* is instructive

here. Although this relates to a very localised, analogue form of interactivity (which failed to take-off), she heralds the coming of interactive television with great fanfare but nevertheless fits the technology into existing discourses about television. Lyons proclaimed that

The words [interactive television] have been bandied about the nineties boardrooms by boring blokes aplenty and now – it has arrived! ... OKTV is at the cutting edge of interactive technology ... [and will make] terms like couch potato ... defunct as passive viewers become active players in telly land ... ZAP THAT MAGIC BUTTON! (1996: 1).

Of course, Lyons was slightly premature in heralding the arrival of interactivity but her opening invitation to a new world of interactivity is a careful mix of positioning the technology as radically new (terms like ‘cutting edge’ and ‘boardrooms’, where big decisions are made – by men) within familiar terminology (couch potato, telly land and even ‘zap that magic button’, which appeals to a slight quaintness of innovation). This oscillation between spectacle and the more familiar terms of television works as a microcosm for the way in which interactive television’s position is played out over the course of its inception.

However, as Lisa Parks has recently noted, ‘the convergence of television and computers is not just about technical mixing; it also activates gendered assumptions about “active” users and “passive” audiences (Parks, 2004: 134). Boddy’s account of the development of digital and interactive television services in the US illustrates how promotion attempted to imagine interactivity as transforming television ‘from scorned and degraded to good cultural object’ by reinventing the ‘pacifying, even feminising (in)activity of consuming television with fantasies of (masculine) agency and power’ (2004a: 70). That these discourses might be traced through to the sorts of marketing and actual interfaces of the UK’s interactive

television applications as a new media is not a new discovery in itself. As Lyn Spigel's work attests, discourses of masculinity are constantly re-articulated across television's history at moments of technological change (2001a). However, what remains important is the way in which binaries of active and passive are navigated, re-circulated and gendered in the context of the everyday-ing of interactive television in the UK from its initial moment of spectacle.

Digital iTV in the UK was launched in 1999 with the commencement of *SkySportsExtra* (now *SkySportsActive*) to accompany a major Premier League soccer match. Sky promoted the spectacle of interactivity as 'nothing less than a glimpse into the future – a future where you can be in control' (SkyView, August 1999: Sports Supplement). However, to return to Gunning's notion of spectacle, it is less usefulness that is important here than the fact the application represents a 'glimpse of the future'. The application provided an interface that gave the viewer the ability to choose various camera angles, focus in on an individual player, change commentary tracks, call up onscreen statistics for the live match and replay incidents from the game (figure 4.2); c.f. Lury, 2005: 168-9). However, whilst the application promised hitherto unknown degrees of control over the television set – subjecting it to the mastery of the active user, rather than passive viewer - the actual event of using *SkySportsActive* was one of experiencing frustrating delays every time the viewer decided to change camera angles or call up a stat. Whilst there was substantial investment in the *SkySportsActive* application, bandwidth for interactive television as a whole has remained relatively tight (discussed further in Chapter 6), resulting in the viewer experiencing lengthy load times as the set-top-box jumped between transponders carrying different video streams. Thus *SkySportsActive* actually disrupted the flow of the match or, even worse,

potentially lead to missing a vital moment of the match²⁹. Nevertheless, *SkySportsActive* was positioned as a new use of television that represented a radical break with the past. As *What Satellite* suggested, with such interactivity ‘we can now start to enjoy the kind of services that have never been used before’ (1999: 19). However, this newness in fact actually represented a fulfilment of one of the earliest imaginings of television, whereby mobility and control over live sports broadcasts were envisioned as key pleasures and potentialities of the apparatus (c.f. Urrichio, 2002).

This emphasis on control is key not only to the promotion of interactive television as spectacle, but the address towards a male audience evident in such materials. As with Boddy’s account of the attempts to masculinise television through digital features, I don’t want to suggest that interactivity is inherently masculine, nor do I want to buy into gendered binaries that suggest sport, particularly football, is an exclusively male domain. The masculinity of address in these early promotions is therefore not simply about an association of interactivity with football but is explicated in the surrounding promotional materials, including the paucity of its representation in women’s magazines compared with men’s, the subsequent development of the application and the way television is viewed in the home³⁰. Furthermore, the promotion of interactive television in terms of spectacle evidences a concern to address the early adopters of new media technologies. Whilst studies such as Max Dawson’s demonstrate

²⁹ I use the term ‘flow’ quite deliberately here, for it is suggestive of the way the application must balance the key tropes of liveness, immediacy and intimacy that have been associated with television’s window-on-the-world form (tropes particularly important for live sports broadcasts), with iTV’s metonymic calling up of digital culture and its related panoply of real-time computing, interactivity, virtuality and the like (c.f. Gere, 2002).

³⁰ Indeed, whilst not concerned directly with the promotion of interactive television, the importance of football to ITV OnDigital’s business model (having paid out over £300m for rights to second-tier football matches). As I’ve discussed, the promotion of ITV/OnDigital’s service therefore primarily linked digital television through football to forms of masculinity represented by the slovenly bachelor Al (played by working-class comedian Johnny Vegas) and his companion Monkey.

that in the United States (2007), these are overwhelmingly white middle-class males, as I suggested in Chapter 3 the class distinctions in the UK are less certain. Thus it is important that the application for football viewings was free at the point of use, with revenue streams only available for the broadcaster if viewers were herded towards the *SkyBet* feature.

An address to a male audience is re-enforced by *SkySportsActive*'s promotion in Sky's listing magazine, *SkyView*, whereby the company's TV guide informed consumers that the service would allow them to 'take control' and, 'settle that argument with your mates' by calling up some vital statistic. Equally adverts for Sky's *Open* interactive shopping platform, which appeared in the sports section of their TV guide, depicted a male viewer owning the remote control, lounging on the couch and looking at football merchandise under the heading 'The Warm Up'. In contrast to other adverts for Sky's *Open* shopping service, the female viewer/shopper (for she is not afforded the control of the male *viewer*) here is displaced and obscured by the male figure. Of fundamental importance here is the emphasis placed by Sky on the acquisition of football rights to the economic success of the operator's digital satellite platform. As set out in the previous chapter, this has seen BSkyB retain its stranglehold on broadcasting rights for the Premier League since originally outlaying £304million in 1992 for the rights as part of the corporation's tactic of using 'sports as a battering ram and a lead offering in our pay television operations' (Rupert Murdoch quoted in Millar, 1998: 3). Thus the investment in *SkySportsActive* as the platform's first interactive offering is also suggestive of a gendered bias in the promotion of interactive services. Unlike *Open*, which experienced numerous delays in its launch, *SkySportsActive* was given unlimited bandwidth to develop its interactive

application – at the time a very precious commodity (Source: *What Satellite*, November 1999: 19).

Furthermore, subsequent development and user feedback about the application have focused on the application's fanzone commentary. This allows viewers to listen in to – and a chance to become – commentators who are rival, inevitably male, fans sitting in a commentary booth basically taunting and ritually abusing one another. The address to the male fan is evident in the type of "laddish" behaviour that is tolerated and promoted here, as not only does the application allow viewers to listen into such commentaries, but also offers a chance to witness the fanzone commentators in action. Promotions for the service feature a number of outtakes from this section that show men pulling up their shirts, or down their shorts, to bare beer bellies or naked bottoms at their erstwhile colleagues, aggressive taunting and gesticulation as well as bleeped out swearing.

Finally, the aesthetics of the application's interface is itself addressed towards a masculine audience and providing control. That such interactive texts might have a masculine address beyond their generic category relates to how television is viewed in the home. David Morley's study of television and gender has suggested how the remote control tends to not only belong to the male of the household, but has specific uses within different gendered hands. As Morley's survey suggests, 'none of the women in any of the families use the automatic control regularly ... [whilst] they complained of men using them obsessively' (1994: 476). *SkySportsActive's* aesthetic structure is such that obsessive use of the remote control is rewarded by allowing the viewer to play at television producer; by constantly switching camera angles and calling up onscreen stats in order to not only produce a personalised experience of the match, but one that

offers the promise of bettering the coverage provided by the broadcaster: no more complaints of not being able to see something from a different angle, know a vital stat, or review a specific incident. In combination with the observation that men 'state a clear preference for viewing attentively, in silence' (ibid: 478), this would suggest that texts such as interactive football have a masculine address that privileges the owner of the remote control, particularly the solo viewer.

The appeal to notions of spectacle extended beyond sports broadcasting and informed Sky's promotion of all its new interactive services. As part of a long-running marketing strategy between 2001 and 2004, Sky personified the viewer's red button as an animated character called "Little Red". Little Red was depicted as a red-haired cock-rocker, dressed in tight leather trousers and regaling the audience with a rock-concert style performance that highlights the attractive features of Sky's interactive portal, *SkyActive*. Fireworks and a stage filled with video-walls, which run in the background with images of Sky's various interactive applications, announce the coming of interactive applications as a truly spectacular event. This high tech stage performance is accompanied by Little Red's lyrics, which personify the technology of interactivity as male whilst using cock-rock's forms to address an audience in terms that imagined it as female. Thus, the lyrics repeat 'I'm your little red button babe, c'mon touch my button babe', as Little Red slides across the stage floor and seductively touches himself. The advert opens with the suggestive line 'pleasuring you is my creed, and when you touch me [pause] I can get what you need', which is accompanied by a cut to a close-up of Little Red's gyrating pelvis. Whilst there is an emphasis on servicing the (female) consumer's needs, the re-imagining of the red button as an active, overly sexed, cock rocker ensures that not only is a male

audience not alienated, but that a sense of masculine empowerment and control based around sexual prowess is attached to interactivity³¹. However, despite the promoted fantasy and spectacle of this interactive space, the actual aesthetic space of *SkyActive* feels rather bland: corporate, functional and highly text driven (figure 4.3). As Daniel Chamberlain's work on interface aesthetics elsewhere suggests (2006), the use of highly text-driven menus set against uniform backgrounds (here royal blue) recalls Marc Auge's discussion of "non-space", experienced as duration rather than encountered space (1995)³².

The fantasy of male empowerment is reiterated by the men's magazine *Arena*'s use of interactivity as a theme for a photo shoot in its October 1999 issue. The fashion shoot is entitled 'Do Not Adjust Your Set' and is offered as 'homage to the joy of interactive TV'. Over nine pages, divided into four "episodes" the promotion is depicted from the point of view of a male figure who lies prone on a hotel bed whilst semi-clad female models, posing as carnal incarnations of interactive television, pleasure him in various ways (figure 4.4a-d). At one point in the narrative a group of police officers storm the party and lead the girls away, only for the final episode to conclude with 'the triumph of interactive TV' as the police officers return to enjoy the pleasures of the personified interactive television. Interestingly here interactivity, whilst aligned with a male fantasy, also allows for the depiction of the male figure as rather passive. However, because the female figures here are not the domestically active and de-sexualised mother figures of the cartoons and adverts Lyn Spigel

³¹ This is made more explicit in another promo in the series that advertises a Tetris game on *SkyInteractive*. Here Little Red implores the viewer to 'get the blocks horizontal ... the best way to be, Yeah ... [he goes on] and you can do it with up to four friends'.

³² The aesthetics of such applications might, in turn, be related to the interactive menus of chain-hotels that allow guests to order on-demand films, games and pornography. Such an approach is apparent in Lev Manovich utilisation of Marc Auge's theory of super-modernity and non-space: 'traditional places are replaced by equally institutionalised non-places, a new architecture of transit and impermanence: hotel chains and squats, holiday clubs ... non-place becomes the new norm' (2001: 280).

discusses in relation to 1950s television (2001a), the photo shoot plays into fantasies of male empowerment – technology at the male viewers' beck and call for the purpose of pleasuring him. Arguably whilst all of these promotions may not be exclusively addressed to a male audience, they do privilege the association of technological spectacle, control and masculinity.

Interactive Television as window-on-the-world

Thus far I have been concerned with discussing the way in which Sky and men's magazines heralded the arrival of interactive television as a form of technological spectacle. However, against this grain of spectacular interactive television offerings ran a current of promotion that represented interactive television through the discourses of television's window-on-the-world metaphor. Given the persistence and pervasiveness of this metaphor, it is hardly surprising to see its recall in the service of familiarising and everyday-ing interactive television. As I've suggested in section one, beyond simple immediacy this metaphor arguably subsumes within it key discourses about television that have remained prevalent across its history. Of central importance for my concerns here is the way that live immediacy has been tied to notions of mobility and with it, a negotiation of both public and private, domestic spaces as well as between competing positions of active and passive viewing, bringing with them gendered binaries³³. Lynn Spigel's work on television in the home is illustrative here, attesting to the way that television and its representation often attempted to 'negotiate the twin desires for participation in the public world and private family lifestyle' (2001b: 388). Spigel suggests that television in the era of scarcity offered a kind of 'imaginary transportation' between these spaces through the 'fantasy of antiseptic space', allowing the possibility for people

³³ Of course notions of public service broadcasting and its role in configuring the national have been pivotal in television's negotiation of public and private spaces.

‘to travel from their homes while remaining untouched by the actual social contexts to which they imaginatively ventured’ (Spigel, 1992: 111). In so doing, she not only links television’s window-on-the-world form with discourses of mobility, interactivity and intimacy but also a negotiation of both public and private spaces.

This mobility negotiates not only the space between public and private, placing a safe barrier (the screen) between the two, but also the desire to be both passenger and driver. However, the mobility of television’s window in the studies of Spigel and Boddy is most commonly aligned with masculinity. As Spigel’s work has shown, the television adventurer is most commonly depicted as male. Her work demonstrates how the advent of portable television shifted representations of the male consumer from lazy spectator to an association with a ‘more active style of masculinity’ related to ‘mobility and travel away from home’ (Spigel, 2001a: 388-96). Similarly, Boddy’s detailed study of new media and popular imagination points to the way in which television was linked to forms of transport, mobility and in turn, masculinity. Boddy discusses a DuMont advert for its new television in the 1950s that promises the audience would become ‘an armchair Columbus on ten thousand and one thrilling voyages of discovery’ (Boddy, 2004a: 54). The audience here is positioned as not just passenger on the voyage, but rather Columbus himself, an explorer and in active control. In asking the reader to interpolate themselves, as armchair explorers, into the position of Columbus here the advert is demonstrative of the way in which this mobility has been associated with masculinity. Thus as I suggested in section 1, television’s window always and already restricted the views and journeys on offer to the audience.

The re-circulation of window-on-the-world discourses in the promotion of red button interactive TV in the UK therefore does not simply

familiarise and everyday the platform. Rather, the presence of these discourses has served to detach the promotion of interactivity from spectacle and thus implicitly open the mobility of television's interactive portal to a wider viewership. However, as with the gendering of television's association with mobility in the period of scarcity, the journeys on offer in the period of excess have been similarly imbued with gendered preconceptions. As I go on to demonstrate, this has occurred largely along institutional lines. Thus although spectacle is no longer the overriding discourse in the promotion of interactive television discussed below, mobility becomes a site of tension in the way interactive television functions as a portal to aggregate viewers and rationalise their viewer flows. I suggest that Sky's promotions tend to circumscribe and rationalise the journeys on offer in a way that aligns its everyday-ing with a negatively valued, feminine conception of the domestic. In contrast, the alignment of interactive television with the everyday and the domestic in BBC promotions troubles such a straightforward binary. Paying attention to the BBC's applications and promos reveals a process of everyday-ing whereby the astonishment invoked by the spectacular new-ness of interactive television is gradually replaced with its position as convenient and unremarkable. It would probably be too large a claim to suggest that the everyday-ing of interactive television through more inclusive window-on-the-world discourses has been solely the work of the BBC. As Tom Gunning argues, astonishment is an inherently unstable and temporary experience, rather than simply the result of a benevolent institution with a concern to supply universal access to digital television's new technologies. Nevertheless, there is a clear division between the way in which these window-on-the-world discourses are mobilised by the promotional material of public service and commercial institutions discussed below. Before I go

on to consider how this process of everyday-ing interactive television has occurred along gendered lines, I want to first demonstrate the presence of the key discourses I identify in the window-on-the-world metaphor, namely liveness, immediacy, hybridity, mobility, intimacy and the negotiation of public and private spaces.

The marketing of interactive television news, and its subsequent aesthetic form on both the BBC and Sky, explicitly figures television as a window-on-the-world: promoted in terms of liveness, intimacy, mobility and hybridity. Sky's promotional campaign for *SkyNewsActive*, the 'world's first interactive television news' service, ran for over two years from mid-2002 until the end of 2004. The promo featured one of Sky News' most prominent and long-serving newscasters, Anna Botting. The familiarity of Botting's face and performance is of particular importance as the *SkyNewsActive* multiscreen application, which is essentially mirrored by the BBC's news application, is itself aesthetically quite complex. Indeed far from being a window-on-the-world, the application itself works effectively as a portal: it remediates web aesthetics to create a hypermediated feel through the screen's fragmentation into a series of video-windows that the viewer is able to select via on an onscreen cursor controlled by their remote. Each window opens onto a cycled videostream of a particular sub-genre of news, for example, headlines, business, sport, weather or show business, which the viewer can then combine with text-based news stories from any news sub-genre.

For the promo, this hypermediated aesthetic is marshalled under the tropes of intimacy through Botting's performance: Botting uses direct aural and visual address which, coupled with the use of gesture and her presence actually using the technology, aligns her with the viewer and helps towards everyday-ing interactive television (figure 4.5). Indeed at one

point she appears to be causally leaning on the application, demonstrating the ease of its use. Botting describes the application as “*your* eight windows on the world” providing a “whole world of interactivity to explore”, signalling the transition of television’s window to a portal in the medium’s interactive guise. Gesture accompanying the dialogue at this point emphasises the notion of the interactive television environment as a world, as the presenter opens out her hands as if revealing a globe to the viewer. A medium close-up then depicts her looking up and around the frame as if seeing a whole expanse of space unlocked by the application. The call to explore Sky’s interactive news application thus extends the mobility of television’s window-on-the-world to a wider range of viewers. However, even here the importance of gender in the way these discourses are mobilised is apparent. The intimacy of Botting’s address is complimented and reinforced by her appearance in a plunging v-line sweater and high heels. Her overtly feminine coding, as with so many female newsreaders³⁴, helps the application negotiate the binary of bringing hard, public news into the domestic, private setting of the home. Moreover there are subtle divisions apparent in the way she addresses the audience. Botting is only ever presented in the mid-close-up of television’s most familiar and intimate forms of direct address when she is discussing the application’s ability to bring the viewer “soft” news genres: on demand showbiz, weather etc. In comparison, whenever “hard” news categories are discussed – business, headlines, world news etc – Botting is removed to a longer shot. This division in shot length draws attention to Botting’s use of facial gesture and vocal intonation in her introduction of ‘soft’ news categories. Here she continually raises her eyebrow and intonates with a

³⁴ For example, recent fashion features in *The Observer* and the London free-sheets, *Metro* and *The London Paper*, have focused on the looks and fashions of Jeremy Paxman’s developing retinue of supporting newscasters on the BBC’s flagship *News Night* programme (February, 2007).

knowing wink which, as she announces "... and of course, all the latest showbiz gossip and news", intimates a kind of shared secret of a guilty pleasure with the (female) audience. As I argue in Chapter 6, the mobilisation of these window-on-the-world discourses in relation to the multiscreen's aesthetic structure as a portal are problematic for the way in which we understand the public service and citizen value of television news as offering a 'mixed diet' of hard and soft news. The implicitly limited horizons offered by Botting's address to the female audience therefore further compound this problematic (Bennett, 2006). Thus whilst window-on-the-world discourses are circulated, the application works as a portal to limit the way viewers negotiate the movement between private and public spaces, between the position of consumer and citizen along heavily encoded gender lines.

The aesthetic structure of the application's interface also foregrounds the importance of liveness to the functioning of this and other interactive television applications. In terms of liveness it is important to note that as with all the interactive applications discussed so far, television's interactivity is always necessarily live. That is, one must be watching at the time of transmission in order to interact with an application. Recorded applications have their interactivity 'used up' because manipulation of the interactive text is only possible at the point of broadcast – such as the ability to move an onscreen cursor. To a degree therefore, interactivity reinvigorates the need to watch television live at the time of broadcast which, in an age where time-shifting to create personalised schedules is becoming increasingly prevalent, makes interactive television an important tactic for aggregating audiences in one place and in front of the television set³⁵.

³⁵ This is particularly evident in the use of more recent *SkySportsActive* applications that deliver a choice of football matches occurring simultaneously, bringing a diverse audience under the banner of one channel and brand.

Liveness is of particular import here for the way in which it connects with television's intimacy. Anne Freidberg's concentration on the relationship between window, screen and architecture provides an invaluable insight into understanding television's screen as a window. However, in important ways her work fails to address the importance of liveness in television's window-on-the-world function. Most particularly for my purposes here, the role of television personalities and presenters in everyday-ing and familiarising interactive television is entwined with television's liveness. As I have argued elsewhere (Bennett and Holdsworth, 2006; Bennett, 2008) television's ontological liveness plays a key role in authenticating the "televisual image" of television personalities, often producing an intimate connection. As such, thought of in relation to Horton and Wohl's description of the kind of 'parasocial interaction' direct and intimate forms of address television uses, part of television's mobility comes from the intimacy and familiarity with particular presenters, who travel on behalf of us, lending their travel for our immobility (1993). Thus, it is equally important to understand that the performances of familiarisation by Botting and Porter (discussed below) also work to take the imaginative journey on behalf of the viewer.

The final discourse within television's window-on-the-world metaphor to note here is the promo's highlighting of the ability to personalise the service, linking it to other nascent telecommunication forms and thus signalling television's always hybrid form. This is aesthetically marked by the presence of an onscreen cursor, which signals the viewer's ability to navigate the text in ways that remediate the web's hypertext forms. But it is also reinforced by an explicit connection to other media forms that viewers can experience Sky News on; the promo informing the

viewer of their ability to receive and access Sky News through their mobile phone and the Internet.

The actual process of using interactive television applications reinforces a tension between window-on-the-world discourses and the second shift aesthetic practices of portals, which is apparent around the way each call up an imagined mobility for the viewer. Since 2001, the major transmitters of interactive applications, the BBC, Sky, ITV and until its withdrawal of the service Channel 4, have all introduced an in-between interface that facilitates the movement from audience to viewer. Termed “the bridge” by industry figures, this screen greets viewers after they have pressed the red-button, providing them with a range of interactive television applications to choose from. Bridge applications have been designed to familiarise interactive television, orientating the viewer to the content on offer through a menu screen that partially fills their screen (leaving the normal broadcast programme running behind its semi-transparent interface or windowed in the top corner of the screen). The term bridge also calls up metaphors of transportation, suggesting a transitory space before one reaches (travels to) their final destination. As the BBC’s explanatory literature on interactive television posits the experience, to press the red button is ‘to go interactive’ (www.bbc.co.uk/digitaltv site visited 02/08/06). The connotations of mobility are hard to resist here and the sense of ‘going interactive’ being figured as a journey of sorts – leaving the main broadcast programme to access an interactive application – is underscored by the way in which load times for interactive applications cause long delays before the viewer reaches their final destination. Interactive television therefore clearly calls up the discourses of television’s window-on-the-world metaphor. However, whilst the bridge recalls the connotations of transporting the television

audience to new places, the imaginative journey on offer here is circumscribed by the second shift practices of portal structures. The bridge aggregates the channel's interactive applications and herds viewer exploration by offering a variety of choices that only lead out onto the channel's proprietary spaces or those of content affiliates. However as I go on to discuss in the final section below, interactive television doesn't simply rationalise viewer mobility, but does so in a way that configures the journeys on offer along gendered and institutional lines in important ways.

Gendered mobility: Just popping out to see the neighbours

As I suggested in the thesis introduction, the BBC heralded the arrival of interactive television on all digital television platforms as a spectacular event. In so doing, the spectacular was aligned with key discourses of mobility inherent in the window-on-the-world metaphor. Similarly to the DuMont television advert, the BBC's *Walking with Beasts* was positioned in terms of exploration and spectacle. The programme's opening monologue welcomed the viewer to a new world of interactivity:

This is *Walking with Beasts* interactive. Your chance to explore the fascinating world of mammals, from a time the world forgot. Press the arrow keys on your remote control to change narrator. Or use the colour keys to delve deeper. Green calls up onscreen facts at any time. Press yellow for evidence as told by the world's leading scientists. And blue takes you behind the scenes for the making of, *Walking with Beasts*.

From a Columbus-like voyage of discovery to an exploration of the "fascinating world of mammals", which we can delve deeper into by calling up on-screen facts and diving behind the scenes, the fantasies invoked to market interactive television have remained remarkably stable across the intervening 60 years. This is an extremely complicated application, which

as the series' interactive executive producer Marc Goodchild points out, aims to foreground the potentialities of interactivity and thus, in its own right, the aesthetic structure of the programme is a form of spectacle (Interview conducted 25/01/03)³⁶. Of course in the declaration of its spectacular form, the usefulness of the application is less important than its magical properties; as *TV Times* enthused to its readers, digital audiences could 'press the red button on their remote control wand' to access extra material (17-23/11/01)³⁷. Nevertheless, the application did work to mobilise window-on-the-world discourses in a way that unbound spectacular forms of interactive television promotion from masculine connotations. Indeed, the scheduling of the programme, together with a controversy over its scientific veracity, meant that *Walking with Beasts* 'wasn't meant for a science audience'³⁸, but was aimed at a broad family-audience (Interview with Marc Goodchild, 25/01/03).

This detachment of spectacle from an address to a masculine audience is central to the way that interactive television has become everyday-ed. Significantly, the promotion of *Walking with Beasts*' interactivity as a form of spectacle replaced the emphasis on control, which attached it to masculinity, with window-on-the-world discourses of mobility. However, as Shaun Moores has argued in his study of satellite broadcasting,

if broadcasting is able to "transport" viewers and listeners to previously distant or unknown sites ... then

³⁶ This is reinforced by the introductory sequence's visuals, which depict explosions and prehistoric beasts running towards the viewer and seemingly over the application's interface to culminate in a Sabretooth tiger "breaking the frame" by slashing through the programme's videographic title, which calls up the Lumière Brothers' early cinematic exploitation *L'Arrivée d'un train à la Ciotat* (France, 1895).

³⁷ The importance of spectacle over use-ability was emphasised by the application's status as a controversial winner of a BAFTA award for enhancement of a linear media. Jonathan Webb, Flextech's director of interactive media, claimed that *Walking with Beasts* simply 'did not work as a piece of enhanced TV' and the application received its BAFTA award before it had actually aired on television (quoted in *Broadcast*, 25/11/02).

³⁸ A category that itself is often linked to masculinity, as the debates about the falling number of women into the sciences in higher education attests.

we need to specify the kind of “journeys” that are made ... Who stays at home? Who feels the need to escape the confines?” (Moore, quoted in Morley, 2004: 314).

Asking this question of the way interactive television’s mobility is promoted to a female audience by Sky is particularly revealing in this context.

Throughout 1999 and early 2000, Sky’s *Open* campaign consisted not only of the football, male-focused promotions discussed above, but also a more mainstream campaign (appearing in the main listings section of its *SkyView* magazine and in satellite-television magazines) that used window-on-the-world discourses to familiarise and everyday interactivity. However, in so doing it reinforced a gendered distinction between the possibilities of interactive television as a spectacular new form of technology that aligned it with masculine interests and interactive television as part of an ordinary, domestic, more-female-oriented everyday.

In comparison to the male ownership of the technology and remote control in the ‘warm up’ advert discussed above, the explanatory introductions to *Open* in *SkyView*’s main section shows the remote control as shared between the family, both father and daughter operating the system and interacting in a shared experience. Calling up Anne Friedberg’s (1993) figure of the flaneur with the slogan ‘Window Shopping’, the accompanying text begins to open discourses of mobility beyond the male viewer, inviting the whole family to explore the world of *Open*. The advert draws a hypothetical scenario for the reader that frames interacting here as akin to shopping – ‘the year is 2001. You’ve got stacks of errands to catch up on: there’s the weekly shopping to do, new shoes to buy ...’ (*SkyView*, April 1999: 31-2). The rhetoric of convenience displaces that of control: *Open* allows the imagined female reader to escape the hassles of shopping and domestic chores. Similarly, another advert overlays a picture

of a woman's handbag with text that emphasises a convenient mobility: 'Push your way to the front of the queue'. Television is still a window-on-the-world in its interactive guise, but the possible journeys on offer through interactivity here are turned into safer, more inclusive and less spectacular, experiences.

This is picked up by the more recent *SkyActive* re-brand at the end of 2004, described as a "video magazine" it re-imagines the corporate, non-space, of interactive television as a cosy and familiar place aimed almost squarely at the female market. In an interview with Sky's Head of Interactive Development, Mirage Islam, he suggested that audience research conducted by Sky had revealed a heavy female user base for interactive television. As he puts it, these viewers are looking for "time out" in the middle of the day' (Interview conducted 10/11/05). As such, the 2004-05 campaign addresses this audience with offerings of games, quizzes, prizes, horoscopes and shopping. The advert features Gail Porter who, although as famous for her appearance in lad's magazine *FHM*'s stunt of projecting her naked body onto Westminster as her presentation of children's and lifestyle television, is here generally stripped of explicit sex appeal. Dressed in cosy, warm clothing she welcomes the viewer to the new *SkyActive*, which is specifically imagined as if it were a home that the presenter invites you to join her in (figure 4.6). The initial space viewers are greeted with upon pressing the red button allows the female viewer to not only be favoured by the address, but positively depicted as in control of a domestic space in a way that isn't perhaps always possible for the domestic routines of the imagined house-wife; i.e. guilt free time out. As Porter walks around the house, she tells the viewer how *SkyActive* has been undergoing a "bit of a makeover", signalled by the presence of a workman applying the finishing touches to the house's paint job, which as

Porter explains has done away ‘with that old blue: thank goodness!’. This, she proclaims, will be a new cosy space, where the viewer can have a cup of coffee with friends – supplied here by the workman who Porter orders off to make coffee in a display of feminine control of the interactive space³⁹ - and “play games and talk to your friends, and gossip, and date and bet and do my favourite thing of all, which is shopping of course!”.

This promotional video is accompanied by an aesthetic design of the application that mimics more familiar magazine format television programming, which as Buzzard notes, already pre-figured the portal practices of new media by acting as ‘sites that meta-aggregate’ content and audiences (2003: 205). As Porter demonstrates to the viewer how to use and navigate the application, a pictorial menu laying out the options on offer is shown. This allows *SkyActive*’s new aesthetic to essentially resemble a lifestyle programme whereby a videostream of content, which might include a holiday-programme style travelogue or cooking advice and recipes, dominates the screen with a series of text and video options laid out on the left hand side for the viewer to choose from (figure 4.7). BSkyB’s then Head of Interactive Television, Ian Shepherd described it as ‘magazine-style channel that offers on-demand entertainment and information as an alternative to conventional television’ (quoted in *iTV Today Newsletter* 01/05). Shepherd goes on to suggest that the viewer’s first encounter with the new service is a ‘single-screen video – essentially a television show’, describing its design as a merging of traditional and interactive television forms (ibid). Difference between interactivity and traditional television forms is therefore kept to an absolute minimum. This re-brand turns the journey on offer from one of leaving the home to visit

³⁹ Similarly Proctor & Gamble noted that the use of interactive advertising for its Daz cleaning product was successful because it put the ‘woman in control’. As Proctor & Gamble spokeswoman Roisin Donnelly positioned it: ‘interactive TV is a very powerful medium because the woman is in control’ (*The Guardian*, 25/10/04).

the non-space of Sky's earlier *SkyActive* incarnation or a fantasy world of control in football-viewing, to one of leaving the home to encounter another safe, domestic space.

Read in conjunction with the re-brand's advertising campaign, which is centred around one woman's discovery that *SkyActive* can replace her best friend, the mobility of television's window-on-the-world is imagined as a highly intimate journey. In a way that recalls Su Holmes' detailing of the relationship of *The Groves* (BBC, 1954 – 1957) soap opera as 'neighbours to the nation', particularly to the female audiences of soaps, the journey on offer to the female audience here is one of 'just popping out to see a neighbour or friend' (Holmes, 2006). As such, the familiar renderings of this space arguably make it easier for the viewer to explore and, most importantly, use/pay for the new services offered by television's renewed hybridity with nascent telecommunication technologies: the fantasy of anti-septic space and domestic security of television doubly envisaged. To return to Shaun Moores' questioning of the 'kinds of journeys on offer' through television, this everyday-ing of interactive television has simultaneously worked to narrow the horizons of mobility on offer to the female audience: the male adventurer is replaced by the female gossip, her mobility restricted to a natter over the back fence. Thus whilst window-on-the-world discourses are re-circulated and recalled in such promotions and applications, these effectively work to familiarise and everyday the portal practices of new media, which herd, guide and restrict viewer mobility and control according to gendered preconceptions.

In contrast to the highly constrained mobility of Sky's everyday-ing of interactive television through these window-on-the-world discourses, the BBC's public service obligations of universalism and to 'building digital Britain' (DCMS, 2006) has led to an approach that extends, or at least

levels, the journeys on offer through interactive television to a much wider audience. As I suggested in the previous chapter, the Corporation's role in promoting the digital terrestrial platform Freeview has been instrumental in this development. As with the current of Sky's promotion discussed above, interactive television is largely represented as part of a domestic, everyday mise-en-scène. However, notions of gender and control are differently enlisted here. I want to discuss one particular advertising campaign here which focuses, as with all adverts for the Freeview platform, on the platform's ready availability and ease-of-use.

The advert unties digital technology from spectacle and aligns it with the intimacy and familiarity of television by setting the advert in an "ordinary"⁴⁰ family's domestic space. Moreover the advert inverts the relationship between gender and digital technology by positioning the father as a digital refusenik, who has to be badgered into going digital by his family. The advert marked a continuation of the face-ripping campaign discussed in the previous chapter. However, here the spectacle of this CGI technology is further recuperated into discourses of the domestic and ordinary. Rather than simply have one celebrity head replace the next, their image is superimposed onto the heads of the family members in the scene. In the advertisement's pay off joke the mother's head has been replaced by that of Amanda Holden (a well-known television actress with a "sex-kitten" televisual image), as she alluringly offers herself to the dad for a kiss the mask is again replaced, this time with that of ex-footballer and *Match of the Day* (BBC1, 1964 -) presenter Gary Lineker as the voiceover instils "... and interactive sport for dad" (figure 4.8). Thus, through the father-figure's depiction as a technophobe the alignment of sport with masculinity, technology and control is here troubled by the concerns of the BBC to

⁴⁰ Read, white, middle-class, two children.

make interactive television an everyday experience and opportunity. The male of the household is no longer the early-adopter, lured by spectacle, but subject to the family dynamics that coalesce around the television set.

For the BBC the concern to 'everyday' and familiarise interactive television has led it to position the technology as, just like television, open to everyone. As such, the BBC's interactive television applications have come to increasingly resemble a continuation of the earlier, analogue Teletext system: even transposing Teletext's page numbers for the navigation of text stories made available through the bridge. Indeed, nearly all the BBC's design interfaces share a common aesthetic and navigation logic, which is described in their BBCi brand values as 'comfortably exciting'⁴¹. Thus spectacle has been replaced by domesticity and a continual pairing down of BBC interactive television applications from the complex, but spectacular *Walking with Beasts*, to an approach that foregrounds intimacy and accessibility. Thus as I go on to discuss in Chapter 7, applications for history programmes, such as *Who Do You Think You Are?* (BBC, 2004 -), are often physically 'hosted' by presenters who guide viewers through how to use the application.

Conclusion

The promotional materials and applications discussed here engage in a paradoxical task of proclaiming interactive television's newness, whilst simultaneously re-assuring the viewer of its familiarity and safety. As I have argued, this has been facilitated by the mobilisation of television's window-on-the-world metaphor. Indeed, considering the long history of attempts to create interactive television before its current red button incarnation, arguably domesticity and familiarity have been interactive

⁴¹ As a result, applications must be designed to bring 'viewers closer to content they love: easy access to the free, secure and trusted BBC' (BBC, 2004: 5).

television's "killer applications" – securing its longevity in contrast to the many failed start-ups noted at the beginning of the chapter. That this has occurred along particularly gendered lines is a factor that I have suggested we might relate to the peculiarities of the UK's public service landscape. That is, the everyday-ing of interactive television through the mobilisation of window-on-the-world discourses has not been simply a linear trajectory that has seen an association of interactive television with masculinity and spectacle give way to more familiar, ordinary renderings. Rather, gendered preconceptions have remained pivotal throughout the everyday-ing of the medium, with more limited journeys on offer as the platform has become domesticated and unbound from spectacle.

Furthermore, the different discourses and promotions discussed above suggest that despite the new media capacities of digital television, the experience and promotion of interactive television is still very much linked to television's place in the home and its temporal rhythms. In this sense, it seems old media theories, debates and metaphors still have much to tell us about digital television. For example, we might profitably enlist Nick Browne's conception of supertext to think about how the screen acts not simply as a window-on-the-world, constantly offering the viewer broad vistas, but rather the screen of interactive television invokes the practices and mobility of new media portals to regulate and restrict viewer movement according to the generic and institutional concerns of the day's programmed schedule (1987). That is, whilst the domestic, intimate mise-en-scène of applications like *SkyActive* might cater for a female audience looking for 'time out' in the middle of the day, sports offerings broadcast in primetime still promote interactive television in terms of control and, to a lesser extent, spectacle that aligns the platform with masculinity. That this rationalisation is programmed along lines that move beyond the simple

concerns of portal strategies, whereby viewers are encouraged to spend time in proprietary content, and circumscribes viewer movement along gender lines makes analysing the way interactivity is intimately bound up with window-on-the-world discourses and their institutional deployment all the more important. Thus to paraphrase Victor Perkins (1993[1972]) we must pay attention to the specificities of interactive television *as television*, rather than a radical reconfiguration of the medium to a new media form.

For the BBC the everyday-ing of interactive television has involved tying the platform to window-on-the-world discourses, particularly linking it back to the way television's screen negotiates 'the twin desires for participation in the public world and private family lifestyle' (Spigel, 1992: 111). Thus the placing of interactive television within the private, domestic world offers an imaginative journey to all members of the family to public spaces that don't simply align new technology with masculinity and control. In the BBC's promotion of interactive television the broad vistas of television's window-on-the-world are increasingly open to all, even when spectacular (as in the case of *Walking with Beasts*), whilst being the "man of the house" doesn't equate to technological competence or control (as in the promotion of interactivity on Freeview or the gender neutral approach to a comfortably exciting brand image). In contrast, for Sky, placing interactive television as an everyday, domestic, ordinary experience involves explicitly feminising the technology – restricting the imaginative journey to gossiping over the back fence or trips to the mall. As a result, the everyday-ing of interactive television is not a simple dichotomy between masculine control, spectacle and activity with feminine passivity and domesticity. Instead, it is apparent that when related to institutional discourses, the positioning of interactive television in terms of window-on-the-world discourses troubles such a binary approach. Thus, whilst

discourses of mobility are apparent across the spectrum of promotion and interactive applications discussed here, the journeys differ dramatically between those on offer from Sky and the BBC.

Despite the commitment to universalism and building digital Britain evinced by the BBC's approach to interactive television, arguably many applications' interface structures still privilege the male viewer through the same aesthetic strategies that I have outlined in relation to *SkySportsActive* and David Morley's work above. Navigation of interactive television applications generally requires direct ownership of the remote control and, as students of my teaching interactive television have discovered, other spectators tend to be displaced and frustrated by their lack of control; particularly where male viewing strategies of zapping are invoked. To a degree, quiz-based applications like *Test the Nation* (BBC, 2000 -) and *Who Wants to be a Millionaire?* (Celador/ITV, 1999 -) open this out and demonstrate the possibility for a more collective interactive experience, but overall interactive television applications address the owner of the remote control and as Morley has shown, this tends to be overwhelmingly the male of the household (1994). However, as we shall in the chapters that follow, the applications under discussion do deploy shifting modes of address that speak to different viewers. As such, my concern moves beyond simply how gender figures in the way interactive television offers and restricts or rationalises mobility. Instead, having demonstrated the persistence of mobility as a key discourse in the promotion and aesthetic of interactive applications, I am interested in how the second shift aesthetic practices of public service broadcasting rationalise viewer mobility to fulfil generic and institutional aims. Thus, just as the above discussion has teased out how the shift from window to portal in television's interactive guise explicates a tension around the site of mobility and gender, the discussion


of individual genres and applications in the following chapters demonstrates how such a tension exists in the use of interactive television by the BBC to fulfil public service objectives.

Appendix of images for Chapter 4

Mrs Mack zap attack


"I am skeptical about new fangled ideas but I'll make an exception in this case. This remarkable piece of equipment can allow you instant communication with the powers that be and brings hours of entertainment in a jiffy."

STEP 1




EVERY DAY IN THE TELEVISION PAGES OF THE DAILY RECORD OR SUNDAY MAIL YOU WILL SEE THE OKTV SYMBOL NEXT TO YOUR FAVOURITE PROGRAMMES. BELOW THIS WILL BE THE OKTV GAME CODE FOR THAT PROGRAMME FOR EXAMPLE: OKTV1237

STEP 4




USING THE BLUE BUTTONS ENTER THE OKTV GAME CODE FOR THIS PROGRAMME THEN PRESS THE GO BUTTON. ANSWER 01 GAME WILL NOW APPEAR ON THE HANDSET

STEP 5




DURING THE PROGRAMME, QUESTION 1 WILL APPEAR AS A SUBTITLE ON YOUR TV SCREEN. TO ANSWER, USE THE BLUE BUTTONS ON YES AND NO BUTTONS. THEN PRESS THE GO BUTTON. ANSWER 02 WILL NOW APPEAR ON YOUR HANDSET SCREEN. REPEAT THIS UNTIL THE GAME IS OVER.

STEP 8



LISTEN TO YOUR PHONE. A RECORDED MESSAGE WILL TELL YOU THAT YOU ARE THROUGH TO DITV


STEP 9



PRESS THE SEND BUTTON ON YOUR OKTV HANDSET. HOLD THE RED SPEAKER AT THE BACK OF YOUR OKTV HANDSET FIRMLY AGAINST THE MOUTHPIECE OF YOUR TELEPHONE AND PRESS THE RED TRIGGER. AGAIN, YOUR HANDSET IS NOW SENDING ALL THE ANSWERS TO OKTV. THIS TAKES ABOUT 10 SECONDS.


STEP 2

Turn to teletext




TUNE INTO ONE OF THESE PROGRAMMES. PRESS YOUR TELETEXT BUTTON AND GO TO PAGE 686.

STEP 3




TO PLAY THE GAME WITH THIS PROGRAMME, PICK UP YOUR OKTV HANDSET AND PRESS THE MODE BUTTON REPEATEDLY UNTIL READY APPEARS ON THE SCREEN OF THE HANDSET.

STEP 6




WHEN YOU HAVE ANSWERED EVERY QUESTION, THE COMMAND STORE GAME ON TYPE PHONE NUMBER AND DIAL WILL APPEAR ON THE SCREEN OF YOUR OKTV HANDSET. USING THE BLUE BUTTONS ENTER THE OKTV GAME'S LINE NUMBER 0005 1234567 INTO YOUR OKTV HANDSET AND PRESS DIAL.

STEP 7



THE COMMAND "HOLD UNIT TO PHONE AND PRESS TRIGGER" WILL APPEAR ON THE SCREEN OF YOUR HANDSET. PICK UP YOUR TELEPHONE. HOLD THE RED SPEAKER AT THE BACK OF YOUR OKTV HANDSET FIRMLY AGAINST THE MOUTHPIECE OF YOUR TELEPHONE AND PRESS THE RED TRIGGER.

STEP 10



WHEN YOU ARE FINISHED, LISTEN TO YOUR PHONE AGAIN. A RECORDED MESSAGE WILL TELL YOU THAT YOUR ENTRY HAS BEEN RECEIVED. YOU ARE NOW ENTERED INTO THE OKTV GAME. GOOD LUCK!

"With one press of an OKTV button plus a telephone plus a teletext remote control, you can miraculously be in touch with the world of gameshows, and I for one have always been a believer in a bit of a flutter. It brings a flush to your cheeks and excitement to what otherwise, might have been a dull and dreary day. So folks, take my advice and get the handset ready to have some fun."

Figure 4.1 Advert for OKTV platform: 'Mrs Mack' demonstrates the "ease" of operating OKTV's interactive application.



Figure 4.2 *SkySportsActive* allows the viewer to replay events, watch the game from different angles, call up on screen statistics and enjoy the fanzone commentary.



Figure 4.3 *SkyActive*'s bland, heavily text-driven, non-space.



Figure 4.4a



Figure 4.4b



Figure 4.4c



Figure 4.4d

Figure 4.4a-d A photo shoot in men's magazine, *Arena*, themed as a 'homage to interactive TV'.



Figure 4.5 Anna Botting’s presence in the highlighted window aims to reassure the viewers as to how to use the multiscreen *SkyNewsActive* application



Figure 4.6 *SkyActive* rebrand: The application now re-imagined as a cosy and familiar domestic setting in which the female viewer is in charge.



Figure 4.7 SkyActive's video menu, replicating a 'magazine-style channel that offers on-demand entertainment and information' (Shepard, quoted in *iTV Today Newsletter*, 01/05).



Figure 4.8 The BBC's Freeview promotion of interactive television services inverts the relationship between spectacle, control and masculinity.

Chapter 5: Viewer mobility, spectacle and the BBC as public institution – Organising the navigable space of interactive television

This chapter is primarily concerned with the use of interactivity in natural history programming. The choice of natural history being dictated not only by *Walking with Beasts*' position as the BBC's first-ever interactive documentary, but also by the importance of the genre's place in public service debates and the association of natural history with moving image technologies. As Derek Bousé has demonstrated, from Eadweard Muybridge's and Etienne-Jobs Maney's pioneering use and adaptation of cinematic equipment in the late nineteenth century for the study of animal kinetics, developments in moving image technology have often been linked with the display, recording and study of wildlife (2000). This chapter engages with the way in which *Walking with Beasts*, as an example of a public institution's display of natural history, negotiates the demands of the genre's form. I look beyond the immediate new media practices of portal structures to link the forms of rationalised mobility on offer through the *Walking with Beasts*' application to a longer lineage of public institutions' concerns in displaying natural history. Thus my discussion of organised viewings as a second shift aesthetic programming strategy demonstrates that the portal practices of rationalising user/viewer mobility are not only not new practices of digital media. Rather, as well as being the remediation of television's industrial practices, rationalising and regulating spectator mobility, in spaces virtual or real, has long been the concern of public institutions. I argue that such a history can profitably help us understand how a public institution, like the BBC, can herd viewers in the loose

textual boundaries of digital media forms for public service (rather than commercial) purposes.

Across the chapter I investigate the aesthetic structure of *Walking with Beasts* and other natural history applications to examine how they negotiate the contradictory pulls of spectacle and educative aims involved in the display of natural history. Television's position as window here confers a mobility akin to the flaneur and museum-goer of the late nineteenth and early twentieth century. However, this is re-cast in the terms of the portal of twenty-first century new media. As a result, my predominant concern in the chapter is to link these earlier forms of rationalised mobility and that present within the cyberspaces of interactive television's portals. Drawing on Tony Bennett's work (1995) on the concern of public institutions to rationalise the museum-goer's mobility as a form of "organised walking", I suggest we can think of this digital media form of rationality as a textuality of organised viewings.

As with Newcomb and Hirsch's conception of viewing strip (1983), my concern here is to relate how the viewer's use of the remote control to navigate, select and programme their way through the flow on offer is intimately related to institutional concerns. As Charlotte Brunsdon argues, Hirsch and Newcomb's conception of the viewing strip 'suggests a mediation between broadcast provision and individual choice' whereby 'individual[s] negotiate their way through the "flow" on offer ... thus different individuals might produce very different texts or viewing strips' (1998: 107). In the logic of interactive television, the negotiation that Brunsdon refers to is replaced by the navigation not of the traditional scheduled flow, but of "streams". The viewer's demands of navigation reinforce the centrality of the remote control to the textuality of organised viewings, allowing not just channel changing or surfing but exploration of

the text's boundaries. That is, whereas Newcomb and Hirsch's model referred to the channel surfing used by an audience to find out and choose from what's on TV, the *viewsing strip* of organised viewsing explains the individual viewer's construction of a personalised text in relation to the concerns of the BBC to regulate and herd viewer-flows. Thus, the second shift aesthetic model of organised viewsing allows for an analysis of the application that enables it to be placed within the discourses of public institutions, relating the application to the BBC's concern to regulate the spectator's navigation of natural history display.

Mobility and natural history: From Museum-goer to screen-viewer

In late 2001, the BBC re-branded its interactive services, BBC Online, BBC Text and BBC Interactive as BBCi, bringing all these new, digital media sites together under a single identity. The flagship television programme for this re-brand was *Walking with Beasts*, which the BBC heralded as launching mass-viewer interactive television as part of the wider discursive moment of spectacle I noted in Chapter 4:

Walking with Beasts began on BBC One on Thursday, bringing interactive television into digital households in the UK ... After years of false starts, interactive television is starting to deliver some of the benefits its evangelists have long been promising (BBC News Online, 15/11/01).

As I have noted previously, the importance of *Walking with Beasts* as the BBC's flagship application for this re-brand was that it would be interactive to viewers on all three digital platforms: satellite, cable and terrestrial. The series was the second in the *Walking with ...* trilogy, following *Walking with Dinosaurs* (BBC/Discovery, 1999) and preceding *Walking with Cavemen* (BBC/Discovery, 2003). The series' format formed part of what Karen Scott and Ann White call "un-natural" history programming, which used CGI to recreate extinct life (2003). The introduction of interactive

features, which were altered for the following *Walking with Cavemen* instalment, allowed digital viewers to access a range of extra video, text and aural content. This included 'Mainstream', 'Making Of', 'Evidence', 'Facts' and 'Alternate Commentary' audio-visual streams, which were promoted in the title sequence as spaces and content that the viewer could "explore" and "delve deeper" into for more information on each episode's Beasts⁴². The series achieved the fifth highest ratings figures for 2001 and, with an audience of over eight million for the first episode, contributed to BBC1's much publicised trouncing of ITV1 as Britain's most popular channel under Greg Dyke's directorship.

Significantly for its interactive features, *Walking with Beasts* achieved a high level of use, with over two million viewers (of an available eight million digital television homes at the time the series was aired) pressing the red button during the course of the series; the interactive application also received a BAFTA award for 'enhancement of a linear media'. However the programme was also critically lambasted, most notably by David Attenborough who dismissed it as both 'tacky' and full of the 'bells and whistles' of CGI spectacle. As such, Attenborough and others saw *Walking with Beasts* as about entertainment rather than education, positioning the series within the discourses of 'dumbing down' that were rife at the time and, as Helen Wheatley implicitly shows, outside the discourses of quality, public service broadcasting (quoted in Wheatley, 2004: 330).

I start with this short overview of the production, text and reception of *Walking with Beasts* to suggest that, as Alison Griffiths' work has demonstrated, the display of natural history and anthropology has always

⁴² The full transcript of the narrator's introduction is reproduced in Chapter 4, which discusses how the sequence foregrounds the promise of mobility to be delivered by interactive television.

been (and continues to be) a 'site [of] complex negotiations . . . between anthropology, popular culture and commerce in attempting to strike the right balance between education, spectacle and profit' (2002: 47). In this chapter I aim to trace the presence of this precarious balance by public institutions from the late-nineteenth century to the present day; from the exhibition of natural history in the museum to its display in interactive television. In particular, my concern is with the relationship between the activity of the spectator, that is their perceived virtual and actual mobility, and this balancing act. As Griffiths' and Bennett's work have demonstrated, the development of the museum as a public institution led to an attempt to display natural history that focused on the didactic aims of the museum, differentiating itself from the 'vulgar' display of anthropology and natural history in amusement parks, cabinets of curiosity and fairs (Bennett, 1995). The simultaneous development of an increasingly mobile citizenry and gaze (due to nascent developments in transport technology and types of public spaces available), which Anne Friedberg describes as *flaneur-ism*, meant this concern was often focused on an attempt by the museum to counteract and differentiate itself from the distracted spectatorial glance and behaviour of the *flaneur*.

Importantly, as Friedberg's work demonstrates, this mobile spectator was connected to a virtual gaze, which although apparent across all forms of visual representation was 'produced most dramatically by photography' and the cinema, which 'combined the "mobile" with the "virtual"' (Friedberg, 1993: 2-3). As a result, similar concerns to those of the spectators' physical mobility accompanied the introduction of moving image technology into the museum space and the didactic aims of natural history display. The museum was therefore part of a larger cultural milieu in which mobility intersected with various modes of spectatorship. Henry

Fairfield Osborne, curator of the American Museum of Natural History, stated the museum itself might be thought of as ‘journey for those who can not travel’ (quoted in Griffiths, 1996: 53). Bennett positions this concern to regulate the spectator’s movement as a form of organised walking, whereby the museum, the fair and the permanent amusement park all shared ‘a concern to regulate the performative aspects of their visitors’ conduct ... each, in its different way, is a place for “organised walking”’ (1995: 6).

As discussed in Chapter 4, the prominence of discourses of mobility is reprised by the current development of interactive television. The invitation for the viewer to “explore” and “delve deeper” into the “fascinating world” of *Walking with Beasts* calls up the imaginative journey of television’s window-on-the-world. It is worth recalling Jacobs’ assertion here that early television offered the audience a form of mobility through television’s association with nascent telecommunication and transport technologies. Through this association, television made an ‘invitation to journey *from* the living room with the broadcasters to distant events and locations’ (Jacobs, 2000: 25). Similarly, *Walking with Beasts*’ invitation to journey into this ‘world’ is influenced by the aesthetic and discursive capacities of contemporaneous telecommunications technologies, such as the Internet, World Wide Web and the possibilities of convergence with other digital media. As I have suggested, this is most apparent in the aesthetic, discursive and production practices of portals, which are predominantly concerned with rationalising the movement of user/viewer-flows.

However, I want to concentrate more directly on the mobility offered by digital media forms here. As Janet Murray’s work on digital, interactive texts argues, digital media present environments with ‘space *that*

we can move through' (1997: 89, emphasis mine). As Murray's and work such as Manovich's (2001) and Zapp's (2007) demonstrates, digital media forms often present imaginary places that attempt to constitute the spectator as mobile, active and immersed within navigable spaces. Their work implicitly suggests that it is through the control of a character in a narrative that this immersion is achieved. As Manovich argues, in games such as *Myst* and *Doom* 'narrative and time itself are equated with movement through 3D space' (2001: 145). In contrast, interactive television applications generally present the viewer with a range of content to choose from that is spatially laid out. This has largely taken the form of portal structures, whereby content is spatially laid out in a series of video windows that allow viewers to navigate across a choice of video streams, such as the *SkySportsActive* and the news applications of the BBC and Sky discussed in the preceding chapter. As a result, the movement here is essentially planimetric: the viewer scrolls across a two-dimensional X- and Y-axis of the application's portal or menu screen. However this movement, particularly in *Walking with Beasts*, is supplemented by the limited introduction of what Jeremy Butler usefully terms a third, Z-axis, which 'pokes out at the viewer [sic] or recedes into the background' (2001: 325). This Z-axis is essentially a psychological movement that relates to the sense that using interactive applications involves a journeying (for those who cannot travel): from the channel's scheduled broadcast programme to the navigable space of the interactive application transmitted "behind" the broadcast flow⁴³.

Discussing why and how he became interested in developing the notion of cyberspace, William Gibson recalls watching youths at a video

⁴³ As I suggested in the previous Chapter, this is aptly connoted by the term 'the bridge' used by the industry to describe the in-between interface that greets viewers on pressing the red button.

arcade: 'these kids clearly believed in the space these games projected. Everyone who works with computers seems to develop an intuitive faith that there's some kind of actual space behind the screen' (quoted in Lury, 2001: 17). Such a view is evident in the grandiloquence of *Walking with Beasts*' introductory sequence, which attempts to inscribe a sense of a space behind the screen by encouraging the viewer to "delve deeper" and "explore" the interactive spaces of the programme by pressing the red button. The application's interface then demands the viewer navigates the different streams of content, reinforcing this sense of movement as viewers switch between streams to find out what's going on in different areas – 'what is the evidence for this?', 'how did they make that?'. As viewers switch between streams in search of answers to these questions or simply exploring the application, the narrative continues in the mainstream, which as I'll come to below, requires the viewer to check back in on narrative moments sporadically. The sense of movement connoted by switching between streams is further signalled by a slight delay as data-streams are jumped between. By requiring a relatively high degree of perceptual, cognitive and motor demands of the television viewer therefore, the experience of accessing and navigating the videostreams of *Walking with Beasts* seeks to create what Geoffrey King and Tania Krzywinska describe as an 'immersive effect' in which the viewer is absorbed into the application, attempting to establish the illusion of a quasi-physical sensory presence of the viewer in, or at least in control of, the onscreen world (2006: 28). This sense of movement makes the text non-linear and, in the liberatory thinking of some cyber-theorists (and more importantly its promotion by the industry), allows the viewer to create their own version of the programme. However, whilst Murray may indeed be correct about the ability of digital technologies to create immersive, navigable

environments, it is important to bear in mind Caldwell's assertion that such spaces are, nevertheless, rationalised and constrained by those who author them. Thus whilst television's window has always constantly framed the view onto the world it offers, interactive television's portal structures and rationalises the viewer's movements within that world.

This is recognised by Manovich who, drawing on de Certeau, suggests that exploration of this world is regulated by the demands of narrative: 'in Greek, narration is called "diagesis": it establishes an itinerary (it guides) and it passes through (it "transgresses")' (2001: 245-6). However, Manovich adopts contradictory positions. On the one hand he suggests that narrative provides constraints on the user's movements, on the other hand he finds that discussions and theorisations of the mobility of digital media users too often positions the user as flaneur because of this figure's inattentiveness. He suggests that for 'the virtual flaneur, such operations as search, segmentation, hyperlinking, visualisation and data mining are more satisfying than just navigating through a simulation of a physical space'. Manovich's characterisation of the spaces of the computer therefore continues to put the user in control, linking the figure of the computer user with the explorer of American literature (ibid: 268-73). Whilst Manovich's work here is susceptible to the kind of criticism that I have suggested he generally eschews (c.f. Chapter 2), for my interests here it demonstrates the persistence and problematics of the continued use of the flaneur as metaphor for the digital user or viewer.

As I have suggested above, this figure has been of particular importance to debates about the display of natural history and anthropology in the museum. Thus whilst Manovich dismisses the relevance of the flaneur because of its perceived inattentiveness, for my discussion of the display of natural history in interactive television it is

precisely this concern that makes paying attention to the second shift rationalities of the application important. That is, as with the concern of the museum to differentiate itself from the vulgar display of anthropology and natural history in amusement parks, cabinets of curiosity and fairs, the distracted attention of the interactive viewer must be marshalled for the didactic aims of the BBC as a public institution (Bennett, 1995). Essentially the interactive structure of *Walking with Beasts* can be considered, rather than simply an individually navigated and programmed experience, a remediation of the museum's 'organised walking': organised viewings, which swaps a concern with the museum-goer's physical mobility for the portal practices of new media that regulate and rationalise the virtual mobility of the application's viewer-flows. As I go on to discuss, the concern to regulate a distracted gaze is not simply a technologically determined distinction between the active computer user and passive television audience, but is rather intimately related to the generic and institutional concerns of natural history display. Before going on to consider the public service second shift aesthetics of *Walking with Beasts*, I want to first examine the notions of spectacle and education, which establish the terms of the tension between distraction and attention in the display of natural history.

Balancing spectacle and education: Mobility and the aims of natural history display

The primacy of the visual as a conduit of scientific knowledge, the emphasis on spectator mobility, both real and virtual and the values of didactic consumerism linked the nineteenth century experiences of the department store shopper, the natural history museum-goer, Midway gawker and early film spectator (Griffiths, 2002: 8+).

The tropes of spectacle within natural history display might be broadly broken into three categories, which have remained remarkably consistent across the history and sites of its exhibition. Firstly, there is the sense of wonderment and awe that nature in the aesthetic of the sublime can evoke, often aided by the framing, staging or production of those involved in its display. These “generic” moments of natural history spectacle are, or attempt to be, framed invisibly (in a Classical Hollywood sense) – whether in cinema, television or museum – and the spectacle is of a “natural” moment, object or specimen itself; for example, a taxidermy life group display of a Grizzly Bear, reared on hind legs. Within the cinematic and televisual display of natural history this is most often the moment of predation, where the narrative (or in this case, the educational lesson) is suspended in order for a dramatic moment to be played out, usually to the accompaniment of a score that reinforces its visually arresting and visceral nature⁴⁴. Secondly, there is the spectacle of verisimilitude: recognising that what is on display is man-made nature. For Scott and White, this spectacle takes form in Bolter and Grusin’s terms of immediacy, achieved through the claims to life-likeness by digital technologies’ CGI rendering of prehistoric beasts and dinosaurs. Most notably, in *Walking with Dinosaurs* this is achieved in the series’ sixth episode when ‘as the camera moves in for an extreme close-up, the roaring tyrannosaurus seems to shower it with saliva, which again obscures the lens’ (2003: 323). As Griffiths’ work attests in relation to the balance of spectacle and education, because attempts to imitate nature have always been aligned with the spectacular in natural

⁴⁴ Indeed, programmes such as *Built for the Kill* (Discovery/Granada Wild, 2000 -) are premised entirely on the display of these spectacular moments. As the programme’s press release promised: ‘With over 2400 edits in each programme, *Built for the Kill* deconstructs the minutes and seconds leading up to a kill, revealing these acts of predation in a whole new light’ (National Geographic Channel Press Release, 25th November 2003).

history display, some museum curators advocated the use of anti-realist representational strategies in order to retain ‘the pedagogic impression [rather] than a totalising verisimilitude’ (Griffiths, 1996: 72).

The third form of spectacle foregrounds the display apparatus itself. We might most easily align this to Tom Gunning’s work on the early cinema of attractions, whereby the narrative or content becomes secondary or, in his words, a ‘frame upon which to string a demonstration of the magical possibilities of cinema’ (Gunning, 1986: 65). As discussed in the previous chapter, the arrival of interactive television was widely heralded and promoted as a moment of spectacle by the television industry and audience alike. That this trope will be promoted by *Walking with Beasts*’ use of interactive television is foregrounded to the audience by the series’ title sequence, which culminates in a close-up of Sabretooth Tiger who roars and reaches out with its sabres to break the frame and rip apart the series’ title logo (figure 5.1)⁴⁵. The three forms of spectacle discussed here often coalesce, importantly and intimately connected across the various technologies of display to the mobility of the spectator in the balancing of spectacle and education. As the opening quote to this section from Griffiths’ attests, it is the primacy of the visual and its relationship to spectator mobility that links these different experiences of natural history and is most evident in this negotiation of spectacle.

Bennett’s discussion of organised walking suggests that the arrangement of exhibits across the architectural space of the museum is designed to use sequential locomotion to present the visitor with an itinerary that reveals an evolutionary order of things. As Bennett suggests, the museum, by contrast with the Midway gawper and flaneur, ‘enjoined the visitor to comply with a programme of organised walking which

⁴⁵ This moment recalls MGM’s famous growling lion logo that accompanied its cinema releases.

transformed any tendency to gaze into a highly directed and sequentialised practice of looking' (1995: 186). However, as Griffiths implicitly argues, spectacle often forms as much of a guiding principle under which Bennett's notion of organised walking is played out. She argues that:

the spaces between the museum life groups experienced by the museum-goer can . . . be read as anticipatory, since they largely consisted of supplementary materials that failed to attract the spectator's attention in the compelling manner of the life group tableaux (Griffiths, 1996: 61).

That these life groups, through their visually arresting presence in size and verisimilitude, acted as a form of spectacle is borne out by Donna

Haraway's work on the visceral experience of the American Museum of Natural History. Haraway describes the layout of the American Museum of Natural History's Akeley Hall of African Mammals as dominated by the display of African Elephants, standing in the centre of the room 'like a high altar in the nave of the great cathedral' (1989: 29). She implicitly realises their awe-inspiring size and verisimilitude as a form of spectacle, positing that they stand so large and life-like that a moment's fantasy would see them awaken from their dream-like stasis (ibid). In a fashion akin to the life-sized replica of the Blue Whale in the British Museum of Natural History, the display of African Elephants dominates not only the entire second floor gallery, but the third floor as well, which is terraced around the exhibit to allow a bird's eye and/or close up view of the spectacles. The positioning of this display as a "must see" spectacle is confirmed by the museum's floor plans that specifically pick out displays of spectacle by providing a shadowed illustration of the exhibit, rather than simply naming the gallery (as is generally the case) (figure 5.2). Such floor plans organise visitors' overall trip to the museum and yet distract their attention within the individual gallery: the domination of space by such life groups

privileges the moment of spectacle and encourages the visitor to stop in awe of the exhibit. Visitors pass through the gallery with a focus on one exhibit, which is accompanied by very little explanatory text, by-passing many other exhibits, dioramas and explanations of natural history. The presence of other spectacular exhibits, marked on the floor plans, then continues this pattern of organised walking and distraction as visitors organise their time around the must-see exhibits; thus perennial favourites such as dinosaurs similarly appear in iconic form on the floor plans of both museums.

Griffiths' work demonstrates that the scale and verisimilitude of the 'life group' often served to stupefy and entertain, rather than educate the museum-goer. For Franz Boas, the American Museum of Natural History's curator during from the mid-1890s until 1905, the danger of the life group was that their realism would distract the spectator's attention from the intended scientific aims, displacing the anthropological object-lesson 'in favour of a fascination with the technical means of the human facsimile' (Griffiths, 1996: 71). In a similar vein, the mimetic properties of film and the predominance of the "big hunt" films at the turn of the century caused a similar anxiety about the use of film in the museum's display of natural history (c.f. Bouse, 2000). Haraway demonstrates that these debates coincided with the development of film technology and its use to counter hoax activity regarding "wildest Africa" in anthropology and natural history. On the one hand filmmakers such as Osa Johnson proclaimed that the 'camera cannot be deceived', yet on the other, aligned this truth-telling function with discourses of spectacle and profit, proclaiming that 'this Big Feature is going to be the biggest money maker ever placed on the market ... it will be *so spectacular* that there will be no danger of another film of like nature competing with it' (quoted in Haraway, 1989: 45, emphasis

mine). Thus as Griffiths argues, cinema was perceived as a threat to the newly established didactic regime of the rest of the museum environment. The eventual introduction of film to the museum space was on condition that it be accompanied by a lecture, whereby its meaning could be mediated via the scientific authority vested in the lecturer (c.f. Griffiths, 1998). Thus despite the invention of the kinoscope in 1893 the adoption by the American Museum of Natural History (one of the first museums to experiment with film) did not occur until fifteen years later. To this end, the introduction of moving image technology added greater tension to the balancing act of education and spectacle: cinema's capacity for visual splendour was thought to inherently invoke irrational, emotional responses that the museum sought to contain. As Friedberg's work on the flaneur and cinema suggests, the immobility of the cinema spectator is compensated, or rewarded by, the imaginary mobilities that such fixity provided (1993: 2-3). As we shall see in the discussion below, a concern to regulate this imaginative mobility for the purposes of the public institution's didactic aims remains a central concern in the use of moving image technology in the display of natural history.

To complete this trajectory of balancing spectacle and education in the display of natural history it is worth briefly situating television's relationship to these debates and the place and style of natural history programming. Whilst Wheatley's discussion of *The Blue Planet* (BBC/Discovery, 2001) is not concerned with discourses of mobility, her work on natural history demonstrates the continuing relevance of debates about the balancing of spectacle and entertainment in its display on television, with the BBC standing in for the museum as public institution. Often marketed as "event television", natural history programming has tended to be held up in public service broadcasting debates as an example

of quality programming because it ostensibly fulfils the traditional edict of educating and informing whilst doing so in a visually spectacular way that not only entertains, but does so in large numbers. Drawing on Charlotte Brunsdon's work on quality television drama, Wheatley repurposes Brunsdon's categories of quality for natural history television as 'proven scientific fact', 'best of British presenting', 'export value' and expensive production according to 'upper-middle-class taste codes' (Wheatley, 2004: 328-9). Wheatley's detailed textual analysis of the BBC's flagship natural history programme of 2001, its status sitting in contrast to *Walking with Beasts*' position as flag-bearer for digital television, convincingly positions *The Blue Planet* as an example of quality television. Here *The Blue Planet*'s status as quality, public service television is owed to its careful balancing of spectacle and education that lead to a display of "visual pleasure" in accordance with upper-middle class taste codes. That is, whilst the educative aims of the programme were somewhat subverted by the emphasis on visual display, the series' use of a specially commissioned orchestral score, cinematic lighting, film stock and languid editing pace all served to place a primacy on visual pleasure, rather than the raw, visceral moments of spectacle that are usually based on moments of predation.

As Wheatley's discussion elucidates, by conforming to such notions of quality, *The Blue Planet* functioned as a piece of event television that served to rebuke a sustained period of attack on the BBC's licence fee. As I suggested in Chapters 2 and 3, this arose out of prominent arguments in favour of de-regulation of the television market in favour of consumer choice that were coupled with television's move to the period of excess. Similarly to Wheatley's argument regarding *The Blue Planet*, *Walking with Beasts* can be read as a form of event television that sought to assert the relevance of the BBC in the face of sustained criticism, which brought

notions of public service broadcasting ‘into question by industry regulators, media professionals and television viewers alike’ (ibid: 327). However, whilst *The Blue Planet* conformed to well-established taste codes and notions of quality, *Walking with Beasts*’ status as event television relied on its spectacular status as the harbinger of interactive television, re-imagining television’s window as a new media portal. As a result, the application would have to manage the balancing of education and spectacle with a regulation of viewer movement, introducing new concerns in the way we judge public service value in the digital age by returning us to a concern with spectator mobility. Thus the discussion below attests to the way in which the primacy of the visual and its relationship to perceived and actual spectator mobility echoes throughout the halls of natural history display.

Spectacle and public institution: From the museum to the BBC

The broadcast version of *Walking with Beasts* – which was available to watch as a straight-forward linear programme throughout the interactive transmission via the main feature video stream (hereinafter the ‘mainstream’) – mimicked the natural history genre by narrating the life-stories of various CGI beasts in their un-natural habitat. The narrative followed an invented life-story of various beasts that saw them experience the traditional trials of life, such as birth, mating and, of course, moments of predation. The interactive application provided the viewer with much more detail and information by supplementing the mainstream with four alternative video and audio streams; in turn, giving a sense of being able to ‘move around’ and explore the programme (and by implication the ‘fascinating world of Beasts’). The application consisted of two videostreams entitled, ‘Evidence’ and ‘Making Of’, an additional audio

commentary and 'Facts' stream, which consisted of a series of pop-up text boxes that gave information on climate, biology and the beasts themselves.

Before going on to discuss the aesthetic structure of this application, the difference between broadcast and digital versions of the programme is worth briefly discussing here. In particular, the presence of a more in-depth additional audio commentary raises important issues in relation to public service provision and universalism. Whilst the broadcast programme's mainstream was narrated by Kenneth Brannagh, viewers of the digital transmission application had the choice to access an alternative, more scientific, commentary voiced by Dilly Barlow (who was a prominent reporter on the BBC's flagship current affairs programme, *Horizon* (BBC, 1964 –). It would be an easy, and to a degree accurate, argument to make at this point that the provision of this alternative commentary, together with the four other videostreams of content that seek to explain, elucidate and interrogate the spectacular image track, reinforces a digital divide between the have and have-nots of digital television. However as my discussion in Chapter 3 suggests, digital television has not always been so straightforwardly linked to wealth and class as might be expected in relation to other information technologies of the digital revolution and its subsequent division of the information rich and poor that is inextricably linked to wealth.

Indeed, although *Walking with Beasts'* interactive application was the first to be available across all digital television platforms, the carriage capacity of both cable and digital terrestrial severely restricted the number of videostreams and information transmitted in the application's "transport stream" on these platforms. As a result, on digital terrestrial the application was limited to fact-boxes the viewer could call up on beasts within individual episodes (repurposed from the 'Beast fact-files' available on the

programme's website), whilst the version I discuss below was only available on Sky's satellite service (cable viewers being able to access an application that lay somewhere between these two positions). Linked to my discussion of class and platforms in the previous chapter, therefore, the most detailed version of the application was available to Sky's more working-class household, who are predominantly figured on the opposite side of the digital divide they find themselves on here. However in interviews with the series interactive executive producer, Marc Goodchild, he noted that the use of Brannagh had polarised responses, positioning the programme within the then still current debates about dumbing down. Equally, from the BBC's perspective, the scheduling of the programme on BBC1 was 'meant to show *Walking with Beasts* wasn't meant for a science audience. So the interactive application catered for the core audience by offering something more substantial', signalled by Dilly Barlow's 'trusted voice'. Thus, Goodchild argues that it was interest, rather than issues of class or wealth, which differentiated the programme's viewers from its audience (Interview conducted 25/01/03). Nevertheless, he is still careful to suggest that the two commentaries were not poles apart, noting that the two were written and recorded simultaneously with changes in one script affecting and being included in the other. Whilst it would be naïve to accept that the interactive application did not raise issues related to a digital divide, as I'll go on to show in my discussion of the application's aesthetic organisation and its balancing of spectacle and educative aims, it is doubtful that viewers were privileged by the excess of videostreams and audio-commentaries on offer.

Returning to the aesthetic structure of the interactive application, figure 5.3 displays the application's use of the BBC's more widely

circulated onscreen i-bar⁴⁶. The colour-coded titles here indicate the planimetric movement available between streams via the use of their remote control: setting out five streams for the viewer to explore. The sense of movement, as the viewer chose to switch streams, was reinforced by the series' attempt to mimic the replacement aesthetic of computing whereby one stream would wipe or slide across another. Thus the chosen stream's window would move to dominate the screen, whilst the mainstream is tiled into the top corner (figure 5.4). When viewers chose to change streams, there was a brief pause in transmission as they jumped between streams to access new content, further underlining the sense of mobility involved in exploring the application's navigable text (Interview with Mark Goodchild, conducted 25/01/03). Consequently, the interactive application – as a form of spectacle in its own right – had to negotiate, and be sure not to undermine, the twin forms of spectacle already apparent: CGI verisimilitude and the generic moments of predation written into the programme's narratives. As a result, *Walking with Beasts* had to perform a double balancing act, weighing spectacle against educative aims whilst simultaneously pitting different forms of spectacle against one another.

The two 'Evidence' and 'Making of' videostreams were formatted into short segments, such as an interview with a scientific expert or series producer, which occurred at fairly regular intervals. Importantly, at the end of each segment, the viewer was provided with an aural prompt regarding the narrative events in the mainstream's story, which acted as cues for the viewer to return to the mainstream. These cues effectively provided a means for organising the viewer's movement between streams, ensuring

⁴⁶ Until the bridge was re-designed so as to always be the viewer's first encounter with the BBC's interactive application and, in turn, to mimic the more familiar system of page numbers established by Teletext, the BBC i-bar had been the predominant aesthetic structure for navigating interactive applications. The i-bar effectively showed the viewer, through an onscreen representation, how to navigate the application via the colour buttons on their remote control.

they were presented with a text that was more coherent – as to watch one stream of content was to miss what was happening on another, most problematically, this included the mainstream’s narrative and moments of spectacle. For example, in the episode entitled Sabretooth, the narrative follows the life story of the CGI Smillodon character Half-Tooth, which includes various moments of predation and conflict with fellow Smillodons. For the viewer watching these subsidiary videostreams, the balancing of spectacle and educative aims is performed by timing the running of segments with interviews and scientific data to end when particularly spectacular moments are due to be played out on the mainstream. As in figure 5.4, at these moments the small video window of the mainstream is tiled back to dominate the viewer’s screen, accompanied by an aural rejoinder to return to the narrative to “watch Half-Tooth do battle ...”. Such timings and reminders acted as a form of regulation on the viewer’s exploration of the text’s navigable space so as to ensure the viewer on any stream is able to enjoy this dual moment of spectacle, involving both predation and a high degree of verisimilitude as the Smillodons fight.

The use of spectacle as an organising principle is most apparent in the episode Land of Giants, where a chase between two beasts is slowed into bullet-time, the camera rotating around the adversaries as they slip in the wet conditions. Not only is this moment presented as spectacle in the mainstream – by completely suspending narrative and educative aims (both commentaries pause during the chase) – but the timing of the ‘Evidence’ stream’s segmented content coincides to allow the viewer to return to this visceral encounter on the mainstream (again, so as to ensure the action can be watched in the glory of a full-screen screen image, rather than in a reduced video-window). Finally, the ‘Making Of’ stream is devoted to an account of how this moment was achieved, allowing the spectacle to be

present in both windows on this stream's screen as well (figure 5.5). Thus the organised viewings experience of *Walking with Beasts* ensured that those viewers who responded to the accompanying map or guide were not lost in the technical wizardry of interactivity or the (comparatively) vast spaces of digital content, but similarly to the shaded icons on the museum's floor plan, were guided through their journey via the prominence of spectacular moments and images⁴⁷.

The timing and interrelationship of *Walking with Beasts*' many streams demonstrates that the application was not simply an amorphous world of digital content to explore, but was rather a rationalised space. The imaginative journey through television's window was therefore restricted to a portal that organised and regulated viewer-flows to showcase the series' high production values and moments of spectacle. Ostensibly a spectacular transformation of television's window into a new media form, the application's concern to regulate viewer-flows remains remarkably similar to the concern to regulate spectator mobility in the display and organisation of exhibition space in the museum.

However, as a public institution the BBC's organisation of the text's navigable spaces around principles of spectacle remains problematic for the question of balancing education and spectacle. David Attenborough's denouncement of the programme's showcasing of "whistles and bells" technology indicates that the programme's need to balance forms of spectacle against one another undermined the negotiation of spectacle and educative aims. Furthermore, the promotion of interactivity as a form of spectacle in its own right, combined with the use of CGI to recreate beasts (whose verisimilitude was to be judged against the blockbuster graphics of

⁴⁷ This fear of confusion can perhaps be more appropriately thought of as the paranoia of 'what have I missed just now?!'.

Jurassic Park (Spielberg, 1993)), meant the programme failed to conform to the middle-class taste codes that Brunsdon (1997) and Wheatley (2004) show to be so crucial in the category of quality television. Whilst the application's interactive structure sought to organise the space of natural history's display, the desire to promote the programme and application as spectacular advertisements for the BBC's new digital interactive service resulted in the programme's denunciation.

This criticism arguably reverberates with those anxieties that surrounded the introduction of cinema into the museum space around the turn of the twentieth century: in the present case fed by broader anxieties over the introduction of new digital imaging technologies, largely in the form of CGI, into the didactic regime of the BBC as public institution. Just as film's place in the display of natural history and anthropology met with fears of hoax features on wildest Africa, the use of CGI technology has provoked concerns over the accuracy of such programming (it is notable that CGI-based natural history programmes have, thus far, not been produced by the BBC's renowned Natural History Unit but rather by BBC Science). Although the use of CGI largely stands in for the place of cinema as the technology of anxiety in this historical trajectory, arguably the position and use of interactive television caused similar consternations about what the BBC's role as a public service broadcaster in an on-demand, personalised, digital environment might be. Arguably, the desire to showcase the BBC's leading and innovating role in this area led to *Walking with Beasts* being far too complex and difficult to use for the viewer. Indeed the application's BAFTA (British Academy of Film and Television Arts) award was the subject of some debate, as industry magazine *Broadcast* reported, the series was a 'controversial winner' of the BAFTA for enhancement of a linear media (having won the award before

the series even aired). Jonathan Webb, Flextech's director of interactive media, claimed that *Walking with Beasts* simply 'did not work as a piece of enhanced TV' (quoted in *Broadcast*, 25/11/02, site accessed 09/04/03).

Indeed, Mark Goodchild admitted the series was 'too ambitious', as it did not produce a coherent narrative for the viewer. Returning to the importance of the commentary track discussed earlier, Goodchild notes that the use of Dilly Barlow was not only about signalling more serious scientific content through her 'trusted voice', but was also a necessary aesthetic decision to aid viewer navigation between streams: an earlier trial using two male voices failed to clearly indicate the shift when viewers opted to change streams. However, he argued that

many of the problems with interactive applications will be solved by an on-demand version of television [which] ... would allow a more coherent narrative to be followed by returning to the point where one left the mainstream to explore the subsidiary ones (Interview conducted on 25/01/03).

Such an on-demand vision of interactive television posits a truly post-broadcast landscape as the goal, where television's liveness is increasingly supplemented by the real-time ontologies of computing. However, for the moment we must still consider interactive applications in relation to liveness and the way in which they master the metric of (viewer) time.

To a degree, the problems experienced by *Walking with Beasts* undermine any accusations that the programme created a digital divide. Similarly to the contemporary museum, which as Ann Witcomb's work demonstrates has increasingly turned to interactivity as a means of both enticing entrants and organising material, *Walking with Beasts* evidences a concern by the BBC to experiment and foreground its use of new media capacities in a landscape where such public institutions are increasingly forced to justify their existence and state funding with visitor numbers

(Witcomb, 2003). For the BBC, the primacy placed on innovation, and the need to draw attention to it in the form of spectacle, obscured the programme's educative aims to a large degree. Nevertheless, *Walking with Beasts* does stand as a stark reminder for the potential for a digital division to occur, during not only the switchover period to the UK's full digitalisation (which in 2001 left over half the population without the interactive add-ons), but also beyond this into the next period of television when technological differences between platforms will continue to see a large differentiation between the kinds of applications Freeview and the other platforms can handle. As I noted in Chapter 3, there is some concern that if HDTV continues to be pushed as an industry standard, the limited bandwidth available on the Freeview platform will severely restrict the platform's ability to transmit a large number of channels in HDTV signals. Similarly, the limited carriage capacity of the platform will necessarily limit the development of interactive applications for Freeview viewers, creating a divide between them and their Sky and possibly cable viewers (as discussed in earlier chapters, cable is currently the least supported platform for interactive applications, although its position in delivering Internet Protocol Television will radically alter this in the near future).

Whilst Goodchild might contend that on-demand interactivity might solve some of the complex navigational problems of *Walking with Beasts*, this is not something that has developed at the time of writing but is increasingly achieved through the penetration of DVR Harddrive recorders like Sky+, which allow the audience to programme their own flow of shows (if not interactive applications) and might be profitably thought of, together with other applications I discuss, in terms of the viewings strip model I'm proposing here. However, I want to retain my focus on natural history here by closing this discussion with an examination of

developments in interactive application in two subsequent BBC natural history programmes: *Walking with Cavemen* and *The Life of Mammals*. These programmes continued to rehearse debates that I have outlined above in relation to the balancing of spectacle and education, but do so in a context where BBC interactive television producers had learnt from *Walking with Beasts*' mistakes. As Tom Williams (BBC's Creative Director of Interactive Television) expressed in an interview conducted in 2004, the BBC's interactive production design works under a rationale of simplicity: 'if one menu is bad [in that it requires viewer to understand and navigate it], two menus is even worse' (Interview conducted on 26/08/04).

Walking with Cavemen's premise was to send presenter, Professor Robert Winston, back in time for a closer look at our evolutionary ancestors (resulting in the series being populated by a large number of extras in ape-suits, who would make appropriate "ooh ooh" noises and clamber enthusiastically across the set). The use of Winston is interesting here, although a professor in fertility and genetics, Winston's expertise does not extend to natural history⁴⁸ and his presence across a raft of BBC scientific programming is predicated on his ability to make information and complex ideas accessible. Arguably the value of this televisual-image extends to interactive television, as with the place of Gail Porter in my discussion of promotional materials in Chapter 3, reassuring viewers new to the interactive spaces of digital television by the presence of his familiar, and trusted, face and voice. Presenters from the UK's interactive television industry at the American Film Institute's 2003 conference on interactive

⁴⁸ Evidenced by the woeful narration and narrative that at one point has Winston collecting the broken body of episode 1's central character 'Lucy', which he solemnly lays by a riverbed, removing his hat and wiping his brow in a gesture of sorrow. Lucy is then recalled in the interactive schedule near-video-on-demand add-on to the series, which investigates some of the programme's claims in more depth, to be revealed as the first homo-habilis fossil ever discovered: named Lucy from The Beatles' song 'Lucy in the Sky with Diamonds' playing on the radio at the time of discovery.

television, 'Interaction 03', underlined the importance of television personalities and presenters to selling interactivity to the audience. Marc Goodchild argued that the BBC emphasise presenter endorsements to let audiences know about interactive applications, with David Attenborough's "call to action" in *The Life of Mammals* (discussed below) being particularly successful, whilst MTV's Dan Campbell noted that for *The Real World* 'we had Angelina Jolie who told people to press their red button and a lot of people did!' (speech given to American Film Institute Media Conference, 2003).

The organised viewings of *Walking with Beasts* arranged around the principle of spectacle was followed by *Walking with Cavemen*, which although representing a pull back from the level of interactivity and its hyping as a form of spectacle in its own right, nevertheless was largely predicated on the display of natural history's other forms of spectacle, outweighing the programme's educational aims. As with the other *Walking with ...* trilogy's instalments, these recreated beasts were given narratives, personalities and spectacular encounters, such as inter-ape-clan wars and being chased by a variety of predators. The series' interactivity came in the form of "pop-up" text boxes and the transmission of a Schedule Busters Near-Video-On-Demand behind the scenes, evidence programme at the end of the main feature's schedule-slot. Both of these sought to provide the viewer with a greater degree of scientific veracity than the presenter, Robert Winston's, rather whimsical presentation and commentary. Thus the simplification of the interactivity is represented by the disappearance of multiple video and audio streams, replaced by the viewer's initial encounter with the interactive application looking, barring the BBCi logo in the top right corner, remarkably similar to the mainstream version. The pop up text boxes, or labels, can be divided into two categories: firstly, those

that are automatic and similar to the 'Fact' stream in *Walking with Beasts*, which occupy a section in a bottom third of the viewer's screen (in figures 5.3 and 5.6); and secondly, a series of more in-depth "Fact-files" (figure 5.7), which the viewer could choose to call up or ignore at particular moments in the programme. The more in-depth labelling practices depicted in figure 5.7 obscure almost the entire screen, leaving the viewer with an impression of what the visual content might be, but retaining the audio-stream of the main feature. These pop-up text boxes, in relation to the links I wish to make with the museum, can arguably be considered as labels for exhibition artefacts. As a result, the purpose of labels in the museum and its academic consideration provide useful approaches for considering how these labels function in the public service rhetoric of natural history programming.

Bennett shows how the evolutionary museum, distancing itself from the cabinet of curiosity and the enlightenment museum, developed a system of labelling that was, for the first time, explanatory. Written in English, labelling as conceived for the 'new museum idea' by George Brown Goode of the Smithsonian institute, was intimately related to the new liberalism of early twentieth century museum display that fixed the museum's position as a public educator. Prior to written English accompanying the artefact, museum labelling practices had served the purpose of reinforcing the visual spectacular of the objects on display by, in the cabinets of curiosity, operating 'on the same plane rather than serving as a key to their meaning' by themselves, being 'sources of visual delight' in display (Jardine quoted in Bennett, 2004: 168). Or, alternatively, in the enlightenment museum they acted acting as an index of material, written in Latin that privileged the object's visual appeal and allowing access to knowledge only if one was of a certain class (Bennett 2004, 168).

Thought of in this way, labelling in public service broadcasting natural history programming should continue the course of public education – elucidating and explaining the object on display in a way that is accessible to all. Leaving aside the question of digital access, it is clear that the labelling of *Walking with Cavemen* is informed by museum practice – its pop-up labelling functioning like an immediate object label in the museum, whilst the more detailed fact files can be read as summative museum displays, explaining where the viewer/visitor is at in relation to the display's overall meaning/evolution or purpose. However similarly to *Walking with Beasts*, the timing of the interactive application's elements in relation to the main feature are of paramount importance in understanding the balance of spectacle and education; again, the interactive application is carefully structured so such elements tend not to disrupt the primacy of spectacle in the mainstream's visual imagery.

Whilst the automatic pop-up labels may appear at virtually any time, regardless of the presence of spectacle in the mainstream, this is because they are both relatively unobtrusive and uninformative. So during episode two of the series, a group of Homo Habilis ape-men work together to drive off a lion from a carcass in order to obtain food. The footage amounts to one of the series' more obvious attempts at spectacle, ape-men and women clambering over rocks, whooping and charging with a series of quick edits and mobile camera framing giving the scene a feeling of pace and excitement. During the build up to the Habilis' driving-off of the lion, automatic pop-up labels appear but do not distract or obscure the narrative and visual spectacle. In contrast, because the summative labelling of the actively called up fact file obscures the visual image, the opportunity for the viewer to explore these is limited to moments where the main feature's visual splendour and spectacle are at a minimum. Thus it is not

until the lion has been driven off by the Homo Habilis that a fact file becomes accessible. The emphasis on spectacle is further reinforced by the absence of Winston's narration, again allowing spectacle to speak for itself and remain a guiding principle in the viewer's organised traversing of the programme's interactive elements.

However, leaving aside the question of a digital divide, the introduction of pop-up labelling practices serves important public service educative goals that relate to the use of labelling technology in the early twentieth century new museum idea. George Brown Goode's account of principles of labelling museum displays can easily be applied to this digital address: 'formerly accessible only to the wealthy, and seen by a very small number of people each year, exhibits [through clear labelling practices] are now held in common ownership and enjoyed by hundreds of thousands' (Goode quoted in Bennett, 2004: 169). Placing the BBC as public institution in this discourse of accessibility, Goode's ideas relate specifically to television's ability to pervade the everyday and reach people from all walks of life. *Walking with Cavemen's* labelling practices can be subsumed within the BBC's category of Engaging Enhancement interactive applications, which have been used extensively outside of the natural history genre to accompany the BBC's coverage of cultural events, such as the *Last Night of the Proms* (BBCi, 2003 -), or *Shakespeare at the Globe* (BBCi, 2004 -). These applications are introduced by Alan Titchmarsh and Andrew Marr respectively, who point out to the audience that 'pressing the red button' will call up a useful series of "Cliff Notes" that interpret, explain and enhance the performance. Thus the promotion of interactivity via familiar and trusted presenters, such as Winston, Marr and Titchmarsh, ensures that the new didactic elements of BBC's interactive programmes are made as accessible as possible. As I go on to explore in more detail in Chapter 7,

their calls to action promote digital television through an emphasis on interactivity, demonstrating the technology's importance to the BBC's remit of driving digital Britain.

Ultimately the attempt to balance spectacle and education in the use of interactive television for the display of natural history has led to a return to the anxieties that accompanied the introduction of moving image technology into the museum. Building on the promotion of interactivity through the use of a presenter in *Walking with Cavemen*, the 2002-03 series *The Life of the Mammals* employed the reassuring presence of David Attenborough to introduce and guide the viewer through the interactive application, both visually and aurally. As such, *The Life of Mammals* replicates the introduction of film into museums whereby the technology's potential to stupefy was mediated via scientific authority vested in the lecturer: here represented by Attenborough's appearance in a cinema-come-lecture theatre to inform the audience of the chance to take the series' interactive challenge (figure 5.8). *The Life of Mammals*, unlike the *Walking with ...* series, was produced by the BBC's Natural History Unit and contained all the trappings of quality that Wheatley details in her discussion of *The Blue Planet*: a specially commissioned score, David Attenborough's presentation and the restrained sense of money spent according to upper-middle-class taste codes (best encapsulated by the series' title sequence, which depicted various mammals in slow motion, often shot against the golden-tinge of a setting sun and accompanied by a grandiloquent orchestral score). Similarly, the interactive application was not available throughout the duration of the programme, but rather (arguably as a mark of respect for the quality of the main feature) only appeared at the programme's final minutes (an example of the BBC's 'near-video-on-demand schedule buster application' format). At this point, David

Attenborough introduced the interactive supplement and invited the audience to press the red button and test their skills against the “fascinating world of mammals”. The multiple choice quiz that viewers then accessed was, similarly to the *Walking with ...* applications, structured as a form of organised viewing that rationalised the interactive space by allowing choices that determined what the viewer saw and heard next (figure 5.9). However, by structuring these choices around an educational quiz and rewarding correct answers with more spectacular footage than that accessed if the viewer answered incorrectly, the programme effectively organised the display of natural history around a careful balance of both education and spectacle.

By organising *The Life of Mammals*’ interactive elements to be accompanied by David Attenborough, the BBC enlisted a figure who both represented the ‘best of British presenting’ and someone vested with ‘proven scientific’ knowledge. In so doing, the BBC utilised interactivity to produce programming that fitted within both the discourses of public service broadcasting and quality television. In particular, the use of interactivity at the programme’s conclusion ensured that the spectacle of technology did not usurp the upper-middle class taste codes of visual pleasure that the main feature strove to present. This, combined with the restricted mobility the programme offered the viewer, is suggestive of both how digital spaces are rationalised and how debates about quality television and digitalisation, in the display of natural history at least, are intimately related to longer histories of visual culture.

It is significant that it is the most recent natural history programme to have an interactive application attached which most comfortably conforms to the public service goals of natural history display. *The Life of Mammals*’ simplified interactive application fitted an increasing emphasis

on simplicity and useability as markers of quality within the BBC's interactive production culture. In 2004, Tom Williams (BBC Creative Director of Interactive Television) outlined that the approach to quality interactive applications was threefold, requiring originality, but also quality of execution and a robustness of application that ensure it is '100% useable' (Interview conducted 1/09/04). The latter two of these criteria refer to the aesthetic and technological structure of the interactive application in relation to the content. Marked by both the aesthetics and rhetoric of choice and control (Attenborough informs the viewer, "the decisions you make using your remote control will determine what you see next"), the application is also carefully balanced to ensure the didactic aims of the genres are met ("you will find out how you, as a human, match up against some other extraordinary mammals"). The application clearly marks a concern with marshalling the viewer-flows of interactive spaces for public service purposes: not just aggregating an audience and keeping them engaged with the content for longer periods of time – as Caldwell suggests are the primary aims of commercial second shift aesthetics – but also meeting the difficult balancing act required by the educative display of natural history. Thus, as with Bennett's organised walking, *The Life of Mammals*' organised viewings presents an itinerary that is focused on the educative aims of the public institution.

Conclusion

The above discussion has established a link between the mobility of the audience and the organisation of natural history across different technologies and sites of display: between on the one hand, the museum-goer and flaneur of Bennett's, Griffith's and Friedberg's work, and on the other that of the viewer of interactive television's new 'cyberspaces'. This

link demonstrates the continued importance of the forms of rationality built into these spaces of display, which as Lev Manovich's account of Vertov's early films suggests, might be posited as standing

halfway between Baudelaire's flaneur and today's computer user: no longer just a pedestrian walking down a street, but not yet Gibson's data cowboy who zooms through pure data armed with data-mining algorithms (2001: xxx).

Similarly the viewer's activity in the applications discussed above is still rather constrained, limited to a choice between pre-selected data-streams. As such, the user-flows of Caldwell's second shift aesthetics involved here can largely be perceived as a form of viewers programming their own flow, creating a viewing strip from the pre-determined choices on offer.

By paying attention to the second shift aesthetic structures of these applications we can understand the forms of rationality they impose on the viewer's movement. In so doing, we are able to retain a notion of the text as a locus of study for investigating issues of industry, aesthetics and audiences. Thus the interactive applications here offer up a journey for those who cannot travel along public service lines, rather than the simple commercial imperatives of Internet portal practices. This offer of a journey demonstrates the way in which interactive applications continue to call-up the mobility offered by television's window. *Walking with Beasts* announced the new period of excess' reconfiguration of that window as a portal, 'spectacularly' (re)mobilising the audience of television as interactive viewers and then working to constrain, rationalise and regulate this mobility. As my discussion of this mobility's links to pre-existing concerns in regulating spectator movement in museum display attests, how interactive television recalls, remediates and re-circulates discourses entrenched within television's position as a window-on-the-world is of fundamental importance in understanding the second shift aesthetic practices of public

service broadcasting. Over the next chapters this mobility is placed within the discourses of choice, engagement and the public service remits of the BBC that show a continuation of the attempt to re-imagine television's window as a portal. As a result, a tension emerges between the individualisation and personalisation of the interactive television experience and public service broadcasting's address to a universal, national, view(s)ing collective of citizens.

Appendix of images for Chapter 5



Figure 5.1 *Walking with Beasts*' title sequence

[illegible]

The floor plan shows the layout of the American Museum of Natural History. Key areas include:

- Top Section:** Columbus Avenue, Hall of Minerals, Hall of Dinosaurs, Hall of Birds, Hall of Fishes, Hall of Insects, Hall of Reptiles and Amphibians, Hall of Mammals, Hall of Birds, Hall of Fishes, Hall of Insects, Hall of Reptiles and Amphibians, Hall of Mammals.
- Left Side:** Hall of Ocean Life, Hall of Birds, Hall of Fishes, Hall of Insects, Hall of Reptiles and Amphibians, Hall of Mammals.
- Center:** Hall of Ocean Life, Hall of Birds, Hall of Fishes, Hall of Insects, Hall of Reptiles and Amphibians, Hall of Mammals.
- Right Side:** Hall of Ocean Life, Hall of Birds, Hall of Fishes, Hall of Insects, Hall of Reptiles and Amphibians, Hall of Mammals.
- Bottom Section:** Hall of Ocean Life, Hall of Birds, Hall of Fishes, Hall of Insects, Hall of Reptiles and Amphibians, Hall of Mammals.

Two red circles highlight the following exhibits:

- MILITARY HALL OF OCEAN LIFE**
- NORTH AMERICAN MAMMAL**

1

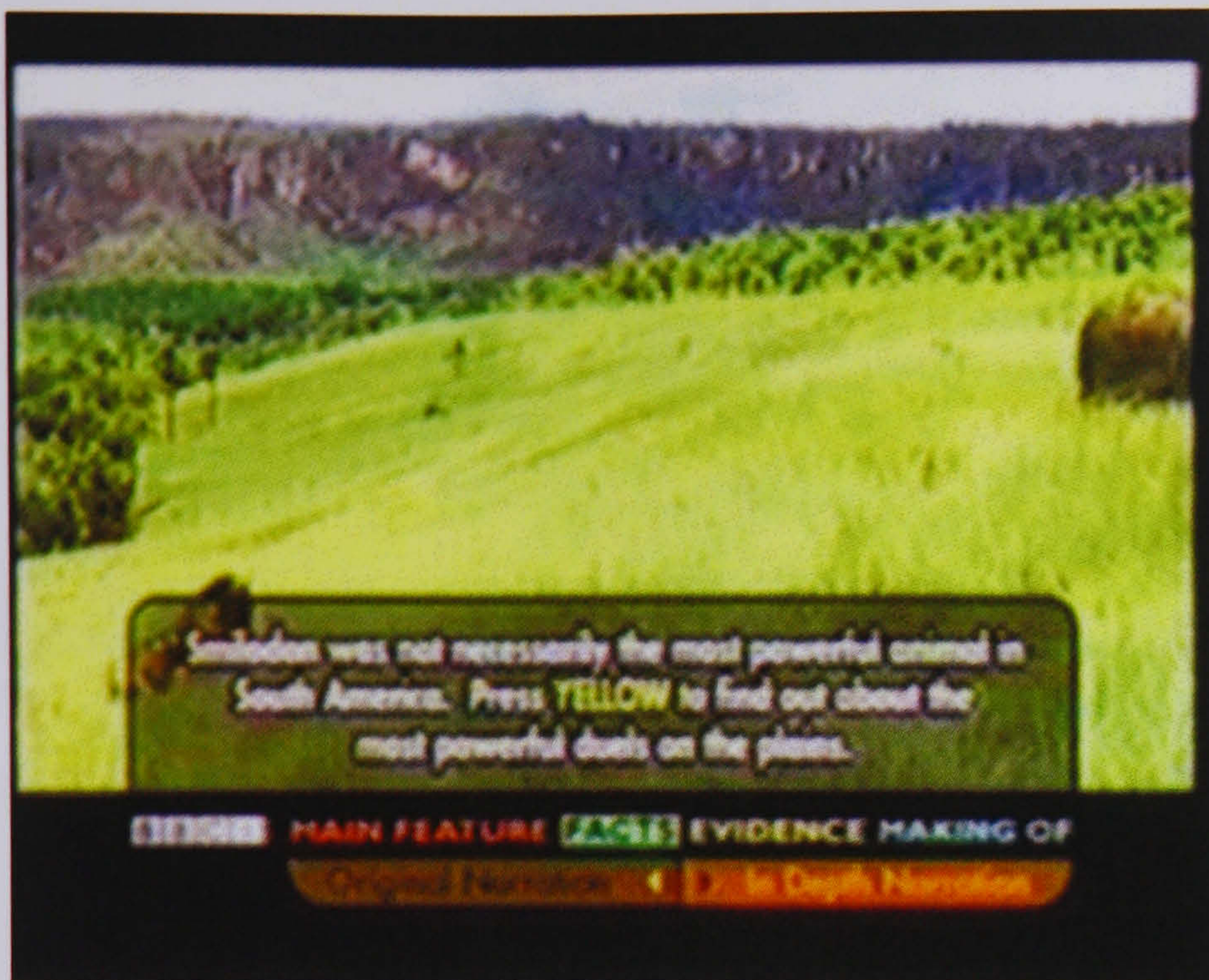
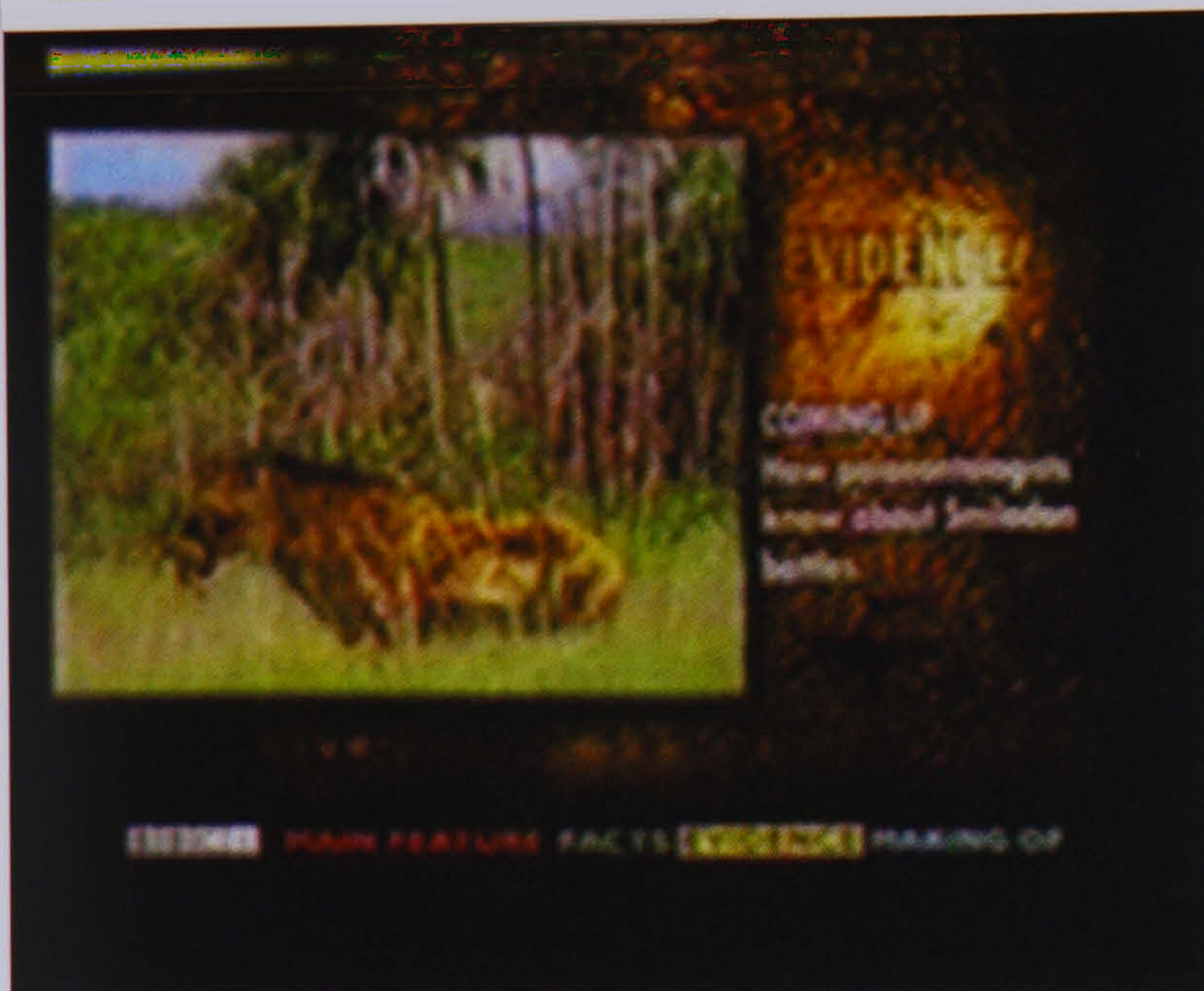


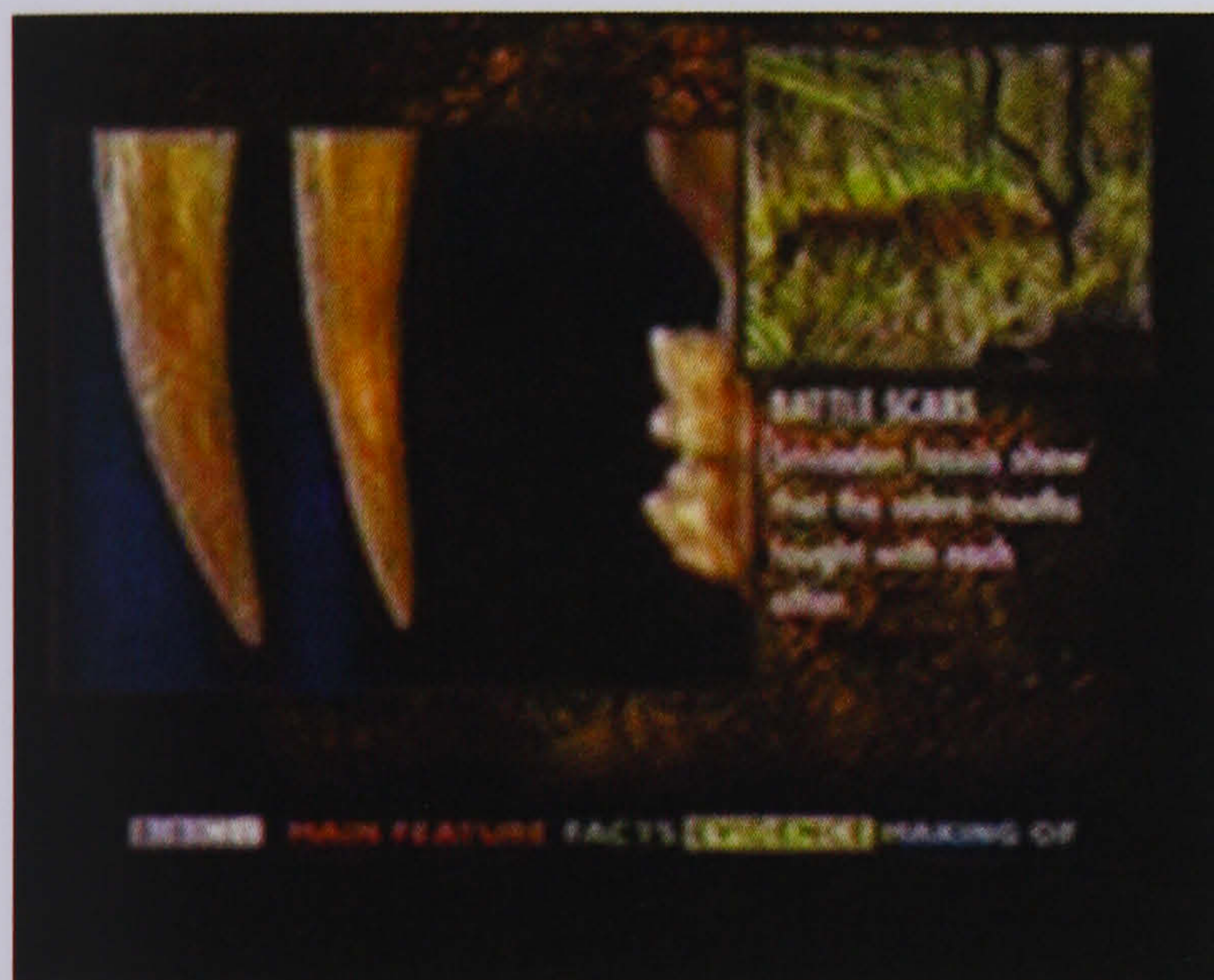
Figure 5.3 *Walking with Beasts*' four video streams, plus the choice between commentaries, laid out as a series of planimetric movements that invite the viewer to 'jump' between streams.



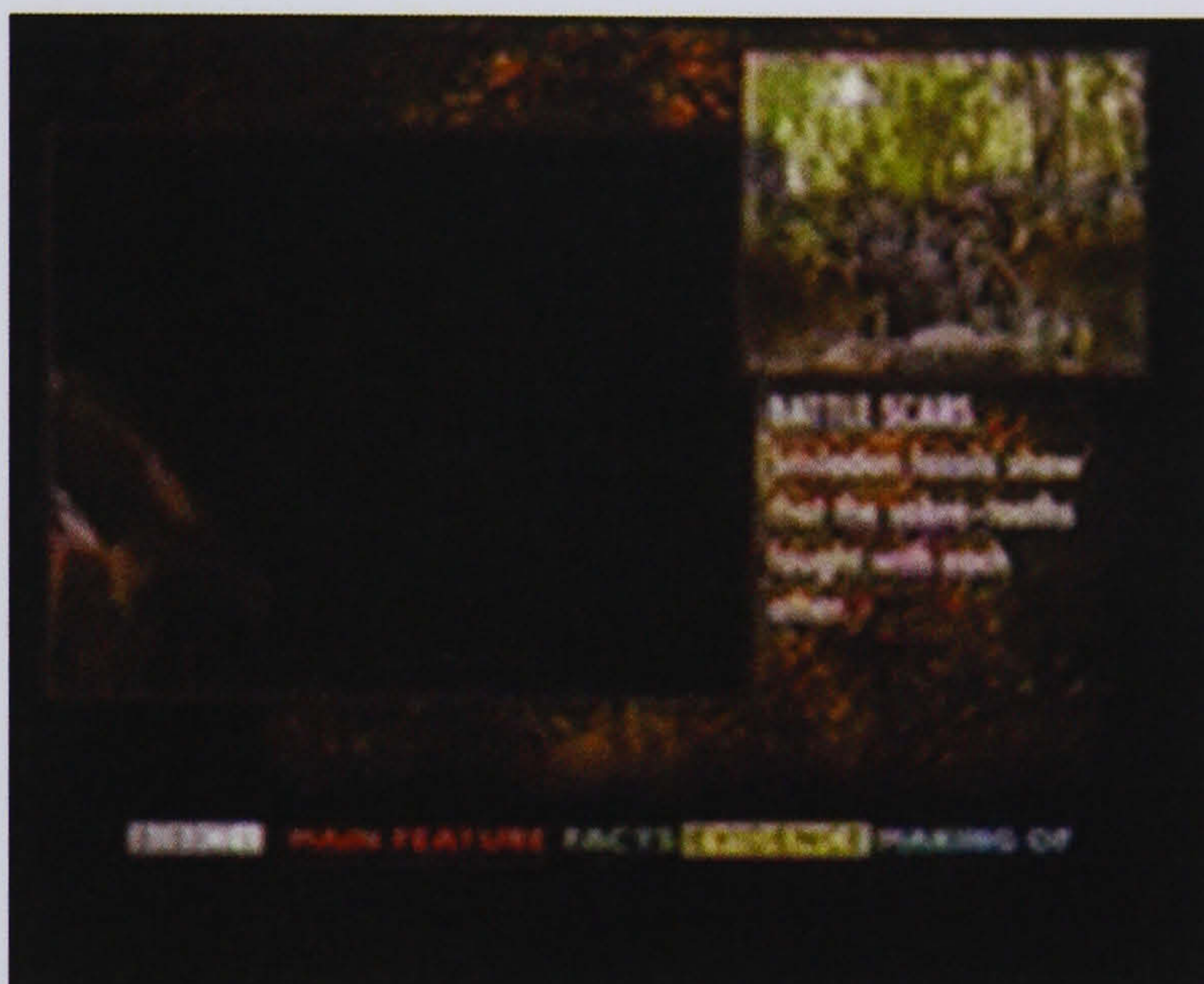
Frame 1:



Frame 2



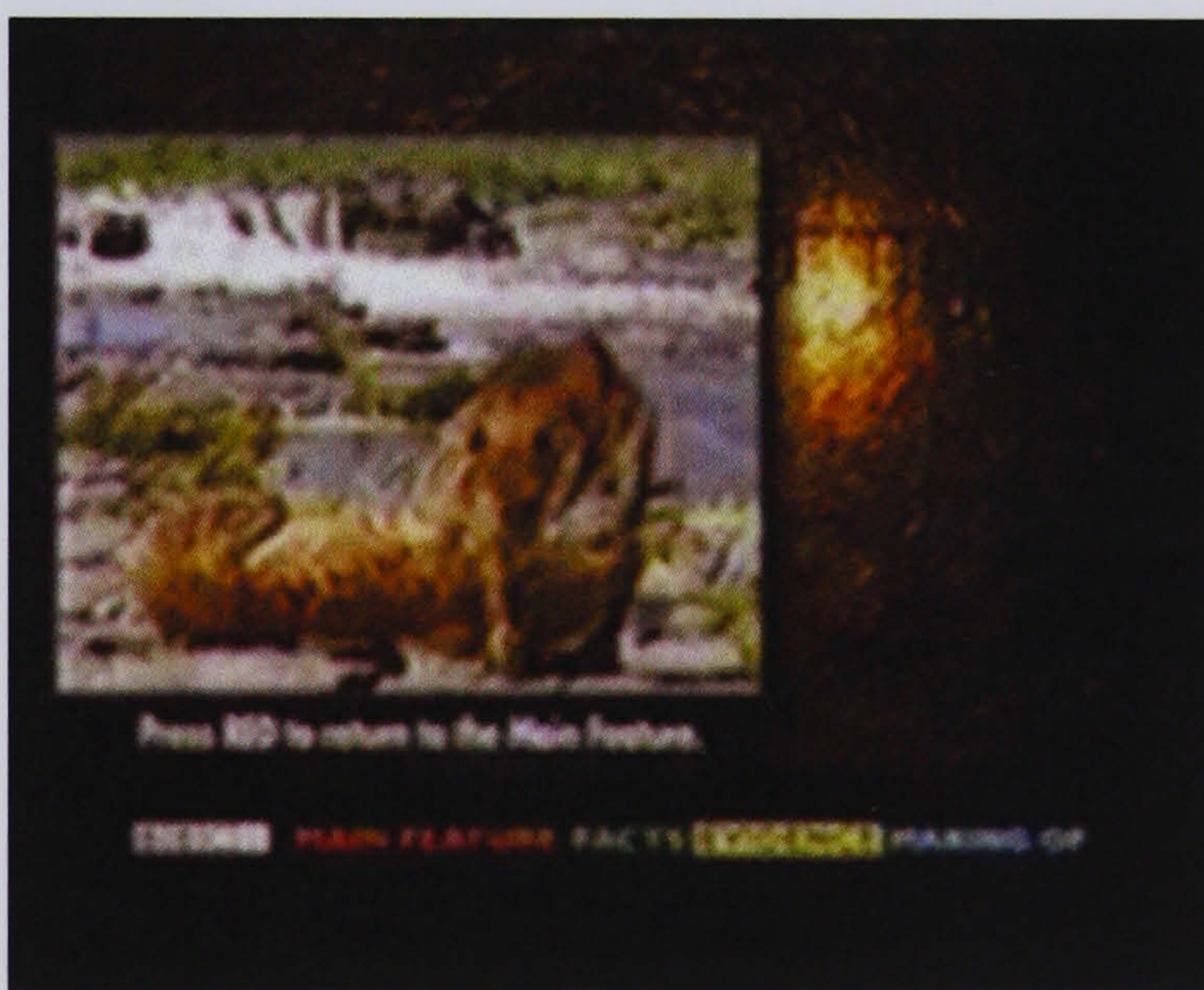
Frame 3



Frame 4



Frame 5



Frame 6

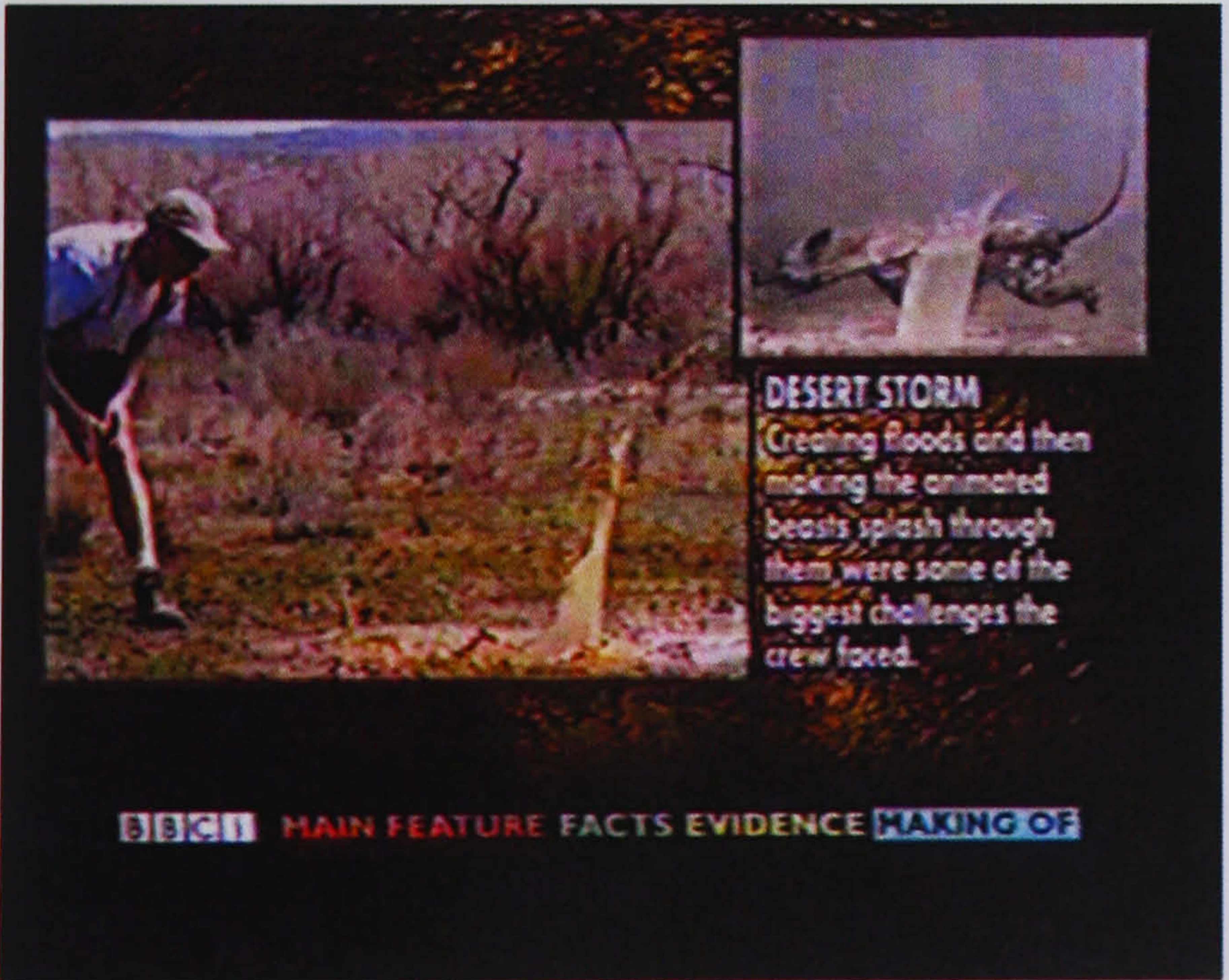
Figure 5.4 The tiling of one stream to replace another (here from Mainstream to Evidence and back again) clearly marks out the segmented form of each individual videostream. In turn, this structure organises the time viewers spend on each individual stream, prompting them to return to the mainstream – thus allowing the image to fill the viewer's screen, rather than appearing in a video window – for dramatic sequences, such as the battle developing in frame 4-6 (and previewed by the text that accompanies the segment: 'Battle Scars: Smilodon fossils show that the sabre-tooths fought with each other').



Frame 1: Mainstream – Two beasts are frozen, mid-chase, in a moment where the series' three forms of spectacle coalesce.



Frame 2: Evidence – The stream's segment run-times are arranged so as to ensure the moment of spectacle is tiled to occupy the main window.



Frame 3: Making of – the spectacle doubly-envisaged

Figure 5.5 Spectacle in the Land of Giants, doubly envisaged



Figure 5.6 The type of 'pop up' labelling that punctuates *Walking with Cavemen* appears at the bottom of the screen and simply labels the display that is on screen: species, time of life and other basic facts.

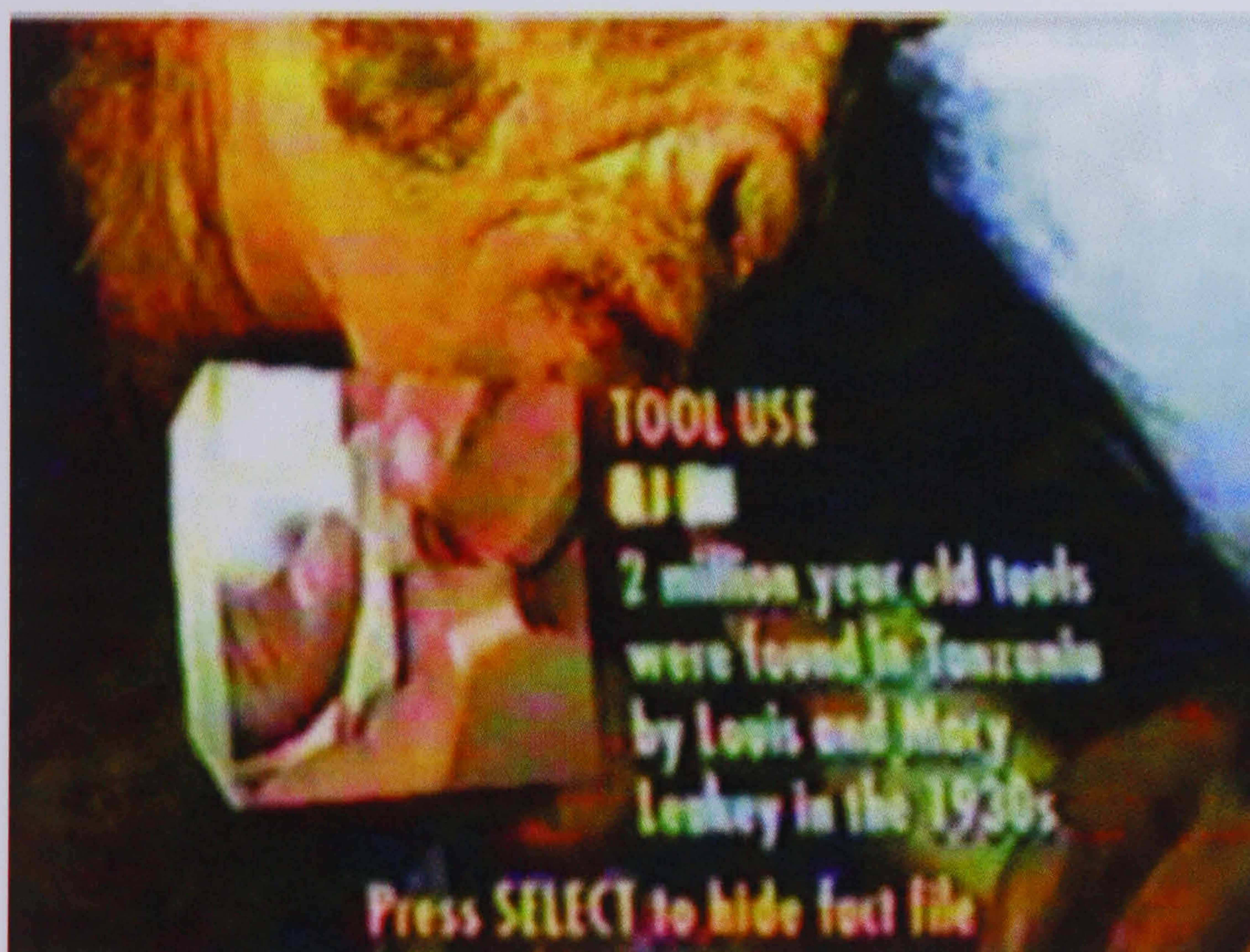


Figure 5.7 The more in-depth fact files of *Walking with Cavemen* were called up by the viewer in a NVD model, which indicated to the viewer when these fact files were available.

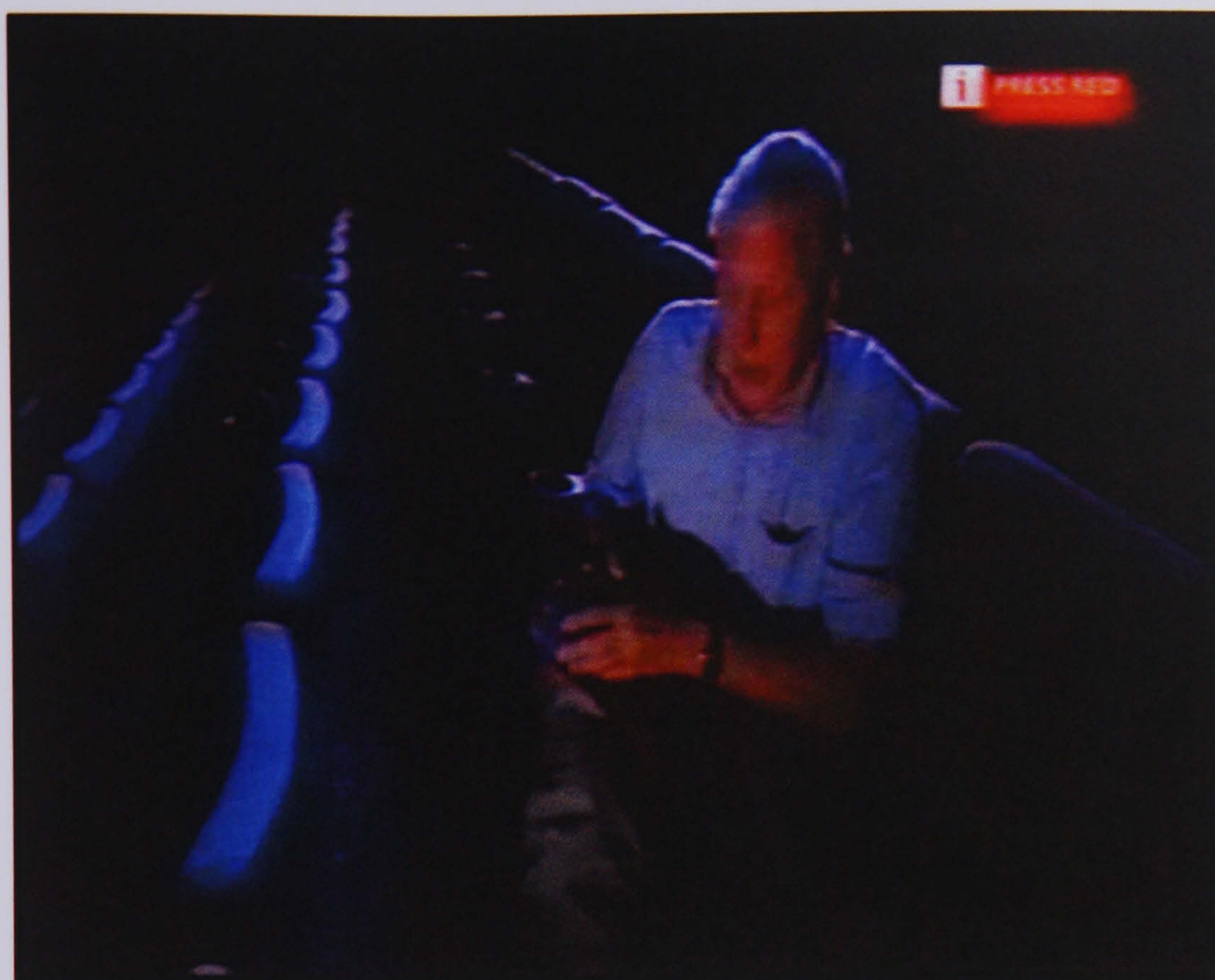


Figure 5.8 Attenborough's placement in a cinema-cum-lecture theatre in *The Life of Mammals*' application recalls the position of the lecturer used to introduce the use of cinema in the museum at the turn of the twentieth century.



Figure 5.9 Viewers answers to *The Life of Mammals*' application's multiple choice questions dictated what they saw and hear next: a congratulatory note from Attenborough accompanied by some rewarding spectacular image, or a commiseratory and explanatory commentary from Attenborough explaining where the viewer went wrong with footage to demonstrate.

Chapter 6: Fragment – The public service value of choice in interactive applications

...on Wednesday evening I flicked between all eight European Champions League matches. Calling the shots from the sofa – in a way previously restricted to specialist vision-mixers in the studio – has been the TV experience of this summer. For the first time, the BBC's Wimbledon and Olympic coverage allowed digital and satellite viewers to watch full matches and events which would once have been reduced to a one-line summary from the presenter of the controller's scheduled coverage on the main channel (Mark Lawson, *The Guardian*, 18/09/04)

Mark Lawson goes on to describe the introduction of these interactive television applications as 'significant a shift in the consumption of television as the arrival of colour, video-recording or satellite ... viewers[sic] are increasingly being offered at least the illusion of self-control, self-scheduling'. Lawson's comments on the viewings experience of these applications demonstrates how interactive television has the, at least rhetorical, capacity to offer a far wider amount of information, coverage and choice to the viewer than broadcast television. The primacy placed on choice in these applications is unsurprising given the discourses of market liberalisation I traced in Chapter 1 as occurring concurrently with the development of digital television in the UK. Furthermore, freedom of choice was depicted as the "Holy Grail" of interactive television for early interactive TV producers (van Dijk and Vos, 2001). This chapter engages with the way in which this promotion of choice and, as a presumed necessary corollary control, has played out in some of these most prominent interactive television applications in the UK. Thus, if organised viewings speaks of a highly rationalised interactive textuality, structured around a series of linear choices that allow viewers to access different

flows, then the textuality discussed in this chapter, fragment, is defined by higher degrees of choice and looser textual boundaries.

The genres of news and sport make particularly compelling cases for analysing both the textual form of fragment and the public service implications of interactivity. Both genres have had extensive interactive application developments, with a high degree of crossover in the production contexts of both applications, not only within the BBC, but between the BBC and Sky as well⁴⁹. Interviews with the BBC's Nick Cohen (Assistant Editor, News Interactive) and Patrick Dalzell (BBC's Senior Executive Producer of Interactive Sport) reveal how the BBC's Wimbledon application (2000 – ongoing), which allowed viewers to choose between simultaneously occurring matches by presenting them in a video menu, acted as something of a catalyst for the aesthetic design of SkyNews' multiscreen interactive service. In turn, the development of news and sports applications by both corporations have been the result of a heavy culture of 'borrow', 'steal' and 'compete' between the two corporations: Sky's development of an eight-windowed interactive news application was then adopted by the BBC, who replaced an early text-driven application with a six-windowed multiscreen news application (figure 6.1).

Furthermore, as I pointed out in previous chapters, the acquisition of sports rights has been pivotal in the shaping of the digital landscape which, with the capture of FA cup football rights by ITV and Setanta Sports, has continued to be a key battle ground right up to the time of writing in 2007. The importance of sports for the BBC's use of interactive television to fulfil

⁴⁹ As Marc Goodchild (Senior Executive Producer of Interactive Factual Programming) points out, with sporting applications one 'can spend a long time building the service/application and then tweaking it over a season, or over many seasons', thus ensuring its robustness, ubiquity and perhaps quality or refinement (Interview conducted on 25/01/05). It is easy to extrapolate from Goodchild's words that similar conditions exist with the development of interactive news applications, an inference further reinforced by their aesthetic similarity and the use of the same technological "blue print".

public service broadcasting remits is evidenced by the recent *Creative Futures* document, which argues that ‘sport touches many people. It drives interactivity, broadband and online activity’ (2006b).

More particularly for my purposes here, as I go on to discuss below the fulfilment of the traditional public service remits of news and sports programming has been supplemented by the rhetoric of choice. It is upon this dialectic, between the rhetoric of choice and the public service remits of universalism, nation building, civic value and education that I want to focus. As such, this dialectic returns me to my interest in television’s competing positions of window-on-the-world and portal. This tension is made explicit by the aesthetic structures of the applications themselves, which use video windows to represent the industrial strategy of the portal. That is, each application resembles the webportals of Buzzard’s (2003) and Burnett and Marshall’s (2003) description through its aggregation of a variety of content for viewers to select from. In turn, as Lawson’s description of the sports applications above suggests, these applications aggregate the viewers of different games, events or interests in one place. In so doing, their portal structure calls up television window-on-the-world in two important ways. Firstly, as I have suggested above and in my discussion of Sky’s promo for its *SkyNewsActive* service in Chapter 4, the applications are themselves explicitly windowed recalling, through remediation, television’s window-on-the-world.

Secondly, each video window opens onto content that is implicitly imbued with the discourses of television’s window-on-the-world: the genres of news and sport remain ideologically, if not always ontologically, imbued with liveness and both genres remain pivotal to the way in which television’s window negotiates the binaries of public and private spaces. On the one hand news ideologically serves to bring the world to the

viewer, fulfilling one of the key roles of public service broadcasting in addressing an informed citizen. As John Fiske's and others' works suggests (1987; Hartley, 1982), the power of television news' claim to objectivity goes 'hand in glove' with the authenticity and immediacy supplied by television's live relay function. On the other, sporting events like the Olympics serve to bring the viewer to the world, which through television's liveness allow us to travel to distant locales as a collective, an experience I have already suggested has been consistently articulated with the national and public service broadcasting remits (c.f. Chapter 1).

In this context, how the portal structures the choices on offer and how viewer mobility is rationalised and regulated is of fundamental importance in understanding the success of the public service second shift strategies of these applications. As such, I aim to problematise the promise of choice as a direct response to the threatened position of public service broadcasting in the digital landscape. As a necessary corollary, I question how the BBC should fulfil its obligation of 'binding the nation' (BBC, 2004) or large audiences together (discussed further in the final chapter). These two aims focus the following discussion's analysis on two areas of public service provision the BBC has traditionally been charged with, recently reinforced by latest policy debates around the BBC's Charter renewal: namely, universalism and what has been articulated as the requirement to 'Sustain citizenship and civil society'; and 'Promote education and learning' in the government's *White Paper* (DCMS, 2006). In the first section of this chapter, I therefore set out the particular provisions in recent policy documents that relate to the generic and institutional concerns of the case studies here. The second section is then concerned with articulating the textuality of fragment. Finally, I set out the implications of this textuality for

the way in which such forms of interactive television fulfil the BBC's public service remits.

Whilst the preceding chapters in section two have been concerned to position interactive television within longer histories of television and the BBC as a public institution, the textuality of fragment discussed below is one that more explicitly places television at the intersection of old and new media scholarship, theories and textualities. As such the discussion of fragment draws on John Ellis' notion of segment, placing this in relation to new media scholarship and the critical theory surrounding hypertext.

Fragment is itself a term that is widely used in discussion of hypertext and new media; for example, Lev Manovich discusses the 'fractal structure of new media' (Manovich, 2001: 30), whilst Luis Arata raises the concern that interactivity as much as liberating can lead to 'sudden conflicts, disintegration, fragmentation and other unpleasant surprises' (Arata, 2004: 222) and Martin Lister suggests 'fragmentation, non-linearity, intertextuality and the "death of the author" have all been cited as both literary theory and hypertext reality' (2003: 28). However, fragmentation is also a major concern of the television industry, particularly the BBC. As part of the BBC's submissions prior to the publication of the government *White Paper* on the future of public service broadcasting, the BBC argued that:

The explosion of new technologies will fragment audiences across an ever wider range of services ... But while audiences and channels fragment, the media industry itself consolidates and the powerful become more powerful: BSkyB, to take one example, now controls over two-thirds of the UK's pay-TV market (2004: 10).

These are all connotations that my explication of the interactive television textuality of fragment draws upon, referencing not only its aesthetic form but also its public service and industrial implications. By focusing on how the text addresses the viewer, fragment allows us to understand not only

the second shift aesthetic practices of public service broadcasting of these types of interactive application, but also to deal with the problems they pose to the linearity assumed by previous models of the television text. In so doing, it explicates the tension between window-on-the-world and portal as one that operates at a textual and industrial level in the way second shift practices structure viewer choices.

The public service landscape: Fragmenting footholds

As has been highlighted by the recent Charter renewal process, both sports and news genres are highly regarded by the public in terms of public service value. Sport was listed as second only to news when the public were asked which genres they most valued from the point of view of society (BBC, 2004: 33). In this section I briefly outline some of the ways in which news and sport have been positioned within contemporary debates about public service broadcasting, dealing firstly with news programming before moving onto a discussion of sports. As I noted above, both genres have been important in fulfilling the role of the BBC as a site for imagining, debating and securing the national – either as informed citizenry, or national collective. However as Hilde van den Bulck's work suggests, having been instrumental in the formation of the nation-state – making the impersonal mass of Benedict Anderson's 'imagined community' knowable to one another – the mass media's role is now fundamentally in question: '... the idea and practice of "national identity" is considered to be one of the collective identity constructions under threat from globalization and postmodern fragmentation (van den Bulck, 2001: 53-4). In particular, as studies such as Harrison and Wessels have argued, the fragmentation of media audiences across a range of channels and platforms that transcend national boundaries is understood as a 'a process which drives viewers

away from public service broadcasters' (2005: 835). As such, outside of the immediate development of digital television in the UK, the current global television landscape is one that already calls into question the way in which the BBC mobilises the genres of news and sport as demonstrating their fulfilment of public service value. These challenges require a complex and robust response to demonstrate the continued relevance and role of public service broadcasting, something the applications under discussion below manage to varying degrees of success.

News has been pivotal in the perception of television in the role of making an informed citizenry. John Corner's work on television as a form of "public address" suggests that this positioning connotes two meanings: 'both an idea of television as a kind of public address system and an idea of it as routinely addressing itself to matters of public concern and public value' (1991: 1). In turn, as Michael Schudson notes, 'most studies [of news], regardless of the approach they take, begin with a normative assumption that the news media *should* serve society by informing the general population in ways that arm them for vigilant citizenship' (2005: 191). The key news value of impartiality is therefore doubly important to the BBC, which as Jackie Harrison notes, is 'at the heart of all the BBC's programming, as it reflects two public service principles: servicing all interests and ensuring that minority interests are represented' (2001: 118). Whilst the discussion below is not concerned with a content analysis of particular news stories to determine their objectivity and impartiality, the position of television news as both impartial and informative is inextricably linked with my concern with both the ability of television to define the national and of its position as a window-on-the-world. The BBC's *Building Public Value* demonstrates the continued public service value placed on news, which remains couched in terms of democratic value and the ability

to define and bring the nation together. The BBC includes news as part of the first of the BBC's five core ways of fulfilling public value, stated as democratic value:

the BBC supports civic life and national debate by providing trusted and impartial news and information that helps citizens make sense of the world and encourages them to engage with it (BBC, 2004: 30).

Conversely to its position in academic study, where its objectivity, potential for bias and news-making ability is continually brought into question, popular perceptions of news have consistently seen it as a genre that embodies television's window-on-the-world facility. Justin Lewis commences his introduction to 'Studying Television News' in Glen Creeber's *Television Genre Book* by suggesting 'television news generally presents itself as a "window-on-the-world", in which the events of the day are transparently revealed for all to see' (2001: 108). As I argue below, the position of television news as a window-on-the-world is problematically reinforced by the aesthetic structures of interactive television news in a way that belies its portal function.

The relationship between the news' potential for democratic value and journalists' ability to shape the news is perhaps best summed up in terms of their perceived role as gatekeepers. Corner's work above and later, in his 2001 *Critical Ideas in Television Studies*, evidences a number of the field's concerns with the broadcast news institutions of television as "gatekeepers". However as Corner's and Schudson's work attests, the simple notion of gatekeeping as the news journalist's function has become increasingly complicated, not only in relation to the ideal of singular journalists selecting the day's news, but more particularly in relation to the growing clamour of voices in the online news world (including the blogosphere). Thus as Michael Schudson suggests, the 'term "gatekeeper"

provides a handy metaphor for the relation of news organisations to news products. But surprisingly, it leaves “information” or “news” untouched’ (2005: 174). Despite this, there remains a persistent concern with the types of knowledge, information and access to sources provided by television news. Whilst the study of news in the discussion of interactivity will, like many of those Schudson criticises, leave information and news untouched, it will consider how interactive applications work as a portal that has continuities with the gatekeeping debate. Like the news organisation’s position as gatekeeper, the interactive application structures our access to news, but it does so in a way that promises a greater degree of control and choice than previous articulations of the television news view(s)ing experience. That is, whilst David Manning-White’s famous 1950 study applied the term gatekeeper to journalism practice that chooses one story over another, interactive television shifts the burden of choice onto the viewer (quoted in Lewis, 2001: 114).

I want to turn now to my interest in the public service role of sports programming. As I detailed in section one, the ownership of sports rights have been pivotal in shaping the UK’s digital landscape. Sports rights were pivotal not simply to competition between commercial players’, such as that between platform operators BSkyB and ITV/OnDigital, but also to the BBC’s jockeying for position as digital TV emerged. Georgina Born’s study details that under Greg Dyke sport became a key battleground for establishing the BBC’s public service credentials (2004). Following the importance of sporting rights, particularly football, in the establishment of Rupert Murdoch’s BSkyB platform detailed in Chapters 2 and 3, Greg Dyke reversed John Birt’s declining investment in top sports broadcasting. Sport then figured prominently in Dyke’s ‘commitment to broadcasting as a socially unifying force ... He understood that sports are a critical part of the

licence fee settlement' (Born, 2004: 472)⁵⁰. This investment is evidenced in the BBC's expenditure not only on the acquisition of primary free-to-air broadcasting rights to the highlights of Premiership football (re-captured from ITV after their digital platform's failure), but also more significantly in the BBC's innovation and development of a range of applications for their sporting events coverage.

However, it has not simply been the growth and strength of commercial competitors, particularly BSkyB, which has been responsible for the loss of sporting rights by the BBC. Arguably the fragmentation and segmentation of the nation has increasingly made it difficult for the BBC to justify large outlays on the rights to sporting events whose importance has traditionally been defined in terms of the national⁵¹. In an environment where complex identities are in play, caused by the increased movement of peoples brought about by the many forces of globalisation and other local conditions, the BBC can no longer be assumed to be broadcasting to the nation as 'one man' as in the Reithian era. The need to address a fragmented audience is set out in the obligations listed in the recent *White Paper* as:

Making us aware of different cultures and alternative viewpoints through content that *reflects the lives of other people and other communities within the UK* (2006: 18, emphasis mine).

This obligation sets out a need to address a diverse audience, rather than Reith's imagining of the 'nation as one man'. However, it is important to note that the language here problematically suggests a continued distinction between "us" and "them", between "we the nation" and "them

⁵⁰ Indeed, such has been the importance of maintaining an investment in sport at the BBC that in April 2000 the Head of BBC Sport resigned following heavy and sustained criticism from the media over the BBC's loss of rights to a number of key sporting events, including Test cricket and most famously, the Oxford-Cambridge boat race.

⁵¹ Indeed the BBC's loss of the rights to broadcast FA Cup games noted above can be seen as the result of such pressures.

the others". This is a problematic I explore elsewhere and, as my discussion of fragment in relation to the BBC's coverage of the Olympics suggests, is not one that is inexorably repeated by BBC programming strategies (c.f. Bennett, 2006). Thus, whilst fragment evidences a problematic tension between window and portal in relation to news, its more judicious use in coverage of the Olympics allows the BBC to address a segmented, fragmenting national body and transcend such stark binaries as set out in the *White Paper*.

That interactive television has provided a strategy for dealing with this fragmentation is borne out in the regulatory discourses surrounding the BBC's future and debates about new media forms. As Francoise Sabbah noted in 1985, the

new media determine a segmented [audience] ... because of the multiplicity of messages and sources, the audience becomes more selective ... deepening its segmentation [and] enhancing the individual relationship between sender and receiver (quoted in Castells, 2000: 368).

Sabbah's notion of an 'enhanced relationship' between sender and receiver has found its articulation in the requirement for the BBC to engage audiences/viewers and measure programming's impact through a continued, individual and personalised relationship with them. The *White Paper* obliges any new BBC service to meet this criterion of engagement. This is used throughout the document to suggest both a bringing of audiences closer to the BBC as well as providing opportunities for them to personalise their relationship with the Corporation. This interpretation not only allows the BBC to fulfil this remit by producing applications that conform to fantasies of two-way television interactive television (c.f. Jensen and Toscan, 1999) as well as the predominant forms of red button interactivity, which facilitate a larger degree of choice and control for the

viewer. Most notably, the requirement to engage the audience includes providing 'audiences with a gateway to cultural experiences and pathways to further exploration' and 'in sport, promote interest and participation in the smaller, minority-interest sports that are less well covered by commercial networks' (2006: 16). This suggests that the BBC must offer itself as both a portal to personalised content, as well as use that portal to fulfil window-on-the-world obligations of opening new vistas of cultural experience.

Terms such as choice, engagement and control are also an ever-present terminology in the interviews on interactive television I have conducted with BBC staff. Here interactivity is hyped as a new way of engaging audiences as newly 'active' and simultaneously the simultaneous 'fulfilment' of one of the new public service criteria. For example, Marc Goodchild argued that 'television is traditionally a passive medium for inspiring and activating people. The advantage of interactivity is that it can take this a step further' (Interview conducted 25/01/05). Goodchild goes on to argue that the applications for the BBC's Wimbledon and Olympics coverage were 'the epitome of quality interactive applications, because they deliver choice and have been refined and refined, making them quite robust' (ibid). Similarly, Nick Cohen suggests that both quality and public service value of interactive television can be defined in terms of choice: 'it is the control and choice of getting what you want' (Interview conducted 1/11/05). I will return to the issue of quality and public service broadcasting at the end of this chapter, as it is this promise of choice and control that is particularly evident in those new interactive television forms that take a fragmentary textual form. Thus it is how the portal practices evident here, whereby news and sports content and viewers are

aggregated, structure the viewer-flows by privileging choice that is of primary concern in my analysis of fragment below.

Textual forms of interactive television: Fragment

Before going on to explicate the textuality of fragment, I want to first briefly describe the structure of the news and sports applications in relation to the industrial context within which they emerged. Former news journalist Barbie Zelizer argues, ‘critical incidents’ act as a discourse about more general topics at issue for journalism, and thus tend to play out debates about form, style and other aspects of news coverage. Importantly for my purposes here, Zelizer demonstrates that such ‘critical incidents’ are generally shaped by discourse about two features: technology and archetypal figures (Zelizer, 1992). This has had two related developments for digital news: the reassertion of liveness as an aesthetic, analytical, textual and news value (which I deal with below) and the emergent primacy of the news multiscreen as a way of presenting interactive television news.

As Emily Bell reported, ‘during the opening stages of the Iraq war, SkyNews outscored the BBC’s rolling service by three to one viewers in multichannel homes’. (Bell, 2003). This success saw the channel often top the BBC’s coverage and, through its slightly longer history, emerge as a market leader in rolling 24-hour news in the digital era. As a result up until 2004, when the channel was re-launched after the *Lambert Report*, the BBC had largely been chasing SkyNews’ coverage, technologies and ratings (Wells, 2004). Sky’s leadership was enhanced by its use of interactive services, which it launched in June 2000 – a full 18 months ahead of the BBC. The interactive news application immediately created an impact by offering viewers a chance to vote on news stories of the day. SkyNews’

first such poll registered 90 000 votes on the question as to whether ‘the UK should join the US air strikes in Iraq’ (March 2001) (Source: *Evening Standard*, 21/11/01). As the industry magazine *Broadcast* reported in May 2003, the coverage of Gulf War II was profoundly impacted upon by the increased presence of interactive media:

Broadcasters are increasingly looking to a blend of TV coverage and digital technologies such as interactive TV, the Internet and mobile devices as a means of attracting and keeping viewers [sic]. The use of interactive devices became more widespread than ever during the Iraq (8/05/03, site accessed 20/12/05)

Thus by the middle of 2003, the BBC had moved from its heavily text-based news application (figure 6.2), whereby viewers could only see one videostream at a time, designated by the selection made on the page’s menu (which appeared on the left hand of the screen in text format), to a basic copy of the SkyNews multiscreen homepage. As frames 2 and 3 in figure 6.1 denote, apart from the obvious branding differences marked by colour, channel idents and screen layout, the most obvious difference is that the BBC’s homepage is somewhat stripped back: aesthetically it is less busy and comprises only six video windows compared to SkyNews’ eight.

The applications here remediate both the aesthetic influences of television and the web to create its own televisual form of hypertext, that of fragment. In the necessary reversal of the logic Bolter and Grusin see at work in CNN’s website, where the ‘web editors ... clearly want their technology to be “television only better”’ (1999: 9), Nick Cohen speaks of the BBC’s news application as delivering ‘the power and reliability of the web and making it a televisual service ... web delivery with television interface is the goal’ (Interview 1/11/05). In this sense, the form of fragment discussed below conforms to Bolter and Grusin’s notion of aggressive remediation, whereby the new form is still marked by the

presence of the older media and 'therefore maintaining a sense of multiplicity or hypermediacy' (47).

The news multiscreen application presents the viewer with a series of equally sized video windows, laid out horizontally, to choose from. Each window is labelled as containing a streamed loop of stories from a particular subgenre of news: headlines, weather, sport, entertainment, etc. The viewer navigates the multiscreen's windows via an onscreen cursor manipulated by their remote control's directional buttons, selecting an individual stream of content to watch that then takes them from the multiscreen to an individual window, tiled into the top left of the viewer's screen with the rest of the space given over to text-based stories that the viewer can call up from any subgenre of news. The video loop retains the segmented form of television that John Ellis discusses as consisting of 'small sequential unities of images and sounds whose maximum duration seems to be about 5 minutes' (Ellis, 1992[1982]: 112). Whilst the segmentation of these loops is generally much shorter than 5 minutes, with the entire video stream likely to last between 3 and 5 minutes, Ellis' idea of segmentation remains relevant for the way it structures the individual nodes of the multiscreen. As Bolter and Grusin argue in relation to aggressive remediation forms, the news multiscreen application 'becomes a mosaic in which we are simultaneously aware of the individual pieces and their new, inappropriate setting. In this kind of remediation, the older media are presented in a space whose discontinuities ... are clearly visible' (1999: 47).

The text-based stories that occupy the remainder of the viewer's screen are accessed via scrolling across on-screen options or by using the number buttons on the remote control to link to a particular set of stories from one subgenre; an aesthetic decision based on the earlier Teletext and

Ceefax systems, which used the remote control's colour keys to jump to particular pages of text-driven content. This structure allows the viewer to watch any one particular subgenre of news, whilst calling up text-based stories from any other; for example, I can watch today's headlines whilst surfing through a series of text stories on sport or weather. Because of the 24-hour availability of the service, more striking and problematic juxtapositions between text and video can be created, especially when a singular event is being covered; for example, calling up text stories of sport or entertainment news whilst watching live video of the war on Iraq. This obviously has important implications for how news stories are received and paid attention to, which I will come to below. For now it is worth closing this description by noting that the BBC retained its two video-stream application on the limited carriage capacity of the Freeview platform. The development of this application was part of the BBC's response to the *Lambert Report's* criticisms and recommendations for the BBC's news services. This recognised that whilst the BBC's 24-hour news and interactive services played an important part in public service broadcasting, they should be made more widely available to avoid a digital divide (2004).

The Athens Olympics application represented the development of the BBC's *Wimbledon* application, which had been the first to allow for the coverage of simultaneously occurring matches. Its development to the more clearly windowed form of the Olympics application owes much to the development of the news application discussed above and the success of *SkySportsActive's* football application. The Olympics application took a similar form to the news multiscreen with the viewer's screen being divided into a series of smaller video windows (figure 6.3). However these windows were laid out so that a main window dominated the viewer's screen, letting them know which event was being covered on the broadcast

programme, whilst three smaller windows were arranged vertically on the right hand side of the screen, each allowing the viewer to select a different Olympic event that was occurring co-temporally. Occasionally one window was given over to a highlights stream but generally viewers selected which event to watch and could then call up a range of text stories, including medals tables and a summary of the day's events, via the colour keys on their remote control. The viewer's navigation of the various events on offer was aided by an onscreen EPG, as well as *The Radio Times*' first ever listings for content available interactively (figure 6.4).

The arrangement of these applications, particularly through the presence of an onscreen cursor (as opposed to the use of the less obtrusive i-bar to map the use of the viewer's colour keys in *Walking with Beasts*), resembles the usage of hyperlinks on the Internet and it would be tempting to simply suggest that their organisation and textual form can be explained completely by hypertext theory. Unlike organised viewing or the texts discussed in Chapter 7, this fragment is clearly a hypertextual system. The individual streams of content accessed through the various video windows represent nodes or lexias of the news application's multiscreen portal structure. Similarly, text stories are accessed via hyperlinks selected by an onscreen cursor, which allows the viewer to explore the mass of aggregated content. This branching structure allows the first screen of the application to have an explicit webportal structure, acting to 'customize [sic] the user's relationship to information with an organized homepage structure' (Burnett and Marshall, 2003: 91). As such the applications act as 'organized access points that allow the user to move outward' and explore, whilst also offering a place to return home to in order to find one's bearings and move to other content (ibid). Indeed, both the BBC and SkyNews's news multiscreen applications provide viewers with a shortcut

key on the remote control to enable them to return quickly back to this homepage, no matter how far down their individualised path they wander. A similar shortcut is available to viewers of the Olympics application, which conforms to Patrick Dalzell's mantra: 'never take the viewer [sic] more than one click away from the event: content is king' (Interview conducted 22/03/04). Nevertheless, as I have suggested in Chapter 2 a wholesale application of hypertext theory to the interactive features of digital television would be problematic, and I want to briefly revisit some of the theoretical problems here before going on to examine how this impacts on considering the public service value of these texts.

In contrast to my explication of organised viewings, fragment's textual form is characterised by a finer balance between, and negotiation of, liveness and real-time. Whilst the non-linear structure of *Walking with Beasts* could not escape the problems of liveness, the viewer never able to return to the narrative at the point they left its flow, the news multiscreen (and to a lesser degree the Olympics application) aesthetically mimics the database form of the computer, which calls-up information. Thus the multiscreen of each application appears not as a linear sequence, but rather as a 'collection of individual items' upon which the viewer 'can perform various operations'— in this case, 'view' and 'navigate' (Manovich, 2001: 218-20). As such, these applications evidence the shift towards post-broadcast television I detailed in Chapter 2, whereby database ontologies are increasingly apparent in the primacy placed on choice by interactive television. However, through their generic identity, the content and structure of each individual node of the multiscreen remains imbued with the ideological liveness of television's window-on-the-world. Furthermore, whilst the applications might remediate computing's database structures the way viewers access content remains importantly restricted by the "live"

transmission of each individual stream of content. As a result, viewers cannot call up material precisely on-demand, but must enter any particular node of the multiscreen at whatever point in the streamed loop of content is being transmitted live at that moment.

Thus despite the importance of hypertext to the structuring of such applications, the term stream here connotes the continual importance of Williams' ideas of flow to the structure of the television text, with each individual stream still emanating live from the broadcaster. As such liveness not only limits the ability of the viewer to totally personalise or control the navigable text, but also circumscribes the size of the application to the point it is hard to conceive of it as an environment or database, at least in the terms of hypertext and new media theory. As Cohen explains, 'bandwidth keeps it [size] tight now, so we can't archive stories for interactive television. You've only got today's info and this limits the size of the application ... which is fine, as television is essentially live anyway' (Interview conducted 1/11/05). The interactive news application might remediate the hypermedia aesthetic of the web through the display of links and the cursor's ability to access individual nodes. However such a hypermedia aesthetic simply masks the live immediacy of television, which remains latent in the way viewer-flows must navigate the audiovisual streams on offer through either the news or Olympics multiscreens' video windows. This liveness is further reinforced by the ideological status of each genre, whilst the presence of televisual tactics such as direct aural and visual address, help the text retain a sense of the intimate immediacy that is the hallmark of television's window-on-the-world liveness.

Nevertheless it is important to note that the applications under discussion here, particularly that of the news multiscreen, involve a finer balance between, and negotiation of, liveness and real-time. As I suggested

in Chapter 2, producers of interactive television often recognise the influence of web aesthetics, but see their inclusion in interactive TV applications as a balancing act involving paying careful attention to television's aesthetic and cultural forms. Thus whilst the post-broadcast forms of these applications metonymically call up the database aesthetic of computing, we must pay attention to the balancing of tensions between this form and those of television. As I suggested in Chapter 2, Lev Manovich's work points to a central tension here between database and narrative (2001). However, as I suggested there, it is not just the difference between liveness and real-time that generates such tensions but the particular forms, requirements and experiences of individual genres. As such, rather than simply asserting, as Manovich does, that database and narrative are 'natural enemies' (the former simply presenting a list of items that it 'refuses to order'), we must pay attention to how this tension plays out in relation to the demands of news and sports respectively. Thus in the following sections I deal with the public service second shift aesthetics that structure this tension between database and narrative, portal and window, firstly in relation to news before concluding with a discussion of the BBC's Athens Olympics application.

Interactive news: universalism, civic value and education ... choice?

Importantly, part of the way in which interactive television news' database aesthetic is rendered a familiar experience is via the re-circulation of window-on-the-world discourses. As I suggested in Chapter 4, this is made explicit in Sky's promotion of its multiscreen news application, which at first instance, appears quite complex – belonging more obviously to the computer screen than the television. This promo reminds viewers that

even in interactive form, the news will remain a window-on-the-world to the important information about today's events, but offered in a personalised form:

SkyNewsActive, the world's first interactive television news service is now offering even more choice. Simply press the red button ... to enter the world of interactive television. Eight screen *SkyNewsActive*, your eight windows on the world. When the news changes, they change. Choose the headlines, or the latest weather forecast ... the latest business headlines, plus a round up of all the showbiz stories. Watch the current top video story when you want it ... (Ana Botting's voiceover).

The promo is demonstrative of the way in which the news multiscreen operates at a level of dialectic between portal and window-on-the-world. On the one hand, television is still a window-on-the-world in its interactive guise and, as such, the news application will remain live and up-to-date ("when the news changes, they change"). On the other, the window is now a personalised portal ("*your* eight windows"): aggregating the different forms of television news (headlines, business, showbiz) and offering them as a series of choices to suit the individual viewer's interests and lifestyle ("when you want it"). The need to distinguish such interactive applications' textual form from a simple transposition of hypertext theory to the television apparatus becomes clearer when we consider the public service implications of how this portal configuration regulates and structures these choices. As I suggested in Chapter 4, the position of television as window or portal is key in understanding how it facilitates the negotiation of the movement between private and public spaces, between the position of consumer and citizen.

That these portal discourses, of choice and control, are part of the way in which we understand the public service value of the interactive news multiscreen is evidenced by the way they are marshalled within

interviews with BBC producers of interactive television and the BBC's surrounding press releases and policy documentation. In an interview with Tom Williams he argued that: 'The public service aims of interactive television are to provide choice and develop applications on a case-by-case measure' (Interview conducted 26/08/04). Most significantly the idea of choice is attached to the idea of 'empowering' the audience. In 2004 Michael Grade outlined that 'one of the BBC's current slogans is Information, Education, Entertainment, Interaction, wherever, whenever, however you want it' before going on to suggest that 'the red button empowers our audiences, giving them the chance to tailor our output to their needs' (Grade, 2004). Similarly, Helen Thomas (Executive Editor, BBC Hull) positioned the BBC's localised interactive services as providing 'our viewers [with] unprecedented choice and control over how and when they watch the news – think of it as a TV news jukebox where viewers decided the playlist' (BBC Press Release, 08/10/03).

From the broadcaster's perspective, this empowerment and viewer choice comes with the significant advantage of not having to sacrifice ratings either for its channel or the particular programme on air as, ratings-wise at least, the viewer remains on the same channel and ostensibly watching the same programme. As I go on to discuss below, this is most obviously a strategy valuable for the coverage of major sporting events. However, it is equally apparent in the way news applications are positioned in terms of choice and convenience (as Botting suggests, "when you want"). Both Sky and BBC ran advertising campaigns in 2004 for their interactive news services that emphasised the empowerment of the audience by suggesting the application provided news at the viewer's convenience. Both corporations used the image of a busy single-mother who, hassled by children and chores, finally finds time to flop down in

front of the TV and is able to call up the news services to meet her schedule.

This choice and convenience places the viewer in control of ordering the previously sequentially ordered segments of the news bulletin. As a result the interactive news viewer, as hypertext theory suggests is possible, usurps the total authority of the author, in this case the ordered flow of news items. Television news programmes' syntagmatic combination of news stories traditionally commences with international and national news, moving through to the sport and weather, possibly via a short deviation into business and/or financial news, rounding off with human interest or show business. An audience, in truth, always watched this previously linear segmentation of the news with different interests and modalities that meant some occupants of the household tuned in for 'hard' news and sport, whilst others may have taken more interest in human-interest stories, local news etc. However, whilst ethnographic studies have demonstrated how the always interactive audience has compensated for this by watching intently at times, distractedly at others (timing tasks to be involved when items of interest are on display etc), the linear form of news meant the audience was always exposed to the mix of news items of the programmed flow⁵². The multiscreen as a portal structuring of news therefore simply facilitates the individual interests that were previously subsumed within the seemingly undifferentiated category of the news audience. The multiscreen aggregates all news sub-genres and, as a consequence, all the many news audiences/viewers together in one place. Thus it allows the viewer to choose only the segments of interest, rather than being bound by the linear broadcast flow of a news bulletin.

⁵² See for example, Ien Ang's study of television's place in domestic routines or, more recently, Helen Wood's work on the way audiences select and use television programming on hard drive recorders to fit their domestic milieu (Ang, 1996; Wood, 2007).

The multiscreen arguably therefore addresses an audience whose identity is not discrete and holistic, but rather fragmented and compartmentalised. As such, in positive terms, it provides a public service response to the new forms of identity and identification that I suggested in Chapter 2 were part of the larger cultural milieu of a globalised world within which digital television's forms take shape. As Jim Collins argues in relation to an increasingly multichannel television landscape, both audiences and programmers recognise that audiences are comprised of 'specific, generational, racial and gendered perspectives', which do not 'coalesce into one big picture, but [are] rather a composite of overlapping views that visualise the terrain of contemporary life in reference to its specific uses' (Collins, 1992: 340). Thus, the multiscreen breaks the wider category of news audience down into the individual news viewer, addressing the news viewer as a bricoleur.

In this sense, we might think of the multiscreen as a bricolage: a combination of television segments, fragmented and treated as malleable hypermedia forms that can be extracted and arranged into a single text to suit the individual viewer's interests. As Jim Collins argues, 'only by recognising this interdependency of *bricolage* and eclecticism can we appreciate the profound changes in the relationship of reception and production in postmodern cultures' (Collins, 1992: 338). As Landow suggests, collage, or collage-like effects, in fact appear inevitable in hypertext environments (1994: 37-38). Consequently, viewers approach the bricolage with specific uses in mind ('what was the score in the Derby game?'; 'What will the weather be for the weekend?'; 'What has happened to Brad & Jen's marriage?' etc), creating their own news narrative. This syntagmatic combination is thus ordered by the viewer's own personal hierarchical ranking of the various news sub-genres on offer. This affects

both how the viewer navigates the multiscreen spatially, perhaps commencing with the business news before returning to the main headlines and so on, as well as temporally, their interest in the sub-genre or particular item dictating the duration which they spend on an individual stream.

At first instance this may appear of great public service value: the news multiscreen's portal structure aggregates content in a way that addresses a wide variety of news audiences, now recast as viewers able to "cherry pick" the segments and sub-genres of news that most interest them. Arguably this might make the news text more appealing to viewers, in turn making it more accessible to a wider audience. Indeed this seems to be the case as the BBC's monitoring of use by viewers suggests that it has, surprisingly, been most successful with groups traditionally not perceived as news audiences. As Cohen reveals,

Subsequent to the launch of the multiscreen, we found that it reached a different demographic: in crude marketing terms, the C2 – D/E demographic. This was a group not traditionally involved in news and wasn't what we expected; for example, the news online service maintains a more professional, A/B demographic audience (Interview conducted 30/11/05).

However, it is the appropriateness of positing choice here as a public value that becomes questionable in relation to the public service, civic role, news programming is supposed to fulfil. John Hartley suggests that there are "rules" of combination that tell us which paradigmatic elements can go together ...' because the understanding of news items tends to be influenced by their positioning in relation to other items (as the work of Glasgow Media Group has demonstrated to good effect) (Hartley, 1982: 32). As Hartley goes on to argue, 'news is competing with the semiotic context that surrounds it' (ibid: 47) and the seriousness of an item,

such as coverage of the war on Iraq, is inevitably impacted on by the ability to watch this report on an application that allows a semiotic context that can include text-based stories on sporting endeavours or celebrity lifestyle etc. Indeed, returning to the issue of excess raised in Chapter 2 in defining the current epoch of television, John Langer argues that bad news is defined by excess:

What may distinguish unworthy news is its excesses, its flamboyant gestures ... The unworthy news may get its bad name not because of its popularity or its shameless persistence in bulletins, but because it is unruly, more openly acknowledging and flaunting devices and constructions which the serious news suppresses and hides (1992: 128).

Arguably therefore, the application's semiotic excess flaunts the constructed-ness of news, handing the responsibility of organising this unruly text over to the viewer. Thus, if the problems with the rationalised organised viewings experience of *Walking with Beasts* were related to the application's failure to adequately balance the competing aims of the genre, the difficulty here is one of failing to provide a more rationalised and organised viewings encounter: that is a public service structuring of viewer-flows should be interested in providing a semiotic context in which the viewer is more likely to experience a mixed diet of sub-news genres.

As Lev Manovich notes in relation to the variability inherent in new media forms, 'by passing on these choices to the user, the author also passes on the responsibility to represent the world and the human condition in it' (Manovich, 2001: 44). Manovich is ambivalent about this "freedom" provided by the data structures and human-computer interfaces of new media. Drawing on Grahame Weinbren, he suggests that 'making a choice involves a moral responsibility'. These freedoms have a negative parallel in the automated web- or phone-based customer service systems, which companies 'turn to in the name of "choice" and "freedom"' but

actually the labour is 'passed from the company's employees to the customer ... now she has to spend her own time and energy navigating through numerous menus' (ibid)⁵³.

If Manovich thinks this is an unfair balance of labour in the transaction of a consumer good through new media systems, how do we view them in relation to a public service transaction, where news is supposed to provide us with civic value? Are we all, as viewers, ready and able to make the moral decisions asked of us by the fragmented textual form of interactive news to remain informed of world events or events outside our immediate areas of interest? Mark Lawson's ruminations on the interactive applications discussed here are illuminating and worth quoting at some length:

Some digital news channels already allow us to choose heavy or light headlines in the bulletin: drop the Euro, go with the dead donkey. And this raises the biggest risk of interactive viewing: that self-control encourages us to drop our standards. As anyone who has tried to buy a child an ice-cream is aware, choice can encourage greed and confusion. The mere knowledge that seven other games were available on Wednesday encouraged me to sample flash-points from all of them rather than appreciate one match properly. If this continues, I will end up knowing a lot less about a lot more football ... This trick can be dismissed as paternalist, but the spread of red-button television makes it easier for an individual to turn the experience of television into a river of trivia. The opening of broadcasting to the audience may encourage shallow viewing. But eight televised games still feels a kind of paradise (18/09/04, online).

As Lawson acknowledges, the questions I pose here suggest that the BBC should occupy a paternal role: Auntie, choosing our diet of programming

⁵³ This is recognised by Lury's discussion of interactivity where, discussing *Big Brother's* interactive application, she suggests that the surveillance aesthetic places 'the viewer in an implicit position of responsibility, not just for choosing what they are seeing ... but also in the sense of being a witness, of being responsible for what they see' (2005: 169). Whilst Lury doesn't acknowledge it, this argument clearly has the hallmarks of John Ellis' theorisation of television as a form of 'witness' (2000), the problems with which I deal with in Chapter 1.

for us. However, whilst I have sympathy with such a viewpoint in relation to the problems posed by interactivity, this is not the summation of my argument here. Rather than simply suggest the need for a more paternalistic BBC, my concern is with the dialectic between choice and public service obligations that is problematic.

On the one hand, the window-on-the-world metaphor and aesthetic is mobilised to guarantee the civic value of the news application, bringing the important news of the day to the citizen. On the other, this is then married with the application's portal structure to promote freedom, control and choice as part of the BBC's role in the digital landscape. As Karen Lury suggests, interactive news applications now realise the 'spatial ambitions of news programming', its window-on-the-world function of offering a 'sense of news from "anywhere-at-once-now"', through offering such choices (2005: 167). However, this actually reduces the BBC's ability (and obligation) to fulfil the new edicts of 'sustain[ing] citizenship and civil society'; 'promot[ing] education and learning'; and 'bringing the world to the UK' because it relies on the individual viewer performing the labour of this task: something, in effect, audiences and viewers pay the licence fee for. Indeed, returning to the gatekeeper function of news journalists discussed above, whilst this metaphor has come under criticism for its failure to grasp the 'the complex news-constitutive character of contemporary broadcast journalism', such criticisms have foregrounded how much professional work goes into making the news: work now passed onto the unskilled viewer (Corner, 2001: 75). This is not to say that public service value only resides in world, or hard news programming – Moseley's work on lifestyle programming demonstrates the fallibility of such thinking (2000) – but that there is a question of balance at stake here and choice itself cannot be taken as a public service value. As a result, the

already problematic ideological implications of such window-on-the-world rhetoric are transposed onto a windowed aesthetic that actually reduces the window to a personal portal – or perhaps goldfish bowl is a more appropriate metaphor – that can help ingrain narrow-visioned personal preferences for particular news subgenres.

Furthermore, even where a mixed-diet is self-programmed the multiscreen largely reduces the news to a sound bite⁵⁴. Jackie Harrison's 2000 study of terrestrial television news in Britain posited that as rolling-24-hour news channels became increasingly prominent, a reduction in 'appointment news' would result, leaving audiences 'restricted to unedited blizzard of information, or short, uninformative news bulletins' (2000: 12). The multiscreen application can be read in such terms, forming part of a wider television industry practice of "unbundling". As Max Dawson explains, unbundling forms part of a wider 'itemised economy' in which 'the primary unit of exchange is no longer the compact disc, the newspaper or magazine, or the television series, but rather the track, the article, the episode, or the scene' (Dawson, 2007). News, already produced as segments on videotape or digital storage devices, is particularly susceptible to this practice: 'news is sound-bite and image driven, making it far more suited to [unbundling]' (Caldwell, quoted in *ibid*).

Whilst this practice does not inherently reduce news to the sound-bite, the problem becomes more acute in the interactive news application and the way it measures use and ratings. At present, ratings technologies are not able to deal with the nuances of the interactive text, only registering that a viewer has accessed the application as a whole. As a result, regardless of which and how many segments of the news

⁵⁴ As I have argued elsewhere, the BBC's axing of its nightly bulletin on BBC3 (a channel aimed at the 20-35 y.o. demographic) has literally reduced its news content on the channel to 60second sound bites undermining the tone of the central features that was to make the service distinctive (Bennett, 2006).

multiscreen the viewer chooses to watch, they are all included within a ratings figure for “news”. This problem becomes more apparent when one considers that the average length of time viewers spend on the service is between one and three minutes (source: Nick Cohen interview 30/11/05). As a result, although a larger or new audience might watch the interactive news text, if viewers only watch the sport, or the entertainment news, or the business news or a short combination of each, there is a question as to the public service value of what they are watching.

In this sense, what Landow describes as Lyotard’s confusion that digitized information is something equivalent to a sound-bite, its textuality tyrannically controlled by a programmer, becomes a reality (albeit in the case of the BBC a largely benevolent tyrant programmer) (Landow, 1991: 32). So the term fragment has a final meaning, related to its grammatical usage, which indicates an incomplete sentence; the fracturing of the news into individual nodes undermines the cumulative organisation and structure that Ellis perceives in his theorisation of television’s segmented form (1992[1982]). Therefore as with my discussion in Chapter 5, it is important to recognise that the freedom, control and choices made available by interactivity can be rationalised by second shift programming strategies, which in the case of interactive news applications need to re-strike the balance between personalisation and provision of a mixed diet of news sub-genres. Most importantly, as the *White Paper* chastised, the BBC ‘might decide that one of its objectives should be to explain issues behind the news better than any other broadcaster’ (2006: 12). To this end it is a shame that the BBC pulled its *News at Ten Extra* service, which provided viewers with more in-depth coverage of the Corporation’s main evening news bulletin, after just a few months in 2005 due to consistently poor ratings. Thus, despite an attempt to mobilise the potentialities of interactive

television to fulfil the criteria of engagement set out in the *Green and White Paper*, choice has problematically remained the predominant value in defining such application's second shift public service strategies.

Interactive sports applications: Fragmenting the nation

So far I have been concerned to interrogate and question the way the BBC has promoted choice as a public service value in relation to news programming. However choice itself is not inherently problematic, as the use of interactivity in the coverage of the Athens Olympics suggests. This application was one of the BBC's highest profile and most used interactive services in 2004, with nearly 60% of its 6million viewers staying on the service for 15 minutes or longer (Timms, 2004). By streaming co-temporal events simultaneously, the BBC boasted that it was making 'over 1000 hours of extra footage available to the digital viewer' (Salmon, quoted in Gibson, 2004). As Owen Gibson outlines, this has allowed the BBC to 'carefully cultivate an image as the place where the nation comes together for the one-off events' (ibid). Obviously, this recalls the BBC's traditional remit of defining the national, but it must do so in a way that moves beyond the now outmoded Reithian edict of 'making the nation as one man'. In the following discussion I am interested in how the Olympics application negotiates this desire to aggregate large audiences in one place, whilst also promoting choice as a public service value.

As with the news application, choice and control featured as key discourses in promoting the Olympics application. As Andrew Thompson (BBC Head of Development, New Media and Sports News) argued, the Wimbledon application 'empowers our viewers and allows them to take control of what matches they want to see ...' (BBC Press Office, 24/06/05). In a similar vein, Patrick Dalzell argued that

For sports it [public service value] is value for money. As a licence fee payer, you pay for coverage of an event. Adding interactive services is minuscule ... For television as a whole, interactivity should be more integrated and about choice (Interview conducted 22/03/04).

Dalzell's comments implicitly point to some of the tensions that the Olympics application had to negotiate. On the one hand, the application invoked portal strategies in order to represent value for money: aggregating content in one place and giving viewers as much choice of coverage as possible. As I go on to discuss, in so doing this provided the BBC with an opportunity to engage viewers with different sporting and national allegiances. On the other hand, it had to act as a window-on-the-world, 'bringing the world to the UK and the UK to the world' through the live coverage of a world event.

However, events such as the Olympics problematically invoke television's liveness, and its antecedent connotations of collective viewing, for public service broadcasters. As Rod Brookes' analysis of the Olympics suggests, the BBC's public service obligations require the Corporation to screen events live. However, this is problematic for two reasons. Firstly, with multiple events occurring simultaneously, the BBC must act as a gatekeeper in selecting which sports to broadcast. Secondly, as the location of the Olympics is rarely in the same time zone as the broadcaster and its audiences, events often occur at times that are inconvenient for aggregating a mass audience. As Brookes explains, the requirement to screen events live can mean 'losing the many potential viewers who were asleep or at work during the screening'⁵⁵. In contrast commercial stations in the USA, such as NBC, 'withheld live coverage, preferring instead to generate maximum revenue from advertisers' by screening prime time highlights

⁵⁵ After a successful smaller trial for the 2004 Olympics, the BBC rolled out full coverage of the 2006 World Cup online, allowing it to capture the office-bound audience.

packages (Brookes, 2002: 32). By allowing the BBC to screen multiple events and create an always available highlights stream, the Olympics application maximised the number of people likely to watch live, but also provided the capacity for viewers to catch up on the day's action.

Furthermore, as Dalzell points out, for the BBC this not only enables them to better exploit the rights they have paid for, but also the coverage they are already obliged to provide. As with Wimbledon, the BBC's commitments at such large sporting events are to capture footage from the action of various games; as a result, there is already a large industrial infrastructure of cameras, sound equipment, editors and commentators at such events. However, previously the audience was receiving relatively little value from their licence fee money in this area, as the many hours of footage recorded were edited into short highlights package. As a result, the promotional boast for the BBC's interactive Olympics coverage of over 1000 hours of extra content, was in fact simply giving the viewer access to content which would have already been filmed, and in effect paid for in their licence fee.

Whilst the application clearly provided some value in the way choice was promoted, and did so in a way that negotiated the liveness of window-on-the-world obligations, the application's portal structure inevitably leads to some cherry picking. As Rod Brookes points out, the public service role of Olympics coverage has always been to place smaller sports in the shop window (2002). That the application might undermine this function is acknowledged by Peter Salmon (BBC Director of Sport), who posited that the BBC's Olympics coverage and applications 'provided a comprehensiveness that sucks people in and drives millions of people to quite specialist sports'. Similarly to the discussion of the news multiscreen above, Salmon shifts the labour of the transaction to the sports bodies

themselves who he maintains must keep ‘their side of the bargain to capitalise on the show window offered by the Olympics’ (quoted in *The Guardian*, 09/08/04). In turn, of course, these bodies must rely on the BBC’s viewer performing the task of navigating away from the main content, as minority sports always occupied the smaller windows on the periphery of the main video window in the Olympic application’s structure.

Nevertheless the ability to choose between events, where different nations and viewers have vested interests in different sports, is suggestive of a new way of fulfilling public service obligations. Through the application the BBC was able to cater both for individual identities that might have complex national allegiances (as in my own case, being Australian and reluctantly British), whilst in some sense still bringing the ‘100 tribes’ of Britain together for the kind of shared experience that has traditionally defined concepts of broadcast television. Such an approach seems particularly apt in a period where the idea of one unified, identifiable nation is thrown into question by so many factors external to television. Whilst David Docherty, writing about choice and BBCi services, may be correct in surmising ‘the social glue argument is pernicious because it leads to ratings chasing’ and it ‘certainly should not form any criteria with which to judge BBCi’, this seems a judgement we should make according to individual programming or genres rather than the BBCi service as a whole (Docherty, 2003). The ability to amass a large audience for the Olympics and offer choice at the same time appears a predominantly useful service.

The BBC’s argument for its ability to bring people together for sporting occasions in *Building Public Value* is significant in this regard, as it attempts to define such occasions in terms that are not exclusively of the national:

The BBC will offer an exciting range of sporting and other national events that help to bring people together across the UK. The BBC has a greater capacity than any other organisation to bring large numbers of people together, acting as a source of social capital in an increasingly fragmented age (2004: 79).

This ideal coincides with a desire of the BBC to respond to a changing country that is ‘an increasingly diverse and fragmented society, economically, socially, demographically and culturally’ (2004: 76). Read in conjunction, these commitments find a successful articulation in the way the Olympics mobilises the discourses of choice, control and arguably those subsumed within the window-on-the-world metaphor – liveness, the national, immediacy and the broad vistas of public service broadcasting. Such a balancing act suggests a valuable role for the Corporation to play within the changing landscape of digital television. As Harrison and Wessels suggest,

new forms of audience engagement exist, which should not be viewed as audience fragmentation but audience discernment constituted through an environment which is pluralistic, engaging, associative and critical: an environment that itself helps to stimulate the expression of a pluralism defined by the activities of diverse individuals and groups within their different social, cultural and political experiences and settings. These expressions, we argue, mark the continuation of public service values in a new form of public service communication (2005: 837).

Fragment, as constituted by the Olympics application, represents just such a modality and demonstrates that the BBC can continue to have a valuable and important role as the nation’s public service broadcaster. Thus, the public service value of the way the portal practices of a fragmentary textuality function to privilege choice is intimately related to genre.

Conclusion

A fragmenting audience is an inevitable result of a developing multichannel environment in a period of increasing globalisation, and the ways in which a public service provider caters for this are problematic. The BBC must provide for people in their various audience and viewing modalities, and the use of a fragmented textuality in applications like that for the Olympics seems an important way of dealing with some aspects of this. However, whilst the move in the *White Paper* to untie public service value from specific television genres should be welcomed, it is unlikely to diminish the prominence of news or sports in fulfilling public service obligations. This is particularly true of the news' place in satisfying the diminishing public service obligations of the other terrestrial channels. As my discussion of the different applications attests, interactivity provides both great potential for public service programming to meet these challenges as well as representing another element of the tightrope act the BBC must forever perform.

In conclusion, the problems posed by hypertext for literary theory can be reconfigured for the issues at stake in television studies. Espen Aarseth argues that for literary theory, 'the absent structure of narrative is the key problem', suggesting that 'in determinate cybertext the absent structure is the plot' (1994: 74). In contrast, for television's new hypertextual interactive forms, the absent structure is that of flow – in this instance that across the normally linear segments of the news. Instead, flow is replaced by choice. In the second shift terms I proposed to analyse these services in, the transferral of the paradigmatic process of selection and syntagmatic combination of news items to the viewer suggests a new modality of experiencing the television text, marketed by the BBC as empowerment but perhaps without its traditional public service responsibility. Whilst there are programmed forms of rationality in the news

application's textuality, at present this privileges choice to the extent that a mixed diet supplied by flow is replaced by a menu of bite-sized fragments. The challenge for the BBC is to find the *public service* structuring logics of second shift aesthetics for such applications with greater consistency.

For Georgina Born, the Ofcom statement that in 'a fully digital world ... consumers will have access to much greater choice' begs the 'crucial and opaque question of just how "choice" in broadcasting is defined or even measured' (2004: 475). This chapter has taken this criterion as its central concern, suggesting its role in public service broadcasting debates is indicative of the tension evident between television's changing position as window-on-the-world and portal. Most importantly, as I have demonstrated above choice is clearly not a catch-all value to append to all BBC activities, but must be investigated in relation to specific generic concerns and against the longer positioning of television as a window-on-the-world. Whilst personalising services through the choices on offer in interactive applications is not inherently antithetical to public service provision, to return to Barry Cox's vision of the digital television future as a virtual shopping mall discussed in the thesis' introduction, choice privileges the positioning of the audience as consumer rather than citizen. As I go on to discuss in the final chapter, the shift of television's window to a portal need not simply privilege choice and address the viewer as consumer, but can work to address the viewer as citizen, structuring their viewer-flows to drive them online as part of a national, collective experience.

Appendix of images for Chapter 6



Frame 1: The original BBC Wimbledon application – offering the viewer a choice between five, predominantly live, videostreams.



Frame 2: Sky's interactive news application – the eight videostreams are made up of a mixture of live and pre-recorded material, which in conjunction with a large database of text-based stories, provide the viewer with a “world” to explore.



Frame 3: The BBC's interactive news application – utilising only six videostreams, the BBC's application is predominated by pre-recorded material, with live feeds reserved for 'breaking stories' of major significance.

Figure 6.1 The three applications displayed in frames 1-3 all borrow from each other's application structure (or software blue-print). Whilst all are aesthetically different and provide different focuses and options, all use the interactive television platform to transmit a menu-based application from which viewer can select individual videostreams or text-based stories.



Figure 6.2 The BBC switched from this text-driven news application to the multiscreen above following the success of Sky's application and its association with their ratings-winning Gulf War II coverage.



Figure 6.3 The Athens Olympics application evidences the production heritage from the Wimbledon and news applications above.



Figure 6.4 The onscreen EPG for the BBC's Athens Olympics application allowed viewers to plan ahead.

Chapter 7: Interfacing the UK – Building Digital Britain

2004 heralded an important series of events concerning the BBC's place in the increasingly digital television landscape. The start of the year was marked by digital television take-up reaching tipping-point, with over 50% of the population reported by Ofcom to own at least one digital television set (Ofcom, 2004c: 2). Whilst there had been significant growth in the proportion of homes accessing digital television by the BBC-led Freeview platform, digital television uptake was largely dictated by Sky's subscription rates. At the start of 2004, Ofcom estimated there to be approximately 7.2million subscribers to Sky's digital satellite service, compared to Freeview's 2.9million and cable's 2.3million. Despite Freeview being widely described as a success by the Blair Government, the BBC and the industry alike in saving the digital terrestrial platform after the ITV/OnDigital debacle, the BBC's place in the digital television future was under fire at the start of 2004. As I have suggested in the thesis introduction, the fallout of the *Hutton Report* left the Corporation rudderless in the crucial period leading up to licence-renewal. This was to begin in earnest with the BBC's first submission to the Government, *Building Public Value*, due in mid-2004. This report came on the back of increased pressure on the BBC's place in the digital age following Ofcom's two earlier reports on the future of public service broadcasting – the most recent of which had recommend the BBC investigate subscription funding and that a public service publisher be established as a new way of delivering public service television in the digital age⁵⁶.

⁵⁶ Furthermore, Ofcom had supported the call by independent producers to increase the BBC's quota of programming supplied by independents from 25% to 50% (Born, 2004: 499).

However by the end of the year, the BBC's place in this digital landscape looked increasingly secure: digital uptake had grown to over 60% of homes and had largely been driven by Freeview, which was by then delivering digital television to over 5million homes, closing the gap to Sky's subscription-based digital satellite platform to just over 2million. In addition, the appointments of Dyke's and Davies' successors, Mark Thompson and Michael Grade respectively, had been met with widespread approval. During this period the BBC produced a document, in *Building Public Value*, which envisioned a role for the Corporation that intertwined the promise of choice in the digital age, with notions of a public sphere that sought to retain the importance of the concept of the national. As Wheatley has demonstrated, an important tactic for countering such sustained periods of attack on the BBC has been the use of event television programming (2004). Just as *Walking with Beasts* and *The Blue Planet* formed part of the Corporation's robust response to such criticism at the start of television's digitalisation, the applications under discussion here were attached to a series of history programmes, which in commemorating the end of World War Two as a 'shared moment that can bring the UK together around those things that bind us' functioned as an important form of event television. As such, they aimed to demonstrate the BBC's continuing value and relevance in the digital landscape (BBC, 2004: 76). Thus as a necessary corollary to the discussion of fragment as a textuality that responds, with varying degrees of success, to the viewer's desire to choose, navigate and be in control of content, the forms of interactive television discussed here are characterised by a desire to bring viewers together into one space and engage and participate with the programme or application, each other and, crucially, the BBC. In particular, I am concerned with the relationship between these applications and the *White*

Paper's requirement for the BBC to build digital Britain and 'represent the UK, its Nations, regions and communities'. I argue that by linking conceptions of the national with the ideal of digital Britain, the fulfilment of both these purposes is inextricably entwined and articulated with the requirement to 'sustain citizenship and civil society' (DCMS, 2006).

The applications under discussion here fit well with my concern to demonstrate that interactive television does not simply remediate web and new media portal practices, but does so in a way that is entwined with television's position as a window-on-the-world. As Lisa Parks has argued, emergent textual and industrial practices of digital television encourage audiences and viewers 'to reimagine the television screen as a democratic Internet portal that gives everyone equal access to knowledge about computer technologies and cyberculture' (2004: 143). As Parks' statement suggests, of fundamental importance for the BBC's status as a public service broadcaster in the digital landscape is the way in which it strives to give 'everyone equal access'. Of particular concern here are those groups who have been defined as vulnerable to being left on the wrong side of the digital divide, most notably the elderly whom Rupert Murdoch dubbed the "digital immigrants" of his generation (c.f. BBC, 2004; Ofcom, 2004a, 2006b)⁵⁷. For such viewers, the BBC had articulated 'a special responsibility for bringing the final cohorts into the digital television universe' by acting as a trusted guide to older viewers who were 'less digitally adept ... ensuring no one gets left behind' (2004: 11). This suggests, as Ofcom have recognised, that interactive television has an important role in defining citizenship in the digital age and might be positioned alongside news as a televisual form that can represent 'social

⁵⁷ 'I wasn't weaned on the web, nor coddled on a computer ... My two young daughters, on the other hand, will be digital natives' (Rupert Murdoch, speech available at http://www.newscorp.com/news/news_247.html).

value' or 'informed democracy' (supporting documentation to *Phase 1 Review of Public Service Television Broadcasting*, 2004).

Equally, Parks' use of the term portal is suggestive of the way in which the applications under discussion here offered both an imaginative journey, as well as worked as a second shift practice of aggregating content, audiences, viewers and users. As Mark Goodchild described, the applications associated with the commemorative history programming 'emerged as a portal ... [providing] all the information the viewer needed to know about the BBC's coverage: the programmes, the schedule, the web content and information on how to participate' (Interview conducted on 09/06/05)⁵⁸. As Goodchild goes on to suggest, the applications' second shift strategy of aggregating content was complemented by this portal function offering viewers a journey: the 'portal ... act[ed] as a catalyst to send people to the web', specifically the associated *People's War* website⁵⁹. As I will go on to demonstrate, the applications' simplification of choices – whereby the database of computing's portals, unlike the news multiscreen, is only apparent at an aesthetic level – worked to drive viewers online through the rationalised and personalised journeys of television's democratic portal in ways that strongly re-articulated television's, particularly public service broadcasting's, window-on-the-world function: bringing viewers together and then sending them to spaces under the rubric of the national; and, for the digital immigrant (to whom these

⁵⁸ Goodchild acted as the senior executive producer on all of the history programming applications discussed below.

⁵⁹ It is important to recall at this point that, as I noted in Chapter 2, whilst the BBC announced a policy of 360 degree commissioning for multi-platform 'projects' that develop content simultaneously across television, interactive TV, online and other platforms, none of the applications are the specific result of this strategy. Thus Goodchild's positioning of the interactive TV applications as portals describes not only their relationship with the audience and viewers of television, but also the BBC's production context whereby the interactive team often drove the process – commissioning the applications first, collecting eye-witness testimony interviews and ensuring a consistent branding across platforms.

applications are addressed), opening onto the broad new vistas of digital spaces.

It is worth briefly engaging with Will Brooker's concept of "overflow" here in relation to the way I'm positioning these interactive applications as portals that drove viewer-flows to the web. Brooker's work is a useful starting point for thinking about the changing relationship between television and the web. As I have suggested in Chapter 3, as a corrective to Henry Jenkins' (1992, 2002) overly optimistic view of cultural convergence, Brooker's ethnographic study of fans' interaction with the overflow of television remains important (2001). However, as production ecologies continue to exploit convergence and, indeed, they themselves converge as cultural sites, Brooker's treatment of the television text as the starting point 'for further activity rather than as an isolated, self-contained cultural artefact' is problematic. In particular, through his assertion that the individual episode functions as the reference point that fans 'must return to', Brooker argues that the content and text of affiliated websites are for ancillary and subsidiary material: overflow (2001: 461-69). That is, Brooker sees these sites as filling the gaps between episodes for audiences who are keen to remain immersed in the diegetic world of the programme, which work on the soap opera audience has already acknowledged is a key site of pleasure in the audience's experience of, and participation with, the television text (c.f. Allen, 1994).

However Niki Strange's work on the 360 degree commissioning policy of the BBC challenges the centrality of television in this assertion, noting that whilst TV often dominates commissioning strategies, different textual formations persist in television's dispersed multiplatform texts (Strange, 2007). Drawing on John Caldwell's work on "critical industrial practice" (2006), Strange's work articulates the way in which we must

conceive of the dispersed texts of multiplatform, digital television as the products of changing production and commissioning strategies and their relationship to aesthetics and audiences, rather than simply as a site of television overflow.

Similarly, the programmes under discussion here are demonstrative of the way in which television isn't the always already positioned starting point for experiencing television's dispersed texts. For *Dunkirk* and *D-Day* neither web nor interactive application acted as an extension of the text or a site of overflow, but functioned in a more complex relationship that aimed towards fulfilling wider public service broadcasting aims. Thus it's important to note that with *Dunkirk* and *D-Day* it was the interactive application's production team who drove the production process.

Interviews with production personnel revealed how it was the interactive team who first decided on how to cover the commemoration events with a collaborative television, interactive and web effort. Most importantly for the argument that I want to make here, it was the interactive team who commissioned and collected the testimony of the Second World War veterans. As I'll go on to show, it was this testimony which then drove the content and experience of the interactive application, the television programme and the web. To this end, I want to position my understanding of these texts as portals in relation to debates about history programming, its aims and problematics.

History programming provides a particularly fertile locus for a discussion of interactive television and the national for the way in which the genre often aims to create a sense of community. As Jon Wilson argues, good history programming aims to 'bring the past alive' (2003: 181), which Simon Schama interprets as being about a kind of 'freedom, empathy and community' that links our experiences to others 'separated from us by

time'. Schama goes on to suggest that history programming can facilitate the feeling of community by helping to recognise connections, working towards 'the demystification of perpetual difference' and developing a sense of shared histories (2004: 22-23). In this regard, my understanding of the role history programming plays in the citizen formation of digital Britain relies on Joke Hermes' work on "cultural citizenship". Drawing on John Hartley's suggestion that 'television taught us to understand "difference" ... as well as neighbourliness' (quoted in Hermes, 2005: 301), Hermes argues for a broad understanding of cultural citizenship that sees it as debated, a process of 'public opinion and the building of shared identities among audiences' (2005: 302-3). As Graeme Turner has argued in relation to Australian national identity, for the BBC this involves representing British-ness as 'among other things ... plural: identities rather than identity' (Turner 1994: 123).

2004 provides a useful underpinning for the selection of these texts in relation to these concerns as it marked the 60th anniversary of the end of the Second World War and, as a consequence, a host of event programming to commemorate the occasion. Indeed as Laurence Rees, the producer of *Auschwitz* (BBC2, 2005) noted the following year, these commemorations were probably the last to be held with survivors of the war itself (*After Auschwitz*, BBC4: 2005)⁶⁰. Mark Goodchild elaborates the importance of this event for the BBC:

The BBC always knew that whatever it did, D-Day and Dunkirk would be huge. Although the Ministry of Defence did try and play-down the celebrations, the BBC felt it had to cover the event and commissioned the drama about two years before the day (Interview conducted on 09/06/05).

⁶⁰ As discussed below, this gives a primacy to the place of testimony in the programmes and applications examined here.

The ambivalence of the Ministry of Defence and the Government in marking this occasion arguably signals an uneasiness with how such events sit within a representation of modern, multicultural Britain. That is, as I suggested in the preceding chapter, my discussion below pays attention to how making such events constitutive of national identity problematically enshrines a national body that continues a distinction between “us” and “them”, between “we the nation” and “them the others”. Whilst the BBC’s coverage of memorial events such as D-Day and Dunkirk is clearly mobilised under the function of bringing ‘the UK together around those moments that bind us’, arguably they don’t engage with the requirement to provide programming ‘that reflects the range of cultures and communities across the UK’ (DCMS, 2006: 19). Thus, as I will come to in my concluding discussion of *Who Do You Think You Are?*, difference and the conception of audiences as plural is of central importance in understanding not only the contemporary cultural notions of citizenship in digital Britain, but also the BBC’s role in addressing the digital immigrant as an expansive category.

As with my analysis in previous chapters, the discussion below pays attention to the specificities of the genre to which the applications belong. As such, I relate my understanding of the democratic portal function of the applications to the way in which they work both as “authenticating strategies” for dramatic reconstructions, as well as the concerns of history programmes to bring the past to life. As a result, I am concerned here to first relate the applications’ aesthetic and public service form to new media scholarship on the possibilities of a Habermassian public sphere. In turn, my second concern is to relay these ideals to the conceptions of the national that are intimately bound up with questions of both history programming and public service broadcasting. In particular, I aim to pick

out two trends evident in the programming I discuss here that extend conceptions of the national in different ways. I argue that on the one hand, those programmes and applications centred on the commemoration events of World War Two are concerned with extending the opportunities and virtual spaces of digital media to digital immigrants. However, this group is already secured in its place within the national – a predominantly white, often male, conception that fought for Queen and country⁶¹. Thus on the other hand, the BBC has used history programming like *Who Do You Think You Are?* to extend the opportunities of digital media to both digital immigrants as well as viewers who have more complex relationships to the national: often immigrants or second generation Britons themselves. As a result, the applications for history programmes not only seek to ‘bring the past alive’, but further, actively look to the past as a way of striding into the digital future.

Remediating the nation: (Inter)active audiences, the public sphere and the digital divide

As discussed in Chapter 3, new media theory often posits that the ‘interactivity’ of digital technologies heralds a potential to create ‘virtual’ worlds that are able to fulfil Habermassian ideals of a public sphere. As Terry Flew comments, such arguments picture technologies as offering ‘the possibility of a reinvigorated sense of community-building and citizen participation in public life’ (Flew, 2002: 26). Whilst not always, or indeed often, conceived of in relation to the national, for the BBC the national remains an important site of activating such participation. Given the uncertainty of the BBC’s position in the digital age at the start of 2004, it is perhaps unsurprising that *Building Public Value* is filled with references to

⁶¹ For a discussion of the hegemonic representation of British national identity as white, see Higson, 1995; Malik, 2002.

the ability of the BBC to bring together the nation in a way that no other commercial broadcaster or new media service can. Indeed, the BBC placed the ability to bring together the nation for shared experiences whilst simultaneously recognising its diverse make-up as one of the central public values it would seek to fulfil in the digital age:

The BBC has a deep commitment to ... reflect the diversity of the country, foster a sense of belonging and encourage participation. The BBC also has a particular responsibility to the UK as a whole – for bringing people together to share events of national importance (2004: 36).

The BBC's position is therefore to bring together the nation for collective experience but simultaneously recognise, represent and facilitate a multicultural imagining of the nation as diverse but unified. As such, how we understand the BBC as fulfilling this role is a question not simply of representation, but also one of participation. Most particularly for my concerns in analysing the texts of interactive television, it is a question of *representing participation*: how the interactive applications structure viewer-flows to encourage participation, making the imagined journey through interactive television's portal as citizens who, at the journey's end point, are involved in defining the national.

John Street provides a useful overview of the debates about the relationship of technology and democracy, community and participation that I outlined in Chapter 3 (1997). Importantly, Street recognizes that these approaches can produce both utopian and dystopian responses to technologies' facilitation of forms of democracy and participation. Thus, whilst some of the new media theory I discussed in Chapter 2 might often fall into the former category, Sonia Livingstone characterises the political economy view of new media as pessimistic. Livingstone suggests that although political economist approaches to new media concede that much

political activity is conducted online, they consider there is little evidence that political activity is thereby increased or improved (2005). Moreover, theorists such as Graeme Murdock and Peter Golding argue that the “virtual political sphere” is insufficiently inclusive, interactive or consequential and that the persistence of a digital divide leaves individualisation and disenfranchisement as the likely outcome of net politics (quoted in Livingstone, 2005: 19).

I will return to this issue of unequal access and disenfranchisement below; for now I want to concentrate on how we might understand interactive television as part of the BBC’s role of encouraging participation in a national public sphere. As I suggested in Chapter 2, the positing of new media technologies as capable of activating the audience, invoking participation in communities and democracy relies on wrongly characterising old technologies, particularly television, as passive. My argument about television’s window-on-the-world discourses there and in Chapter 4 suggested that such a view creates a false dichotomy ‘between choice and determinism, between activism and passivism’ whereby television’s digitalisation presents a fundamental rupture with its old media formations (Street, 1997: 37). Instead, we are better off considering how these window-on-the-world discourses are constantly re-called and re-circulated in structuring the choices and activities of interactive television’s portals. As Street suggests, such a historically and culturally grounded approach involves considering ‘the way in which different media systems construct different opportunities for political engagement and different levels of thought’, particularly through their different ‘forms of address’ (1997: 37).

Academic discussions of interactive television’s form of ‘participatory’ address have focused on its provision of voting options that

allow viewers to decide the outcome of reality game shows. However, less work is apparent on the forms of interactive television that I discuss below, which do not operate on the basis of a simple commercial transaction or voting, but rather are designed to encourage viewers to see themselves as part of digital Britain. Virginia Nightingale and Tim Dwyer's argument regarding the commercial nature of interactive television voting applications extends this discussion to how these texts address the audience in terms of the national. They suggest that both the production companies involved and the individual programme presenter's call to action 'repeatedly attach words like "democratic" or references to national identity to the voting outcomes' (2006: 30). However for Nightingale and Dwyer, 'ultimately [this] is a strategy designed to undermine the integrity of the nation state and to replace it with unprecedented dependence by the public on user-pay entertainment and services' (2006: 40). This is because the programmes, by charging premium dial-up rates to 'interact' with programmes that only have entertainment value, work to blur the distinction between consumer and citizen, negatively impacting on the democratic responsibilities and opportunities of the latter.

Whilst Nightingale and Dwyer's analysis might be overly pessimistic, as Su Holmes' work on the complex modes of resistance invited and reinforced by programmes like *Pop Idol* and *Pop Stars* has demonstrated, the address to the national by interactive television remains a compelling and multifaceted question (2004a, 2004b). In particular, there is a need to take into account the different address made by different providers and forms of interactivity. That is, not only do we need to explore how the public service remits of the BBC serve to create a different mode of address in their applications, but we must also take into account the fact that it is not only voting applications that can encourage participation and

engagement. Thus unlike the voting formats of programmes like *Big Brother*, the texts below do not work on a rudimentary, return-path form of interactivity that is based on a commercial transaction. Instead they work in two mutually reinforcing ways, firstly by validating the viewers' experience as part of the national (and its digital future) through representational strategies, and secondly by simultaneously acting as a portal to drive viewers to online spaces – structuring their viewer-flows as a mobilised citizenry.

Of relevance here then is the BBC's explicit engagement with issues raised by the digital divide through a re-assertion of its position as a national, universal provider. Interestingly this is achieved through an address towards a very specific audience: the digital immigrant. The BBC's address to this audience aims to encourage their participation by both simplifying the structures and aesthetics of interactive applications, making them use-able, as well as informing the digital immigrant that their stories and experiences are valuable – thus tying this address to the goals of history programming to 'bring the past alive'. In such a way, the applications work to re-imagine the national as digital Britain, including the 'less digitally confident' within the new media "information society".

The address to older viewers is made explicit by *Building Public Value*, which depicted the *People's War* website as 'specifically designed to attract people over 60 to try the Internet' (2004: 62). Furthermore, Jana Bennett's discussion of the kinds of pop-up text-boxes that characterise the applications of the memorial programming discussed below suggests that these were specifically tailored for an older audience. Detailing a similar application used to explain and analyse Mozart's work for a season of programming on the composer in 2004, Bennett suggested that

Some of the biggest takers for this have been late adopters to digital, the older classical music lovers – like my mum and my in-laws, who all told me they had pushed their red buttons to devour what was on offer. A year ago they would have thought of digital as the face of their alarm clock (Speech given to MiPTV and Milia, 30/04/04).

The implication of Bennett's speech is that because these applications are both unobtrusive and explanatory, their value is immediately apparent to audience's unaccustomed to digital technologies. Furthermore, these applications require very little in the way of either actual interaction, or the forms of choices that I have suggested characterise interactive television. As a result, in contrast to the high degree of perceptual, cognitive and motor demands an application like *Walking with Beasts* demands of its viewers in creating an immersive experience, the applications here demand little in terms of the viewer's adeptness with digital technologies: they are useable to the widest possible range of viewers. As I suggest below, their function as an authenticating strategy also drives viewers to stay on the application for the additional 'Eyewitness Stories' element which, in turn, acted as a portal to the BBC's online content. Thus unlike the mobility conferred by *Walking with Beasts*, the journeys on offer here are more discursive, asking the viewer to take the imaginative passage to become Internet users as part of digital Britain.

This address to the digital immigrant evinces a concern to address worries over the emergence of a digital divide as television becomes increasingly convergent with other digital media. As I suggested in Chapter 2, interactive television has been positioned as offering access to and participation within the spaces of new digital technologies. However, by linking this purpose with both the traditional public service concerns of defining the national and sustaining citizenship, as well as the aesthetic tropes of immediacy, authenticity and liveness (which I come to below),

interactive television's portal to digital spaces has been framed within television's familiar window-on-the-world discourses. By using interactive television as a portal to encourage participation amongst viewers with the BBC and, importantly, across different new media technologies, the BBC's role in fulfilling Habermassian notions of a national public sphere is linked to its position as a trusted guide to new digital technologies. This was recognised by the DCMS's *White Paper*, which posited that

Since its establishment the BBC has taken a leading role in opening up the benefits of new technologies to mass audiences ... it is seen as a "trusted guide" to new technology and the new experiences that come with it (DCMS, 2006: 11-12).

However, in bridging the digital divide the BBC must also deal with the inevitable fragmentation of the audience in this landscape. As I suggested in the previous chapter, one response to such fragmentation through the use of interactive television has been the development of applications that privilege viewer choice whilst aggregating an audience in one place. However, such applications not only diminish the public service value of particular genres, like news, but also fail to address the issues of a digital divide that are central to the BBC's position as a universal provider.

Arguably the BBC has promoted two strategies for encouraging participation and engagement that seek to address these issues of fragmentation and division: locally, on a level of communities of interest, and nationally, as discussed below. As Georgina Born argues, the BBC's digital activities 'extend the variety and range of the BBC's mode of address to its audiences and publics, inviting participation' (Born, 2004: 489). As work by Lizzie Jackson (2005), Niki Strange (2005), Jackie Harrison and Bridget Wessels (2005) has demonstrated, the web, cross platform projects and interactive television all provide ways in which the BBC can address specific "communities of interests". These communities are often formed on

a local level, such as the BBC's Kingston Interactive Television (KIT) partnership in Hull, or the plethora of services and partnership that Harrison and Wessels discuss. As Harrison and Wessels argue, localised interactive television projects need not represent the atomisation, isolation or fragmentation of the audience. Rather, such initiatives can facilitate the formation of new audiences and communities with 'individuals and groups who otherwise might ... [not] be participants in these new services' (2005: 849-50), such as the case with the digital immigrant.

In contrast to the local level of community these projects address, the BBC's other strategy has been to position itself as capable of bringing together the whole nation, binding them through shared experiences. Inevitably, this tactic is most often fulfilled through event television. As I suggested in Chapter 2, whilst Wheatley is correct to problematise such programming's place within the schedule's flow, in relation to their interactive applications we might more usefully think about how these structure viewer-flows. For my purposes here, this is intimately related to how and who they include within a Habermassian public sphere facilitated by new media. That is, how the BBC's commitments to universalism and questions of the national respond to Murdock's charge that virtual communities are often insufficiently inclusive. As I have suggested, the BBC's role in 'bringing the nation together for shared experiences' needs to be thought of in relation to a plural notion of cultural citizenship that recognises diverse forms of national identities as part of digital Britain. Whilst the BBC's Athens Olympics application facilitated the aggregation of diverse identity positions, the applications below don't just recognise the diversity of viewers, but structure their viewer-flows to engage different communities of interest, both digital and real immigrants, to be incorporated as part of the national. Thus, the pull of the BBC to facilitate a

national public sphere need not be one that is incongruous with such pluralism – as the BBC itself recognised, the corporation's role is to 'offer everyone a democratic voice and a means of contributing to the national debate' (2004: 66).

Bringing the past to life: (Digital) immigrants and the (digital) nation

[*D-Day's* dramatisation and] first-hand eyewitness accounts link the past and the present to the red button (Jana Bennett, Speech given to MiPTV and Milia, 30/04/04).

The commemoration events of Dunkirk and D-Day were inscribed within the discourses of public service broadcasting and debates about the place of the BBC in the digital age. The constant citation of these programmes as examples of such public value was explicitly marked by the criterion of good history programming discussed in the opening of this chapter: *Building Public Value* undertook to 'bring the past to life' and 'our shared historical and cultural heritage alive for a modern audience' (2004: 70). Furthermore, Jana Bennett's description of *D-Day* above also suggests a concern to link these forms of historical programming, dramatisation and eyewitness testimony (tactics that play to the aesthetic of television's immediacy), to the experience, aesthetics and structures of red button interactive television. As a result, the interactive applications here show a concern to extend the concerns of history programming, themselves figured within the discourses of public service in the digital age, to the interactive applications themselves.

As commemoration events the programming, coverage and applications of both *D-Day's* (BBC/Discovery/ProSieben/France2/Dangerous Films/TelFrance, 2004) and

Dunkirk's (BBC, 2004) memorial histories were multifaceted. Both consisted of the eponymous focal-point drama-documentary, which was facilitated by the extensive use of reconstruction and testimony, screened at prime-time. However, for *D-Day* this was preceded by a day's live and interactive coverage of commemoration events in Normandy, which had in turn been preceded by further coverage of dignitaries' visits to memorial sites the previous day. In effect, even the coverage and drama-documentary for *Dunkirk* had acted as a precursor for the D-Day celebrations, marking a season of events that the BBC intended to use as demonstrative of its ability to bring together large audiences for shared experiences that defined the national. Separated by two months, the two events were linked primarily through the *People's War* website, which acted as a common thread of promotion. As a result, one of the most important ways in which the interactive applications for both events was to work was as a portal, sending people to the website (Goodchild, 09/06/05). This was achieved by entwining the application's portal function with their status as authenticating strategies for the demands of history programming. I start with a discussion of this latter status first, before going on to consider how this was intimately related to the application's function as a portal, 'bringing audiences closer to programmes, getting them more involved and creating shared experiences' (Jana Bennett, speech given to MiPTV and Milia, 30/04/04). Thus the applications discussed below, through their close relationship with the aesthetic demands of history programming, evidence the increasingly everyday place of interactive television by 2004, bringing television's position as window and portal closer together.

Taylor Downing suggests that after *The World at War*, television history became dominated by two formats: those that were presenter-led, and those premised on the use of eye-witness testimony inter-cut with

archive film, which used dramatic commentary and powerful music to bridge the gap between the two sources (2004). Whilst the popularity and importance of the presenter-led series is evident in the high-profile production deals of television historians, such as David Starkey and Simon Schama, the latter form has increasingly been infused with use of reconstructions⁶². As Downing goes on to argue, part of the reason for the increased use of reconstruction is the need to free television history from the 'tyranny of the archive image', opening up 'pre-twentieth century history ... [and revealing] elements of twentieth century history that it has been impossible to depict in a visual medium' (ibid: 13). Reconstructions, as Champion, Schama and Downing all argue, are pivotal in the ability of television history to bring the past to life. As Schama contends, reconstructions are part of the poetics of television history, which

calls for [a] sense of surrounding the viewer, for at least some moments in a different world; and (even harder) making the viewer forget for those same moments that the outcome of that history is already known ... Poetic reconstruction, if it is to work, needs to lose the characters, and by extension, us, who are watching them, entirely within their own world without any inkling of their return trip to the contemporary (2004: 29).

Schama's comments point to the way in which good history programming invokes television's imaginative journeys into the diegetic world of the programme. As I'll go on to discuss, this is then reinforced by the promotion of a discursive journey to occupy not this world, but through interactive television's portal, a remediation of this world into online spaces where the national past has an important role in the formation of digital Britain's future.

⁶² For example, in 2003 Simon Schama signed a record £3million with the BBC to present two new landmark series on history and art.

However, the increasing use of reconstructions has not been unproblematic; as Melvyn Bragg suggests ‘there is always the question of dramatic reconstruction’ (2004: 85). This question is most often raised in relation to the veracity and realism of reconstructions and history programming’s documentary origins. As a 2006 debate on Radio 4’s *Front Row* programme about Simon Schama’s history of art series *The Power of Art* (BBC2, 2006) attests, extensive use of reconstructions is perceived to diminish the educative value of such programming, criticisms effectively placing reconstructions within the wider discourse of dumbing down (20/10/06). As with my discussion of the display of natural history in Chapter 5, the demands of history programming require the negotiation of forms of spectacle, in this case ‘set-piece’ dramatic reconstructions of battles, fights etc, with not only the educative aims of the genre, but its budgetary constraints as well. That is, as with the first form of spectacle outlined in Chapter 5, history programmes’ form of spectacle relates to verisimilitude and the ability of such scenes to invoke wonderment and astonishment in the audience (c.f. Gunning, 2004). As Kilborn and Izod’s work on documentary aesthetics argues, whilst dramatic reconstructions might be a primary source of a programme’s appeal to audiences, reconstructions must also be clearly signalled to the audience in order to underline ‘the programme’s claims to be “responsible” factual discourse’ (1997: 160). However, equally important is the place of reconstruction in creating the immediacy necessary to bring the past alive. In this context, verisimilitude is a desirable quality that the budgetary constraints of the genre can impair:

As documentary producers we never have the budgets to spend that Stephen Spielberg and Tom Hanks had on *Band of Brothers*. And it shows. As makers of factual television we will never make combat seem as

real as in the wholly dramatised scenes of *Band of Brothers* (Downing, 2004: 13).

In this way, unlike *Walking with Beasts*' desire to emulate the forms of CGI spectacle in the blockbusters of Hollywood, history programming must look for other ways to authenticate the dramatic reconstructions. It is within this context that the interactive applications work not only to further the aims of the genre, but also those of the BBC in 'bringing audiences closer to programmes' and, in turn, digital spaces.

I want to focus particularly on *Dunkirk*, as the first in the series of commemorative programming in 2004, in the following discussion of interactive television's deployment to facilitate the public service goals of history programming. I then turn to examine how both *Dunkirk* and *D-Day* worked as portals to encourage engagement and participation by digital immigrants in a way that foregrounded television's, and the BBC's, role in defining the national. *Dunkirk*'s dramatic reconstruction told the story of the British troops' retreat to and evacuation from Dunkirk following the Nazis' Blitzkrieg. The programme related the historical details of the events through a series of intertwining narratives based on testimony from veterans involved in the conflict. The interactive application consisted of two elements, 'Eyewitness Notes' and 'Eyewitness Stories'. 'Eyewitness Notes' worked as an example of the BBC's Engaging Enhancement applications, providing the viewer with a series of pop-up text boxes that interpreted, explained and enhanced the programme. These featured quotes from the veterans whose stories were being told or anchoring information about characters involved in the drama-documentary. The second element (discussed below) then picked up on three key stories from the drama-documentary using the voices of the veterans quoted in the 'Eyewitness Notes' feature to expand upon events depicted in the main

drama-documentary. In different ways, both features worked as authenticating strategies for the narrative told in the programme's dramatic reconstruction and, in turn, helped to drive viewers into the online spaces of the associated *Peoples' War* website.

Dunkirk's opening sequence announces the interweaving of dramatic reconstruction with archival footage as the programme's primary strategy of authenticating the drama. We are introduced to the programme through the world of the reconstruction with a tightly framed close-up of a young soldier's face. The camera's intense focus on his eyes is met by the soldier's gaze, which is returned back beyond the audience into the middle-distance, as if recalling the atrocity and despair of Dunkirk. A cut then introduces the series' first use of archival footage: a shakily panned shot across a wrecking-yard of a beach that is Dunkirk during the time of the evacuation. These images are joined by more archival shots of burnt out boats, cars and leaden looking soldiers as a voiceover is introduced on the soundtrack and a series of cuts moves the programme back and forth between reconstruction and archival footage. The cutting almost creates a dichotomy between archive and reconstruction, whereby the former is imbued with properties of a still, barren quietness, whilst the latter is filled with a greater sense of present-ness signalled by an increase in movement derived from the camera's first person perspective within the water-bound evacuees as they are buffeted by waves and fellow evacuees. However, as the sequence draws to a close the reconstruction elements introduce shots where the camera is still, the diegetic noise at a minimum and the shots an almost abstract close-up of a mop cleaning blood on a ship's deck. This gives way to a shot of blood pouring out of a gutter, a vivid stream of red dominating a blank background over which the bold, red title DUNKIRK appears. Throughout the sequence the two sources of footage are bound

together by the voiceover, which we are invited to treat as the soldier's, as it reads an edited version of 'For Whom the Bell Tolls'. Arguably it is this attempt at seamless movement, between archival footage and reconstruction, to which the interactive application and its use of veteran's voices must respond: a challenge to 'bring the past alive' by imbuing the archival footage or testimony with an immediacy through the presence of the reconstruction, which in return is lent authenticity by the continual inter-cutting of archival images or testimony.

Although it is this seamlessness and strategy of authentication to which the interactive application must respond, as I noted earlier, the dramatic reconstruction's writers had to base their narrative on eyewitness testimony that was researched and recorded by the interactive team. From a production standpoint therefore, the interactive team were instrumental in driving the linear experience of television and its relationship with the web. Nevertheless as Goodchild notes, one of the primary goals of the interactive application was to add credibility to the series' dramatic reconstructions:

These interactive elements gave us the opportunity to reinforce the series' factual authenticity ... here we have a historical story which we're going to tell as a drama, but we'll be able to include the personal testimony of the people the story is based on in the interactive stream (Interview in *iTVToday*, issue 5.34, 25/02/04).

As a result, the pop-up text boxes occur at fairly regular intervals throughout the programme, serving to validate the narrative on screen. Unlike the text-boxes in *Walking with Cavemen* however, spectacle is never given precedence over the role the application plays in underscoring the factual accuracy of the programme. Instead, the application's use of eyewitness testimony in the form of short quotes from veterans, works to provide a level of explanation to the onscreen image as well as emotional

realism. I want to briefly focus on one sequence that demonstrates the way in which the 'Eyewitness Notes' feature worked not only as an authenticating strategy for the reconstruction but also to promote and keep viewers on the 'Eyewitness Stories' feature at the end of the programme.

The incident revolves around the massacre of thirty-six British troops by the Nazi SS in a cowshed in Wormhout, northern France. The sequence takes place approximately two-thirds of the way through the drama's narrative, when a troop of British soldiers – including central protagonist Private Alf Tombs – surrender to the Nazi SS following a hopelessly one-sided gun-fight. For the audience of the dramatic reconstruction, the scene plays out a stereotypical archetype of German soldiers: the "Jerry" who brutally execute British troops in cold blood. Having herded the men into a cowshed, German officers execute a number of British soldiers, including their captain who is making representations for his men to be treated in accordance with the Geneva Convention. The sequence ends with a German soldier throwing a grenade into the shed crammed with British soldiers, returning shortly after to gun down any moving survivors he finds. The emotional intensity of the scene being (rather clumsily) reinforced by blood splattering the camera lens, lending it an immediacy akin to that noted by Scott and White in their discussion of the Tyrannosaurus spitting on the camera in *Walking with Dinosaurs* (2003). The sequence ends with a close-up of "Alf Tombs" dazed and blood-soaked face, indicating to the audience there were at least some survivors. We then segue to a rousing speech by Winston Churchill that urges against a negotiation with the Nazis, promising "we shall go on and fight it out ... [until] each one of us is choking on his own blood upon the ground".

Read together, without any inter-cutting of archival sources in the form of testimony or footage, the lack of explanation about the event results in scenes relying on and reinforcing a view of German-English relations that is acrimonious and jingoistic. In this sense, the BBC's effort to bring the nation together for shared experiences is rather backward looking and negative. However, for the digital viewer the 'Eyewitness Notes' feature works to authenticate this as an emotionally powerful moment, in particular by driving the viewer-flows to the 'Eyewitness Stories' application. Thus, whilst the 'Eyewitness Notes' feature worked as an authenticating strategy for the brutality of the scene by adding the real Alf Tombs' testimony in a text-box to accompany the scene's aftermath, this function is secondary to driving viewers to the extended experience of the programme's interactive application. As such it occurs after the scene of devastation at Wormhout, which as figure 7.1 depicts is accompanied by a pop-up text-box that explains: "None of the perpetrators of the massacre at Wormhout were ever brought to justice. Hear more about this after the programme". Although the 'Eyewitness Stories' did function to further authenticate the drama-documentary, more importantly, this feature also worked to provide an extended space for discussion of the experiences of war by veterans. In so doing, it set the rather British-centric account of the main drama-documentary amongst "recollections from British, French and German soldiers on the road to Dunkirk" ('Eyewitness Stories' voiceover). Thus, across the 'Eyewitness Stories' feature a more complex relationship emerges between German and British soldiers, where the conditions of war enforces acts of brutality, admiration and clemency from all participants.

The 'Eyewitness Notes' feature therefore works on a number of levels. Firstly, it authenticates and adds emotional realism to the drama by

providing immediate evidence for the reconstruction in the form of snippets from the eyewitness testimony collected. In turn, 'Eyewitness Notes' acted as a strategy of promotion for the second 'Eyewitness Stories' feature. Thirdly as a strategy of authentication, the application contributes toward *Dunkirk*'s fulfilment of the goals of good history programming. In particular, the application works to ensure moments of spectacle do not reduce the audience to astonishment and wonder. For example, as the story's protagonists reach the beach at Dunkirk a point-of-view shot looks out onto a CGI recreated landscape of hundreds of soldiers, ships, equipment and German planes on the attack – a spectacle of verisimilitude as discussed in Chapter 5. However for the viewer the application immediately authenticates this shot, providing them with testimony of Private James Bradley who reflected "There were hundreds and hundreds of soldiers on the sand ... I thought they'll never get these people away" (figure 7.2). Overall, the function of the interactive application is to provide an immediacy to the drama-documentary and the veteran's testimony: the authentication of the former's drama by the latter's 'truth function' in turn lends the veteran's voice the immediacy of the drama-documentary's verisimilitude, spectacle and emotional narrative. As Goodchild argues, the BBC attempted 'not to play on what makes [the veterans] a generation apart, but to focus on the aspects of their story that make you relate to their experiences as young men' (Interview in iTVToday, issue 5.34, 25/02/04). Thus, Alf Tombs' presence onscreen as both veteran giving emotional testimony and as character in the drama works to bridge this gap and 'bring the past to life' for the viewer. Such testimony, as I'll go on to show, through the intertextual ferment between application, programme and promotion, became a driving strategy in the way viewer-flows were managed by the portal practices of interactive television, encouraging

digital immigrants to see their own experiences as relevant to digital Britain.

The importance of testimony therefore worked simultaneously as a way of driving viewers online as well as acting as an authenticating strategy for the drama-documentary itself. In turn, testimony is lent immediacy by the drama-documentary and the presence of veterans' voices within it through the 'Eyewitness Notes' feature, which was reinforced by the 'Eyewitness Stories' element of the interactive application that featured at the end of the programme's transmission slot. The application commenced almost immediately after the closing credits of the drama-documentary. Viewer-flows were managed by voiceover during the closing-credits and the presence of videographics that indicated more testimony was "Coming Up Next". Importantly, this voiceover was explanatory:

Over the next half hour [signalling to the viewer how long their use of the application will last] you can hear stories from the campaign told by the people who experienced it ... *Dunkirk* continues with 'Eyewitness Stories', three real stories from the drama of Dunkirk. Use your left and right arrow keys and select to choose the stories you want to watch.

The voiceover then lists the options and informs the viewer of what stream they are currently on. Before I go on to discuss the importance of the application's explanatory structure, I want to first briefly conclude on the importance of testimony in the application. As the application's introduction suggests, 'Eyewitness Stories' offered the viewer the choice of three stories that were based on the testimony of Dunkirk veterans, intercutting this with scenes from the preceding drama-documentary. Testimony is given primary importance here, standing in for elements of the reconstruction and creating an emotional realism through the veteran's presence (figure 7.3). Throughout the retelling of the final moments of the

events, there is no inter-cutting of footage from the drama-documentary, instead relying on the intensity of Tombs' testimony and signalling its importance as an authentication strategy for the programme.

Arguably, the application's privileging of testimony as an authenticating strategy encouraged an older generation to see their own stories as valuable, representing their participation as integral to the formation of digital Britain by encouraging them to share their own experiences online as I'll go on to discuss. Of particular importance here was the way in which the application managed the tension between the real-time of interactive, new media forms and the liveness of television. Whilst the application opens with a representation of veteran's testimony placed within the hypermedia aesthetic of a database (figure 7.4), this screen is quickly replaced by the application's homepage that clearly marshals the choices on offer in relation to television's liveness rather than a remediation the database ontology of computing, as in Chapter 6 (figure 7.5). The viewer can either select one of the three streams on offer, or choose to do nothing from this screen and watch whatever story is indicated by the cursor's current position. The access to each story is therefore managed by a combination of viewer choice and television's liveness: the front page's countdown timer gives the viewer given plenty of time to select which story to watch, as well as indicates to the viewer when stories will commence. As a result, the application avoids inducing the paranoia of the 'what have I just missed now' on the other streams, which requires the complex rationalisation of viewer movement in *Walking with Beasts*. In addition unlike the news and Olympics applications, because the viewer cannot choose to call up this homepage, but is rather returned to it at the end of each looped story, viewers are unlikely to be disorientated by entering a different stream's story "mid-

loop". Thus viewer-flows are rationalised in a way that seeks to replicate the linear experience of television, as the voiceover explains: "you can choose to switch between stories at any time. Or choose to watch all three one after the other". The simplification of choices through the careful management of television's liveness indicates not only, as Goodchild suggests that interactive television 'was rapidly maturing', but also a concern from the BBC to render the encounter with new media's portal experiences as familiar and 'comfortable' as possible (quoted in *New Media Age*, 12/02/04). In turn, interactive television functioned as a portal to engage viewers in a sustained experience with the BBC that, importantly, built confidence in the digital immigrant to go online and share their "valuable" histories.

In terms of this engagement it is significant that neither *D-Day* nor *Dunkirk*, as interactive drama-documentaries, stood alone but were rather part of a season of event programming to commemorate the end of World War Two. As a result, the BBC was able to use interactive television to create a continuity between the programmes, the *People's War* website and, crucially, remind the viewer (and the government) of the BBC's vital role in covering such events. Thus, as I suggested earlier, not only did *Dunkirk* act as a precursor to *D-Day* but was itself preceded by a series of interactive trailers. During trailers for *Dunkirk* viewers were able to press their red button and access a series of short eyewitness testimony extracts. As Goodchild argued, in effect the BBC used 'interactive television to drive the linear TV experience' (Interview conducted on 09/06/05). As a result, the interactive television applications here not only acted as a portal to the website, but in important ways also to the television experience itself.

A similar approach was evident in the way in which the interactive application for *D-Day* preceded the prime-time dramatic reconstruction.

This application was available from the start of the BBC's coverage of D-Day memorial activities, which commenced at nine a.m. earlier that day. In addition to the strategies of authentication and reinforcement evidenced by my discussion of *Dunkirk*'s application above, *D-Day*'s application worked as anticipatory and as a way of engaging viewers in the events and opportunities of the BBC's D-Day coverage. This application consisted of three video streams and two text-based services (figure 7.6), both giving information on the BBC's cross-platform coverage of the events, including the television and radio schedule, details of *The People's War* website and a mobile phone game. Indeed, this latter element arguably addressed a younger audience – the digital natives of Rupert Murdoch's dichotomy – who, in turn, were represented as part of the *D-Day* commemorations by appearing alongside their grandfathers in short segments inter-cut during the BBC's coverage of State ceremonial events. Thus digital immigrants and natives were entwined in 'bringing the past to life' and forging its relevance to building digital Britain. To return to the application itself, a videostreams of highlights from the 2004 commemoration events was included. In addition a 'Veterans Reflect' stream which, like the 'Eyewitness Stories' element of *Dunkirk*'s application, intercut footage from eyewitness testimony interviews with archival footage and promotion of the evening's *D-Day* drama. A final stream, entitled 'On this Hour' worked to provide viewers with updates on how the D-Day campaign progressed over the course of the day, addressing the viewer as if the events were live.

As Goodchild explained, through foregrounding testimony the application was able to 'provide back-stories – like soap opera – detailing how scenes in the drama came about'. This feature, together with the 'on this hour' feature, 'became a thread, enabling the viewer [sic] to navigate the various elements of *D-Day*' and driving them towards the drama-

documentary (Interview conducted on 09/06/05). This has two important implications for my argument here. Firstly, the application exploited the liveness of television to keep viewers engaged with the BBC's coverage of events by offering them a host of material to explore, return to and build from across the day. Secondly, as with *Dunkirk*, testimony became a key organising strategy for managing viewer-flows between application and programme, acting as a key discourse for the way in which the application functioned as a portal to drive people to the website. I want to conclude my discussion of this memorial programming with an examination of how this discourse, linked with traditional window-on-the-world concerns to bring the nation together, facilitated the viewer's journey to participating in the public spaces of the online world. Thus I suggest that the close integration of the application with the aesthetics and discourses of this memorial programming, was integral to the achievement of what Schama argues are part of history programme's attempt to 'surround the viewer ... in a different world', which for *D-Day* and *Dunkirk* included the online spaces of the Internet.

As with *Dunkirk*, *D-Day* gave viewers access to a simple form of new media that was designed as a portal to drive digital immigrants' viewer-flows online. As such its structure continued the BBC's drive towards simplicity, offering limited choices that were clearly structured by television's liveness, such as the 'On This Hour' feature. More importantly, it was through explicitly valuing the experience and testimony of older generations that the viewer was meant to take the confidence from this simplified new media experience and go online – to imagine television's window as a portal to the Internet. Before the drama-documentaries of both events, and over the course of their promotion as well as during the interactive applications themselves, the BBC ran a trailer that pushed the

viewer to become a user on the BBC's online *People's War* website. As with the interactive applications, the promo evinces a concern to encourage the digital immigrant to participate, by representing their experiences of World War Two as a vital part of British history. The screenshots in figure 7.7 depict how, similarly to the attempt at seamless intercutting between archival and reconstruction sources in *Dunkirk*, the promo moves between archival and digital sources: a screengrab of the website embedded within a pin-board of old photos. Over this image, a voice over invites the viewer to participate online and share their experiences:

If you, or someone you know, was at Dunkirk [sic D-Day] in 1940, as military personnel or civilian, we want to capture your stories. Type your experiences straight into the people's war website ... it's easy ... Your memories are part of our history, please share them with us, lest we forget.

This call to action was repeated throughout the *D-Day* application's availability over the course of the day, reminding viewers of the opportunity to be active in the process of building an archive of important histories from World War Two at the end of any stream of content. As such, the invitation to engage and participate online was constantly reinforced by the presence of veterans' testimony, which itself had been turned into a prime-time drama-documentary. Thus by embedding testimony as part of a new media experience and hypermedia aesthetic, the application suggested these experiences and histories were part of digital Britain.

The journey on offer through the interactive application's portal here is not that of entering the diegetic world or cyberspace of the application, but rather is more discursive. The promotional discourses ask the viewer to build from the experience of using interactive television

applications and seeing older generation's testimony represented as valuable (part of a 'national event') to make the imaginative journey to become Internet users: to see the spaces behind the television screen – couched in the familiar terms of the collective experience of the national and the aesthetic tropes of liveness, immediacy and authenticity of television as a window-on-the-world – as analogous to those lying behind the computer screen. In turn, this journey is structured by the safe and comforting experience of the BBC acting as a trusted guide to these new spaces.

It is worth quoting John Willis, BBC Director of Factual and Learning, at some length here as he outlines how *The People's War* website fitted within the BBC's strategy of promoting itself as breaking down the digital divide and facilitating the participation of its audiences in debates about the national.

Our web initiative *The People's War* seized the opportunity created by great TV programmes to inspire older viewers to tell their wartime experiences. This resulted in over 125,000 contributions with 91% of the stories contributed by people over 65. More than that, by harvesting those personal histories online we not only created a unique archive but raised awareness of the web with older people. Over 15,000 people started using the Internet after *The People's War* with a further 75,000 saying they planned to do so (quoted in *Broadcast*, 12/05/06).

In contrast to the user figures here, Jane Roscoe's study of *Big Brother* Internet users suggested that the programme had a core fan base who participated in online activities of just 35,000 (Roscoe, 2004). The impact of the commemoration programming therefore successfully encouraged participation and engagement in a way that wasn't reduced to merely voting out a contestant, but instead addressed a viewership that was particularly neglected by the commercial sector and vulnerable to being left out of 'digital Britain'. As Goodchild argues:

D-Day was ultimate public service. On the television level, we were addressing the nation ... At the interactive television level, we were dealing with the personal and emotional level ... The Internet was ... sort of an archiving process. Here it was about capturing the stories for the future, building (collective) knowledge (Interview conducted 09/06/05).

Goodchild's comments are illustrative of how the BBC used the season of events to drive audiences closer to the programmes, the BBC, and in turn each other as part of 'digital Britain'. As a result, the use of personal testimony as a discourse to structure viewer-flows towards the BBC's online spaces allowed interactive television to act as a portal that at its end point, as Goodchild implicitly suggests, opened out onto to the broad new vistas of digital, online spaces for the digital immigrant rather than simply operating on the level of 'personal and emotional'. The success of participation on the website indicated that interactive television had successfully reimagined television's window as a 'democratic Internet portal that gives everyone equal access' to the spaces of digital Britain (Parks, 2004: 133). Thus, as Peter Preston writing in *The Observer* surveyed, the BBC's coverage of D-Day was 'a set-piece public service broadcasters' festival, stiff upper lips and pre-scripted rhetoric exorcising the last ghosts of Hutton' (06/06/04).

Conclusion: Extending the national

Broadcasting now has a major role – perhaps the critical role – to play in “re-imaging the nation”: not by seeking to re-impose a unity and homogeneity which has long since departed, but by becoming the “theatre” in which [Britain's] cultural diversity is produced, displayed and represented, and the forum in which the terms of its associative life together are negotiated. This ... remains broadcasting's key public cultural role – and one which cannot be sustained unless there is a public service idea and a system shaped in part by public service objectives to sustain it (Stuart Hall, quoted in Born, 2004: 507).

Despite the success of the above applications in extending a re-imagined nation, digital Britain, to the digital immigrant, the stories and opportunities to engage there were arguably addressed to an audience that, until the digital revolution, had long considered themselves to be Britons. The stories told predominantly came from white people of Anglo-Saxon or Celtic origin, with all except one delivered by men. Whilst there are clearly interesting questions of the national to be explored with respect to the history of strained Anglo-Saxon and Anglo-Celtic relations, for my purposes here I am more concerned with the way in which a re-imagined digital Britain is opened up to the diverse multicultural identities of the modern nation.

Who Do You Think You Are?'s approach to national identity is particularly important in relation to the rather closed form of identity one is encouraged to explore being part of digital Britain by the applications for the memorial events discussed above. These applications were addressed to digital immigrants who might have had an involvement in the war itself, treating their memories as precious national commodities. Whilst it would be unfair to characterise this address as exclusive of other identities, the centrality of commemorating past events is worth dwelling on here. The BBC's promo, discussed above, for viewers to share their memories ends poignantly, as the laconic jazz soundtrack drops away and the voiceover pauses dramatically to deliver the line "Lest we forget". Discussing the importance of such memorial events in the context of attempts to build a multicultural Australian national identity, Daniel Nourry argues:

Anzac Day, through the call "Lest We Forget", (re)inscribes the conditions of possibility of a hegemonic notion of Australian identity into future generations, through a call that defines as *ethical* and *authentic* only positive and uncritical relations to the logic of this interpretation *and* the 'ideal' subject it produces as the historical basis (truth) of this

interpretation: the Anzac [original emphasis] (Nourry, 2005: 373).

Nourry's persuasive argument that such acts of remembrance call up a hegemonic notion of national identity is arguably replicated by not only the call to action here, but also the privileging of eyewitness testimony as *the* authenticating strategy of both event's histories. As James Chapman suggests, over-reliance on testimony is problematic. Discussing the production of the landmark series *The World at War*, he details how there was an acute awareness that 'over a quarter of a century after the events, people's memories may prove fallible' (2001: 137). Furthermore, he suggests that testimony has a tendency to reduce history to the level of anecdote going on to argue that it is 'not the stuff of history'. For Chapman testimony, rather than being the guarantor of reconstruction's authenticity and truth, always serves the purposes of the drama. Whilst I do not want to go as far as Chapman's claims about the reliability of testimony, it is important to note that in both *Dunkirk* and *D-Day* testimony is privileged as the guarantor of the reconstruction's authenticity. In turn, the "Lest we Forget" call to action inscribes the participation of similar war stories (recalling that the *People's War* website is arranged around events in the war, rather than any expansive account of that historical epoch, such as migration) as the authentic truth of British history.

As a result, I want to conclude the chapter by looking at *Who Do You Think You Are?*. Whilst the programme's status as a celebrity-led genealogy investigation worked to continue the BBC's interest in extending digital Britain to the digital immigrant through the interest in genealogy of older generations, it also looked to incorporate an approach that recognised a more diverse nation. As BBC2's biggest ratings success of 2004, gathering an average audience of over 5 million people, *Who Do You*

Think You Are? thus exemplifies the BBC's attempts to 'reflect the diversity of the country' and 'foster a sense of belonging and encourage participation' amongst a plural conception of British identities (BBC, 2004: 36). The series predominantly follows British television personalities as they trace their individual family tree and figures these genealogical excavations into broader histories of Britain and British national identity, engaging with a more encompassing notion of each. This is underlined by the selection of television personalities for the series, with the first season including portraits of more complex British identities, such as David Baddiel (British-Jewish) and Moira Stewart (British-Afro-Caribbean), alongside more "traditional" notions of British identity, such as Jeremy Clarkson's white Anglo-Saxon background of industrial prosperity. As the BBC's publicity for the series suggested, the series would attempt to define a national extended to the viewer's own personal histories:

The ancestors of these well-known faces were part of the warp and weft of the fabric of Britain's social history, just as the ancestors of everyone had their part to play (BBC Press Office release, 24/09/04).

In its address to a wider audience, the television personality's history becomes a paradigm through which to explore other issues of British history, creating the sense that British identity is constituted by a variety of experiences. In doing so the series asks the audience to interpolate their own identity-position, no matter how racially, historically, ethnically or otherwise complex into an expanded notion of British national identity.

Similarly to the 'Eyewitness Stories' application discussed above in relation to *Dunkirk*, *Who Do You Think You Are?*'s application was made available at the end of the programme. As such it followed on from a brief segment at the programme's conclusion that, coming after the individual celebrity's excavation of their own genealogy, featured a brief chat

between presenter Adrian Chiles and genealogist Nick Barrett that provided an insight into how some of the research had been achieved. Chiles would then invite the audience to press the red-button to join him and Nick for more information on genealogy research, BBC events and 'Digital Stories'. Whilst the first two of these elements is generally addressed to the digital immigrant, as connoted by Chiles' presence in the interactive application itself – welcoming viewers, instructing them how to navigate the menu and providing a reassuring presence – 'Digital Stories' provided the opportunity to address a more diverse notion of British identity. This feature consisted of two different video stories each week compiled by "twenty members of the British public", as Chiles introduces them, on their family history. These personal stories allowed viewers to understand their own testimony and history as valuable in constructing the meaning of British-ness. However, the application extended its address beyond those to the veterans of World War Two evident in *D-Day* and *Dunkirk* by providing stories from participants who were diverse in terms of age, ethnicity, gender and race⁶³.

Whilst I don't want to comment extensively on the individual stories told across the application's twenty contributions, it is worth briefly considering how they promote an engagement amongst viewers to consider their own family history as important. Nick Henry's story and opening address to the viewer is illustrative here. Telling the story of a deep family secret about a concealed first marriage of his grandmother and illegitimate child, Nick suggests that "ordinary people's family history is just as fascinating as Kings' and Queens' family history. Sometimes even more

⁶³ Such an address is also apparent in the BBC's interactive application for its coverage of the European 2004 Football Tournament. This allowed viewers to text in their comments on the game, share their emotions and respond to one another. Thus in one exchange, Trev from Bedford declares 'Portugal are going down, just like my pint!' to which Ailes in Glasgow responds 'C'mon Portugal, show 'em how a team works'.

so I think". Whilst Nick's story is one of a white Anglo-Saxon family, told by a middle-age white man, his unearthing of a family trauma is recuperated into a process of learning about himself and his relationship with his father, in turn helping him to "continue [his] own journey". The inclusion of such a story is suggestive of the way in which the application works to reassure the viewer that excavating troubling information in a family past need not be a negative experience in understanding one's own life. Similarly, the story of a British-Asian woman describes her relationship with her Indian origins as a discovery: "Until recently it was a culture I knew little about. Now I have lived in India, I am proud to be that little bit Indian". Her story takes her British identity as central, with the genealogical excavation of her immigrant ancestry an extension of her identity. Thus the 'Digital Stories' feature included stories from members of the British public that had more complex relationships to their Britishness through immigrant histories.

To a degree this might suggest a co-opting of multicultural identities in a way that suggests a continued hegemonic representation of Britishness, whereby national identity is to be thankfully and gratefully accepted by "the Other". As Ghassan Hage argues in relation to Australian national identity, such an extension of national identity is only to mask the power of the dominant under the rhetoric of 'good multiculturalism/nationalism' enlisted against the 'evil nationalism' of homogeneity, exclusion and racism (Hage, 1998). Undoubtedly *Who Do You Think You Are?* might fall under such criticism, however by representing participation of different identities as an important part of digital Britain the programme does open up a space for different identities to come together and debate their place within the national. Indeed, it is important to note that all the stories are told with a home cinema aesthetic, which encourages the viewer to understand the

process as one they could do themselves. This is reinforced by the presence of Aiden Chiles, who reappears on a loop between stories to guide viewers to other areas of the application, familiarising the spaces of the application through the immediate and intimate tropes of direct aural and visual address. At the end of 'Digital Stories', Chiles suggests "If that inspired you to get started, you might care to take a look at Nick Barrett's how to guide" or "go online and look at our website ...". Similarly, Barrett's guide directed viewers to the web for more information on how to trace viewer's own family history. As such, the application again acted as a portal to structure viewer-flows towards participation on the web⁶⁴. After three series of the programme, only the first of which was accompanied by the interactive application⁶⁵, 100,000 messages had been posted on the associated *Family History* website. These range from simple tips as to how to better do one's research into family history, through to the sharing of experiences unearthed in the process that others relate to, sympathise with and comment on. In addition to the message boards, the site contains a searchable archive of pictures posted by users, allowing individuals to connect with one another through undiscovered shared histories (for example, a user searches for a particular family surname and discovers another user's posted photo). The participation here is akin to Piere Levy's conception of a *multilogue* (1998: 65), engaging users in dialogue with each other and representations the BBC offers of the national, negotiating their experiences as a shared situation of digital Britain.

To return to John Street's work on the forms of participation enabled by new media technologies, it is clear that the applications

⁶⁴ The *Family History* website contained links to external sites, rather than simply the BBC's own content, which evidence the public service obligations of second shift practices online genealogical research as well as message boards and a reinforcement of the 'How To' information from Nick Barrett.

⁶⁵ As I discuss in the thesis conclusion, the increasing penetration of broadband has moved much content previously made available through interactive television to online spaces).

developed by the BBC in 2004 work towards positioning it at the centre of digital Britain. The applications for *Dunkirk* and *D-Day* speak to different communities of interest to those heralded by *Who Do You Think You Are?*, but all invite viewers to see themselves as not only part of the national, but as participating in its formation under the umbrella of the BBC. As promised in *Building Public Value*, the BBC's use of new media and interactive applications will seek to open up 'not just individual consumer pathways', but new civic spaces akin to 'town squares and public places where we can share experiences and learn from each other' (2005: 24). As Buzzard suggests, such a conception conforms to the fantasy of new media's portal structures, which 'occupy ... the coveted promised land ... Some see these portals as the new shopping malls, town centres and news hubs all rolled into one' (2003: 205). However, for the BBC the second shift practices of herding viewer-flows here use interactive television as a portal to send people to the web not just as a means of aggregating and rationalising viewer mobility. Instead, by using discourse that represents everyone's testimony and history as a valuable part of British identity, they 'reimagine the television screen as a democratic Internet portal'. However, in addressing the digital immigrant, this interestingly does so in a way that doesn't just simply recall the traditional position of television as a window-on-the-world, but actively appropriates it. Thus in these applications it is television's status as a portal that opens out on to broad vistas of digital spaces for the purposes of negotiating the viewers' journey from private spaces to participation in the public spaces of the national.

Across the content of these applications, television's window is not only re-imagined as a portal, but does so in a way that responds to Stuart Hall's call for a re-imagination of the nation as a forum of negotiation, where Britain's 'cultural diversity is produced, displayed and represented'.

The notion of a forum returns us to the way in which interactive television functions as a portal to spaces that fulfil a Habermassian notion of the public sphere. Such a conception is evident in the way these applications are marshalled under the measure of impact set out in *Building Public Value*. As Mark Thompson set out in 2006, this involves going ‘beyond immediate audience data to gauge the wider effects of our output – in terms of public response and participation, educational outcomes and critical reactions’. In particular, the BBC’s role here is stimulate ‘new ways ... of deliberative dialogue with the public’ (speech 11/10/06). Arguably the interactive applications discussed here, particularly through their position as a portal to the web, allowed for viewers and users to engage in dialogue with one another, the BBC and with what it means to be British in the digital age. Whilst they are open to Murdock’s charge that new media forms of democratic participation are insufficiently conclusive, their value in securing the BBC’s position as the place where audiences, viewers and users come together to debate and deliberate on the national is invaluable. In particular, their public service value lies in their ability to respond to the conditions of the new digital landscape that, as Harrison and Wessels suggest, provides the opportunity for ‘new forms of pluralism and diversity of participation and representation that facilitate audience engagement’ (2005: 850). Thus, as Mark Thompson noted, by 2004 interactive television had ‘come of age’, not simply through its increasingly *de rigueur* status in production strategies (quoted in *The Guardian* 08/09/04), but also through the way in which their portal function has become increasingly inscribed within the televisual experience.

Appendix of images for Chapter 7

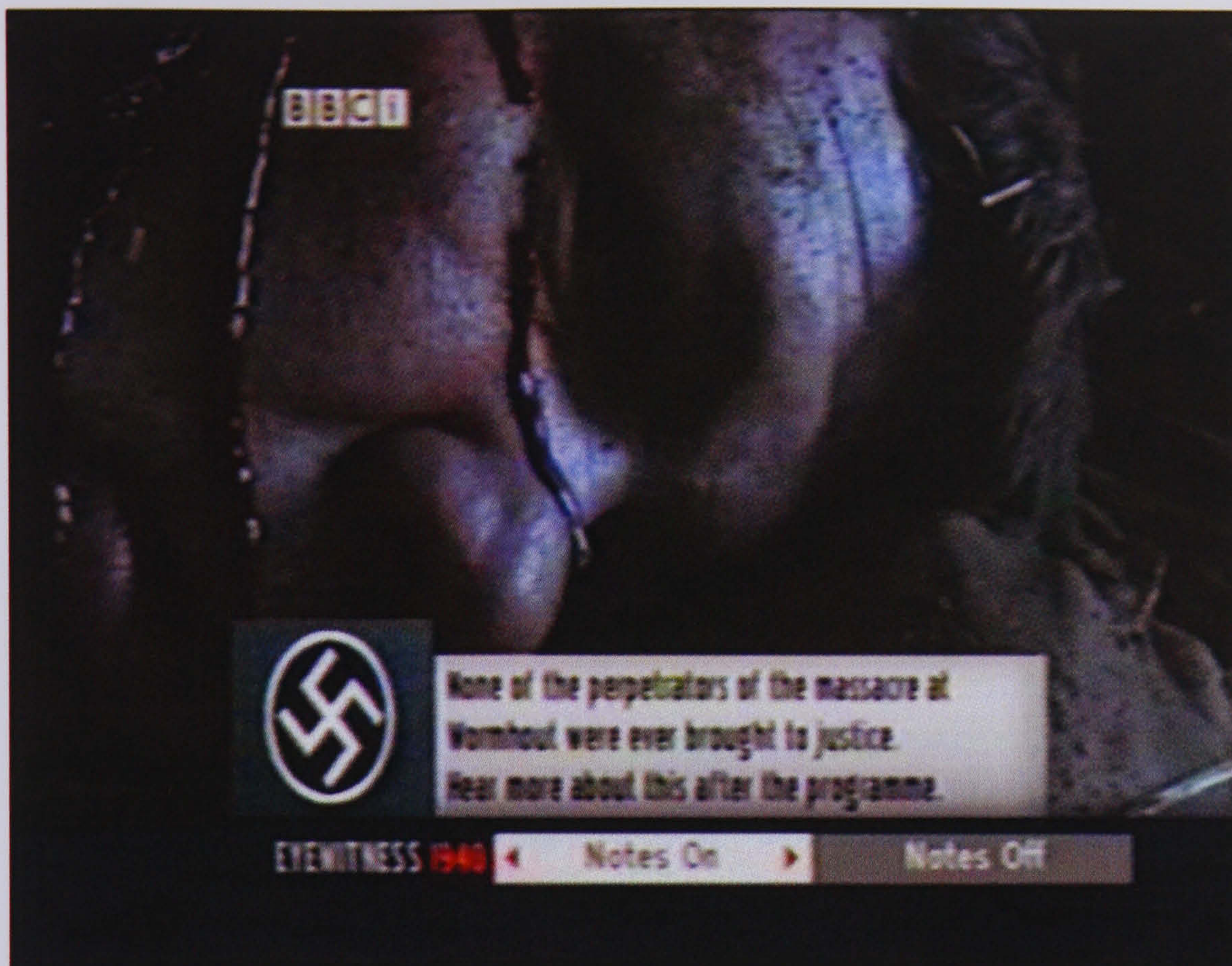


Figure 7.1 Eyewitness Notes as strategy of authentication in *Dunkirk*

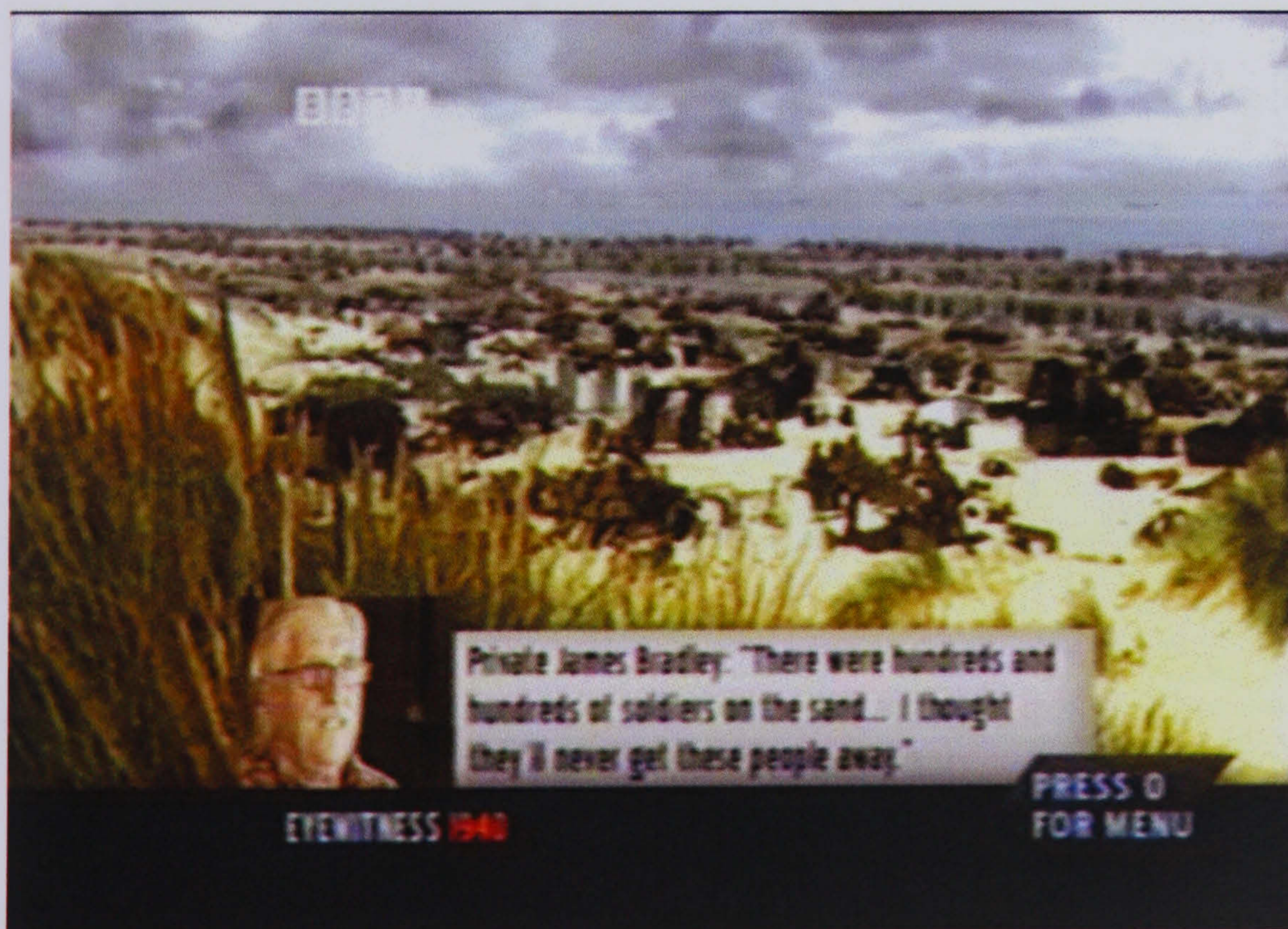


Figure 7.2 *Dunkirk*'s interactive application's text box authenticated the use of CGI, which as discussed in Chapter 5, might otherwise work as a form of stupefying spectacle.



Figure 7.3 frame 1



Figure 7.3 Frame 2



Figure 7.3 Frame 3

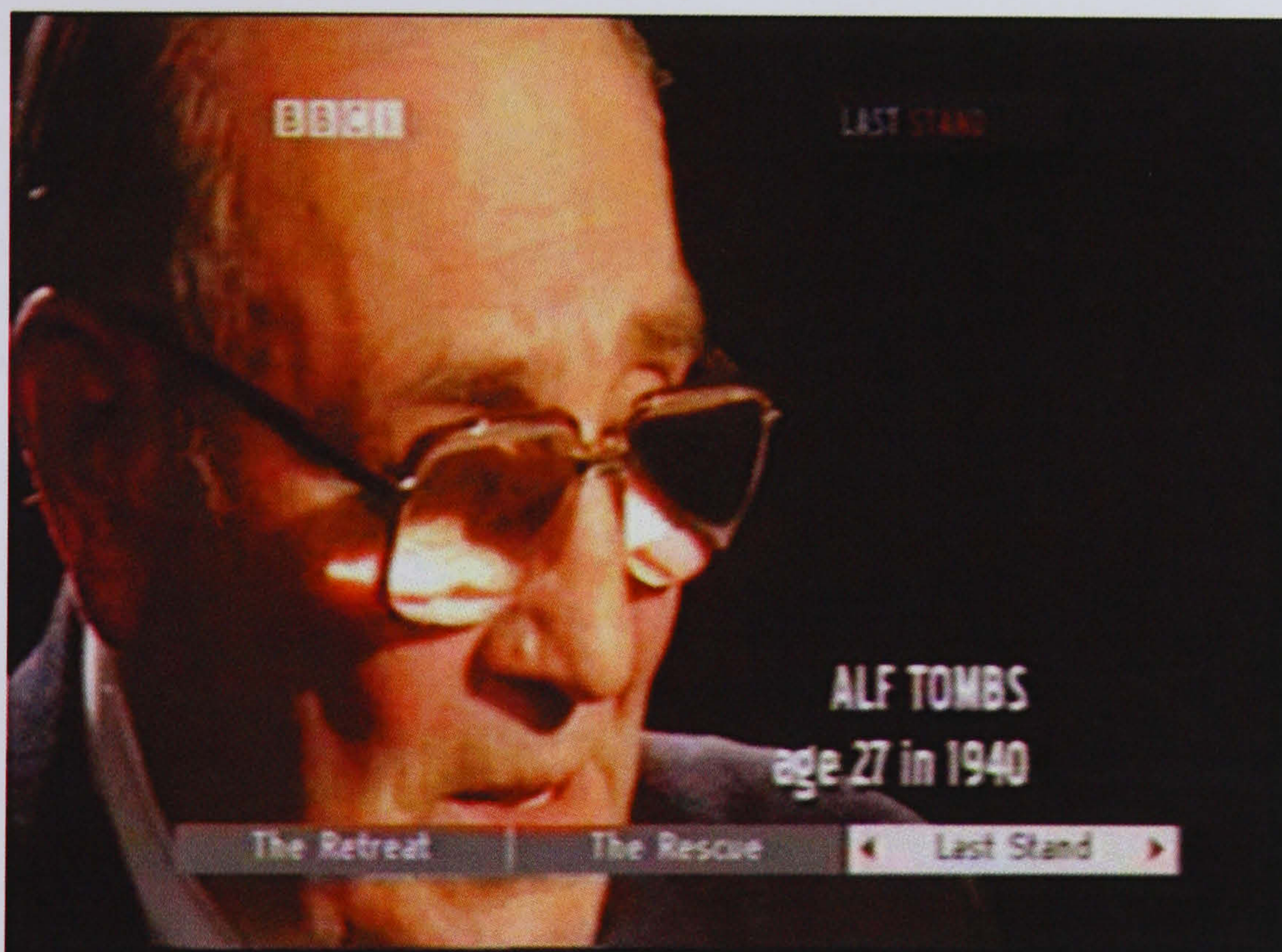


Figure 7.3 Frame 4

Figure 7.3 The use of different settings and lighting sets Alf Tombs' testimony apart in *Dunkirk's* 'Eyewitness Stories' application, allowing the sequence to build in emotional intensity. Thus the sequence moves from the domestic settings in frames 1 and 2, where memorabilia and natural light provide comfortable environs, to the scene of the present-day location in frame 3, and finally Tombs' studio-lit setting in frame 4, surround the veterans.

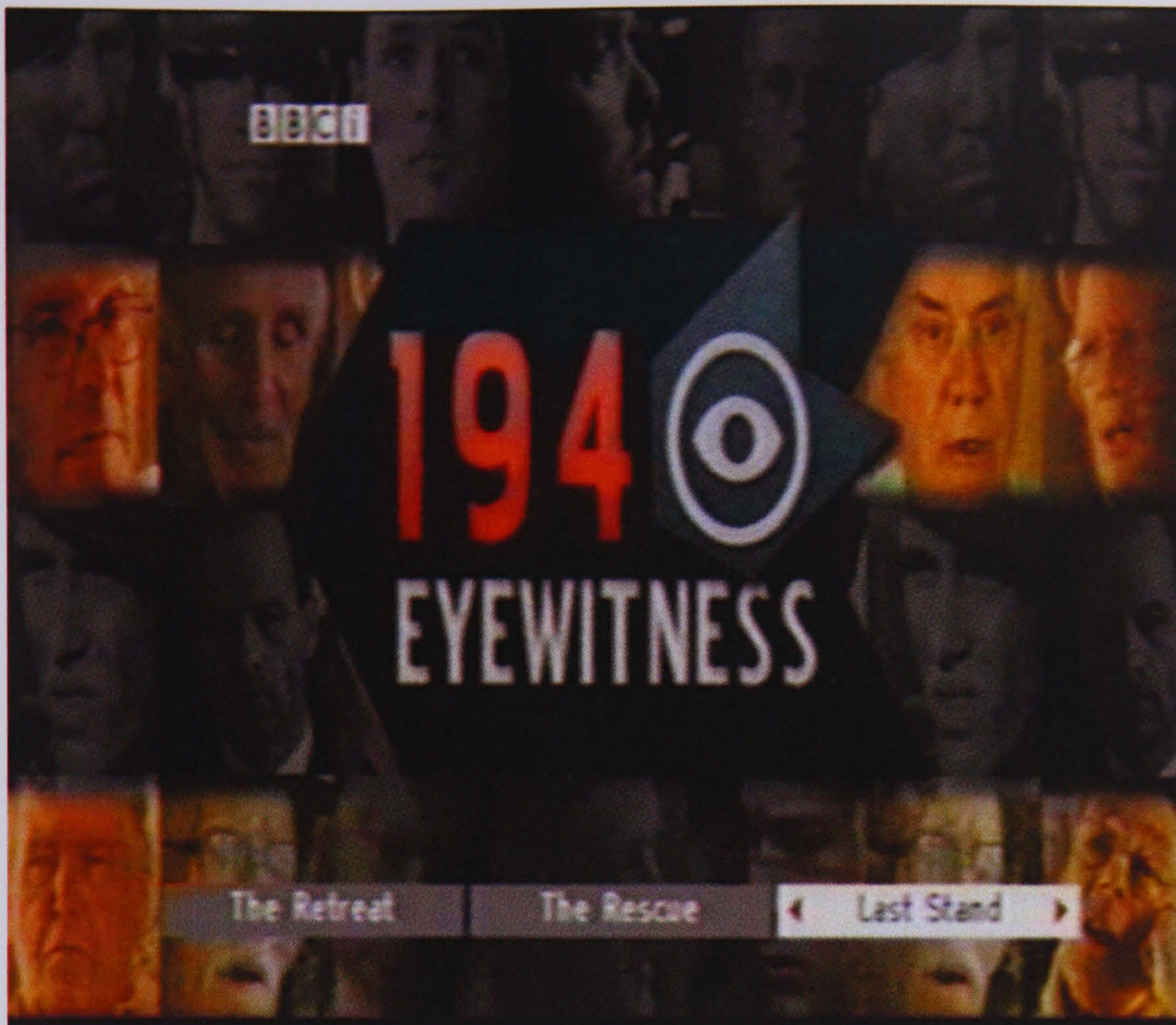


Figure 7.4 Veteran's faces appear in a hypermediated database aesthetic in the first page of *Dunkirk*'s 'Eyewitness Stories' application. However, the menu bar at the bottom of the screen and the application's homepage (figure 7.5) simplify the choices on offer and recuperate the new media practices of 'interactivity' into the more familiar linear broadcast experience.



Figure 7.5 *Dunkirk*'s 'Eyewitness Stories' homepage remains explanatory and, via the large countdown timer in the top left of screen, inscribed within television's liveness.

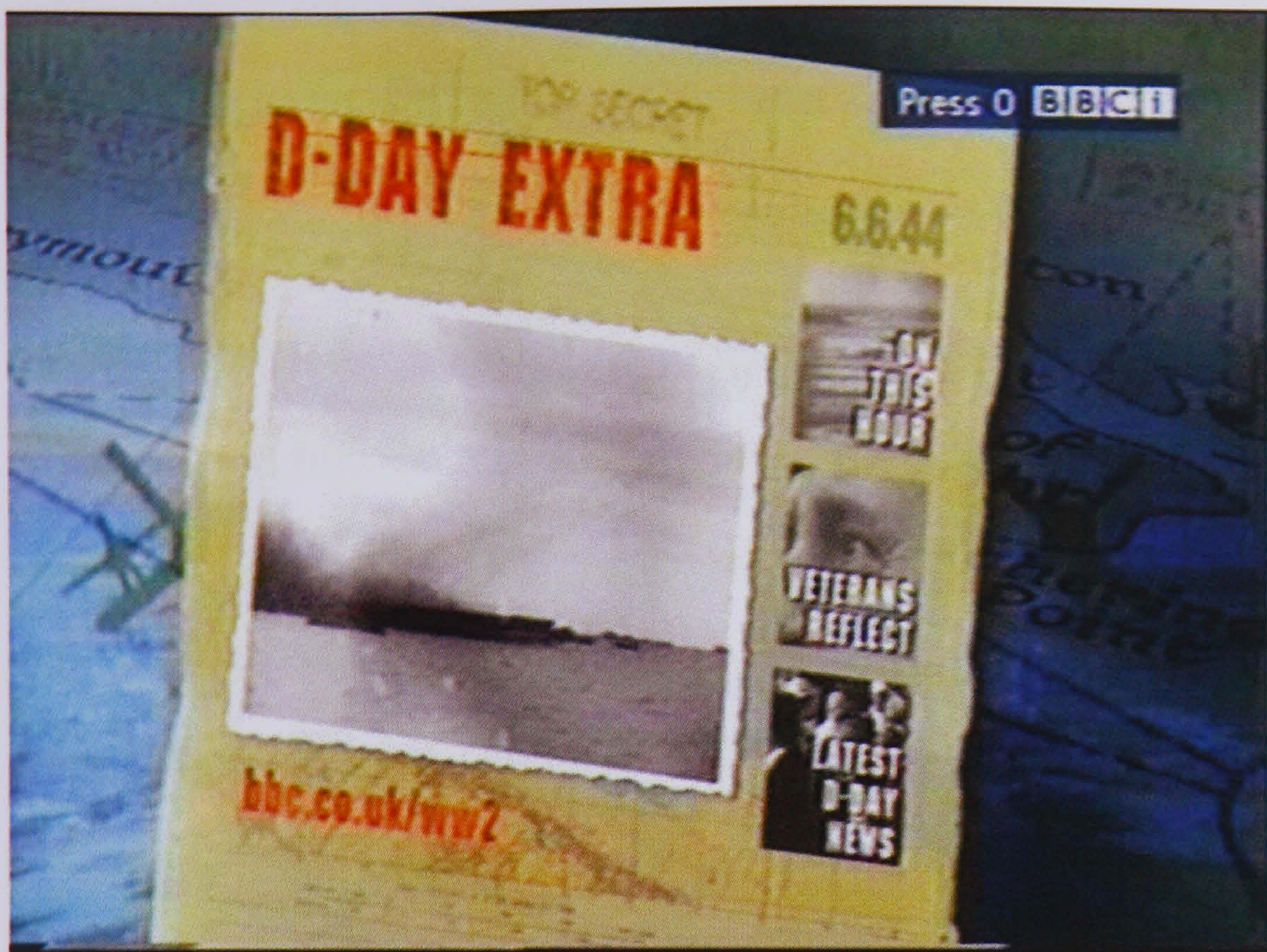


Figure 7.6 *D-Day's* application worked as anticipatory by featuring an 'On this Hour' videostream and back-stories to central characters in that night's drama.



Figure 7.7 The BBC's promotion for the *Peoples' War* website, which embeds a representation of the website within a montage of photos that appear as if on a note board.

Conclusion: Interactive television, the BBC and the period of excess

Through an examination of interactive television I have demonstrated how textual analysis can help us understand both the place of the BBC and its fulfilment of public service obligations in the digital television landscape. Furthermore, such an approach has enabled a consideration of interactive applications as an example of television's new formations in the period of excess, which figures these within longer histories of, and discourses about, television's cultural form. In so doing, I have elucidated a key dialectic between understandings of television as a window-on-the-world and its positioning as a portal that interactive television, as one site of television's changing formation, explicates. This dialectic places television's form at the boundaries of debates and theories about old and new media. One of the thesis' major concerns therefore, has been to engage with how theory from both these academic disciplines can illuminate our understandings of the changing text of television studies. I have therefore proposed a number of emergent textualities, which have uncovered a complex relationship between the BBC's public service obligations, its use of interactive applications to fulfil these and the corporation's relevancy in the post-broadcast age. By way of conclusion, I shall summarise my key findings and suggest some implications for future work.

To greater or lesser degrees the applications under discussion in the thesis have demonstrated the continuation of window-on-the-world discourses across television's history, from television's initial inception into everyday life during the period of scarcity, through to digital television's inception into daily life at the start of a new era of excess. I have argued

that these discourses have often been entwined with the tactics through which interactive television has been familiarised, organised, rationalised and differentiated from broadcast forms of television. In turn, this new post-broadcast era of excess has seen a rise in the prominence of discourses that connect interactive television to new media portal practices. However, in doing so I have been careful to maintain that television's longer histories and discourses are constantly recalled and re-circulated. As such, whilst both window and portal are pivotal in framing the world the audience and viewer perceives, I have suggested it is the latter which now acts as a further constraint on the imaginative journey that (interactive) television invites us to take: rationalising the viewer-flows of interactive TV. As I suggested in Chapter 4 and 5, the mobility promised by not only television but also antecedent technologies of visual display – including the cinema and the museum – has been re-cast in the terms of the portal of twenty-first century new media by interactive television. In demonstrating the persistence of such historical concerns I have argued that television's digitalisation is not a radical break from its analogue past, but requires us to understand new forms of television practices that are emerging, such as interactive television, as intimately related to institutionally, historically and generically specific debates.

Beyond the now rather familiar declaration that what is new about new media is not that new at all, I have argued that textual analysis of these interactive applications provides a particularly useful methodology for understanding the shifts and continuities in television's digital form in relation to a number of key debates in television studies. Whilst my primary concern has been with the way in which we can analyse the text and understand the public service value of interactive applications through the second shift practices of the BBC, I have also pointed to the way in

which interactive television's place within the everyday milieu of the televisual has been constructed along gender lines. Thus whilst the mobility on offer through interactive television is always structured and rationalised by portal practices that delimit the choices on offer, this often occurs in such a way that female viewers' mobility is restricted to a negatively valued domestic mise-en-scène. Furthermore, the owner of the remote control dictates the actual process of using interactive applications. Whilst Ann Gray's (1992) and David Morley's (1994) work is suggestive of how use of such applications might be structured by the gendering of technologies, the convergence of digital television with other media forms and the multiple opportunities and personalised journeys on offer through these suggests more complex relationships might be arising. This is work that Helen Wood's study of audiences has pursued in *Interacting with Television* and I hope that my work here will contribute a useful textual counterpoint to further work in this area (Wood, forthcoming).

Fundamentally, the thesis has suggested that the relationship between the text of interactive television and the industrial strategies and regulatory obligations of the BBC has proved fecund ground within which to investigate the role of public service broadcasting in television's post-broadcast era. Chapters 5, 6 and 7 propose a number of different understandings of the role and textuality of the BBC's interactive applications, which pay attention to the generic, industrial and institutionally specific contexts within which they were transmitted. However, the value of these textualities is not tied to the extent of the generically specific conclusions reached in each chapter. In particular, whilst each set of texts promoted a form of mobility, each constructed this mobility through a portal that rationalised and regulated viewer-flows. That this occurred through the promotion of choice, its subsequent

structuring and the resultant personalisation of the text was of specific concern for my interest in understanding the texts and public service value of interactive television. This is worth dwelling on here for the way in which it elucidates the conclusions of this study and points to its use for future scholarship.

As Lord Birt articulated in his 2005 McTaggart speech to the British television industry, ‘the awesome challenge for the next generation of ... public service broadcasting will be to maintain universality amidst fragmentation ... to reach out to every kind of individual [and] ... offer an increasingly personalised viewing experience’. Birt’s speech identifies a tension that I have linked to the broad vistas of television’s long-held position as a window-on-the-world, and the role of public service broadcasting in securing these, and its escalating personalisation as a portal. This tension is not simply articulated by the interactive applications I have discussed here, but is both evident in and complicated by wider programming and portal strategies. A short example will explicate how further work in this area is required. In 2003 the BBC launched BBC3, a niche channel targeted at the 20-35 year old demographic. Pivotal to the government’s acquiescence to this new channel was the inclusion of a news service, which was to make BBC3 distinct from the multifarious commercial offerings targeted at this lucrative group. This news service originally consisted of a nightly half hour bulletin and 60-second “bite-size” hourly intermissions. However, the BBC successfully argued that the nightly bulletin’s low audience ratings did not justify the financial cost of the service in terms of its general public service remit. I suggested in Chapter 6 that the privileging of choice within the individual textual form of fragment left the viewer responsible for selecting the day’s news and was therefore want to leave viewers with a potentially unbalanced

experience of the news or, worse still, its reduction to a simple sound-bite. However, the promotion of a raft of channels as a way of facilitating individual choice has precisely left BBC3 audiences with this outcome – the news has been reduced to a 60 second sound-bite on the basis that audiences weren't using the more extended experience of the hourly news text. As the ability to track viewers' use, surfing and interacting preferences becomes an increasingly dominant part of the way portals structure viewer-flows⁶⁶, this begs the question as to what will happen to those nodes of the interactive news' fragmented database form that do not garner the requisite viewer use.

This example evidences both how fragmentation works at the level of text and audience to complicate the position of the BBC as a public service broadcaster, as well as how further research is needed into the developing portal strategies that track, monitor and filter our use of such services. Indeed it is pertinent that this example pays attention to how the BBC tries to cater for a younger audience within its universal remit and endeavour to ensure its relevancy in building digital Britain. Whilst Chapter 7 examined how the BBC attempted to use interactive television as a portal to drive digital immigrants online as a group identified as vulnerable to being left behind by the process of digital switchover, this younger audience is vulnerable to the BBC in another way. Namely, to recall the under-cutting of the scarcity argument for public service broadcasting I elucidated in Chapter 1, younger generations are vulnerable to being lost by the BBC as they may not see the value of the licence-fee in an era of excess that offers such a plethora of choice. The government and the *Barwise Report* worried over the BBC's impact on the commercial sector by

⁶⁶ William Uricchio's excellent article on the importance of filtering and tracking technologies explores these issues further (2004).

targeting this demographic through various services, such as BBC3 through to BBCJam. Equally however, the BBC have worried that without securing this group's allegiance the corporation's ability to sustain its publicly funded status in an era of excess will come under ever-more threat as this demographic become the licence-fee payers of the future. This issue represents a key battleground for how the BBC ensures its relevancy to digital Britain. More work that takes public service broadcasting's role as cultural, rather than simply a matter of plugging the gaps of market-failure – being simply another *choice* in the digital marketplace – is needed to counter economic-driven analyses such as Barwise's (c.f. Cox, 2004; Collins, 1993, 2002, 2006).

The relationship between the textualities I have proposed here suggests that to ensure the corporation's relevancy in the digital landscape, the overarching second shift concern for the BBC's public service role must be, as articulated in *Building Public Value* and government *White Paper*, to act as a trusted guide to the spaces, choices, opportunities and challenges of television's amplified convergence with other digital media. That is, how the BBC structures its overall brand as a portal to demand the Corporation's relevancy in the post-broadcast era. However, this is not to suggest that the BBC's portal should operate in a manner analogous to a commercial portal, opening out only to its own proprietary content or that of its content affiliates⁶⁷. As television's texts, production practices and audiences become increasingly convergent with other digital media, particularly the Internet, how we evaluate the BBC's portal will be intimately linked to how this functions as a gateway for both audiences and producers alike: that is, how

⁶⁷ The BBC may become increasingly pressured to give priority to 'content affiliates' as it is driven towards partnerships in its bid to find alternative revenue sources to the licence fee, such as its production partnership with Discovery and its content sharing agreement with Google/YouTube

it connects audiences/viewers/users with each other, the BBC and independent producers.

As Mark Thompson suggested in 2006, 'the broadcasting space, the digital media space, is public space – a part of the public realm just as much as our city and town squares'. This involves, as Thompson went on to argue, fostering a space that 'goes beyond private supply and demand and which is directed at wider societal goals. Supporting democratic engagement, culture, education, understanding between communities and between Britain and the world' (Smith Institute Media Lecture, 11/10/06). Thompson's speech again calls up the dialectic between television's window-on-the-world – offering us access to these new spaces – and portal – how our choices, movement and interactions are then structured to fulfil societal goals. My case studies here have focused primarily on how the spaces of interactive television are structured to meet such goals, touching on their relationship with online spaces in Chapter 7. Much more work is needed on how these spaces and their interrelationship with television are structured, how viewers get there, what access they have to each other, independent producers and important social debates once they get there. Whilst such work can, and should, take the form of ethnographic studies, the study of these spaces and the BBC's role can also usefully draw on the second shift approach to public service broadcasting's looser texts that I have articulated here.

However, it is important to recognise that within my study these second shift strategies have remained rather medium-specific, structuring the viewer-flows of interactive television. In contrast, the above discussion points to television's increased convergence with other technologies. The rising penetration of broadband, coupled with the growing delivery of Internet protocol television – such as BT's soon to be launched Vision

service and Virgin's and BSkyB's bundling of mobile, broadband and television services – progressively directs our attention to television's relationship with online spaces. Thus, whilst interactive television has become increasingly an everyday feature of the digital television landscape, in that it has become unremarkable (c.f. Gunning, 2004), investment in the platform has decreased as companies look to exploit new web-television synergies, leaving only the BBC and Sky as the major exponents of interactive applications. Of course, this in and of itself is a battle worth paying close attention to, as I suggested in section 1 these two “800lb gorillas” have dominated the UK's digital television landscape.

Nevertheless, the attention to these new forms of convergence television is only appropriate and a growing body of work has emerged over the course of writing the thesis that engages with such cross-media practices as unbundling (Dawson, 2007), bundling (Strange, 2007), viral marketing (Caldwell, 2005), branding (Johnson, 2007), flexible-microcasting (Parks, 2004), and filtering (Uricchio, 2004).

The emergence of this body of work has provided fruitful material with which to engage. However, it has remained somewhat disappointing that the majority of this work focuses on American television, in particular treating “American Quality Drama” as a priori grounds for engaging with what television means in the digital landscape (c.f. Boddy, et. al, 2005; Creeber, et. al, 2007). My work on the UK's interactive television therefore not only contributes to this work, but provides a corrective to its American-bias in focusing on two under-developed areas of research: interactive television, and its relationship to the BBC's place in the period of excess. To a degree, it is unsurprising to find interactive television's position somewhat relegated to a subsidiary concern in both academic and production circles. Drawing on John Ellis and others in section 1 (2000), I

noted that there was a large degree of uncertainty apparent in both the industry and television studies itself as to what television and its texts would be in the era of excess. For my purposes, given the litany of failed interactive TV start-up ventures I noted in Chapter 4, this uncertainty included a question mark as to whether a corpus of texts would develop in any meaningful way at all. As I have demonstrated, the relative success of interactive television in becoming part of the certain object of study that is digital television, owes largely to the re-circulation of window-on-the-world discourses. Thus whilst the textualities of interactive television might be considered the “first iterations” of the BBC’s programming strategies in a post-broadcast era, my tracing of these discourses is suggestive of the way in which this thesis contributes to the prepared-ness of the field to study the shifting parameters of television. As John Caldwell suggests, in the digital landgrab for theorising emergent technologies, textualities and practices, we must develop historically and contextually grounded theorisations, which ensure that as new technologies change, our critical capacity to engage with them is not similarly ‘rendered to its own ash heap of past trends’ (Caldwell, 2000: 3).

Furthermore, whilst analysing these first iterations of post-broadcast television provides a fruitful foundation for further analysis on subsequent iterations, it also ensures that we do not simply sit on our hands, to wait and see what happens – hopefully producing a more ‘correct’ account of the medium at a latter date. As Anna Everett argues, such an approach is problematic because of what is at stake for academic disciplines such as television studies: that is, a risk that a

continued failure by cinema... and television scholars to keep current with and, preferably, take the lead [in analyses and debates about new media formations]... will result in [the fields] repositioning from avant-garde to rear-guard formation ... [As a result,] the field’s

relegation to the margins of the ascendant information economy [would] be assured (2003: 5).

Everett's caution suggests the need to continually engage with emergent forms of media practice in order to ensure our seat at the table for debates about the information economy. This thesis has attempted to ensure not only the relevancy of television studies to these debates, but also a historical and cultural approach to understanding public service broadcasting's role in this emergent digital landscape. I hope that future work will explore how such an approach can reveal other historical trajectories than the one between window-on-the-world and portal I have elucidated here and, in turn, account for newly emergent textualities that position the BBC's role in cultural terms.

Bibliography

A

Aarseth, E. (1994). 'Non Linearity and Literary Theory', in G. Landow (ed.) *Hyper/Text/Theory*. Baltimore & London: John Hopkins University Press, pp. 51-86.

Allen, J. (1983). 'The Social Matrix of Television: Invention in the United States', in E. A. Kaplan (ed.) *Regarding Television: Critical Approaches – An Anthology*. Chicago: University Publications of America, pp. 109-19.

(1992). 'Review Essay: Struggling for the Ground of Television: Political Economy and Cultural Studies', *Quarterly Review of Film and Video*, vol. 14(1-2), pp. 179-96.

Allen, Robert. (1994). *To be Continued ...: Soap Opera Around the World*. London: Routledge.

Allen, Richard. (1998). 'This is not Television ...', in J. Steemers (ed.) *Changing Channels: The Prospects of Television in a Digital World*. Luton: John Libbey Media, pp. 60-72.

Altman, R. (1986). 'Television/Sound', in T. Modleski (ed.) *Studies in Entertainment: Critical Approaches to Mass Culture*. Bloomington & Indianapolis: Indiana University Press, pp. 39-54.

Ang, I. (1996). *Living Room Wars: Rethinking Media Audience for a Postmodern World*. London & New York: Routledge.

Arata, L. O. (2004). 'Reflections on Interactivity', in D. Thorburn & H. Jenkins. (eds.) *Rethinking Media Change: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press, pp. 217-25.

Auge, M. (1995). *Non-Spaces: Introduction to an Anthropology of Supermodernity*. (Trans. J. Howe). London: Verso.

Auslander, P. (1999). *Liveness*. London & New York: Routledge.

B

Balnaves, M. & Varan, D. (2002). 'Beyond Exposure: Interactive Television and The New Media Currency', *Media International Australia*, vol. 105, pp. 95-104.

Barnett, S. (2006). 'The BBC and Digital Switchover', paper given at *Digital Switchover Conference*, City University London, 16/05/06.

Barnett, S. & Docherty, D. (1986). 'The Peacock Debate in the UK', *Screen*, vol. 27(1) ('Crisis in British Broadcasting' Special Issue), pp. 24-7.

- Barthes, R. (1975). *S/Z*. London: Cape.
- Barwise, P. (2004). *Independent Review of the BBC's Digital Television Services*. London: HMSO.
- Baudrillard, J. (1977). 'Rhetoric of the Image', in S. Heath (ed.) *Image, Music, Text*. (Heath, S. Trans.). New York: Hill and Wang, pp. 32-44.
- (1983). 'The ecstasy of communication', in Foster, H. (ed.) *The Anti-Aesthetic: Essays on Postmodern Culture*. (J. Johnston Trans.). London: Pluto Press, pp. 126-34.
- (1991). *The Gulf War did not Take Place*. (P. Patton Trans.). Indianapolis: Indiana University Press.
- BBC. (1991). *Producer Choice*. London: BBC.
- (1992). *Extending Choice in the Digital Age: The BBC's Role in the New Broadcasting Age*. London: BBC.
- (2004). *Building Public Value*. London: BBC.
- (2005a). *Statement of Programming Policy 2005-06*. London: BBC.
- (2005b). *BBCi Brand Guidelines*. London: BBC.
- (2006a). *Statement of Programming Policy 2006-07*. London: BBC.
- (2006b). *Creative Futures*. London: BBC.
- Bell, E. (2003). 'BBC's Limits Still Set by Sky News', *The Guardian*, 1/12/03, <http://media.guardian.co.uk/mediaguardian/story/0,7558,1096630,00.html> site accessed 21/04/04.
- Bennett, Jana (2004). 'Red Button Revolution – Power to the People', speech given *MIPTV and Milia Conference*, 30/03/04.
- Bennett, James (2006). 'The Public Service Value of Interactive Television', *New Review of Film and Television Studies*, vol. 4(3), pp. 263-285.
- (2008). 'The television personality after film theory', *Screen*, forthcoming.
- Bennett, J. & Holdsworth, A. (2006). 'Performing Personality as Emotion and Authenticity in *Who Do You Think You Are?*', *Critical Studies in Television* (TV Shorts), online at: http://www.criticalstudiesintelelevision.com/tvshorts/bennet_whodoyouthink.shtml
- Bennett, T. (1995). *The Birth of the Museum: History, Theory, Politics*. London, New York: Routledge.

- (2004). *Pasts Beyond Memory: Evolution, Museums, Colonialism*. London, New York: Routledge.
- Bennett, T. & Woollacott, J. (1987) *Bond and Beyond: The Political Career of a Popular Hero*. London: MacMillan Press.
- Bignell, J. (2005), 'Exemplarity, Pedagogy and Television History', *New Review of Film and Television Studies*, vol. 3 (1), pp. 15–32.
- Binkley, T. (1993). 'Refiguring Culture', in P. Hayward & T. Wollen (eds.) *Future Visions: New Technologies of the Screen*. London: BFI Publishing, pp. 92-122.
- Birt, J. (2005). 'McTaggart Lecture', speech given to *Royal Television Society*, 26/08/05.
- Boddy, W. (1990). *Fifties Television: The Industry and its Critics*. Chicago: University of Illinois Press.
- (2000). 'Television in Transit', *Screen*, vol. 41(1), pp. 67–72.
- (2004a). *New Media and Popular Imagination: Launching Radio, Television, and Digital Media in the United States*. Oxford: Oxford University Press.
- (2004b). 'Interactive Television and Advertising Form in Contemporary US Television', in L. Spigel & J. Olsson. (eds.) *Television after TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 113-32.
- (2004c). 'Redefining the Home Screen: Technological Convergence as Trauma And Business Plan', in D. Thorburn & H. Jenkins. (eds.) *Rethinking Media Changes: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press, pp. 191-200.
- Boddy, W. et al. (2005). 'In Focus: The Place of Television Studies', special issue of *Cinema Journal*, vol. 45(1), pp. 79-117.
- Bolter, J. D. & Grusin, R. (1999). *Remediation: Understanding New Media*. Cambridge, Mass. & London: MIT Press.
- Bondeberg, I. (1996). 'Public Discourse / Private Fascination: Hybridization in "True-Life-Story" Genres', *Media, Culture & Society*, Vol. 18(1), pp. 27-45.
- Bordwell, D. Staiger, J. & Thompson, K. (1985) *The Classical Hollywood Cinema: Film Style & Mode of Production to 1960*. London: Routledge and Kegan Paul.
- Born, G. (2001). 'Inside Television: Television Studies and The Sociology Of Culture', *Screen*, vol. 41(4), pp. 404-31.

(2003). 'Strategy, Positioning And Projection in Digital Television: Channel Four and the Commercialisation of Public Service Broadcasting in the UK', *Media, Culture and Society*, vol. 25(6), pp. 773-99.

(2004). *Uncertain Vision: Birt, Dyke and the Reinvention of the BBC*. Secker & Walburg: London.

Born, G. & Prosser, T. (2001) 'Culture, Citizenship and Consumerism: The BBC's Fair Trading Obligations and Public Service Broadcasting', *Modern Law Review*, vol. 64(5), pp. 657-87.

Bourden, J. (2000). 'Live TV is Still Alive', *Media, Culture and Society*, vol. 22(5), pp. 531-56.

Bouse, D. (2000). *Wildlife Films*. Pennsylvania: University of Pennsylvania Press.

Bragg, M. (2004). 'The Adventure of Making *The Adventure of the English*', in D. Cannadine (ed.) *History and the Media*. London & New York: Palgrave MacMillan, pp. 67-87.

Branston, G. (1998). 'Histories of British Television', in Geraghty, C. & D. Lusted (eds.) *The Television Studies Book*. London: Arnold, pp. 51-62.

Broadcasting Research Unit, (1985). *The Public Service Idea in British Broadcasting – Main Principles*. London: British Broadcasting Research Unit.

Brooker, W. (2001). 'Living on *Dawson's Creek*: Teen Viewers, Cultural Convergence and Television Overflow', *Convergence*, vol. 4(4), pp. 456-72.

Brookes, R. (2002). *Representing Sport*. London: Arnold press.

(2004). 'The Olympic Games', in G. Creeber (ed.) *Fifty Key Television Programmes*. Arnold Publishing, London, pp. 149-53.

Brown, M. (2004). 'BBC's New Chief Says: Why Can't We Be Friends?', *The Guardian*, 8/09/04
<http://media.guardian.co.uk/broadcast/story/0,7493,1299439,00.html>

Browne, N. (1987). 'The Political Economy of the Television (Super)Text', in H. Newcomb (ed.) *Television: The Critical View*. (4th ed) Oxford: Oxford University Press, pp. 588-99.

Brunsdon, C. (1989). 'Text and Audience', in E. Seiter (ed.) *Remote Control: Television, Audiences and Cultural Power*. London: Routledge, pp. 30-49.

(1997). 'Problems with Quality', in C. Brunsdon (ed.) *Screen Tastes: Soap Opera to Satellite Dishes*. London: Routledge, pp. 124-47. (Original work published 1990).

(1997). 'Satellite Dishes and the Landscapes of Taste', in C Brunsdon (ed.) *Screen Tastes: Soap Opera to Satellite Dishes*. London & New York: Routledge, pp. 148-64. (Original work published 1991).

(1998). 'What is the "Television" of Television Studies?', in C. Geraghty & D. Lusted (eds.) *The Television Studies Book*. London & New York: Arnold Publishers, pp. 95-113.

(2004). 'Taste and Time on Television', *Screen*, vol. 45(2), pp. 115-29.

Brundson, C. et. al (2001). 'Factual Entertainment on British Television: The Midlands TV Research Group's "8-9 Project"', *European Journal of Cultural Studies*, vol. 4(1), pp. 29-62.

BSkyB. (2006). *Fact Book 2006*. Middlesex: British Sky Broadcasting Corporate Communications.

Burnett, R. & Marshall, D. P. (2003). *Web Theory: An Introduction*. London; New York: Routledge.

Butler, J. G. (1994). *Television: Critical Methods and Applications*. Belmont, California: Wadsworth Publishing Company.

(2001). 'VR in the ER: *ER*'s use of E-Media', *Screen*, vol. 42(4), pp. 313-31.

(2002). 'The Internet and the World Wide Web', in D. Harries (ed.). *The New Media Book*. London: BFI Publishing, pp. 40-51.

Buzzard, K. (2003). 'Net Ratings: Defining a New Medium by the Old, Measuring Internet Audiences', in J.T. Caldwell & A. Everett (eds.) *New Media: Theories and Practices of Digitextuality*. London; New York: Routledge, pp. 197-209.

C

Caldwell, J. (1995). *Televisuality: Style, Crisis and Authority in American Television*. New Jersey: Rutgers University Press.

(2000). 'Introduction: Theorizing the Digital Land Rush', in J.T. Caldwell (ed.) *Electronic Media and Technoculture*. London: Rutgers University Press, pp. 1-31.

(2002). 'The Business of New Media', in D. Harries (ed.) *The New Media Book*. London: BFI Publishing, pp. 55-68.

(2003). 'Second Shift Media Aesthetics: Programming, Interactivity and User Flows', in J.T. Caldwell & A.

Everett (eds.) *New Media: Theories and Practices of Digitextuality*. London; New York: Routledge, pp. 127-144.

(2004a). 'Convergence Television: Aggregating Form and Repurposing Content in the Culture of Conglomeration', in L. Spigel & J. Olsson. (eds.) *Television after TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 41-74.

(2004b) 'Is Television a Distinct Medium? TV and Convergence', in J. Sinclair & G. Turner (eds.) *Contemporary World Television*. London: British Film Institute.

(2006) 'Critical Industrial Practice: Repurposing, and the Migratory Patterns of Industrial Texts', *Television and New Media*, vol. 7(2), pp. 99-134.

Caldwell, J. T. & Everett, A. (2003). 'Introduction: Issues in the Theory and Practice of Media Convergence', in J.T. Caldwell & A. Everett (eds.) *New Media: Theories and Practices of Digitextuality*. London; New York: Routledge, pp. xi-xxx

Castells, M. (2000). *The Information Age: Economy, Society and Culture – Volume 1: The Rise of the Network Society*. London: Blackwell Publishing. (2nd edition, original work published in 1996).

Caughie, J. (1991). 'Adorno's Reproach: Repetition, Difference and Television Genre', *Screen*, vol. 32(2), pp. 127–53.

(2000). *Television Drama: Realism, Modernism, and British Culture*. Oxford University Press, Oxford.

Cantor, M. (1982). 'Audience Control', in H. Newcomb (ed.) *Television: The Critical View*. (3rd edition). Oxford & New York: Oxford University Press, pp. 311-33.

Chamberlain, D. (2006). 'Interface Aesthetics: The Primacy of Televisual Non-Places', paper presented at *Screen Conference*, Glasgow, 30 June – 2 July.

Champion, J. (2003). 'Seeing the Past: Simon Schama's "A History Of Britain" and Public History', *History Workshop Journal*, vol. 56(1), pp. 153-74.

Collins, J. (1987). 'Postmodernism and Cultural Performance: Redefining the Parameters', *Screen*, vol. 27(2), pp. 11–26.

(1992). 'Television and Postmodernism', in R.C. Allen (ed.) *Channels of Discourse, Reassembled: Television and Contemporary Criticism*. London: Routledge, pp. 327-49.

- Collins, R. (1993). 'Public Service Versus the Market Ten Years on: Reflections on Critical Theory and the Debate on Broadcasting Policy in the UK', *Screen*, vol. 34(3), pp. 243-59.
- (2002). *Media and Identity in Contemporary Europe: Consequences of Global Convergence*. London: Intellect Books.
- (2006). 'Internet Governance in the UK', *Media, Culture & Society*, vol. 28(3), pp. 337-58.
- Collins, R. & Murrioni, C. (1996). *New Media, New Policies*. Cambridge: Polity Press.
- Corner, J. (1996) *The Art of Record: A Critical Enquiry into Documentary*. Manchester: Manchester University Press.
- (1999). *Critical Ideas in Television Studies*. Oxford and New York: Oxford University Press.
- Cowie, C. (1997). 'Competition Problems in the Transition of Digital Television in the UK Marketplace', *Media, Culture and Society*, vol. 19(4), pp. 679-85.
- Cox, B. (2004). *Free for All? Public Service Television in the Digital Age*. London: Demos.
- Crary, J. (1992). *Techniques of the Observer: On Vision and Modernity in the 19th Century*. Cambridge, Mass.: MIT Press.
- (2001). *Suspension of Perception: Attention, Spectacle and Modern Culture*. Cambridge, Mass.: MIT Press.
- Creeber, G. & Hills, M. (2007). 'Editorial – TVIII: Into or Towards a New Television Age?', *New Review of Film and Television*, vol. 5(1), pp. 1-4.
- Creeber, G. et. al, (2007). 'TVIII', special issue of *New Review of Film and Television Studies*, vol. 5(1), pp. 1-80.
- Cubitt, S. (1998). *Digital Aesthetics*. London: Sage.
- (2000). 'The Distinctiveness of Digital Criticism', *Screen*, vol. 41(1), pp. 86-92.

D

- D'Acci, Julie. (2004). 'Television Studies, Cultural Studies and the Crisis in the Humanities', in L. Spigel & J. Olsson. (eds.) *Television after TV: Essays*

on a Medium in Transition. Durham & London: Duke University Press. pp. 418-45.

Darley, A. (2000). *Visual Digital Culture: Surface Play and Spectacle in New Media Genres*. London & New York: Routledge.

(2003). 'Simulating Natural History: Walking with Dinosaurs as Hyper-Real Entertainment', *Science as Culture*, vol. 12(3), pp. 227-56.

Dawson, M. (2007) 'Little Players, Big Shows: Television's New Smaller Screens and the Aesthetics of Convergence', *Convergence*, vol. 13(3), forthcoming.

De Certeau, M. (1984). *The Practice of Everyday Life*. (S. F. Rendall Trans.). Berkeley and Los Angeles: University of California Press.

DCMS. (1999). *The Future Funding of the BBC*. Report of the Independent Review Panel, Chaired by Gavyn Davies. London: HMSO.

(2003). *Communications Act*. London: HMSO.

(2004). *Report of the Independent Review of BBC Online*. Chaired by Philip Graf. London: HMSO.

(2005). *Green Paper – Review of the BBC's Royal Charter: A Strong BBC, Independent of Government*. London: HMSO.

(2006). *White Paper – A Public Service For All: The BBC in the Digital Age*. London: HMSO.

Department of National Heritage. (1990). *Broadcasting Act*. London: HMSO.

(1992). *The Future of the BBC: A Consultation Document*. London: HMSO.

(1994). *The Future of the BBC: Serving the Nation, Competing Worldwide*. London: HMSO.

Dews, P. (1986). 'From Post-Structuralism to Postmodernity: Habermas's Counter-Perspective', *ICA Documents*, Vol 4(5), pp. 12–16.

Docherty, D. (2003). 'Why the BBC has a Right to be Interactive'. *The Guardian*, 01/09/03.

Downes, E. & McMillan, S. (2000). 'Defining Interactivity', *New Media & Society*, vol. 2(2), pp. 157-79.

Downing, T. (2004). 'Bringing the Past to the Small Screen', in D. Cannadine (ed.) *History and the Media*. London & New York: Palgrave MacMillan, pp. 7-20.

Duncan, A. (2003). 'DTT – The People's Choice', speech to *FT New Media Broadcasting Conference*, 3/3/03

Dyer, R. (1992). 'Entertainment and Utopia', in R. Dyer (ed.) *Only Entertainment*. London & New York: Routledge, pp. 17-34.

E

Eco, U. (1980). 'Towards a Semiotic Inquiry into the TV Message', in J. Corner & J. Hawthorns (eds.) *Communication Studies: An Introductory Reader*. London: Arnold, pp. 103-21 (original work published 1965).

Ellis, J. (1986). 'Broadcasting and the State: Britain and the Experience of Channel 4', *Screen*, vol. 27(1) ('Crisis in British Broadcasting' Special Issue), pp. 6–22.

(1992). *Visible Fictions*. London: Routledge (Original work published 1982).

(2000). *Seeing Things: Television in the Age of Uncertainty* London: I.B. Tauris.

Elsaesser, T. (1992). 'TV Through the Looking Glass', *Quarterly Review of Film & Video*, vol. 14(1-2), pp. 5-27.

(1998). 'Cinema Futures: Convergence, Divergence, Difference', in T. Elsaesser & K. Hoffmann (eds.) *Cinema Futures: Can, Able or Cable? The Screen Arts in the Digital Age*. Amsterdam: Amsterdam University Press, pp. 9–26.

Elstein, D. (2005). 'Public Service Broadcasting in the Digital Age', *Economic Affairs*, vol. 25(4), pp. 68-70.

Erickson, P. (2004). 'Help or Hindrance? The History of the Book and Electronic Media', in D. Thorburn & H. Jenkins. (eds.) *Rethinking Media Changes: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press, pp. 95-116.

Everett, A. (2003). 'Digitextuality and Click Theory: Theses on Convergence Media in the Digital Age', in J.T. Caldwell & A. Everett (eds.) *New Media: Theories and Practices of Digitextuality*. London; New York: Routledge, pp. 3-29.

F

Feuer, J. (1983). 'The Concept of Live Television: Ontology vs. Ideology', in E. A. Kaplan (ed.) *Regarding Television:*

- Critical Approaches – An Anthology*. Chicago: University Publications of America, pp. 12-22.
- (1986). 'Narrative Form in American Network Television', in C. MacCabe (ed.) *High Theory/Low Culture*. Manchester: Manchester University Press, pp. 101-14.
- (1992). 'Genre Study and Television', in R.C. Allen (ed.) *Channels of Discourse, Reassembled: Television and Contemporary Criticism*. London: Routledge, pp. 138-59.
- (1994). 'Melodrama, Serial Form, and Television Today', in H. Newcomb (ed.) *Television: The Critical View*. (6th edition). Oxford & New York: Oxford University Press, pp. 551-62
- Fiske, J. (1987). *Television Culture*. London & New York: Routledge.
- (1989). 'Moments of Television: Neither the Text nor the Audience', in E. Seiter (ed.) *Remote Control: Television, Audiences and Cultural Power*. London: Routledge, pp. 240-66.
- (1986). 'Television: Polysemy and Popularity', *Critical Studies in Mass Communications*, vol. 3(2), pp. 200-16.
- Fiske, J. & Hartley, J. (1989). *Reading Television*. London & New York: Routledge (Original work published 1978).
- Flew, T. (2002). *New Media: An Introduction*. London: Oxford University Press.
- Flichy, P. (1999). 'The Construction of New Digital Media', *New Media & Society*, vol. 1(1), pp. 33-39.
- (2002). 'New Media History', in L. Lievrouw & S. Livingstone (eds.) *The Handbook of New Media*. London: Sage, pp. 136-51
- Foster, H. (1985). 'Postmodernism: A Preface', in H. Foster (ed.) *The Anti-Aesthetic: Essays on Postmodern Culture*. London: Pluto Press, pp. ix-xvi.
- Franklin, B. (2001). *British Television Policy: A Reader*. London: Routledge.
- Freedman, D. (2003). *Television Policies of the Labour Party, 1951-2001*. London: Frank Cass Publishing.
- Friedberg, A. (1993). *Window Shopping: Cinema and the Postmodernism*. Berkley: University of California Press.

(1994). 'Cinema and the Postmodern Condition', in L. Williams (ed.) *Viewing Positions: Ways of Seeing Film*. New Jersey: Rutgers Univ. Press, pp. 59-83.

(2000). 'The End of Cinema: Multimedia and Technological Change', in C. Gledhill & L. Williams (eds.) *Reinventing Film Studies*. London: Arnold.

(2004). 'The Virtual Window', in D. Thorburn & H. Jenkins. (eds.) *Rethinking Media Changes: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press, pp. 337-353.

(2006). *The Virtual Window: From Alberti to Microsoft*. Cambridge, Mass. & London: MIT Press.

Frith, S. (2000). 'The Black-Box: The Value of TV and the Future of TV Research'. *Screen*, vol. 41(1), pp. 33-50.

Froud, J., Johal, S., Lever, A., Philips, R. and Williams, K. (2006). 'Stressed by Choice: A Business Model Analysis of the BBC', *CRESC Working Paper No. 22*, Milton Keynes: Open University.

G

Galperin, H. (2004). *New Television, Old Politics: The Transition to Digital TV in the United States and Britain*. Cambridge: Cambridge University Press.

Gere, C. (2002). *Digital Culture*. London: Reaktion Books Ltd.

Gibbons, T. (1998). 'De/Re-regulating the System: The British Experience', in J. Steemers (ed.) *Changing Channels: The Prospects of Television in a Digital World*. Luton: John Libbey Media, pp. 73-96

Gibson, O. (2004). 'Anyone for More Olympics?' *The Guardian*, 09/08/04.

Gitelman, L. (2004). 'How Users Define New Media: A History of the Amusement Phonograph', in D. Thorburn & H. Jenkins. (eds.) *Rethinking Media Changes: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press, pp. 61-79.

Gitlin, T. (1982). 'Prime Time Ideology: The Hegemonic Process in Television Entertainment', in H. Newcomb (ed.) *Television: The Critical View*. (6th edition). Oxford & New York: Oxford University Press, pp. 426-54.

(1986). *Watching Television: A Pantheon Guide to Popular Culture*. New York: Pantheon.

Given, J. (2003). *Turning off the Television: Broadcasting's Uncertain Future*. Sydney: University of NSW Press.

Golding, P. & Murdock, G. (2005). 'Culture, Communications and Political Economy', in J. Curran & M. Gurevitch (eds.) *Mass Media and Society*, (4th edition) London: Arnold, pp. 60-83.

Goodman, R. Duke, L. & Sutherland, J. (2002). 'Olympic Athletes and Heroism in Advertising: Gendered Concepts of Valor?', *Journalism and Mass Communication Quarterly*, vol. 79(2), pp. 374-93.

Goodwin, P. (1998). *Television Under the Tories: Broadcasting Policy 1979 - 1997*. London: BFI Publishing.

Gough-Yates, A. (2002). *Understanding Women's Magazines*. London: Routledge.

Grade, M. (2004). *Opening Speech given to the Interactive TV Show Europe 2004 in Barcelona*. 14/10/04.

Gray, A. (1992). *Video Playtime: The Gendering of a Leisure Technology*. London and New York: Routledge.

Griffiths, A. (1996). "'Journeys For Those Who Can Not Travel': Promenade Cinema and the Museum Life Group', *Wide Angle*, vol. 18, pp. 53-84.

(1998). 'Animated Geography: Early Cinema at the American Museum of Natural History', in J. Fullerton, J. (ed.) *Celebrating 1895: The Centenary of Cinema*. London & Sydney: John Libbery Press, pp. 190-202.

(2002). *Wondrous Difference: Cinema, Anthropology and Turn-of-the-Century Visual Culture*. New York: Columbia University Press.

Gripsrud, J. (1998). 'Television, Broadcasting, Flow: Key Metaphors in Television Theory', in C. Geraghty & D. Lusted (eds.) *The Television Studies Book*. London & New York: Arnold Publishers, pp. 17-32

(2004). 'Broadcast Television: The Chances of its Survival in a Digital Age', in L. Spigel & J. Olsson. (eds.) *Television after TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 210-23.

Grossberg, L. (1987). 'The In-difference of Television'. *Screen*, vol. 28(2), pp. 28-45.

Gunning, T. (1986). 'The Cinema of Attraction: Early Film, its Spectators and the Avant-Garde', *Wide Angle*, vol. 8(3/4), pp. 63-70.

(1991). 'Heard Over the Phone: *The Lonely Villa* and the *de Lorde* Tradition of the Terrors of Technology', *Screen*, vol. 32(2), pp. 184-96.

(2004). 'Re-Newing Old Technologies: Astonishment, Second Nature and the Uncanny in Technology From the Previous Turn of the Century', in D. Thorburn & H. Jenkins. (eds.) *Rethinking Media Changes: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press. pp. 39-60.

H

Habermas, J. (1999). 'The Public Sphere', in P. Marris & S. Thornham (eds.) *Media Studies: A reader*. Edinburgh: Edinburgh University Press, pp. 92-99. (Original work first published 1973).

Hage, G. (1998). *White Nation: Fantasies of White Supremacy in a Multicultural Society*. Annandale: Pluto Press.

Hall, S. (1980). 'Encoding/Decoding', in S. Hall D. Hobson A. Lowe & P. Willis (eds.) *Culture, Media, Language*. London: Hutchinson, pp. 128-39.

Hanley, P. & Viney, R. (2003). 'Pressing the Red Button: Consumers and Digital Television', *Cultural Trends*, vol. 11(43/44), pp. 35-60.

Haraway, D. (1989). *Primate Visions: Gender, Race and Nature in the World of Modern Science*. London and New York: Verso.

Harries, D. (2002). 'Watching the Internet', in D. Harries (ed.) *The New Media Book*. London: BFI Publishing, pp. 171-82

Harrison, J. (2000). *Terrestrial TV News: The Culture of Production*. Manchester: Manchester University Press.

(2001). 'Constructing News Values (including greybox on 'Gatekeeper Studies')', in G. Creeber (ed.) *The Television Genre Book*. London: BFI Publishing, pp. 114-16.

(2001). 'Objectivity and Television News (including greybox on 'The BBC and Impartiality')' in G. Creeber (ed.) *The Television Genre Book*. London: BFI Publishing, pp. 117-18.

Harrison, J. & Wessells, B. (2005). 'A New Public Service Communication Environment? Public Service Broadcasting Values in the Reconfiguring Media Environment', *New Media and Society*, vol. 7(6), pp. 834-53.

Hartley, J. (1982). *Understanding the News*. London: Methuen.

(1999). *Uses of Television*. London: Routledge.

Hayward, P. & Kerr, P. (1987). 'Introduction', *Screen*, vol. 28(2), 2-8.

Heath, S. & Skirrow, G. (1977). 'Television: A World in Action', *Screen*, vol. 18(2), pp. 7-59.

Hermes, J. (2006). 'Citizenship in the Age of the Internet', *European Journal of Communication*, vol. 21(3), pp. 295-309.

Higson, A. (1995). *Waving the Flag: Constructing a National Cinema in Britain*. Oxford: Clarendon Press.

Hills, M. (2007). 'From the Box in the Corner to the Box on the Shelf', *New Review of Film and Television Studies*, vol. 5(1), pp. 41-60.

Hilmes, M. (2002). 'Cable, Satellite and Digital Technologies', in D. Harries (ed.). *The New Media Book*. London: BFI Publishing, pp. 3-16.

Hirsch, E. (1998). 'New Technologies and Domestic Consumption', in C. Geraghty & D. Lusted (eds.) *The Television Studies Book*. London: Arnold, pp. 47-60.

Holmes, S. (2004a). "'But This Time *You* Choose!": Approaching The 'Interactive' Audience in Reality TV', *European Journal of Cultural Studies*, vol. 7(2), pp. 213-31.

(2004b). "'Reality Goes Pop!": Reality TV, Popular Music and Narratives of Stardom in *Pop Idol*', *Television and New Media*, vol. 5(2), pp.147-72.

(2006). '(Re)Visiting *The Grove Family* – "Neighbours to the Nation" (1954-57): Television History and Approaches to Genre', *New Review of Film and Television*, vol. 4(3): 287-310.

Home Office. (1981). *Direct Broadcasting by Satellite*. London: HMSO.

Horton, D & Wohl, R. (1993). 'Mass Communication and Para-Social Interaction', in J. Corner & J. Hawthorne (eds.) *Communications Studies: An Introductory Reader*, London: Edward Arnold, pp. 111-28

Hujanen, T. (2004). 'Public Service Strategy in Digital Television: From Schedule to Content', *Journal of Media Practice*, vol. 4(3), pp. 133-53.

Humphreys, P. & Lang, M. (1998). 'Digital Television: Between the Economy and Pluralism', in J. Steemers (ed.) *Changing Channels: The Prospects of Television in a Digital World*. Luton: John Libbey Media, pp. 9-35.

Hutcheon, L. (1988). *A Poetics of Postmodernism*. London & New York: Routledge.

Hutton, B. (2004). *Report of the Inquiry into the Circumstances Surrounding the Death of Dr David Kelly C.M.G.* London: HMSO.

I

Iosifidis, P. (2005). 'Digital Switchover and the Role of the New BBC Services in Digital Television Take-Up', *Convergence*, vol. 11(3), pp. 58-74.

ITC. (2002). *Extending Choice, Securing Quality*, Review Chaired by Sir Robin Biggam. London: HMSO.

ITV. (2003). *Statement of Programming Policy, 2002/03*. London: ITV.

J

Jacobs, J. (2000). *The Intimate Screen: Early British Television Drama*. Oxford and New York: Oxford University Press.

(2001). 'Issues of Judgement and Value in Television Studies', *International Journal of Cultural Studies*, Vol. 4(4), pp. 427-47.

Jameson, F. (1985). 'Postmodernism and Consumer Society', in H. Foster (ed.) *The Anti-Aesthetic: Essays on Postmodern Culture*. London: Pluto Press, pp. 111-25.

(1991). *Postmodernism, or, the Cultural Logic of Late Capitalism*. Durham, NC: Duke University Press.

Jenkins, H. (1992). *Textual Poachers: Television Fans and Participatory Culture*. London: Routledge.

(2002). 'Interactive Audiences? The "Collective Intelligence" of Media Fans', in D. Harries (ed.) *The New Media Book*. London: BFI Publishing, pp. 157-70.

(2006). *Convergence Culture: Where Old and New Media Collide*. London & New York: New York University Press.

Jensen, J. & Toscan, C. (1999). 'Introduction', in J. Jensen & C. Toscan (eds.) *Interactive Television: TV of the Future, or the Future of TV?*. Aalborg: Aalborg University Press, pp. 1-31.

Johnson, C. (2007). 'Tele-Branding in TVIII: The Network as Brand and the Programme as Brand', *New Review of Film and Television Studies*, vol. 5 (1), pp. 5-24.

K

Kellner, D. (2003). *Media Spectacle*. London & New York: Routledge.

Kilborn, R. & Izod, J. (1997). *An Introduction to Television Documentary: Confronting Reality*. Manchester; New York: Manchester University Press.

Kim, P. & Sawhney, H. (2002). 'A Machine-Like New Medium: A Theoretical Examination of Interactive TV', *Media, Culture & Society*, vol. 24(2), pp. 217-33.

King, G. (2002). 'Die Hard / Try Harder: Narrative, Spectacle and Beyond, from Hollywood to Videogame', in G. King & T. Krzywinska (eds.) *ScreenPlay: Cinema/Videogames/Interfaces*, London: Wallflower Press, pp. 50-65.

King, G. & Krzywinska, T. (2005). *Tomb Raiders and Space Invaders: Video Games in the 21st Century*. London: I.B. Tauris.

Kiousis, S. (2002). 'Interactivity: A Concept Explication'. *New Media and Society*, vol. 4(3), pp. 255-83.

L

Lambert, R. (2004). *Independent Review of BBC News 24*. (Chair Richard Lambert). London: HMSO.

Landow, G. (2001). 'Hypertext and Critical Theory', in D. Trend, (ed.) *Reading Digital Culture*. Oxford: Blackwell Publishing, pp. 98-108. (Original essay published 1991).

(ed.) (1994). *Hyper/Text/Theory*. Baltimore & London: John Hopkins University Press.

Langer, J. (1992). 'Truly Awful News on Television', in P. Dahlgren & C. Sparks (eds.) *Journalism and Popular Culture*. London: Sage, pp. 113-29.

Lawson, M. (2004). 'Calling the Shots From the Sofa', *The Guardian*, 18/09/04, <http://football.guardian.co.uk/comment/story/0,,1307463,00.html> site accessed 21/01/05.

Levinson, P. (2001). *Digital McLuhan: A Guide to the Information Millennium*. London: Routledge.

Lewis, J. (2001). 'Studying Television News', in G. Creeber (ed.). *The Television Genre Book*. London: BFI Publishing, pp. 108-14.

Levy, P. (1998). *Becoming Virtual: Reality in the Digital Age*. (R. Bononno Trans.) New York & London: Plenum.

(2001). 'Collective Intelligence', in D. Trend (ed.) *Reading Digital Culture*. Oxford: Blackwell Publishing, pp. 253-58. (Original essay published 1991).

Lines, G. (2000). 'Media Sport Audiences – Young People and the Summer of Sport '96: Revisiting Frameworks for Analysis', *Media, Culture & Society*, Vol. 22(5), pp. 669-80.

Lister, M. Dovey, J. Giddings, S. Grant, I & Kelly, K. (2003). *New Media: A Critical Introduction*. London & New York: Routledge Press.

Livingstone, S. (1999). 'New Media, New Audiences?', *New Media and Society*, vol. 1(1), pp. 59-66

Livingston, S. & Lunt, P. (1994). *Talk On Television: Audience Participation and Public Debate*. London & New York: Routledge.

Lury, K. (1995). Television Performance: Being, Acting and “Corpsing”, *New Formations* vol. 26, pp. 114-27.

(2001). *British Youth Television: Cynicism and Enchantment*. Oxford: Clarendon Press.

(2005). *Interpreting Television*. London: Hodder Arnold Press.

Lyotard, J-F. (1986). ‘Defining the Postmodern’, *ICA Documents*, vol. 4 (5), pp. 6–7.

M

McPherson, T. (2007). ‘Response Paper to Television Interfaces Panel’, paper presented at *SCMS Conference*, Chicago, 4/03/07.

Malik, S. (2002) *Representing Black Britain: Black and Asian Images on Television*. London: Sage Publications.

Manovich, L. (1998). ‘Towards an Archaeology of the Computer Screen’, in T. Elsaesser & K. Hoffmann (eds.) *Cinema Futures: Cain, Able or Cable? The Screen Arts in the Digital Age*. Amsterdam: Amsterdam University Press, pp. 27–43.

(2001). *The Language of New Media*. Cambridge, Mass.: MIT Press.

(2002). ‘New Media: From Borges to html’, in N Wardrip-Fruin & N. Montfort (eds.) *The New Media Reader*. Cambridge, Mass.: MIT Press, pp. 13-25.
Accessed via <http://www.manovich.net> 27/01/04.

Marshall, D.P. (2002). ‘The New Intertextual Commodity’, in D. Harries (ed.). *The New Media Book*. London: BFI Publishing, pp. 69-81.

Marvin, C. (1988). *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*. New York & Oxford: Oxford University Press.

McChesney, R. (1989). ‘Media Made Sport: A History of Sports Coverage in the United States’, in L.A. Wenner (ed.) *Media, Sports and Society*. London: Sage publications, pp. 49-69.

McRobbie, A. (1986). ‘Postmodernism and Popular Culture’, *ICA Documents*, vol. 4(5), pp. 54–8.

Merchant, R. (1998). ‘The BBC Interactive Television Unit: A Programme Report’, *Media in Education and Development*, vol. 21(3), pp. 92–4.

- Millar, S. (1998). 'Courtship Ends as Soccer and TV are United', *The Guardian*, 7/09/03, p. 3.
- Mittle, J. (2001) 'A Cultural Approach to Television Genre Theory', *Cinema Journal*, vol. 40(3), pp. 3–24.
- Moores, S. (1988). 'The Box on the Dresser: Memories of Early Radio and Everyday Life', *Media, Culture & Society*, vol. 10(3), pp. 23–40.
- (1996). *Satellite Television and Everyday Life: Articulating Technology*. (Acamedia Research Monograph 18) Luton: John Libbey Media.
- Morley, D. (1994). 'Television and Gender', in H. Newcomb (ed.) *Television: The Critical View*. (5th edition) Oxford & New York: Oxford University Press, pp. 474–97.
- (2004) 'At Home with Television', in L. Spigel & J. Olsson (eds.) *Television After TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 303–23.
- Morris, M. (1990). 'Banality in Cultural Studies', in P. Mellencamp (ed.) *Logics of Television: Essays in Cultural Criticism*. Indianapolis, Indiana: Indiana University Press pp. 14–43.
- Morse, M. (1983). 'Sport on Television: Replay and Display', in E. A. Kaplan (ed.) *Regarding Television: Critical Approaches – An Anthology*. Chicago: University Publications of America, pp. 44–66.
- (1998). *Virtualities: Television, Media Art and Cyberculture*. Indianapolis: Indiana University Press.
- Moseley, R. (2000). 'Makeover Takeover on British Television', *Screen*, vol. 41(3), pp. 299–314.
- Murdock, G. (2000). 'Money Talks: Broadcasting and Public Culture', in E. Buscombe (ed.) *British Television: A Reader*. Oxford: Clarendon Press, pp. 118–41.
- (2000b). 'Digital Futures: European Television in the Age of Convergence', in P. Dahlgren G. Murdock & J. Wieten (eds.) *Television Across Europe: A Comparative Introduction*. London: Sage, pp. 35–57.
- Murray, J. (1997). *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* Cambridge, Mass.: MIT Press.

N

- Neale, S. (1990). 'Questions of Genre', *Screen*, vol. 31(1), pp. 45–66.

(2000). *Genre and Hollywood*. London: Routledge

Negroponte, N. (1995). *Being Digital*. London: Hodder & Stoughton.

Newcomb, H. (1979). 'Towards a Television Aesthetic', in H. Newcomb (ed.) *Television: The Critical View*. (1st edition) Oxford & New York: Oxford University Press, pp. 478-94.

Newcomb, H. & Hirsch, P. (1983). 'Television as a Cultural Forum: Implications for Research', *Quarterly Review of Film Studies*, Vol. 8(3), pp. 45-55.

Nichols, B. (1988). 'The Work of Culture in the Age of Cybernetic Systems', *Screen*, vol. 29(1), pp. 22-46.

Nightingale, V. & Dwyer, T. (2006). 'The Audience Politics of "Enhanced" Television Formats', *International Journal of Cultural Studies*, vol. 2(1), pp. 25-42.

Nourry, D. (2005). 'Body-Politic (National Imaginary): "Lest We Forget ..." Mateship (Empire) Right or Wrong', *Continuum: Journal of Media and Cultural Studies*, vol. 19(3), pp. 365-79.

Nye, D. (1994). *American Technological Sublime*. Cambridge, Mass.: MIT Press.

O

Ofcom. (2004a). *Looking to the Future of Public Service Television Broadcasting*. London: HMSO.

(2004b). *Phase 1: Ofcom Review of Public Service Television Broadcasting*. London: HMSO.

(2004c). *Phase 2: Ofcom Review of Public Service Television Broadcasting*. London: HMSO.

(2006a). *Digital Television Update – 2006, Quarter 4*. London: HMSO.

(2006b). *Digital PSB - Public Service Broadcasting Post Digital Switchover*. London: HMSO.

P

Papathanousopoulos, S. (1998). 'Development of Digital Television Across Europe', *Media International Australia*, vol. 86 (Feb), pp. 77-86.

Parks, L. (2004). 'Flexible Microcasting: Gender, Generation, and Television-Internet Convergence', in L. Spigel & J. Olsson (eds.) *Television After TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 133-56.

Peacock, A. (1986). *Broadcasting in the 90s: Competition, Choice and Quality: Report of the Committee on Financing the BBC*. (Chair Alan Peacock), London: HMSO, Cmnd. 9824.

Perkins, V. F. (1993). *Film as Film: Understanding and Judging Movies*. New York: Da Capo Press. (Original work published 1972).

Pilkington, H. (1962). *Pilkington Report of the Committee on Broadcasting*. London: HMSO, Cmnd. 1753.

Poole, S. (2000). *Trigger Happy: The Inner Life of Videogames*. London: Fourth Estate Ltd.

Poster, M. (1999). 'Underdetermination', *New Media and Society*, vol. 1(1), pp.12-17.

Preston, P. (2004). 'Unearthing the Real Meaning of D-Day', *The Observer*, 6/06/04.

R

Rafaeli, S. (1988). 'Interactivity: From New Media to Communication', in R. P. Hawkins, S. Pingree & J. Wieman (eds.) *Advancing Communication Science: Merging Mass and Interpersonal Processes*. Newbury Park, CA: Sage, pp. 110-34.

Reiser, M. & Zapp, A. (2002). *New Screen Media: Cinema/Art/Narrative*. London: BFI Publishing.

Rheingold, H. (1993). *The Virtual Community: Homesteading on the Electronic Frontier*. Reading, MA: Addison-Wesley Publications.

Robins, K. & Webster, F. (1985). 'Broadcasting Politics: Communications and Consumption', *Screen*, vol. 27(1) ('Crisis in British Broadcasting' Special Issue), pp. 30-44.

Rogers, M. C., Epstein, M. & Reeves, J. L. (2002). 'The Sopranos as HBO Brand Equity: The Art of Commerce in the Age of Digital Reproduction', in D. Lavery (ed.) *This Thing of Ours: Investigating The Sopranos*. London: Wallflower Press, pp. 42-57.

Rose, A. & Friedman, J. (1994). 'Television Sport as Mas(culine) Distraction', *Screen*, vol. 35(1), pp. 22-35.

S

Scannell, P. (1989). 'Public Service Broadcasting and Modern Public Life', *Media, Culture & Society*, vol. 11, pp. 135-66.

(1996) *Radio, Television and Modern Life*. Oxford: Blackwell Publishing.

- (2000). 'Public Service Broadcasting: The History of a Concept', in A. Goodwin & G. Whannel (eds.) *Understanding Television*, London: Routledge, pp. 11-29. (Original work published 1990)
- Scannell, P. & Cardiff, D. (1991). *A Social History of British Broadcasting. 'Serving the Nation', 1923-1939*. Oxford: Blackwell.
- Schama, S. (2004). 'Television and the Trouble with History', in D. Cannadine (ed.) *History and the Media*. Basingstoke: Palgrave MacMillan, pp. 20-33.
- Schirelbusch, W. (1986). *The Railway Journey: The Industrialisation of Time and Space in the 19th Century*. California: University of California Press.
- Schudson, M. (2005). 'Four approaches to the sociology of news', in J. Curran & M. Gurevitch (eds.) *Mass Media and Society*, (4th edition) London: Arnold, pp. 172-97
- Sconce, J. (2000). *Haunted Media*. Chicago: Duke University Press.
- (2003). 'Tulip Theory', in J.T. Caldwell & A. Everett (eds.) *New Media: Theories and Practices of Digitextuality*. London; New York: Routledge, pp. 179-93.
- (2004). 'What if?: Charting Television's New Textual Boundaries', in L. Spigel & J. Olsson (eds.) *Television After TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 93-112.
- Scott, K. D. & White, A. M. (2003). 'Unnatural History? Deconstructing the *Walking with Dinosaurs* Phenomenon', *Media, Culture & Society*, vol. 25(3), pp. 315-32.
- Seiter, E. (1999). *Television and New Media Audiences*. Oxford: Clarendon Press.
- Silverstone, R. (1986). 'The Agnostic Narratives of Television Science', in J. Corner (ed.) *Documentary and the Mass Media*. London: Edward Arnold, pp. 81-106.
- (1999). 'Introduction', *New Media and Society*, vol. 1(1), pp. 10-11.
- Smith, C. (1998). 'The Big Switch? Digital Future – Turn-On or Turn-Off?', Speech to *Royal Television Society Autumn Symposium*, 14/10/98.
- Spigel, L. (1992). *Make Room for TV: Television and the Family Ideal in Postwar America*. Chicago & London: University of Chicago Press.
- (2001a). 'Media Homes: Then and Now', *International Journal of Cultural Studies*, Vol. 4(4), pp. 385-411.

- (2001b). *Welcome to the Dreamhouse: Popular Media and Postwar Suburbs*. (Durham & London: Duke University Press).
- (2004). 'Introduction', in L. Spigel & J. Olsson (eds.) *Television After TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 1-34.
- Strange, N. (2005). 'Thunder Road and the BBC's multiplatform projects', paper presented at MeCCSA Postgraduate Network conference, Cardiff University, 22-23rd June.
- (2007). "'The Days of Commissioning Programmes are Over...': The BBC's 'Bundled Project'", unpublished conference paper to be given at *Television Studies Goes Digital*, London Metropolitan University, 14th September.
- Steemers, J. (1997). 'Broadcasting is Dead. Long Live Digital Choice: Perspectives From the United Kingdom and Germany', *Convergence*, vol. 3(1), pp. 51-71.
- (1998). 'On the Threshold of the "Digital Age": Prospects for Public Service Broadcasting', in J. Steemers (ed.) *Changing Channels: The Prospects of Television in a Digital World*. Luton: John Libbey Media, pp. 97-124.
- (2004) 'Building a Digital Cultural Commons – The Example of the BBC', *Convergence*, vol. 10(3), pp. 102-7.
- Street, J. (1997). 'Remote Control? Politics, Technology and "Electronic Democracy"', *European Journal of Communication*, vol. 12(1), pp. 27-42.
- (2000). 'Aesthetics, Policy and the Politics of Popular Culture', *European Journal of Cultural Studies*, vol. 5(1), pp. 27-43.

T

- Taddia, M. (2002). 'iTV for Dummies', *Broadcast* (supplement), 08/11/02, pp. 13-16.
- Tarroni, E. (1979). 'The Aesthetics of Television', in H. Newcomb (ed.) *Television: The Critical View*. (1st edition). Oxford & New York: Oxford University Press, pp. 437-56.
- Thompson, M. (2006). 'Delivering Public Value: The BBC and Public Sector Reform', *Smith Institute Media Lecture*, 11/10/06.

Thornham, S & Purvis, T. (2005). *Television Drama: Theories and Identities*. Basingstoke & New York: Palgrave-Macmillan.

Timms, D. (2004). 'Record Numbers Follow Olympics via Web and Interactive TV', *The Guardian*, 20/08/04, online at: <http://media.guardian.co.uk/broadcast/story/0,7493,1287620,00.html>

Tincknell, E & Raghuram, P. (2002). 'Big Brother: Reconfiguring the "Active" Audience of Cultural Studies?', *European Journal of Cultural Studies*, Vol. 5(2), pp. 199-215.

Todorov, T. (1975). *The Fantastic: A Structural Approach to a Literary Genre*. (R. Howard Trans.). New York: Cornell University Press (Originally Published 1970 – *Introduction a la littérature*).

Tolson, A. (1996). *Mediations: Text and Discourses in Media Studies*. London: Arnold Publishing.

Turkle, S. (1996). *Life on the Screen: Identity in the age of the Internet*. New York: Simon and Schuster

(2001). 'Who am We?', in D. Trend (ed.) *Reading Digital Culture*. Oxford: Blackwell Publishing, pp. 236-50. (Original work published 1996).

Turner, G. (1994), *Making it National: Nationalism and Australian Popular Culture*, Sydney: Allen & Unwin.

(2001). 'Television and Cultural Studies: Unfinished Business', *International Journal of Cultural Studies*. Vol. 4(4), pp. 371-84.

(2004). 'Television and Democracy: Threats and Opportunities', in J. Sinclair & G. Turner (eds.) *Contemporary World Television*. London: British Film Institute.

U

Uricchio, W. (2002). 'Old Media as New Media: Television', in D. Harries (ed.) *The New Media Book*. London: BFI Publishing, pp. 219-30.

(2004a). 'Historicising Media in Transition', in D. Thorburn & H. Jenkins (eds.) *Rethinking Media Changes: The Aesthetics of Transition*. Cambridge, Mass.: MIT Press, pp. 23-38.

(2004b). 'Television's Next Generation: Technology/Interface Culture/Flow', in L. Spigel & J. Olsson (eds.) *Television After TV: Essays on a Medium in Transition*. Durham & London: Duke University Press, pp. 163-82.

V

van den Bulck, B. (2001). 'Public Service Television and National Identity as a Project of Modernity: The Example of Flemish Television', *Media Culture & Society*, vol. 23(1), pp. 53-69.

van Dijk, Jan & de Vos, Loes. (2001). 'Searching for the Holy Grail', *New Media and Society*, vol. 3(4), pp. 443-65.

Vered, K. (2002). 'Televisual Aesthetics in Y2K: From Windows on the World to a Windows Interface', *Convergence* 8(3): 40-60.

W

Waller, G. A (1988). 'Flow, Genre, and the Television Text', *Journal of Popular Film and Television*, vol. 16, pp. 6-11.

Weinbren, G. (1998). 'Random Access Rules', in T. Elsaesser & K. Hoffmann (eds.) *Cinema Futures: Cain, Able or Cable? The Screen Arts in the Digital Age*. Amsterdam: Amsterdam University Press, pp. 229-40.

Wells, M. (2004). 'BBC News24 Catches up on Sky', *The Guardian*, 5/02/04, available at: <http://media.guardian.co.uk/tvnewsbattleofthebulletins/story/0,7521,1141203,00.html> site visited 21/04/04.

Whannel, G. (1992). *Field in Vision: Television Sport and Cultural Transformation*. London; New York: Routledge.

Wheatley, H. (2004). 'The Limits of Television? Natural History Programming and the Transformation of Public Service Broadcasting', *European Journal of Cultural Studies*, vol. 7(5), pp. 325-39.

White, M. (2006). 'Television and Internet Differences by Design: Rendering Liveness, Presence and Lived Space', *Convergence: The International Journal of Research into New Media Technologies*, vol. 12(3), pp. 341-55.

Williams, R. (1992). *Television: Technology and Cultural Form*. London: Routledge. (Original work published 1975).

Williams, M. (2003). 'Real-Time Fairy Tales: Cinema Prefiguring Digital Anxiety', in J.T. Caldwell & A. Everett (eds.) *New Media: Theories and Practices of Digitextuality*. London; New York: Routledge, pp. 159-79.

Wilson, J. (2003). 'Niall Ferguson's Imperial Passion', *History Workshop Journal*, Vol. 56 (1), pp. 175-83.

Winston, B. (1998). *Media Technology and Society: A History: From the Telegraph to the Internet*. London: Routledge.

Witcomb, A. (2003). *Re-imaging the Museum: Beyond the Mausoleum*. New York and London: Routledge.

Wolf, M. J. P. (1997). 'Inventing Space: Toward a Taxonomy of On- and Offscreen Space in Video Games', *Film Quarterly*. Vol. 51(1), pp. 11-23.

Wood, H. (2007). 'Television is Happening: Methodological Considerations for Capturing Digital Television Reception', *European Journal of Cultural Studies*, vol. 10(4), pp. 485-506.

Wood, H. (2008). *Interacting with Television*. Illinois: University of Illinois Press.

Wylie, P. (1979). *Generation of Vipers*. New York: Larlin Corporation. (Original work published 1942).

Wyver, J. (1986). 'Television and Postmodernism', *ICA Documents*, vol. 4 (5), pp. 52-4.

X, Y, Z

Zapp, A. (2007). 'Imaginary Spaces: User Participation in Networked Narratives', in Plunkett, J. and Lyons, J. (eds). *Multimedia Histories: From the Magic Lantern to the Internet*. Exeter: Exeter University Press, pp. 163-76.

Zelizer, B. (1992). 'CNN, the Gulf War, and Journalistic Practice', *Journal of Communication*, vol. 42 (1), pp. 66-81.

Filmography

L'Arrivée d'un train à la Ciotat (Auguste and Louis Lumière, France, 1895).

Jurassic Park (Spielberg, USA, 1993).

The Matrix (Andy and Larry Wachowski, USA, 1999).

Man with a Movie Camera (Vertov, Russia, 1929).

Rabbit Proof Fence (Noyce, Australia, 2003).

Sex Lives of the Potato Men (UK, 2004).

Tele-ography

Unless otherwise specified, persons' named for television series are the programme's Executive Producer. These details are omitted for long running series, such as *Big Brother*, *Horizon* and *Match of the Day*.

After Auschwitz (Rees, BBC4, 2005).

Auschwitz (Rees/Tatge [director/writer, 6 episodes each], BBC2, 2005)

Big Brother (Endemol for Channel 4, 2000 -).

Built for the Kill (Buchanan/Watts/Fairclough [15 episodes each], Discovery/Granada Wild, 2000 -).

The Blue Planet (Fothergill, BBC/Discovery, 2001).

Buffy the Vampire Slayer (Whedon [writer/creator], Fox, 1997-2003).

Celebrity Big Brother (Endemol for Channel 4, 2001 -).

D-Day (Kemp, BBC/Discovery/Prosieben/France2/Dangerous Films/TelFrance, 2004).

Dunkirk (Holmes [writer/director], BBC, 2004).

The Groves (Warrington, BBC, 1954–1957).

Horizon (BBC, 1964 –).

Last Night of the Proms (Kenyon [Controller], BBC/BBCi, 2003 -).

Let the Blood Run Free (McFadyen, Network 10, 1990).

The Life of Mammals' (Salisbury, BBC/Discovery, 2002-03).

Match of the Day (BBC1, 1964 -).

Max Headroom (Frankish Wagg [6 episodes each], Lorimar Productions/ABC, 1987-88).

Miami Vice (Mann, Michael Mann Productions for NBC, 1984 – 1989).

Pop Idol (Fuller, ITV/Thames Television, 2001-2003).

The Power of Art (Schama [writer], BBC2, 2006).

The Real World (Kenney, Bunim-Murray Productions for MTV, 1992 -).

The Salon (Unknown, Endemol for Channel 4/E4, 2003-04).

The Simpsons (Brooks/Groening, Twentieth Century Fox, 1989 -).

The Sopranos (Chase, HBO, 1999 - 2007).

Test the Nation (Gurin, BBC, 2000 -).

The Today Show (NBC, 1952 -).

Walking with Beasts (Haines, BBC/Discovery, 2001).

Walking with Cavemen (Dale, BBC/Discovery, 2003).

Walking with Dinosaurs (Green/Haines/James/Learoyd/Lynch/Orr [6 episodes each], BBC/Discovery, 1999).

What's your Story (Pilkington, BBC, 1988).

Who do you think you are? (Carter/Smith, Wall to Wall for BBC, 2004 -).

Who Wants to be a Millionaire? (Knight [series' creator], Celador for ITV, 1999 -).

Winky Dink & You (Heyward/Prichett/Wyckoff [series' creators], CBS, 1953 – 1957).