# Pushing the button: A quantitative analysis of red button television content in the UK

Submitted in partial fulfilment of the
Requirements of the Degree of Doctor of
Philosophy.

July 2014

Andrew Fox

# Table of Contents

**Abstract**

The technological, sociological and cultural position of television, as a method of delivering content, has been the subject of much academic debate in the past twenty years. Perceived threats to television have emerged through the convergence of technologies, which has enabled traditional media forms to take on the characteristics of each other. As a result there is no such thing as a dominant communications medium in the 21$^{st}$ Century, as shared technological characteristics mean that the user can access a multitude of content through one single device.

Some believe that television is on the wane, leading to dire predictions of the 'death' of television. For others, if television is to survive and develop as a communications medium, it needs to take on one element of convergence by becoming more interactive. There is a substantial amount of academic work which suggests how television can achieve this and what the content provided will do. However, these are merely suggestions, as there is no research which looks at what interactive content actually is. The assumption for scholars, who believe that interactive television is a viable format, is that it is inevitable that interactivity will become an everyday element of television use. Ideas as to how this can be achieved have been put forward but have not been followed up. This research aims to fill that empirical gap and is informed not by what could be but what is.

It is clear that digital television has allowed for an additional stream of information to be accessed, through the red button on the remote control. This content provides a variety of options for the viewer, however, the key question, which this research is addressing, is how much of it is interactive? Additional research is now needed to establish just how much of this content exists, what the red button allows the audience member to do and how. Therefore it is necessary to measure and quantify the amount of red button content across a sample of channels, which represent the three types of broadcasting comprising the British broadcasting landscape; public service (the BBC), commercial (ITV) and subscription (Sky).

Comparisons can also be made between the set top box technologies to ascertain if the red button content across platforms is different on a channel by channel basis. This will help establish if there is a technological difference between the platforms or a policy difference from broadcasters towards the platforms. The research will establish how much, if any, interactivity there is from red button applications by exploring what the applications are and what they do. What will also be addressed is whether the red button applications potentially provide the audience with a different experience in how the television set can be used.

The conclusions from this thesis will add to the academic body of work, which currently exists, and help the debate move forward. What will be established is whether the broadcasters of television content have adapted to the threats that have been brought about by digitalisation of media forms. Also established will be whether television has become a technology which can be viable in a converged media landscape and provide the audience with an experience which provides more flexibility, more choice and direct audience participation.

**Chapter 1 Introduction**

**1.1 Introduction**

In addition to technological concerns, television's impact on society has led to a significant amount of academic work being published in the last twenty five years. This work has provided a broad critical debate of the medium's power from a variety of positions. Amongst these are Crissell (2006), who examines the historical development of the medium and its increasing commoditisation. The basis of Gripsrud et al's (1999) work is the contradictory nature of television, its ability to provide an engaging experience, whilst at the same time asking its audience to suspend belief. Meyrowitz (1987) examines the influence that television has on behavioural patterns. Fiske (1987) deals with the cultural impact of television and how the content it broadcasts influences its audience. Silverstone (1994) addresses television as a social construct.

While by no means an exhaustive list of the literature available, the above demonstrates the variety of academic debate the medium has influenced. Recent work (see Spigel and Olsson (2004), Turner and Tay (2010) and Napoli (2010)) points towards a change currently occurring, in the way that television is perceived, as a cultural device, a provider of content and the implications for the audience. Collections by Gripsrud (2010) as well as Bennett and Strange (2011) explicitly examine the increasing digitalisation of all media forms and how television is potentially affected. Hartley (2009, cited in Turner and Tay (eds.)) argues that television is becoming a more democratic medium as '(W)hat counts as television is diversifying' (ibid, p. 20). A more cautionary note is struck by Curran (2010, cited in Fenton (ed.) pp. 19-33), when exploring how the British press have historically heralded the arrival of new media technologies. Each technological development has been hyped, claiming that the new arrival would provide an experience above

and beyond what was already occurring. However, rather than living up to those expectations, each new development has disappointed in terms of public take up. The objective of this research is to contribute and further the arguments above by exploring one recent cultural development in the evolution of television, the interactive return path and how it is used, more specifically the now familiar 'red button' on the remote control. Interactive digital television, which, despite much trumpeting in the national press, has, for Curran (ibid.), failed to deliver on its initial promise. The thesis will quantify and analyse the content which is available through the red button. This introductory chapter will set the foundation for what follows. I will begin by briefly exploring two broad concepts, which inform current thinking on technological development. The first of these is "technohype," and is aligned with what I establish above when introducing the work of Curran (ibid). I will then move onto briefly discuss "internet television." The foundation of the research is based around how television is responding to perceived threats to its dominance, as a provider of content. A converged media type like internet based television needs to be discussed, albeit briefly. The chapter will then develop the potential for television to become a more interactive device before the key research aims will be introduced. A brief overview of a series of field interviews, carried out in 2006 and 2007, will follow before I outline the manner in which the thesis will be structured.

**1.2 Technohype**

Further into this chapter, and throughout the theoretical framework and literature review, I will explore the claims made by some authors as to what interactive television could be. These claims are an attempt to justify moving television away from its traditional place and re-position the medium into a newly converged, networked and economically competitive broadcasting landscape. In this brief section I will address how this new broadcasting landscape has been seen within the broader umbrella of technohype.

At the outset of this research my intention was to explore whether or not television had been absorbed into a media landscape which had converged technologically. As the research progressed the question became one of television as an interactive medium. In the broader context of the study technology became of a lesser importance. However, technology does underpin how the various forms of media have developed. As the technologies evolved so the claims, which form the core of most of the literature, reviewed in chapter 2, used those advances to predict what potentially could be.

Technohype can therefore be traced back to the technological deterministic argument as put forward by McCluhan (1974) and Meyrowitz (1987). For Lange (1997) the new media landscape was to be based on 'dedicated communication' (pg. 156). As technologies were converging so those who provided media content had to find new ways of disseminating the material. Those who consumed the content had to adapt to new methods of accessing that material. This research aims to address whether the dedicated communication model has worked for television. Have the broadcasters taken influences from other media formats to fundamentally change the way in which television delivers content to the audience? Furthermore if the broadcasters have succeeded in providing a television experience, which is fundamentally different what does it mean for the audience? Is the material on offer capable of providing an interactive experience through enhanced content, or is it simply the case that red button content offers more choice to the viewer, away from traditional programming? As is the case with any kind of hyperbole, which greets a new technological advance, methods were explored as to the potential interactive television could offer. This study will explore whether or not the technohype surrounding interactive television came to fruition. The following two sections examine how interactive television could work. A further section explores what the attitudes of the two major broadcasters in the UK, the BBC and ITV, had towards interactive television in the recent past.

**1.3 Internet television**

The idea that the internet can deliver television content, or that television can take on characteristics of the internet, stems from the idea that technologies are converging. This is achieved because microchip technology has reached the point where it is used in a variety of devices. For Noll 'TV sets are increasingly utilising the processing power of computer technology. Thus, the technologies of the TV set and the personal computer are converging' (2004, cited in Noam, et. al. pg. 1). The suggestion here is that the television set is playing catch up with the standard desktop personal computer. Personal computers have become commonplace in the home and workplace alike. Equally, personal computers are capable of processing data intensive files, such as video, quickly. The television set has to at best cohabit and at worst compete to maintain its place in the domestic setting. For Owen (2000) the threat, that the internet poses to television, is not just technological but also has implications from a cultural and political standpoint. However, it is easy to suggest that the merging of two technologies means that one has to be more dominant than the other. It is clear that desktop and laptop computers, as well as mobile devices such as telephones and tablets, can offer audio visual content. This does not necessarily mean that we are seeing the emergence of a style of internet television which will usurp the television set or the content it carries.

Part of the problem is that internet television is difficult to define. There is no evidence that people who view video content on the internet accept that it is internet television (Noll, 2004, cited in Noam et. al). The uncertainty which revolves around internet television can be explained around the habits of the user. Traditional television content tends to take the long form. It is rare for a television programme, with the exception of the odd news bulletin, to be shorter than half an hour in length. Studies by Carey (2004, cited in Noam, et. al.) and Barkhuus (2009) found that plenty of people accessed video content on the internet, but the clips were relatively short and no programmes or feature films, in their entirety, were viewed. The suggestion here is that television has not been displaced as the primary deliverer of longer form content into the household. Evidence of this can be found when discussing ITV's attempt at internet television, ITV Local. The idea behind ITV

Local was to provide an on-line space through which regional content could be shown as high quality video. User generated content could also be uploaded directly to the site. In a personal interview, conducted in 2007, the then Managing Director of the service, Lindsay Charlton, revealed that viewing figures and page impressions were encouraging (Charlton, 2007, appendix E). The problem was that the viewers were only using the service for an average of 'two and a half minutes' (ibid. pg. 265).

Charlton referred to this practice of short term visits as 'snacking' (ibid. pg. 258). Individuals could watch a particular news story, that was interesting to them personally, and discard the rest of the news bulletin. This was made possible because the content was posted on the website and was not streamed live. The advantage of this practice was that the content could be skimmed through by the viewer. Barkhuus (2009) provides a similar finding when discussing how one of her subjects would use YouTube to skim to a particularly funny scene in an episode of 'Friends' (1994 – 2004). As television is linear, when broadcast as live, it is not possible to timeshift forwards, as well as backwards, through the programme.

While there are advantages, of viewing video material through the internet, the research suggests that internet television as a concept has not developed as fully as was hoped. Traditional television content is still viewed through the television set. This leads to the next issue in this opening chapter, namely, rather than the internet taking on characteristics which we associate with television, has television taken on characteristics which we associate with the internet?

**1.4 Television and Interactivity**

The idea of television providing a more interactive experience is not a new concept, see Williams (1974) and Stewart (cited in Toscan and Jensen, 1999). However, with the advent of digitalisation and enhanced connectivity, through the use of networks, the interactive television debate has become more foregrounded. Networks have led to a more free flowing method of transmitting and receiving

information. Computer, mobile telephone and tablet technology have developed almost exponentially. Sociologically this has led to the emergence of the network and information society (Webster, 1995, Robins and Webster, 1999, Van Dijk, 2006), a by-product of which is the concept of media convergence.

What media convergence allows is for technologies to take on aspects of other media forms. Mobile phones are still used for communicating directly, but the forms of communication have changed. Phones now use SMS texting and social media applications to promote discussion and conversation, in addition to the traditional format of ringing people up. It is possible to access television and radio content through a computer in addition to use the device as a word processor. For some these new opportunities represent a revolution in the way that we communicate and access content (Haagerup, 2006, www.nieman.havard.edu). Dawson (2007) recognises that these changes are occurring. However, he suggests that being able to access television programmes through mobile devices and computers presents a problem in that the screens are smaller and of a lower definition. For Jenkins (2004) the new methods, of accessing the content, have cultural implications, which reach far beyond technological change. The implications for fandom, in addition to sociological and political forms of transmitting information, are amplified because communication has become more instant. Television, as a communications medium, is not immune to the changes which are affecting the media landscape. As a result the broadcasters of television programmes need to explore changes in the way that content is delivered. Changes have to be made to take into account the challenges which are presented by converged media formats (Syvertsen, 2003), and move beyond just the technological.

The problem faced by television, because of media convergence, is how it can adapt in order to still be seen as a viable medium. Television as a technology has one main function, which is to provide visual content to either a domestic or public setting. In the past, whether an individual or a shared experience, the audience are, at most, active rather than interactive, as the content is being viewed. As is explored by Christophers (2008), British television has undergone a power shift, since the early

1990's, and is now comprised of publicly funded, commercial and subscription based broadcasters. With more competition between the broadcasters, the digitalisation of all media formats and the subsequent challenge posed by convergence, television has to adapt to retain and reinforce its sociological position.

The key question is how does television adapt? Since the turn of the century there have been significant changes in the way that a television set looks and the methods of delivering content. Television sets are now slimmer, screens are larger and high definition pictures mean that the content is clearer than ever before. Additionally because of digitalisation there is more content to choose from than ever before. However, all these changes are essentially evolutionary versions of what existed in 1952, when television superceded radio as the dominant communications medium in the UK. Does television need to offer something beyond more channels and better quality pictures to be seen as a viable medium in the 21st Century?

On the surface the idea of interactive television seems to answer the question. If computers and mobile phones can be successful, why cannot television offer more strands of information? Reedy and Wilson (2009) suggest that it is possible for television to take on the characteristics of the PC and offer more video on demand (VoD) services. Cavazza et al (2000) present a system which would enable the television viewer to talk to a virtual 'person' that would appear on the screen and make suggestions, back to the viewer, about what content to access. Interactive applications such as these two examples would significantly affect not only the way that television would look, but also how it would be used.

Three questions emerge from these suggestions. The first is does content of this type exist? The second is who is developing it? As has been pointed out above, the broadcasting landscape in the UK is now a more competitive business venture than it was twenty five years ago. Is it possible that interactive television can be used as a way of drawing viewers from one broadcaster to another? A third consideration is whether the audience will accept a significantly different experience through their television set (Gunter, 2003)?

**1.5 Research Aims**

This research is informed by the perceived need for television to respond to the challenges which it currently faces. In part this study aims to contribute to the question posed by Hartley (1999, p. 154), just '(W)hat is the use of television at the turn of the millennial century, when it is a well-established medium?' Epistemologically, the time is right to re-evaluate whether television has developed any level of interactivity, because the original experimentation, as explored by Bennett (2008 (a)), has had time to develop and evolve.

This research has three fundamental aims. The first is to establish whether any content, which appears through the red button, can be considered to be interactive. Secondly, the study will establish what content is available through the red button. Finally, based on the results of the first two aims, the thesis will examine the potential consequences for the audience. What this thesis is not is a discursive re-evaluation of pre-existing research. There has already been a substantial body of work written which suggests what interactive television is or could be. Nor is it an audience research based study to establish the habits of red button use by viewers. An audience research based project would have been premature until the nature of the style of red button content has been established.

Therefore what this study will achieve is to establish the amount, style and bearing, on traditional scheduled programming, of red button television content. This will be achieved by using a quantitative research method to precisely measure the red button content available. By measuring the amount of content the study will, in addition to the main research aims, establish the attitudes of the broadcasters towards interactivity. Clearly the role of the broadcasters is important because they provide the content in the first instance. What is also clear is that there is red button content, which appears beneath the programme, being transmitted as an additional stream. The question is whether the content is interactive or not. If the content is interactive, what does it contribute to the overall current experience of television? If the content is not interactive, what exactly does it do?

## 1.6 Field interviews

At the outset of the research a series of field interviews were carried out with key employees at the BBC and ITV. Additionally after the data collection period was concluded a further interview was carried out with a key employee at the BBC (see appendices C, D, E, F and G).

The interviews were useful in bookending the study as they were conducted either side of the content analysis. Analysis could be carried out that not only stemmed from the results of the quantitative element of the methodology, but could also examine past and present attitudes of the broadcasters. That the majority of the interviews were carried out at the BBC, despite repeated overtures to Sky during the post data collection period, and one at ITV in 2007, suggests that the BBC has a more pronounced policy towards red button content, and is willing to place it in the public domain. A key finding of the interviews was that seven years ago the interviewees,' one at ITV and three at the BBC, were positive about the future of the red button stream as a carrier of interactive content. Six years later, in 2013, the BBC was found to be cutting their red button content, particularly the video streams.

## 1.7 Thesis Structure

In this introductory chapter I provide the foundation for the study. The two key elements which underpin the study are introduced, a passive medium in television and the potential for that passivity to be disrupted by elements of interactivity. Both these elements are placed within the technological and political climate which existed seven years ago. Additionally I outline the key aims of the research and why I feel it is necessary for the study to take the approach it will.

The focus of Chapter Two will be to review existing literature relevant to the study. In addition the chapter will provide a theoretical framework, for the rest of the study, by examining relevant theories and concepts which link to both television and interactivity. As well as examining the broader contexts of television and

interactivity I also attend to literature relating to participation, audience relationship and media policy. In Chapter Three I qualify the specific research questions for the study. The four research questions are examined in greater detail before I outline the methodological approach, and design, that was used during data collection. The methodological design provides examples of existing quantitative studies, in order to justify the design of the methodology for this study. The size and parameters of the sample will be presented, along with a comprehensive list of red button applications, which it is thought would have been found. I also return to the field interviews during this chapter. This is because crucial information relating to what was being addressed by one of the broadcasters emerged in the time between the interview taking place and the methodological approach being designed. Additionally further field interviews were requested and carried out post data collection. Finally, chapter three discusses the pilot studies which were carried out to test the design of the quantitative element of the methodology.

Chapter Four presents a broad overview of the results and findings of the data collection period. The results are presented using the headings provided in the coding sheet that was used during data collection. Presenting the results in this manner, with limited commentary, provides a statistical foundation for further discussion. However, in Chapter Five I expand upon the results and findings by placing them within the context of the four research questions which the study intends to answer. Answering the research questions at this stage allows for a framework to be developed which informs a more comprehensive discussion in Chapter Six. Additionally the sixth chapter revisits some of the key literature from Chapter Two, to tie the discussion of the results and findings from the data collection to the literature that provides the theoretical framework for the study. The field interviews also help address and inform the various discussion points. Chapter Seven will conclude the study by examining the implications of red button content for the audience before providing an overall conclusion and final thoughts.

**Chapter 2 Theoretical framework and literature review**

**2.1 Introduction**

This chapter establishes a theoretical framework for the study, by discussing existing literature. While the objective of the research is to explore content that is available, when pressing the red button on the remote control, there will be much use of the word interactive in this chapter. This is because most of the academic work discussed sees the future of the medium as something that the viewer directly participates with. These views move far beyond the idea that the red button is just a conduit used to access more information and envisage a much more developed part of the viewing experience.

The chapter will be divided into a series of headings exploring key issues. In turn, the headings have been narrowed down into sections in order to provide a more focussed structure. There will be much mention of a changing media landscape. This changing landscape will be addressed from the context of the influence that contemporary media content delivery systems have had on television. The relationship between television and the audience will also be explored. Additionally the chapter will examine institutional dynamics as well as the development of policy and regulation. While the main focus of the chapter is to examine British broadcasters there are occasional references to work which addresses the American model.

**2.2 Has the sociological position of television changed?**

Before the idea that television has evolved into a more interactive experience is addressed it is necessary to explore whether or not television's sociological position is undergoing a fundamental shift. The aim of this section is to place into context the current thinking into the social position of television. The section will draw heavily on the work of Katz (2008), Jenkins (2006) and Ellis (2000).

2.2.1 'The Death of Television'

In a lecture titled 'The Death of Television,' and delivered in December 2008 at Leeds University, Eliuah Katz argued that television has lost its explicit 'sharedness.' This is in large part due to the onset of digital television and the subsequent proliferation of channels. What Katz means here is that television has lost its traditional place as a communications medium that is able to bring together social groups.' Television sets are now diffused throughout the household in a multiplicity of rooms, a point that is also made by Silverstone (1994). For Katz (2008) this has resulted in television becoming more of an individual experience. The implications of this, Katz argues, will have a negative effect not only on television as a viewing experience, but also as a societal tool. The medium will not disappear, but its core values, the elements which made it such an important part of society's everyday experience, also identified by Silverstone (1994), will vanish.

Foreseeing the death of television is not a new academic activity. Gilder (1990) predicted that television, as a medium, was a spent force and would be super-ceded by a device called the telecomputer. For Gilder '(T)elevision is a tool of tyrants' (1990, p.35) and the emergence of the telecomputer would allow for a more interactive and, running counter to Katz (2008), a more democratic experience. Gilder's (1990) argument is based on the American style of broadcasting, which has traditionally had a more commercial structure than the more public service attitude of the British model. With the American television channels being run by hard headed business men, interested only in profit, Gilder sees that a more interactive experience allows the audience to have more influence, in what can be done with the medium. Both arguments, while convincing, also serve to highlight the problem that exists and legitimises this research. If digitialisation has led to television becoming a different experience, to what it was in the past, how does this happen? Has the medium become more interactive and what does the red button do, if anything?

The position adopted by Lotz et. al. (2009) is that television is entering a new era, which has been brought about because of a more diffused audience, loss of advertising revenue and the emergence of large scale media conglomerates. American broadcasting norms have always been biased toward the network, a broadcasting institution which would dictate programming content and schedules. The purpose of Lotz et. al's. (ibid.) arguments is that the American broadcasting institutions are moving away from a 'network era' (ibid. p.2) to a 'post network era' (ibid. p.8), which does not signify the death of the medium. What is implied is a re-positioning to take into account that audio visual content is now not just delivered through a television set, but has other means of being seen.

Katz (2008) concentrates on the perceived demise of the medium, from a content based angle and its loss of the ability to draw social groups together. Conversely it can be argued that the broadcasting of television pictures now brings more disparate groups together. It is now virtually impossible to not see television. Television sets are in pubs and clubs, in lobbies of hotels and car showrooms (Hartley, 2009, cited in Turner and Tay (eds) pp. 20-30). Lotz et. al. (2009) talk of diminishing audiences, when in fact there are more television sets broadcasting more television content, to more people. The difference is that there are now more channels for the audience to access. Coupled with this, television content is now not something that exclusively appears on a box in the corner of a room. Television based content is also available on the internet, mobile phones and tablets, which are media forms directed at the individual.

OfCom (2008 (a)) reports that one of its key findings in 2008 was a 16% rise in the number of 15-24 year olds using the internet to watch television. Therefore a television set has become just another technological conduit through which content is piped. There now exist other methods of accessing television content, and the traditional providers of scheduled programmes have been forced into accepting this. Broadcasters have had to actively acknowledge the presence and influence of the internet in order to compete within a cross platform media landscape.

An example of this is another lecture, this time delivered by Peter Bazalgette on the 16th of November 2010 at York University, which takes the opposite view of Katz (2008). Bazalgette's (2010) argument, rather than dealing with the sociological position of television, approached the future of the medium from the technological angle. The core of Bazalgette's (ibid.) argument was that the future of television is in becoming a more interactive medium. For Bazalgette (ibid.) that is currently happening because the era in which we live offers more opportunity for technology to be more flexible in the way that it delivers content to the viewer. It has become harder to define just what platform does what as media technologies and content providers converge.

Bazalgette's argument is reinforced by Gillan (2011), who argues that American networks re-negotiated their relationship with their audiences by providing new methods of engagement. This was achieved by the networks providing content for prime time dramas on other platforms, which act as a way of teasing the audience, drawing the browser back to the main transmission and once more turning him/her into a viewer. Therefore, rather than using the internet based applications to provide an alternative viewing experience, broadcasters in the U.S. are harnessing online spaces to market products and encourage viewers to return to watching programmes. That the online spaces exist and are being used in such a fashion suggests a convergence not only of technology but also marketing practices.

### 2.2.2 Convergence

For Winston (1998) convergence, of any type, is merely just a buzzword. His research provides various examples of the manner in which communication technologies have historically taken ideas from each other in order to evolve into something new. The historical patterns and examples supplied by Winston (ibid.) point to the fact that any technology undergoes some kind of shift, or it moves away from its initial purpose to a new level. The classic example in recent times would be the Internet, which began its existence as a military application.

However, McCluhan (1974) envisaged that communications media had long reached the stage whereby they could contribute to the breaking of boundaries between societies and cultures. Both Jensen (2010) and Jenkins (2006) are more cautionary, while acknowledging that McCluhan's (1974) hypotheses have, in some part, come to pass. This is particularly true of Jensen (2010), who argues that media convergence was inevitable given the historical development of older media technologies as '(O)ne material medium may support several different communicative processes' (ibid. pg. 70).

For Jenkins (2006) media technologies have converged through a combination of collective intelligence, participatory culture and media convergence, leading to a new relationship between media producers and media consumers. This new relationship has led to greater audience empowerment and has impacted on society both as citizens and consumers. Conversely media producers have to engage with the audience on a more personal level. Kolodzy (2006), Thurman (2008), Lee-Wright (cited in Fenton, 2010) and Wardle and Williams (2010) stress this by acknowledging the emergence of citizen journalism and user generated content, whereby rolling news channels actively encourage the audience to send in their views and pictures on news stories via mobile phones and e-mail.

Generally Jenkins (2006) is positive in terms of what convergence means, both for the producers and the followers of media content. Jenkins sees convergence, and the way it is used, as a new form of cultural production, which more tightly links the producer and the fan of the particular content. However, there is a worry that once political organisations and business institutions recognise the flexible nature of convergence it will be undermined and manipulated negatively. The ability for media content to share platforms, a core value that makes convergence a good thing, enables a potential greater audience reach. The conclusion is that while there are lots of positive elements, due to the emergence of convergence, society has 'to be attentive to the ethical dimensions by which we are generating knowledge, producing culture and engaging in politics together' (Jenkins, 2006, p.294).

This last concern is recognised, and furthered, by Silverstone (2007), who approaches the issue from a sociological position rather than the cultural. For Silverstone, society is undergoing a transition similar to the move from the agricultural to the urban at the turn of the 20th Century. However, the transition from the agricultural to the urban was visible, while the current shift is less noticeable. This lack of visibility is due to the fact that the current shift is towards the manner in which citizens receive and use information. This has resulted in the creation of an informational space, which allows citizens to be connected to all manner of information at any one time.

In this respect Silverstone's argument is not so different from McCluhan's (1974) global village, where levels of communication have become so advanced that space and time have been abolished (ibid. p.11). However, Silverstone (2007) takes the argument further and refers to the informational space as the 'mediapolis, the mediated public space where contemporary political life increasingly finds its place' (ibid. p.31). Silverstone's position goes beyond McCluhan's (1974) argument that interconnectivity meant that technological advances were making communications simpler. The mediapolis is not just a technological space, it is a forum which is 'constructed through (principally) electronically communicated public speech and action' (Silverstone, 2007, p.31).

The arguments of Jensen (2010), Jenkins (2006) and Silverstone (2007) present a debate which encompasses the whole of the media landscape. However, this chapter began by aiming to address whether or not the sociological place of television has changed. What cannot be ignored is the importance of convergence on any type of media. Therefore Katz's (2008) concerns are reinforced. Television used to be a social enterprise, which enabled people to experience something as a group. However, as the technology of television sets became more portable so the technology was shared across the social spectrum. This brought about the break-up of the social groupings that the technology enabled. The proliferation of channels contributes to Katz's lack of a shared experience, which is reinforced by media convergence. As convergence has taken hold it is now possible to view televisual content across multiple platforms.

Therefore, the one influences the other. Convergence provides the audience with a broader more disparate choice in terms of how content is accessed. While there are more televisions in places where people gather they are used as moving wallpaper, there are other distractions which stop people from watching the content.  The idea that the radio receiver and the television set are the main methods of listening and viewing content are not as ascendant as they were in the past, however the notion that the mediums are dead does not prevail either.


### 2.2.3   Uncertain future

Television is constantly evolving as a technology, but is also threatened as cross platform media become prevalent, which leads to a degree of uncertainty about televisions future. All the major broadcasting institutions in the UK now provide the audience with a method of viewing content other than through a television set (www.ofcom.org, 2008a). The BBC iPlayer was 'reported to be dealing with more than 70,000 "requests to view" every day in April 2008 and attracting a unique audience of 1.4m in the same month' (www.ofcom.org, 2008a, p.63). By 2010 the number of people in the 15-24 demographic accounted for 40% of the 31% of the population using catch up services such as the iPlayer (www.ofcom.org, 2010, p.103). By 2011 this figure had risen to '37% of people with home internet claimed to watch on-line catch up services' (www.ofcom.org, 2012, p.172). The 16-24 demographic accounted for 48% of the use for these services (ibid). During April 2013 the BBC iPlayer 'attracted 7.6 million unique visitors' (stakeholders.ofcom.org.uk/, 2013, p.205). Computers remained the primary method of accessing timeshifted content but '39% of the total requests (70 million) in May 2013 were made through this platform, down from 54% of total requests in May 2012' (ibid. p.206).

As these results suggest it is not possible to say the changes, which have recently impacted on the media landscape, mean that the place of television is certain. Convergence means that more television content is available but the future of

television has to be approached with a level of anxiety. The irony is that the uncertainty, that television now faces, has been brought about by what John Ellis (2000) calls 'the age of plenty' (ibid. p. 162). For Ellis this is a new phase brought about by the inception and subsequent proliferation of digital channels. On the surface this represents a positive development as, in principle, there is the potential for the audience to benefit from more choice because there is now more content. Genre specific channels enable the audience member to continue watching their favourite style of programme, without constantly observing the rigidity and inflexibility of the schedules. Timeshifting applications, made available through set top boxes, for example the TiVo box used by Virgin Media, also disrupt the schedules, but account for the fall in use of these services through computers.

However, for Katz (2008) both genre specific channels and timeshifting applications only contributes to the impending demise of the medium, as the audience are less likely to stumble on anything that could be new or challenging. The argument is that if a viewer wishes to watch more entertainment based shows there are specialised channels which provide nothing else. Conversely, if a member of the audience wants to watch more news there are now channels that provide just that. Therefore there is little chance that someone who watches Comedy Central will see any news broadcasts or that an avid follower of the news will ever see the latest popular American situation comedies. By being able to view programmes through on demand services the same problem occurs, as the viewer can theoretically build their own schedule.

The debate about the uncertainty for television revolves around this argument. More channels should represent more choice, but it could also mean that the audience's experience is diluted to a few favourite channels, which repeat the same content over and over again. Expanding on this, and returning to a recurring theme, the audience also now has the ability, because of technological convergence, to access television content on other technologies as well as through their television set; televisual content has gone mobile. In the domestic setting, it is now also easier for members of the audience to choose to record programmes, via a hard disk recorder, direct from the television remote control, in addition to accessing on

demand services. All of this, according to Ellis (2000), means that television is losing its underlying and underpinning structure as the schedules become less important.

Schedules were the mainstay of television. The rigidity that they promoted allowed both the producers of content and the members of the audience to know exactly what was on, as well as when, and who it was aimed at (Paterson, cited in Goodwin and Whannel, 1990, pp. 30-41). Scheduling is arguably an art form insofar as it 'forms a framework with which a viewer becomes familiar, so that s/he returns to watch a programme at a known time every week' (ibid. p.31). For Williams (1974) television content was delivered in a manner that consisted of distribution and flow (ibid, pp. 77-120). The schedules were the foundation upon which the content sat and gave a sense of structure to the audience.

Using Williams' (1974) study, as a foundation for his argument, Urrichio (2004) takes the notion of flow and places it within the current debate. The position adopted is that television is entering a new generational phase, one that has evolved through a period of time. The development of the remote control and personal video recorder are flagged up as being pivotal in driving forward this evolution. Urrichio (ibid.) uses the example of being in a hotel room and using the red button on his remote control to access various services on his television.

The digital video recorder (DVR), and its ease of use, is also used as an example of another contributory factor in the generational evolution of television. In the ITC's Annual Report of 2002 (www.ofcom.org.uk) the point was made that DVR take up was low but that the technology was continuing to develop. When the report was published the DVR was seen as a replacement for the VCR or DVD player/recorder. However, Sky, Virgin Media and Freeview provide their customers with DVR's built into their Sky+, V+ and Freeview+ set top boxes. The DVR, for Urrichio, has again disrupted the natural flow of television as envisaged by Williams (1974). By August 2008 Ofcom (2008a) was reporting that DVR takeup was at '23% of households (up from 15% a year ago) (ibid, p. 131). The following year take up had risen to 37% ([www.ofcom.org](www.ofcom.org), 2010, p.100). DVR takeup rose by a further 10% to 47% in 2012 ([www.ofcom.org](www.ofcom.org), 2012). By 2013 this had risen to 67%

(, p. 202).

Both the remote control and DVR/PVR are peripheral devices, which allow easier methods to enable navigation and storing of content respectively. There is the potential for the schedules, on which television content is underpinned, to be undermined. The uncertain future that television faces is not that content will not be seen, it just will not be seen when the producers and broadcasters intend.

**2.3   Is interactive television happening and if so why?**

The following section of this chapter will explore why a televisual experience considered as being interactive, and a possible example of convergence, is emerging. Examined first will be the institutional dynamics and attitudes in British television broadcasting. The focus here will be on the three major players in British broadcasting, the BBC, ITV and BSkyB. Each of these broadcasters has a different set of core values, which have reached their current state through a series of historical developments. These developments will be used as a basis for explaining the current attitudes to interactive content.  Following this, the section will then look at the development of policy towards interactivity. Various regulatory bodies have come and gone since interactivity was first raised, as a potential method of delivering additional television content. The approach will be historical in establishing how the current regulatory position has been arrived at.

2.3.1 Institutional attitudes

The British broadcasting landscape is made up of a combination of publicly funded, commercial and subscription based content providers. Traditionally, the BBC is seen as being set apart from the rest of the terrestrial broadcasters, on the grounds of its public service broadcasting remit and subsequent funding. As the BBC is certain of steady consistent income generation, and that income has to be ploughed back into public service broadcasting, the framework already exists for the BBC to explore new innovative methods of producing content.

This exploration has led to a realignment of production and policy and is explained as a '360 degree commissioning strategy' (Bennett, 2008 (b), p.278), which is designed to encourage the audience to collaborate in a new sense of engagement and participation. Bennett (2008 (b)) uses the BBC's multiplatform approach to the broadcasting of the World War Two commemorations in 2004 as an example. The interactive services provided a bridge, between the more traditional convergence of web based and television content, by 'the applications themselves playing a crucial role in driving the production and experience of the multiplatform text' (ibid. p. 281). Bennett argues that this approach by the BBC is designed to re-invigorate the public service broadcasting model, as it addresses that the public are now consumers in addition to being citizens.

By repositioning itself at the forefront of the government led Digital Britain (2009) campaign, the BBC is re-defining, albeit subtly, its public service policy. As a result policy documents are being re-written, which re-word the traditional inform, educate and entertain policy, although this will remain as the core mission statement. Because the BBC is answerable to a trust, and ultimately to government legislation, a series of policy documents reflect the direction in which the BBC is being pushed. Terms such as 'promoting education and learning' and 'sustaining citizenship and civil society' (Bennett, 2006, p.268) are being used to promote the challenges and the expectations now being asked of a public service broadcaster like the BBC.

The situation at ITV is very different, as the example of Granada TV illustrates. Fitzwalter (2003) makes the point that, up until the early 1990's, Granada Television was a symbol for everything that the ITV network was originally intended to be. The people who were running the station had a set of values that were in keeping with the public service remit to quality television. However, once these people were gone, a swift decline followed. What began as a series of localised regional television stations, that contributed programme content to a national network, has become, through a series of mergers, one company that is based in London. Therefore, ITV is less committed to regional programming output and, more crucially, is even less committed to a public service remit. This, for Fitzwalter (ibid.),

is because of the internal political struggles and ambitions by people who have little in common with what television should be and do. However, central government and the regulators have contributed and exacerbated the situation by either making a series of policy decisions, or turning a blind eye to perceived wrong doing, which have led to the current gloomy outlook. The primary outcome is an attempt to make cheaper more populist programmes, which are more marketable. The values that the ITV network once stood for, in quality drama and insightful reportage, have at best been diluted and at worst cut completely.

The outcome, for Fitzwalter (ibid.), is a much less formidable organisation which is incapable of competing in the public sector with the BBC, and to a lesser extent with Channel 4. ITV is also incapable of matching the commercial capability of BskyB, as it has only one serious stream of revenue which is advertising. Conversely, BSkyB can charge for advertising slots, is subscription based and is a part of a much larger media organisation in News International.

Therefore ITV, for Fitzwalter (ibid.), has completely lost its place within the British broadcasting landscape. It can barely function to produce the programmes to fill its schedules and there is no room for innovative practice. So, while the BBC can explore new methods of content delivery and interactive services, ITV is in a continuous and steady decline, regurgitating tried and trusted formats in the hope that the audience and, more crucially, advertisers will stay with it. Therefore, any interactive content would have to generate income in order to be economically viable. The results of the quantitative element of this study will establish if the interactive space has fully developed as a commercial avenue. What will emerge is whether terrestrial commercial television companies are as ambitious, in their scope of experimentation with interactive and red button services, as the BBC.

However, the exploitation of television as a commercial space was paramount in the reason for BSkyB to launch Sky Digital in the late 1990's. As Horsman (1997) points out, subscription televisions primary motive for existing is profit led. BSkyB's emergence, as a major player in the British broadcasting landscape, upset the balance of power. Fitzwalter (2003) argues that the duopoly between the BBC and

ITV has been stymied by BSkyB. Horsman (1997) argues that the whole of the current problems could have been avoided if the terrestrial companies had been quicker to react to the threat of subscription television. In addition to this the political will for competition to exist between broadcasters was great at the time that the initial subscription television channel, Sky Television, emerged.

As Fitzwalter (2003) and Horsfman (1997) point out, the attempts by the existing terrestrial broadcasters, under the banner of BSB, to enter the subscription market, were a complete disaster, as was so nearly the initial attempt by Sky Television. Where BSB was at a disadvantage was that it had too many stakeholders for it to succeed, whereas Sky could rely on its parent company, News International, to prop it up. This put Sky into a much stronger negotiating position when the inevitable merger between the two occurred. The resulting company, BSkyB, firmly established the broadcasting environment, which exists at the present time in British broadcasting, where the content is divided between public service, commercial and subscription based broadcasters.

However, what the emergence of BSkyB has done is turn television into something that the BBC and ITV never thought it would be. On subscription services television content is now a commodity, which is the reason for the bidding wars that periodically break out between the broadcasters for the rights to show particular programmes or events. In turn, the commoditisation of interactivity is something that has been explored by BSkyB (Bennett, 2006), however, for it to succeed it has to offer the audience something that benefits the overall experience. While the BBC is able to explore innovative practice to maintain a PSB remit, ITV, Channel 4, and five have first to ensure that they can survive in a changing broadcasting landscape, before they can make the perceived leap that the BBC has made. However, in order for BSkyB to offer potential subscribers a service that is attractive it has placed services, which were originally termed interactive, into its programming as an attempt to lure in new customers. As is neatly pointed out;

> We consume the media, and we consume what the media
> stimulates us to consume. In fact the primary definition of media

today is as a space for selling and consumption. In that sense television has always been "interactive." It has been engineered and developed and continuously improved with stimulating consumption and selling products ever in mind – not unlike the way that the Internet is currently developing.

(McGrane and Gunderson, 2010, p.82)

## 2.3.2 Regulatory policy

The attitude of the major broadcasters, to the development of interactive services, differs depending on the particular remit of the organisation. However, what it is possible to say is that there are at least two of these organisations developing red button content, the BBC and BSkyB, if for different reasons. The 2002 Independent Television Commission Annual report, subtitled Overview of Commercial Television – Access, Choice and Competition, recognises this. While the report found that interactive television was becoming more prevalent, the only real innovatory content was to be found on the BBC ([www.ofcom.org.uk](www.ofcom.org.uk)).

However, the various regulatory bodies that have existed over the past decade have struggled to define exactly what interactive television is, and the potential it offers. This section will look at the policy issues that have emerged over time, which have led to the pushing of the red button becoming a method of accessing television content, how the various regulatory bodies have responded to interactivity's potential and addressed any concerns raised.

As far back as March 1998 a report was published by Oftel (Digital Television and Interactive Services: Ensuring access on fair, reasonable and non-discriminatory terms) suggesting that interactive television should be viewed as separate from traditional television content ([www.ofcom.org.co.uk](www.ofcom.org.co.uk)). Exploring how the broadcasting institutions would subsidise the new set top boxes and access routes for digital and interactive content was the main thinking behind the document, as opposed to the content making up the services. The report envisaged that

interactive television would be used for interactive advertising, home shopping and playing along with quiz shows. There is no recognition of the argument in terms of how interactive television could influence the structural elements of traditional broadcasting content. Rather than the two elements converging, the document appears to suggest that there are two clear streams of information that should be viewed and used separately. However, the document contradicts itself by stating that 'Oftel recognises that increasingly broadcasters may be doing both, and in the relatively near future all television services may involve interactive elements' (ibid. p. 8).

By 2001 the ITC ('Guidance to Broadcasters on the Regulation of Interactive Television Services') were recognising that interactive television had evolved by suggesting that there were now two formats, 'dedicated interactive TV' (www.ofcom.org.uk, 2001, p. 4) and 'enhanced programme services' (www.ofcom.org.uk, 2001, p. 5). Dedicated interactive TV would be on-line shopping and on-line betting applications, whereas enhanced programme services would be interaction with a linear programme, interaction with advertising and even 'advertising enhancements to advertisements' (www.ofcom.org.uk, 2001, p. 5). It is interesting to note that, while the ITC recognised that enhanced programme content was now a crucial part of the interactive project, there is a more serious concern about advertising. This could be seen as a recognition that terrestrial commercial television in the UK was in trouble. The perception appears to be that, by making advertising more interactive, new revenue streams could be exploited, a point that is emphasised by other research which exists on the subject (see, Arroyo-Canada and Gil-Lafunte, 2012, Levy and Nebenzahl, 2007, Cauberghne and De Pelsmacker, 2008 and Lopez-Nores et. al. 2008).

In its 2002 annual report (ITC, 2002, www.ofcom.org.uk) the ITC finds the future of interactive television to be largely positive after a period of uncertainty, 'there was some evidence during the year that iTV's obituaries may have been prematurely written' (ibid. p. 9, 2002). The report points out that '(A)s a consequence of new interactive programming from the BBC, Channel 4, BskyB, UKTV, MTV and others, the notion of pressing the red button has become commonplace for many digital

viewers in the space of less than 18 months' (ibid. 2002, p.9). However, and as this research will explore further, in the 12 years since the report was published the development of interactive television seems to have stalled and returned full circle.

The perception of the perfunctory nature of interactive services is reinforced in the 2008 Ofcom consultation 'Second Public Service Broadcasting Review, Phase 1: The Digital Opportunity.' In this consultation document, interactive services are mentioned but the term has a broader meaning. There is much talk in this document of interactive services, the public acceptance of them and the broadcasting organisations commitment to them. However, the phrase 'enhanced programming' as discussed above has disappeared and the emphasis is placed toward video on demand services such as the BBC's iPlayer and Channel 4's 4oD. There is also much made of the separation of digital television and broadband services as two disparate methods of content delivery. Rather confusingly, there is also much talk of convergence and embracing the principles of convergence to suit a public service broadcasting remit. This will eventually result in 'a further blurring of boundaries between the internet and TV platforms, due to the convergence of broadcasting and many-to-many networks' (Ofcom, 2008, p.52).

The report also states the 'necessity of public service institutions embracing interactive media content and distribution as well as linear television' (ibid. p.77). This can be seen as a reference to interactive services, and ties up neatly with Bennett's (2006) exploration of the BBC's coverage of the D-Day landings as an example of the on-going commitment, by the major British public service broadcaster, to explore the potential of interactivity. However, it appears that Ofcom is less convinced, not only of the commitment, but also whether the technology will be superseded by something different. At the moment interactive television portals can only be accessed through the remote control. This includes video on demand services, for example the iPlayer and 4oD, both of which are available as part of the television catch up service offered by Virgin Media. However, Ofcom foresees a time when there will likely 'be a tipping point in the future when a new generation of television sets, with integrated broadband and storage capability, are sold' (Ofcom, 2008, p.51).

The clear differentiation of television from broadband content, for the purposes of a document of this nature, is understandable. There seems to be a certain amount of confusion for Ofcom as to what the audience are accessing and how. While the report espouses the virtues of converging internet like activities, onto television content, and video on demand services, onto the internet, Ofcom still sees them as separate media types. The fact is that all the major British broadcasting institutions have branched out into offering web based services, which back up traditional television content. Web based activities are now inextricably linked with television programmes and vice-versa.

However, Ofcom is unsure as to whether the audience will ever see the two as being an extension of the other, a whole, rather than separate services. At the moment '(A) key uncertainty will be whether those who have grown up with the internet as a part of their lives will revert to more traditional linear TV habits as they grow older, or whether they will continue to shift their preferences towards the internet' (ibid. p.72). The question is whether the same can be said of interactive television services. Just how do the audience perceive and use these services? Are they seen as different forms of television or a natural extension of the other? As Lotz et al (2009) found, prime time television in America actively embraced on-line services as a part of their post network age. The networks have achieved this by providing the audience with more methods of receiving content, through on-line media delivery. This was partially to ensure survival but also was more of an effort to aid and develop an existing broadcasting medium.

This argument, on the American model, is furthered by Bar and Sandvig (2008). American media policy has always been essentially very simple. There are three key elements which dictate policy and they have evolved historically. The first of these was the economic value of the method by which content was delivered. The second element is the technology that is responsible for the delivery of the content. Finally, the third element is the policy that is put into place, which regulates the use of the technology, and how it delivers the content. The examples used here are the postal service, telephony, the press and broadcasting.

The emergence of the Internet precipitated a major crisis which destroyed the equilibrium in this model. For the first time a technology existed, which satisfied the criteria on one platform of all the above mentioned services and technologies. On the one hand, it is difficult to regulate something that crosses and converges' so many technological and political services. On the other hand, it exists so therefore needs to be taken seriously. In particular broadcasting, as explored above by Lotz et al (2009), has had to embrace new methods in order to try and maintain an outlook which may one day restore a fragile equilibrium.

Debrett (2009) supports this view by looking at the way that Public Service Broadcasting has had to adapt to cross platform content delivery. The argument here is that DTT (Digital Terrestrial Television) offers the potential for more audience choice. However, as the audience is becoming more fragmented and disparate, so the traditional public service broadcaster has had to embrace cross platform technology, which then supports the programme content.

In 2009 Ofcom published its final summary of the current state of public service broadcasting. The title of the report, 'Ofcom's Second Public Service Broadcasting Review, Putting Viewers First,' suggests that the primary concern of Ofcom was towards the audience, and their experience of the evolving media landscape. While digital take up is seen as important there is no mention of specific services, beyond the separation of internet and traditional broadcasting methods. The review feels that it is important for the public service broadcasters to increase on-line services as '(L)inear broadcasting is no longer the only way to deliver public service content' (Ofcom, 2009, p.33). More reach is seen as being vital, as content is expected to be available to the audience 'whenever and wherever they choose' (ibid.) and would reinforce 'the opportunity that digital technologies have for new content and services that are more participative, social and interactive than traditional broadcast content' (ibid). In the conclusion of the report it is stated that '(P)ublic service content will only continue to achieve reach and impact if it is made available across multiple platforms, in a variety of formats, to a range of devices' (ibid, p.113).

The above statements reflect Ofcom's concerns, about the manner in which non-traditional forms of content are delivered and then used. Again, this is understandable due to the array of methods with which it is now possible to deliver and receive content. However, Ofcom's main concern appears to be that public service broadcasting, certainly for now, should be viewed as a multiplatform service. A result of this is satisfying the perceived audience demand for as much content as is possible.

While the British broadcasters, especially the BBC, may see red button services and web based activities all as one thing, as part of something that exists under a larger institutional umbrella, the regulators do not. The key in all this is the audience and what they think, as it is on the reaction of the audience on which all broadcasting media, be it a technology or a piece of content, is judged.

The regulators are therefore in a difficult position. By laying down the elements that make up policy, towards a converged media landscape, Ofcom is recognising that the position of the content delivery systems is shifting. As will be discussed below in some depth the shifting landscape is demanding more from both the broadcasters and the audience.

Therefore interactive television services, in general, would have to be more internally regulated by the broadcaster responsible, and the audience would have to make more of a moral judgement as to what services they accessed and why. Ultimately what Ofcom (2009), as a regulator, and Silverstone (2007), with the mediapolis, are saying is the same, although for different reasons. More widespread digital and interactive services, and their use, become the responsibility of the viewer.

## 2.4 What does interactivity mean for television?

This section will look at the broader issues of interactivity. The first section will explore the issue of participation. By looking at participation it is possible to see how a converged media landscape can impact on the audience's experience of

television content. Beginning with the idea that multi-platform access offers the audience the opportunity to be a more willing participant, when engaging with media forms, the section will then move on to discuss how participation can lead to a more individualistic experience, as expressed by Katz (2008). Instead of offering the opportunity for a greater shared experience, interactivity could lead to the viewer becoming more distant and detached.

### 2.4.1 Participatory experience

For Ross (2008) the American television networks have actively embraced the Internet as a platform for providing an enhanced viewing experience. However, it is the fans of the programmes that really make the experience a true cross platform method of audience engagement. Ross argues that the television networks have had to acknowledge the presence and influence of the internet, because the fans of the programmes were using it to share views on character and plot development. Ross calls this new way of not just viewing a particular programme, but also acting as a critic, a fan and an active participant in a particular group as 'teleparticipation' (ibid. p.3).

By using the internet as a meeting place, Ross (2008) maintains that the fans of a particular programme are not only contributing to the emergent culture of on-line use, they are also rediscovering the television viewing experience. There are two distinct experiences happening, one simply just viewing a particular programme, and another whereby the fan of the programme cares enough about it to share their thoughts and views with others. The reach of the Internet means that fans can engage with people who they might not necessarily come into contact with, through conventional social interaction. By using teleparticipation, the fan is able to move beyond the normal conventions of fandom by expressing their views, rather than merely being content to just eat a sandwich from their Buffy the Vampire Slayer lunchbox.

Embracing convergence has enabled the networks to find a valuable method of quickly and easily testing audience reaction. As Ross (ibid.) points out, the first goal

of any television network is to please its audience, to provide something that the audience wants to view. By gauging public reaction through on-line forums the networks can swiftly judge whether or not a particular programme appeals to its target audience.

However, there is a danger in teleparticipation, which Ross (ibid.) fails to fully acknowledge, and links to Katz's (2008) summarisation on the dilution of audience experience. It is possible to argue that more layered interactive experiences, such as teleparticipation, offer the audience even less choice. This is because the audience immerse themselves, not only in the narrative of a particular programme, but also in the characterisation and plot of that text. The teleparticpant is too busy interacting with one particular programme to notice other programmes and genres.

For Enli (2009) the emergence of a participatory culture has not led to a greater influence by the audience. Rather, a whole new meaning, in the relationship between the watchers of television and the institutions that provide content for it, emerges. Using case studies from two popular British reality television shows, Strictly Come Dancing (BBC, 2004 - ) and Britain's Got Talent (2007 - ), Enli suggests that the members of the audience now have the opportunity to openly rebel against the institutional conventions that have in the past been taken for granted, by both the audience and the broadcaster. The audience also has the opportunity to more obviously influence the emergence of new public figures. This can result in the audience taking on the form of a kingmaker, the ordinary can easily become celebrities and the celebrity can be seen in a more ordinary light.

Enli's (ibid.) first case study focuses on Susan Boyle's emergence into the public conscience. The viral nature of how, the seemingly ordinary and insecure, Boyle became a global figure, in what was a very short period of time, demonstrates how quickly the use of digital media can allow content to spread internationally. It is also a good example of how media convergence can work. The combination of a television reality talent show, the internet and the viral nature of the original audience, sharing their experience, provides evidence that the audience has developed an actively participatory culture.

However, in an example of how the opposite can happen, and a celebrity can appear to be ordinary, Enli (ibid.) uses the news correspondent John Sergeant's appearance on Strictly Come Dancing (2004 - ). This is an example of how participatory culture can lead to the broadcaster being alienated by the audience. The BBC assumed that the audience would want to see the best dancer and would subsequently vote for technique and skill. Instead the audience voted for character and entertainment value. This, for Enli (ibid), demonstrated arrogance on behalf of the BBC because it was expecting the audience to behave in the same way that the aims and objectives of the programmes preferred reading.

The participatory culture, as understood by Enli (ibid), has led to a new collaborative relationship, not only between old and new media, but also between the audience and the broadcasters. Ultimately, nobody lost out in the case studies that Enli (ibid.) uses. Britain's Got Talent (2007 - ) managed to achieve a significant audience share for its final show to see if Boyle would win. Strictly Come Dancing's (2004 - ) audience was boosted by the very public debate that ensued, because of the continued participation of Sergeant in the show.

Ross' (2008) and Enli's (2009) arguments suggests that convergence and a more participatory element is a successful part of the modern television experience. In one way teleparticipation ensures that the fanbase remains loyal and stays connected. Conversely, the ability by the audience to influence a programmes narrative ensures that more interactivity is generated. However, the interactivity Enli (2009) discusses was cross platform, no participation was generated directly through the red button on the remote control, because the voting system for both shows was web and phone based.

For Griffin-Foley (2004) participation is nothing new, but rather a natural extension of television's reach, which can be traced back using other dominant forms of media through history. Griffin-Foley (ibid.) points out that early periodical and confessional magazines actively encouraged their readers to provide content, on the basis that it narrowed cultural boundaries and contributed to a more open and democratic society. Radio has also always encouraged active participation in the

form of quiz shows and phone-ins. In this respect television has lagged behind these other forms of media, as it is only recently that it has encouraged its audience to become actively involved in voting for contestants in reality game shows. With the emergence of the internet, television has found something that it can co-exist alongside in terms of offering participation, hence Ross' (2008) concept of teleparticipation.

Schirra et. al. (2014) identify a recent development which pushes the participatory nature of interactivity further, second screen use during live television viewing. Second screen use is utilising a secondary device, for example a tablet or laptop computer, which can then be used to socially network. Most commonly this method of participation is posting comments on Twitter during live television viewing. As a result of the research three common traits were found, which triggered the use of Twitter to share thoughts and feelings on what had been viewed, sadness/grief, humour and character development (ibid. pp. 5-6). This furthers Ross' (2008) idea of teleparticipation as the viewer is using Twitter whilst the programme is airing. A more instantaneous interaction is achieved by this practice as opposed to the viewer watching the programme and then logging onto a chat room to share their thoughts.

What the term participation suggests is that there is a more communal attitude by the audience towards the medium. However, for Griffin–Foley (2004) the participation, that began as an attempt to be more democratic and culturally less ignorant, has broken down as it has evolved on television. Shows like Big Brother (2000 - ) and Survivor (2001 – 2002, UK), instead of instilling a community spirit, have encouraged their contestants to be confrontational and to seek unlikely alliances. This is to the detriment of the other participants, as everyone attempts to curry favour of the general public, who have the contestant's metaphorical lives in their hands, because of the audience's ability to vote. Likewise, the general public sometimes votes in a manipulative manner to keep people in these shows that they believe will offer them the greatest entertainment value, confrontational or not.

Therefore, both Ross (2008), Enli (2009) and Schirra et. al. (2014) embrace the opportunities that participation offers the audience member to be a more willing, active part of the contemporary television experience. Griffin-Foley (2004) suggests that participation only leads to a more selfish, individually centred audience, eager to see conflict.

## 2.4.2 Individualistic experience

This section will examine how the individual experience of interactive television is determined. It will draw on the work of McGrane and Gunderson (2010), Everett (2003) and Andrejevic (2008). Examined will be the place of the individual, how the individual accesses interactive and red button services, and the impact this has in terms of a newly changing audience.

For McGrane and Gunderson (2010) television is no longer a worthwhile social practice. Using as its basis Plato's Parable of the Cave, the argument here is that the audience has fallen under the enchantment of television and that as a result the viewing of television has become a pointless exercise. The Parable of the Cave tells the story of mankind dwelling in a cave viewing shadows of material possessions against a wall. The argument is that the shadows create an artificial reality, which, if the dwellers of the cave were to constantly view, would become their inherited reality; a closed space.

As an audience, television provides us with our own personal "cave." By being bombarded with images, the television viewer objectively buys into a constructed reality, which ensnares and entraps the unsuspecting member of the audience. Because there is no realisation of being trapped, a prisoner or slave to the images placed in front of us, we, the audience, feel no need to escape the shackles that bind us.

The example of John Sergeant as provided by Enli (2009) bears this out. Participation suggests that the audience are collectively reaching the same decision. The reality is that each individual is drawing one conclusion, it just so happens, that

in the case of Sergeant, a large number of individuals chose to keep him in Strictly Come Dancing. The artificial reality here is that the individuals who voted did so in the name of entertainment, or more precisely, their own selfish need to be entertained. The actions of the individuals went against the spirit of the programme and caused embarrassment to a "celebrity" who was clearly ill suited to the parameters of the show, as envisaged by the producers.

It is therefore possible to argue that a more interactive, participatory, televisual form of content promotes a more individual experience.  This is because of the loss of a shared experience (Katz, 2008), and the diffusion of television sets around the household (Silverstone, 1994). Also, the remote control is acquiring a new sense of importance (Wise et. al. (2008) and Urrichio (2004)).

The emergence of the remote control, as an interactive device, is because users of technology, in general, are becoming more used to using external devices to access content in a manner of their choosing. For Everett (2003) the emergence of the computer, being used as a platform for accessing information, has led to a more important role for the mouse. This is because the individual exercises their own method of accessing content by using a peripheral device. Everett (ibid.) argues that the user's own body is paramount in aiding the understanding and the transmission of information, because the user or member of the audience is no longer just a passive observer. Parallels can therefore be drawn between the mouse, which is used to access links on the internet, and the remote control, which is becoming increasingly important in accessing new content on the television screen.

For both Wise (2008) and Urrichio (2004) the remote control is in fact an interactive device in its own right. The point here is that the remote control is no longer used as just a tool to change channels. It is also a conduit to set recordings, recall those recordings, launch video on demand applications and access interactive services. With the emergence of interactive services, the individual experience is greater then the participatory because the remote control has become a more multifunction navigation device, similar to a mouse attached to a computer. However, while television becomes more interactive, it is a more solitary

experience then the participatory nature of the internet, with its chat rooms and social networking sites. The problem with the remote control is that one person uses it to access content they wish to view through what is still a generally passive medium. On the other hand the computer mouse can be used by an individual to access web pages, which can be used to share the views of likeminded members of society.

All this is turn leads to what Andrejevic (2008) refers to as the 'savvy viewer' (ibid. p.37). As discussed above participation does not necessarily mean that the audience are colluding, but are making individual decisions which just happen to be the same. While the phrase participation appears a lot in Andrejevic's (2008) work, in the context of this research it will be argued that participation here means interaction with a particular programme.

For Andrejevic (ibid.) the savvy viewer is one that is less passive, more active and is more inclined to interact with specific programmes, on-line or through red button content. This new type of viewer is also likely, through message boards, to participate in the evolution of a given programmes look or plot development. Andrejevic (ibid.) is primarily talking about the way that the internet is used as a method of interaction. He sees the internet and the content provided '(A)s training wheels for the coming era of interactivity' (ibid. p.24). The internet is being used as a preparation area for the new participatory culture that will emerge because of more interactive services.

As Andrejevic argues, interactive television requires 'the creation of a new, more active – or interactive types of viewer' (2008, p.29). The remote control was simply a way of making the television easier to use. However, it has now been transformed into something more complex that controls a multiplicity of devices and requires time, and sometimes patience, to master its purpose. The same can be said of the elements that enable interactivity. In this case the remote control makes it easier to access the services, as the viewer only has to push one button. However, the interaction becomes more complex, once the button is pushed, as the remote

control takes on the characteristics of the mouse in order for the viewer to navigate to their intended destination or, in this case, content.

What causes concern, from the discussion above, is that, as television aims to consolidate its viability, the shared experience becomes even more distant. While television has a place in the current media landscape, participation is something that is very much a cross platform shared experience. Red button television, on the other hand, provides a much more individual experience.

## 2.5  What does interactivity mean for television content?

This section will begin by discussing how interactive television may lead to an enhanced form of televisual content. Key research used will be Wood's (2007) work into how television has taken on similar characteristics to the internet. The second part of the section will address the greater freedom of choice that interactive television can potentially offer the audience. To achieve this I will refer back to the work of Jenkins (2006) and Bennett (2006, 2008 (b)).

### 2.5.1 Enhanced content

For Wood (2007) the emergence of interactive television services means that television has become a navigable space. Pivotal in forming the basis for Wood's work is Caldwell's (2003, cited in Everett and Caldwell (eds.)) theory of 'second shift aesthetics' (ibid. pp.127-143). Second shift aesthetics is where television content providers are exploring new ways of producing material, used in addition to traditional television techniques, across multiple platforms.

By expanding on Caldwell's model, Wood (2007) argues that the changing format of television, and the way it is used, is a positive evolution for the medium. Television has begun to adopt new media modalities within its more traditional format. By embracing more participatory new media techniques Wood (ibid.) argues that it is necessary to 'ground these practices in relation to television's (old media) adoption of these (new media) processes' (ibid. p.490). What Wood's (ibid.) work does is to

take into account the cross platform nature of interactive television and the manner in which it is influenced by other media content providers. In this respect Wood (ibid.) is agreeing with Everett's (2003, cited in Everett and Caldwell (eds.)) notion of the fetishisation of the mouse (ibid). However, whereas Everett (ibid.) focuses on the way that the body is used to aid navigation through information, Wood (2007) makes the point that the medium itself is becoming something which allows the navigation to take place. The medium of television is using the influence of other media forms to further its development.

Caldwell's (2003, cited in Everett and Caldwell) notion, of second shift aesthetics, also has implications for the underlying structural elements of all attempts at making television more interactive, whether it is for broadcasting, informational or corporate television, as the work of Ursu et.al. (2008) explores. The argument here is that television has traditionally observed strict narrative codes and conventions in the form of authored content, which is then delivered to the audience. This is in direct opposition to the culture of computer gaming, which has traditionally been more interactive (Selfe and Hawisher, 2007). Ursu et. al's. (2008) argument is that the two are no longer mutually exclusive and as television begins to evolve away from a passive, to an active, medium it is beginning to embrace more interactive features.

The different methods of structuring interactive television content mean that the traditional forms of narrative organisation are also changing. Mamber (2003, cited in Everett and Caldwell, pp.145-157) explores 'narrative mapping' (ibid.) as a potential method of aiding the structural process. Narrative mapping is a technique that can be used to trace structural elements of a given media text through identifying relevant strands, for example a character or a particular story line. By using a more non-linear approach narrative mapping moves on from the more traditional technique of exploring structure, and the various methods in which it can be used, as described by Lacey (2000).

The idea of narrative mapping as put forward by Mamber (cited in Everett and Caldwell, 2003, pp.145-157) and Wood's (2007) navigable space can also be applied

to the concept of interactive television. By incorporating elements of hypertextual techniques, into the portion of television that becomes interactive, there is more flexibility and optionality for the audience to experience. Specifically, there would be more choice for the audience and more freedom to access that choice.

## 2.5.2 Freedom of choice

This section examines the greater freedom of choice red button services, which potentially provide a level of interactivity, offer the audience. The section will take into account why a greater freedom of choice has occurred. An examination of this issue is necessary because while Bennett (2008 (b), 2006) focuses on the interactive elements of television content, primarily the BBC's approach, Jenkins (2006) explores the notion from the broader approach of convergence. What both authors do is look at the methods that are used to enable the audience to pick and choose what content they access.

I begin this section with an example of how converged media could misrepresent freedom of choice. Jenkins (2006, pp. 95-134) provides an exploration of how the makers of the Matrix (1999 – 2003) series of films used a multi-faceted method of narrative mapping similar to Mamber's (2003, cited in Everett and Caldwell pp.145-157) technique. While not an example of television content, the following does provide evidence of how over saturation across platforms can lead to audience confusion rather than offering a more rounded experience. On the surface the Matrix was a series of three films, The Matrix (1999), The Matrix Reloaded (2003) and The Matrix Revolutions (2003). In fact it was a complex interweaving narrative, involving the films, computer games, animated shorts and comic books. While this is a good example of how convergence can work, it also serves to highlight how cross platform narrative can mislead. Only if the member of the audience was aware of all four methods of media did the narrative make total sense. In terms of fandom only the most committed follower of the narrative would make the connection and explore all four strands. In another example of how confusion could

be caused, the assumption was that the cinema goer would also be a gamer, comic book reader and consumer of animated shorts.

Television has attempted this type of cross platform narrative manipulation, albeit in not as ambitious a manner. For television it is the broadcasters who control the output of content. The broadcasters are organised in very different ways to the Hollywood film studio and business conglomerate that those studios increasingly find themselves a part of. Bennett's (2008 (b)) research points towards how the individual broadcasting institutions can use different techniques to satisfy a political, as well as an informational and educational, remit. The argument maintained by Bennett (ibid.) is that the BBC is using interactive television to remediate public service broadcasting. This is achieved in two ways, one which is political because the BBC is a public service broadcaster and the other that is participatory. The political rulebook under which the BBC operates is able to fundamentally address the manner in how the BBC generates and invests its income. By introducing a further participatory element the audience is able to access content in a substantially different way to which it is used to.

Using the BBC's coverage of the World War Two 60$^{th}$ year commemorations as an example, Bennett points out that '(F)or Dunkirk and D-Day, neither web nor iTV acted as a site of overflow, but functioned in a more complex relationship that aimed towards fulfilling wider PSB aims' (2008(b), p.282). The freedom of choice that exists, because of the emergence of a more interactive style television, works on a multiplicity of levels. The first, and most obvious, is the menu led system. What this allows is the user of the content to navigate their way towards an experience that moves beyond the traditional form of using television. For Bennett (2006) the BBC has had to fundamentally remodel the way that it approaches its public service broadcasting remit because of the emergence of red button services. However, part of the reason for this is the way that the audience are now able to use television.

Bennett (ibid.) argues that the necessity of the interactive portal is to provide the audience with a comparison and counter point to the already established 'window on the world rhetoric' (ibid. p.268) of the public service broadcasting remit. In an

argument, which is not dissimilar to both Ellis (2000) and Katz (2008), Bennett's (2006) view is that television is becoming a more personal experience, and that the old Reithian values and traditions of the BBC informing, educating and entertaining are having to be revisited. Therefore a new rhetoric is emerging between the audience and the medium. Television audiences are no longer using the medium as a window which allows them to observe a wider world. Instead, and as discussed earlier, the experience is becoming more personal and focussed towards the individual. The problem, for Bennett (ibid.), is that interactive television is not television, in its broadest definition, nor is it truly interactive, which leads to confusion as to what the audience member is actually doing. This conclusion only reinforces the difficulty in defining interactive television, which I will discuss in more detail later in the chapter.

Where the new rhetoric argument differs, from Ellis' (2000) uncertain future, is that interactive television offers the audience an opportunity to be more focussed and targeted in its choice. Bennett (2006) uses the example of news content to demonstrate this. As there are now more options for the audience to choose from so the structured flow of the television schedules as observed by Williams (1974) are breaking down. This is because the audience can choose to access a particular story to view rather than watch a bulletin, and is in direct comparison to the manner in which the world wide web services that are also offered by the BBC operate.

What this means is that there is more space to fill. If a highly regarded public service broadcaster, such as the BBC, is to survive in a converged media landscape it needs to offer more services. The problem with this is that more resources need to be ploughed into more services to give the audience more of an experience.

## 2.6  What does interactive television mean for the audience?

This section addresses the impact on the audience of a more interactive form of television. I begin by exploring whether a more inquisitive audience will emerge, because of more explicit interaction with programmes, before examining whether

interactive television will be absorbed into the everyday television experience. The section will conclude by looking at the issue of audience responsibility.

### 2.6.1   A more questioning audience

Crucial to this study is how digital technologies have allowed the re-definition of the method in which the audience uses the media. For Everett (2003, cited in Everett and Caldwell) digitextualisation is a product of the emergence of new methods in media content delivery and how that content is accessed. It is a 'remediation' (ibid. p.10) of the way in which scholars are now being forced into reappraising traditional academic thought, to take into account the reformatting of new media content delivery systems.

Digitextualisation, for Everett (ibid.), is also a relevant element of the changing nature of the relationship between a medium, television, its producers and its audience. If the whole of the media landscape is undergoing re-mediation, to take into account emergent forms of content delivery, then there has to be an impact in the methods of delivery and use. An audience which is more participatory is likely to ask more questions.

The impact on the producers of the content, due to the emergence of a more inquisitive audience, means that a more open and transparent relationship has to be observed. The emergence of red button services, the ability for the viewer to navigate away from traditional television content to interact with some sort of enhanced viewing experience, needs to be carefully considered. What is demonstrated is that there is a sharp difference between the regulators, academics and commentators as to how interactivity should be utilised by the audience.

Ofcom (2009, www.ofcom.org) are promoting more services across more platforms, with scant regard for what this actually means for the audience, despite the title of a report published in 2009, which suggests a more audience driven perspective. Silverstone (2007) and Andrejevic (2008) strike a cautionary tone as to the moralistic purposes, uses, exploitative and manipulative issues, brought about by

the emergence of interactive services. As interactive content becomes more widespread, not just on television but on other platforms, it therefore becomes a part of the everyday media experience for the majority of society. The same is true of red button services on television. As a result a new discipline of watching, or using, television begins to emerge, which has ramifications across the board for the audience, the producers and the medium.

To return to the question which began this section, it can be seen that the viability of television in a new, converged media landscape is under scrutiny. There are significant issues that result from television aiming to find itself a new place within a newly contextualised digital era. In order to conclude this section of the chapter it has to be recognised what the dangers of the development of interactive television are.

As has been addressed above, and will be explored further in the next section, there is the possibility that interactive television will be seen as just an extension of traditional television and that it will quickly become mundane. Therefore interactive television runs the risk of being rejected, because the audience do not realise that interactive options are any different to the traditional television experience. However, a subtle deviation in the experience allows the audience to use television differently, whether realising it or not. If the audience does not reject interactive television there has to be a more responsible approach to the way the viewer interacts with the medium. Finally, a more responsible audience then asks more questions of the producers of content, which means that the audience becomes more powerful than the content providers.


### 2.6.2   An everyday experience?

While Wood (2007) believes that television is taking on internet like accessibility, he also argues that a cautionary approach is necessary. While the academy is exploring just what this new use of television could mean, for better or for worse, the audience could view interactive television as just something that is merely more of the same. Therefore, interactive television becomes part of the everyday

experience of television, as identified by Bennett (2008 (a)). What interactive television does is essentially provide the viewer with more information that they can access if they wish. As a result, for both Wood (2007) and Bennett (2008 (a)), the audience may not realise fully how interactive applications are fundamentally different to traditional broadcasting concepts.

The arguments put forward here by both Wood (2007) and Bennett (2008 (a)) reflect the current confusion around the scholarly debate about interactive television. Both authors are positive about the potential for interactive television. However, the worry is that the potential will never fully develop, as interactive television will just become another part of the televisual experience, or not be taken up by the broadcasters as an option at all. This is why the major part of Bennett's (2006, 2008(a), 2008(b)) work focuses on the BBC. There appears to be relatively few interactive options on the commercial terrestrial channels. Channel 4, after a brief period of producing interactive content for Big Brother (2000-2010), has now 'almost completely abandoned interactive television' (Bennett, 2006, p.266), which reinforces the use of this dissertation. How much content is available once the red button is pushed on the remote control and what does it do?

Bennett (2006) compares the way that interactive services were originally marketed to the manner in which they are now promoted. Initial Sky interactive services were promoted by a character called "Little Red." As Bennett points out 'Little Red was depicted as a red-haired cock-rocker, dressed in tight leather trousers regaling the audience with a rock concert style performance that highlighted the attractive features of Sky's interactive portal, *SkyActive'* (ibid. p.168).

The fact that Sky's original interactive applications were marketed so heavily suggests that what was being attempted was to convince potential subscribers that interactivity offered something different from the broadcasting norm. Attaching early interactive services to sporting events, and the manner in which they were marketed, means that, arguably, interactive services were aimed pre-dominantly at the male audience. This would be hardly surprising as the main thrust of Sky's early

development was its sports channels and in particular the investment in Premier League football.

However, as Frisby (1999, p.72) ascertains, there is no distinction between the spectacle seeking male, the spectacle seeking female and how both genders use the television remote control. The question is would this be significantly different when using the remote control to access interactive applications? The conclusion is apparently not, as Frisby's data is backed up by Bennett (2008(a)), who argues that as the interactive wing of Sky branched out it became a much more multi-gendered application. This has reached its current state, where *SkyActive* resembles a 'lifestyle programme' (Bennett, 2008(a), p.175), which is pre-dominantly aimed at the female and daytime audience. Brunsdon (2003) and Thomas (2008) both acknowledge that the style of programming which is traditionally associated with the daytime slots have always been 'the domain of the housewife, the mother with children, the retired and the hobbyist' (Brunsdon, 2003, p.7), but are now a part of the peak time schedule.

This explains the shift in aesthetic design. What the *SkyActive* portal has achieved is a move away from pure spectacle to an everyday part of television services, serving many demographics. However, what Brunsdon (2003) and Thomas (2008) are addressing are genres. What Bennett (2008 (a)) is addressing is a portal, which is accessed by pushing the red button. The fundamental difference is the paradox between a way of viewing and a way of seeing. The *SkyActive* portal is just a method of activating interactive services across the channels that Sky offers. However, the look of the different services is determined by the nature of the content that the channel offers. Different audiences are targeted by the various portals. A similar shift has occurred at the BBC, whereby hugely ambitious interactive applications, attached to programmes like 'Walking with Beasts' (2001), have given way to multi-screen modality for large events such as the Lawn Tennis Association Championships at Wimbledon and music events like the Glastonbury Festival. Red button services have moved away from being 'the spectacular to the convenient and unremarkable' (Bennett, 2008 (a), p.162). The implication is that

red button services have been easily absorbed into the everyday television experience.

### 2.6.3 Choice means responsibility

This section will explore the implied shift in audience responsibility by returning to both Silverstone's (2007) rise of the mediapolis and Andrejevic's (2008) savvy viewer, to form a basis for critical discussion.

For Silverstone (2007) the political ramifications of a new openness, in the way that information is shared, is a cause for concern and has led to a new series of problems emerging. As the mediapolis allows a more transparent and open method of information dissemination, and a new brand of citizenship, it has also led to extreme views becoming more prevalent. Silverstone (ibid.) suggests that the mediapolis, as well as being an informational space has, in turn, and out of necessity, also become a moral space. This evolution has taken place because of the vast amount of easily accessible information. This causes concern for Silverstone (ibid.), as there is anxiety that the mediapolis will be used as a political space that will become just another propaganda tool, used to demonise certain races of people and religious ideologies, in the name of a perceived greater good.

While Silverstone's argument tackles the moral dilemma for anyone using interactive forms of accessing information, it is possible to narrow the focus down to address the nature of what interactive television offers. As has been discussed previously, the medium is attempting to become a more viable proposition in a converged media landscape. If interactive television is to be successful, the burden of responsibility has to be shared by the audience who use it, as well as the producers who provide the content. The issues and concerns raised by Griffin-Foley (2004) and Enli (2009), earlier in this chapter on audience participation, reinforce this way of thinking. A more participatory culture, brought about by the individual's use of interactive television content, relies on the audience understanding what the potential of that participation can actually be.

For Andrejevic (2008) participation is not a one way stream of communication. Producers of broadcast content have had to take notice of the viewers and take on board some of their recommendations and concerns. Not to do so could be detrimental to the content that they are producing. In a return loop this turns the message board that the viewer is accessing into a form of instant focus group, which has a direct path through to the producers of the content for the fans of the programme.

The relationship between the fan and the producer has been transformed beyond all recognition, because the fan has a new use of interaction through digital formats. However, in a cautionary note, it is also noticeable that the savvy viewer only contributes the psychological notion that they have not been fooled by the producers preferred reading of the text by being active, as opposed to passive. A positive spin on this is the idea that the savvy viewer puts 'into making the show interesting to themselves' (ibid. p.26). By participating in discussion, and contributing ideas through that interaction, the savvy viewer psychologically feels that they are making a difference to their favourite television programme. The need to be involved satisfies a wish fulfilment to go beyond the normal, traditional relationship that the audience has had with the programme. It is one thing to sit and enjoy a particular programme, and then to discuss it as a part of social activity. It is another to actually be part of a virtual group that feel that they are driving the key decisions that have traditionally been made by the programme's producers.

This leads to the negative side of the argument, as the savvy viewer takes on the 'role of production assistants' (ibid, p.26). This argument goes deeper than the idea of an instant focus group. The risk here is that the savvy viewer becomes a source of cheap labour to the broadcasting institutions. This point is recognised by Andrejevic (ibid.) who states that '(W)ork that used to be the province of producers is being redefined as that of the active consumer' (ibid. p.30). The blurring of the distinction between a producer and a consumer complicates further the new openness, brought about by the convergence of technologies and business models, which have led to the current need for television to evolve and move away from its passive state towards developing more services, which are potentially interactive.

In concluding this section, it is therefore possible to suppose that as well as offering the medium an increased viability, interactive television provides the opportunity for two things to occur. The first of these is that the audience takes on a more responsible role. Secondly, the producers of content treat the audience more equitably. As Ellis (2000) points out, there is a long history of television producers treating their audience as something that will be subservient to the schedules. With the emergence of a more plentiful era, and with the emergence of Andrejevic's (2008) savvy viewer, there is more chance that the audience can engage with the medium. This leads to the audience asking more questions of the medium and the content that appears on it.

This final point raises an important issue in its own right. While this section of the chapter began by asking whether interactive television is necessary, or a positive agent for change, it concludes by stating that the audience are becoming increasingly important. The question is why is that necessarily a bad thing? The central theme of Katz's (2008) argument is that television, by losing its ability to be shared, is losing its democratic place. It is possible to turn this on its head. With more direct participation the audience become a more responsible part of the experience. Does this not enable more freedom? In short, is it just possible that interactivity not only makes television viable, but by extension aids its democratic purpose as maintained by Hartley (2009, cited in Turner and Tay)?

## 2.7   What does interactive television actually offer?

As this chapter forms the foundation of the study, so it is necessary to summarise the results of the research from the previous sections. This will enable the study to move forward in examining the impact that interactivity has had on television and its audience, if any. This section will begin by offering a definition of interactive television and will then examine the forms that interactive television takes by using the work of Jensen (date unknown) as a core piece of literature. The section will then move towards a more hypothetical standpoint to explain the changing

relationship between the medium and the audience. Finally the section will address the impact of interactivity on television as a medium.

### 2.6.3 Defining 'interactivity'

Interactivity here will not be the same as the gaming community would describe it, where gamers control the actions of graphical characters or immerse themselves into interactive fictions, wherein the player takes on a specific role (Selfe and Hawisher, 2007). For Koolstra and Bos (2009), the discussion of interactivity, across a range of academic disciplines, demands a redefinition as to how it, interaction, is used and measured. The necessity of this is reinforced because of the amount of interactive functions that are available across the technological spectrum. Koolstra and Bos (ibid.) present a set of variables which determine just how interactive a particular experience is. The result is that personal interaction scores higher than technological interactivity. Further to this Quiring (2009) found that the younger generations, who use interactive devices most frequently, had less perception of what they were actually doing. For Quiring (ibid.) this lack of perception is because younger people take interactivity for granted. Interactivity is something that is commonplace and is normal and expected, rather than new and exciting.

By using the arguments, discussed above, it becomes possible to narrow down a definition of what interactive television actually is. In this regard interactive television will not be defined as Swann (2000) suggests, where 'television offers five hundred channels – plus the ability to surf the net, order products, pause live TV shows, play video games and conduct video phone chats' (p.10). This definition is too broad, and it is difficult to see how the choice of more channels can be seen as being an interactive experience. What is possible to argue is that the label 'interactive television' is a phrase that describes an experience away from the traditional idea of sitting and passively watching content.

Therefore, interactive television is not about controlling the actions of characters through the use of a joy pad. What also needs recognition is that 'interactive' devices are prevalent throughout the social sphere in a manner of different ways.

Swann's (2000) definition is now fourteen years old and, while some of his predictions have come true, the television set is not the all-encompassing interactive medium that he foresaw. Therefore it is difficult to satisfactorily define interactive television, as the work of both Carey (1997) and Kelly (2002) suggests. For Carey (1997) '(T)here is no consensus on what interactive television means or what it includes' (p. 207), so 'it may be premature to try to define interactive television' (ibid). For Kelly 'defining "interactive TV" is difficult, because defining "TV" is difficult (2002, p.19). Rather than trying to define interactive television, as a series of applications and services, it is instead wise to take a step back and explore the problem from a broader angle.

By taking this step back, the work of Rada (1995) can form the basis within which interactive television can be defined. Rada's (ibid.) work is rooted in the emergence of digital media technologies, essentially computers, and what they offer to society. The argument here is that as digital technologies develop they become more viable as a communications tool. However, Rada (ibid.) makes the point that computers only facilitated the flow of information in a more efficient manner through the use of hypertext, which allowed more flexibility in terms of how information was managed. The crucial thing is that the consumer has actually to want the information in order for the viability to be confirmed. In this respect the emergence of computers, as a communications medium, rather than as something that can just manipulate text or manage complex calculations, is dependent on people wanting to use the technology in a different way.

There are clear similarities with the emergence of interactive television. If television is to become a viable part of a converged media landscape it has to take on new characteristics without totally redefining itself. The issue for both Ellis (2000) and Katz (2008) is that there is no new medium waiting in the wings that will replace television, either as a medium or as a technology. It is, however, possible for television to offer services that will enable its audience more flexibility in the way it is used. Therefore television develops itself rather than following and revolving around other media content delivery systems. The age of plenty, as defined by Ellis

(2000), benefits television because the audience is used to more content and would welcome an increasingly flexible medium.

Therefore television has to become more aligned to what is happening in other technological forms. Interactive television represents new ways of accessing content which maintains the viability of the medium. The search for that viability will define what this research is exploring. If television is to confirm its viability, as an interactive medium, the manner in which content is now presented to the audience needs to be addressed. It will also become apparent how the medium itself can employ new techniques to engage its audience more fully. The problem with defining interactive television is that the very term interactive is very loose. For Palmer (2006, p.34), '(A)ny time a consumer takes control of their media they are interacting with it.' The act of pressing the red button on a remote control is, by this definition, an interactive experience.

## 2.7.2   Forms of interactive TV

It is clear that scholars believe that both the technological and the societal use of television is beginning to change. However, the problem with defining interactive television extends to how the content will look, as the work of van Dijk and de Vos (2001) establishes. Surveying a number of executives, involved in television and internet production across Europe, about what interactive television applications should offer, provided a mixture of results. Those involved in television suggested applications which offered choice of programmes through menus, whereas internet producers referred to producing information and aiding communication (ibid, pp. 452 – 456). Tsekleves et. al. (2009, pp. 11-16) predict five uses for interactive television. The first of these is IPTV, where television takes on the characteristics of the internet. The second is mobile television, whereby content is viewed on 3G and smart phones. Thirdly, is personalised television, where the viewer is responsible for creating their own experience through devices such as PVR's. The fourth use would be for the television set to be linked to other media content delivery systems, through wireless networks, in what is referred to as smart space

television. Fifthly, and finally, it is predicted that 3D television would become prominent (ibid).

For Jensen (date unknown), the evolutionary shift, television is supposedly undergoing, has brought about a fundamental change in the way that the medium is perceived. Television has for many years existed as a mediated form, insofar as there has been a set pattern to the genres of programme and the way that the audience observes them. What Jensen (ibid.) argues is that, with the onset of technological and economic convergence, television is, to a certain extent, reinventing itself. As television is evolving, and becoming a more interactive medium, producers of content are finding new ways of presenting that content, which in turn leads to new formats and genres. However, while the early experiments in interactive television were hugely ambitious, expansive and expensive, interactive television has settled into what Jensen refers to as 'discount interactive TV' (date unknown, p.89).

For Jensen (ibid.) there are three main types of discount interactive television. The first of these is 'enhanced TV' (ibid p.89), whereby content is added to an existing programme's content. The second is 'personalised TV' (ibid p.89). This is where the viewer has the opportunity to build up their own schedules, usually with the aid of a peripheral device, such as a DVR. The third and final type of discount interactive television is 'cross media interaction' (ibid p.90). For Jensen (ibid.) this form of discount interactive television is the most common, and is when a viewer uses another device in order to interact with the television. A clear example of this is the open invitations that the viewer has to phone in, or post their votes online, for reality TV shows, using landline and mobile phones as well as websites. Another example would be the use of social networking second screen use to discuss a programme through websites like Twitter and Facebook (Schirra, 2014).

By establishing the idea of discount interactive television, there are similarities with Bennett's (2008 (a)) argument that interactive television is becoming a part of the everyday television experience. The notion of discount interactive television appears to suggest that interactive television was a grand experiment that

ultimately failed. The reason for this is that interactive television has been absorbed into the normal television experience; that interactive television is an extension of the general experience. From the perspective of the medium, the viability definition works. The reality is that interactive television, as defined in this chapter, does exist and is being used. What has not been defined is the specific content and subsequent audience experience that is considered to be interactive. Therefore, it is the conclusion that Jensen (date unknown) comes to in his paper, by stressing that the emergence of interactive television and the way that the audience uses it is ill defined, misunderstood and merits further study that is the most pertinent point that is raised, and further validates this research.

### 2.7.3  Changing relationship

Acknowledging that media content delivery is undergoing a period of convergence means all forms of relaying the necessary information to the user has changed in two ways. Firstly, as Jenkins (2006) argues, the relationship between the producer of the content and the audience has changed because it is now possible for the audience to be a more active participant than before. This argument is furthered by the work of Griffin-Foley (2004), Ross (2008), Andrejevic (2008) and Enli (2009) by acknowledging the emergence of an audience which has a more participatory role. Secondly, and as a by-product of more participation and more information, the audience has to act more responsibly, (Silverstone, 2007).

The major British broadcasting organisations have had to take this changing audience dynamic into account, when approaching new forms of content. Some of them have been more successful than others at attempting this, but their hands are tied. If television is to become a viable entity in an age of media convergence it has to adopt the principles and practices which govern a more interactive form. Therefore not only does the relationship between the audience and the broadcasters alter, but also the regulators become increasingly determined to push interactivity forward.

With the audience on one side, being able to use television in a different way, and the regulators on the other, pushing for more services, the implications for interactive television are clear. The audience is willing to accept interactivity, either as something that enhances their experience, or to be used as a part of television's everyday use. The regulators and policy makers, meanwhile, see convergence as a way of offering society something that is a valuable method of imparting information across a more diffused audience. The broadcasters are stuck in the middle. Public service broadcasting is able to try to be innovative because of its remit. Commercial PSB television is unwilling to be innovative as it is recovering from a period of upheaval. Finally, subscription television can use interactive services to attract new customers. In a time, where there is convergence and digital television, the impact of interactivity on a medium, which has traditionally a more passive experience, could be the central issue which confirms its viability.

## 2.7.4 Conclusion

This chapter has been an attempt to grasp and contextualise the current theoretical debate, which exists between academics in explaining the position of television within the contemporary media landscape. The only thing that becomes clear is that there is a wide variety of views seeking to explore the issues of convergence, television, the audience, and the attitudes of the broadcasters and regulators. This is why Jensen's (date unknown) supposition that the only way forward is for more debate to take place becomes critical.

The impact these issues have on television leads to suppose that Ellis's (2000) uncertain future is becoming a reality. The problem is that Ellis's research is now fourteen years old, a very long time in media and communication studies terms. If television was facing an uncertain future fourteen years ago the mediums fate should have been sealed by now. Instead television is still the prevalent medium of choice for people wishing to view content. This is because television is judged on its content, not on its technology.

The first section of this chapter began by looking at the perceived demise of television as foreseen by Katz (2008). What this chapter has achieved is to enable a healthy and constructive examination of current academic thinking. The resulting conclusion is that, far from becoming extinct, television is repositioning itself. To do this television is undergoing a period of transition in order to re-establish its viability. The rest of this study will concern itself with whether television has achieved this, to become a viable part of a converged media landscape. The methodological approaches that will be used to establish this will be outlined in the following chapter.

**Chapter 3 Methodology**

**3.1 Introduction**

The preceding chapter demonstrates that the current academic debate about the future of television is an often confused, contradictory and subjective area. Technological convergence means that television, the technology, is under threat as other devices can now be used to view television, the content. As a result television is adapting to maintain its prominence within the household. One area of response is to offer, what are for some, interactive services through the use of the red button on the remote control. Evidence exists which maintains that red button interactive television can take many forms. The literature reviewed puts forward arguments as to how television becoming more interactive can enhance content, encourage more audience participation and democratise the new space which now exists.

However, there has yet to be done a study which looks at the fundamental question of how the initial concepts of interactive television have evolved. Nor has there been an attempt to quantify the amount of red button content and its purpose. This chapter will outline the methodological approach taken in order to address this. Whilst many methodological approaches could have been used (see, for instance, Deacon et. al. (2007) and Yin (2009)) the majority of those were discarded. Instead the primary data was generated through a combination of a content analysis of the interactive and/or red button applications available, and field interviews with relevant industry figures.

A content analysis is quantitative and, if designed correctly, allows data to be measured and then analysed through the use of generated statistics. What the content analysis, outlined here, allowed was a comprehensive measure of how much interactive content there is and what it does. The literature review, which forms the basis of the research for the theoretical framework, succeeds in opening up the debate. However, taking a discursive approach, adopting an individual case

study analysis, does not actually address how much interactive content there is. Instead, in the literature review, there is much speculation about what interactive television could potentially be, as opposed to what it actually is (see for example Swann (2000), Wood (2007) and Caldwell (2003)).

However, additional primary data was also collected to supplement the results of the content analysis. This data took the form of field interviews and were in addition to the conversations that had taken place in 2006 and 2007. A number of face to face field interviews were requested with relevant employees of the BBC and Sky. In this respect the content analysis acts as a bridge between the field interviews carried out in 2006 and 2007, and the field interviews requested in 2013. The content analysis forms the framework for further discussion, with the field interviews being used to bookend the results and findings of the raw data.

### 3.1.1 Research Questions

Pressing the red button on the remote control is how the applications were accessed. It was thought that some of the applications, at the very least, would offer some form of content which could be considered interactive. Therefore when designing the methodology and research questions the focus was on what the applications would do. There is a clear differentiation between pressing the red button, to access the content, and what the applications would offer. Therefore the term interactive used in the research questions refers to the applications that would be found once the red button was pressed. If interactive content was found, or not, could then be used as a basis for discussion. The methodological approach used answered four research questions:

- RQ 1. What amount of interactive television is there?
  There are examples in the literature review of specific interactive television applications (see Bennett (2006), in the regulatory policy section). However, the amount of interactivity that is available to the audience is not addressed. The amount of content available through a selection of channels

is an important foundation on which to base the proceeding research questions. This research question quantifies the amount of content that is available. Addressed will be whether the content is actually interactive, how much of the content supports programmes that are being transmitted and provide specific examples of how the red button is used to support programmes.

- RQ 2. What information is carried by the interactive content?

The work of Jenkins (2006) forms a large portion of the literature review. He explores the potentiality for interactivity and its relationship with the audience in a cross platform media landscape. What does not come across in much of the existing literature is how this potentiality is realised. The closest is Wood's (2007) exploration of how television is embracing characteristics more in common with World Wide Web pages and Bennett's (2006) examination of the BBC's D-Day commemorations. This research question examines the scope and nature of red button interactive television content. Measured is how much information is carried by red button content and the form it takes. By examining the information that is carried, conclusions can be drawn as to the ambition that the broadcasters have when they approach interactive content. It could be that there is much in terms of offering the audience a more flexible experience, for example additional content, such as multiple narrative strands or switching between different stages at a music event. It could be that the interactive stream is used in a more concise manner, by providing information and games. Likewise there could be elements of both which are found.

- RQ 3. What does interactive television look like?

With the exception of Caldwell's (2003) mention of the word aesthetics, when examining how a broadcaster's website was used to create a different strand of characters and plot away from the narrative, little emerges from the literature review about how red button content can look. This research will examine how accessing interactive television changes the nature of the

way that television looks and "feels." The research here was measured by examining how the content is accessed. Did the red button navigate to a menu offering choice, or did an application become available with no other options? Other issues addressed as to how the overall look of the screen changes and how the audience is alerted to the presence of interactive content.

- RQ 4. To what extent does interactive television add to the experience of television?

  The purpose of the study is to examine how interactivity repositions television as a communications medium. Interactive television could be a flawed concept in the sense that the red button applications that exist do not offer what was foreseen by Gilder (1990) and Swann (2000). As a result it is necessary to conclude from the findings of the other three research questions how an interactive element to television adds to the overall experience. In this respect RQ4 is the hardest to quantify. However, there is much that emerges from the literature review examining the nature of a changed audience experience (see Ross (2008), Enli (2009) and Griffin-Foley (2004) on participation and Andrejevic (2008) on the savvy viewer). Whether red button content achieves this, and whether television can still be considered as a viable medium, will be addressed in this final research question.

## 3.2 Primary Data

### 3.2.1 Field Interviews

As I have introduced the field interviews which were done in 2006 and 2007, with Berthoud, Chakura, Charlton and Goodchild previously, I will not repeat myself here. However, it is worth raising the issue that ITV Local as a free standing alternative of viewing television content no longer exists. Research has been unable to locate exactly when the service stopped, but it appears as though what started

out as a separate web based application, away from the main ITV website, has been absorbed into the main itv.com site.

Field interviews were also requested after the initial data collection period had finished and the write up was under way, in the summer of 2013. Initial contact was established through contacting the BBC red button Twitter feed, which resulted in an interview being arranged with Peter Schofield, Senior Technical Product Manager for BBC Broadcast Red Button, TV and Mobiles Platforms for Programmes on Demand, Future Media. Dave Betts, the Managing Editor (TV) for Sky News was a member of a BJTC accreditation panel, which visited the University of Huddersfield (my workplace). He was able to give me the contact details for Laurie Tucker, the Day Editor at Sky Sports News and Andrew Hawken, the Head of Digital Media for Sky News.

All but one request post data collection was responded to. However, only one interview was arranged. Tucker declined the request to be interviewed and repeated overtures to Hawken were ignored. An interview with Schofield was arranged for the 27th August 2013 at Media City in Salford. The interview was semi-structured, this was felt to be the best method as 'the interviewer retains some form of control over the interview agenda by using an interview guide' (Deacon et. al. 2007, pp. 390-391). As the interview questions are guides rather than prescriptive 'there are no restrictions on question rewording or reordering and the interviewer can explore and elaborate on issues that emerge during the course of the interview' (ibid. p. 391). Full transcriptions of all field interviews are available in Appendices C, D, E, F, and G.

## 3.2.2 Content Analysis

As Krippendorff (2004) points out, content analysis is amongst the most widely used and established methodological approaches. While there are too numerous and varied examples of previous content analyses to go into here, there are examples of both television and interactivity being represented separately. As far back as 1954, Head conducted a content analysis of television drama. Recently

there have been content analyses on the impact of the internet on everything from anti-smoking websites to how non-profit organisations use Twitter (see Marra et al, 2004, Schultz, 2006, Slater et al, 2011, Jamal and Waters, 2011, Paek et al, 2011 and Burnaz and Nacar, 2011). Li (2006, ed) was responsible for collating a series of content analyses that examined the role of internet newspapers.

A well designed and executed content analysis allows the researcher to provide a valid, reliable set of data on which to base their arguments. The result of the analysis allows the researcher to provide inferences, which answer the research questions. However, the inferences can only be made if the design of the analysis is solid and consistent. The remainder of the chapter will outline the steps necessary that will result in the inferences, which emerge through the methodological approach, to allow the results, findings and subsequent discussion chapters to be seen as valid.

### 3.2.3 Context

For Krippendorff (2004) the context is the application of the previous knowledge that the researcher has accrued. That knowledge then determines the research questions that are asked and influences the content analysis. In turn the research questions answer the broader inquiry upon which the work is based.

In the literature review, I use Rada's (2003) examination of interactivity as a basis to contextualise interactive television. I propose that red button television is an extension of traditional content, which assures the viability of the medium in an age of cross platform media delivery. However, the manner in which this is done is something of a matter of conjecture as the various pieces of scholarly work are concerned with broader issues. While raising many pertinent points, the pieces of work do not directly address television itself, as an interactive medium. This is true of most of the work explored in the preceding chapter, the one notable exception being the work of Bennett (2006, 2008 (a), 2008 (b)), which specifically addresses the attitude of the BBC towards using interactive content to fulfil its PSB remit. When interactive television is addressed the literature veers between the overly

optimistic, Gilder (1990) and Swan (2000), to the more cautious, Carey (1997), Jensen (date unknown) and Kelly (2002). A more focussed approach is needed to establish if television is undergoing a fundamental shift in the way that red button content is presented to the audience and what the purpose of the material is.

### 3.2.4 Sample and Data Set

### 3.2.4a Sample

Ideally the whole of the available spectrum of television programmes on all channels would be analysed. This technique would take the form of what Riffe et. al. (2005) describe as a 'census' (p. 98). A census would measure all units possible within a known 'universe' (ibid. p. 96). In this case the universe would be every available programme on every available channel at any given time on every platform. This would result in a 'non-probability' (ibid. p. 98) study, whereby the maximum amount of measurement had taken place leading to no reliability issues. However, this would be a time consuming and data intensive method of achieving the aims of the study.

A relevant and reliable set of data can be drawn from relevant components that contribute to the contemporary television experience. A careful choice of units, that would be sampled from the channels and platforms, and accurately represent the amount of choice available to the television viewer, would provide the data necessary to allow for valid findings. An example of how a study like this would work is Tremayne's (cited in Li (ed.) 2006, pp. 49-64) study into how external links are used on news web sites. The sample was drawn from only the newspapers which had the largest circulation in the U.S. Likewise, Herring et. al. (cited in Tremayne, 2007, pp. 3-20) conducted a content analysis of weblogs between 2003 and 2004. The data collection for this study randomly sampled 'weblogs collected at roughly six-month intervals' (ibid. p.5).

The sample for this study draws from a broad universe made up of platforms, channels and times. In this respect the sample encourages what Riffe, Lacy and Fico

(2005) refer to as a probability study in 'that each member of some population of interest is given an equal chance of being included in the sample' (ibid. p.102). However, where the study differs from a traditional probability study, and would be more typical of Treymayne's (cited in Li (ed), 2006) work, is the choices that have been made in terms of what channels have been sampled, as the channels have been selected for their popularity or genre specificity. In addition, where the study has commonality with Herring et. al's (cited in Tremayne, 2007) work is that the measurement paused for a period of time before beginning again, so a broader range of the sample could be covered. By collecting data in stages, the potential existed for a more comparative set of results across the sample.

Two platforms were chosen to be used in the sample, Sky Digital and Freeview, as one is subscription based and one is free to air. The channels, on which interactive content either appears, or not, consist of a mixture of the traditionally terrestrial and satellite, based content. For the portion of the schedule that was analysed, a mixture of late afternoon and prime time programming was measured. The justification for making these choices will be discussed below.

### 3.2.4b Platform

There are five main providers of digital television services in the UK. These are BSkyB, Virgin Media, Freeview, BTVision and Freesat. Each provides customers with a set top box, through which a variety of packages can be viewed. Of the five providers, three are subscription based, BSkyB, Virgin Media and BT Vision. Freeview and Freesat are free to air. Of the providers, Freeview reports that '10.2 million homes choose Freeview for their main TV set in the home' (www.freeview .co.uk), BSkyB claims a total of '10.1 million customers' (corporate.sky.com), compared with 3.8 million for Virgin Media (phx.corporate-ir.net), Freesat's 1.5 million ([www.freesat.com](www.freesat.com)), and 575,000 for BT Vision ([www.digitalspy.co.uk](www.digitalspy.co.uk)).

As Bennett (2006) has shown, initial interactive services, offered by BSkyB, were used as a marketing device to suggest that the platform offered something other than its competitors. Presently, however, none of the main providers make much of

the ability for red button and interactive services, preferring instead to try and persuade potential customers to buy bundles which offer a combination of TV, telephone and broadband services. This reinforces the statements of Bennett (2008 (a)), on the everydaying of interactive television, and Jenkins (2006), on convergence. It would seem that the interactive, red button method of accessing content has become a normal part of the television experience. Likewise the ability the providers have of offering bundles suggests a technological as well as an economic convergence.

An example of how the selling of services is superseding the selling of content can be seen on the Sky Digital website (http://www.sky.com/shop/). Potential new customers can choose from a variety of options, everything from individual channels to bundles which offer television, broadband and landline services. Interactivity is not offered as an individual option, but there is no doubt that the red button appears as a part of the services provided by Sky.

However, for the broadcasters, the platforms do become a method by which interactive services can be promoted. This is because one channel can be offered over a multiplicity of platforms. The BBC makes much of the ability of the viewer to become immersed in content beyond the traditional television content, 'and now on BBC1, BBCHD, online and red button it's the…' is a regular part of the continuity announcer's script. Likewise Sky Sports customers are frequently prompted to 'go interactive' by the host of a particular event. Only when the services offered are considered on a provider, platform by platform, basis do differentiations in the amount of content become discernible.

An example of these differentiations would be the BBC's coverage of the Open golf championship. For the BBC, the Open is a flagship event, which dominates the schedules for one weekend of the year. As well as the television coverage offered, there is a dedicated website and interactive streams available through the red button. For this particular event;

BBC Red Button has a comprehensive package; Freeview viewers can access live video with leader board; satellite and cable viewers can select a three-hole option covering holes 14, 15 and 16; plus a daily 30 minutes highlights package and live play outside of network coverage at the weekend.

(news.bbc.co.uk)

The differences in the platforms can be seen in this example. Freeview only offers one stream of video, while Sky Digital, Virgin Media and Freesat customers have four video options as well as extensive off air coverage. It is not immediately apparent from this statement what is on offer for BT Vision customers. What is apparent is that there is a clear difference in the amount of services that are offered for customers who have the Sky platform, as opposed to viewers of free to air content on Freeview.

The two platforms selected to be sampled, Sky Digital and Freeview, are representative of the main two business models, subscription and free to air. They allow a comparison, between the two models, as to the attitude towards interactive television by the providers of the platforms, by measuring the availability of content and how it appears.

3.2.4c Channels

Eight channels were selected to populate the sample;

- BBC1;
- ITV1;
- Sky1;
- BBC News Channel;
- Sky News;
- Sky Sports 1;
- CBBC;
- Boomerang.

Two of the most popular channels, currently showing content on British television, are BBC1 and ITV1. Although the audience share for these two channels has fallen away in recent years, to 29.6% for a combination of BBC1 and BBC2, and 18.4% for ITV1, in 2008 (Debrett, 2010, p.37), they were still the two most watched channels on British television. Sky 1 has been selected as this is the flagship entertainment channel offered by Sky Digital. Sky 1 appears at number seventeen in the top twenty of audience share (www.ofcom.org, 2011, p.147) and although BBC1 and ITV1's audience share continued to decline in 2010 they 'still attracted more share than any other TV channels' (ibid. p.138). However, much of Sky Digitals reputation is based on its sports broadcasting and Sky Sports 1 is the highest ranked subscription based channel in the top twenty of audience share, number thirteen (ibid. p.147), which merits selection for an appearance in the sample. News and current affairs have always been an important part, of broadcasting, therefore both the BBC News Channel and Sky News red button content was measured.

There are currently several digital channels which offer broadcasting for children. The sample acknowledges this by including two of these channels, CBBC and Boomerang. The comparison here is for two reasons. Firstly to see if interactive functions for children's based programming are significantly different than for other forms of programming. Secondly, an analysis of the difference in attitude between public service and digital broadcasters, towards red button content available through children's channels, could be carried out.

By selecting these channels the sample represented a combination seen as traditionally terrestrial, as well as more specialist digital channels. Comparisons could be drawn between channels that offer mixed and just one style of programming. In turn, this enabled an exploration of different attitudes between public service and subscription broadcasters.

3.2.4d Data Set

As the channels in the sample appeared twelve times each, the data set comprised of a total of ninety six units of analysis. Each channel, or unit of analysis, had six descriptors which formed the foundation for the rest of the data collection. In total six descriptors appeared on the coding sheet;

- Platform

- Channel

- Genre

- Programme title

- Time

- Date

Time and genre merit further explanation.


3.2.4e Time

The sample was split into two distinct time periods, the first being between four o'clock in the afternoon and seven o'clock in the evening. The second time period was for the times between eight o'clock and eleven o'clock in the evening. The periods were split to take into account children's broadcasting. Two of the channels, CBBC and Boomerang, are digital channels. At the time the data was collected (June through to September 2012) children's content also appeared, for a portion of the first time period, on BBC1. CBBC ceased transmission at seven o'clock. For the eight o'clock to eleven o'clock period the entire sample was measured, with the exception of CBBC. Doing this enabled an equal amount of data to be collected across the split sample; twelve appearances per channel. How these appeared on the coding sheet is represented in the tables below.

Time (Children's Programming Sample)

| 1) 16:00 – 16.30 | 2) 16:30 – 17.00 | 3) 17:00 – 17.30 |
|---|---|---|
| 4) 17:30 – 18.00 | 5) 18:00 – 18.30 | 6) 18:30 – 19.00 |

Time (Post Children's Programming Sample)

| 7) 20:00 – 20.30 | 8) 20:30 – 21.00 | 9) 21:00 – 21.30 |
|---|---|---|
| 10) 21:30 – 22.00 | 11) 22:00 – 22.30 | 12) 22:30 – 23.00 |

3.2.3f Genres

To allow for a more efficient system of collecting data the various genres which appear on the schedules have been combined. The list of genres was condensed using the work of Howard-Williams (2011) as a template, and appeared in the coding sheet as below.

| 1) News/Current Affairs | 2) Documentary | 3) Magazine/Lifestyle | 4) Reality TV |
|---|---|---|---|
| 5) Gameshow | 6) Gameshow | 7) Drama/Sitcom/Soap | 8) Movie |
| 9) Sport | | | |

3.2.4g Categories and Values

For Riffe et. al. (2005) categorisation is linked with the broader issue of conceptualisation and complexity. The more complex a concept is then the more difficult it is to provide a reliable content analysis. However, 'if the concepts are simple and easy to apply, reliability is more easily achieved, and a content analysis can be more extensive' (ibid. p.125). The conceptualisation process leads to identification of the categories that will be measured. A good example of this would be Potts et. al's. (1996) analysis into how the behaviour of television characters

could impact on children. Five distinct categories were identified which focussed on the location, type, demographic, event context and outcome of behaviour.

Resulting from the categorisation process a set of values are attached which allows for more accurate data collection. This can again be seen in the example of Potts et. al's (ibid.) when categorising the element of their study measuring the 'Outcome of Safety Behaviour' (ibid. p.521).

> 'Safety behaviour outcomes were coded as (a) successful, if the behaviour successfully and clearly prevented harm; (b) unsuccessful, if the character was harmed despite enacting the safety behaviour; or (c) not tested, if the safety behaviour was enacted yet no injury agent was present or no immediate danger ever occurred'
>
> (ibid. p.521)

Alternatively, category 'Safety Event Type' (ibid. p.521) has a wide range of categories:

> 'Any safety-relevant behaviours or statements of characters were coded. Events were coded as either verbal statements (e.g. "Don't try this at home"; "Watch out, it's dangerous!"), or behavioural enactments of injury prevention, such as characters buckling seat belts, or jumping from the path of an oncoming object'
>
> (ibid. p.521)

The purpose of this study is to investigate the nature of red button television content, which results in the content as something differing from the traditional experience of watching programmes. As a result thirty six categories have been identified, which exist within the sample and emerge from the research questions. Each category has a varying series of values attached to them. The values provide the detailed measurement upon which the final results of the content analysis will be drawn. Some of the categories have very basic 'yes' or 'no' values while others have a more complex method of measuring the content.

- Category One – Red Button

  If there is any option to access further content. This would be done by pressing the red button on the remote control. Attached to this category are three values;

  a) Instant: Where an icon determining that interactive content is available appears on the screen when the channel is accessed.
  b) Hidden: Where interactive content is available when the red button is pushed but is not signposted.
  c) No access: Where nothing happens on the channel when the red button is pushed.

- Category Two – Appearance of red button

  The measurement for this category determines how the red button or associated icon appears to the viewer and for how long. There are four values;

  a) Constant: Where the red button is associated with an icon and is visible at all times.
  b) Appears for more than five minutes: Where the red button icon appears for longer than five minutes from when the channel is accessed before becoming hidden.
  c) Appears for less than two minutes: Where the red button appears for less than two minutes, once the channel is accessed, before becoming hidden.
  d) Hidden: There is no appearance of an icon associated with the red button but content appears when the red button is activated.

- Category Three – Announced or Referred

  The method of alerting the audience that there is interactive content available is measured by this category. The announcement or referral would be done by either a continuity announcer or presenter. Five values will be measured;

a) Before programme: As part of the announcement that the programme is about to commence.

b) During programme: By the presenter, to draw the attention of the audience to the existence and flexibility of the red button content.

c) Before and during programme: Where both values a and b occur.

d) No announcement or referral: No acknowledgement, by a continuity announcer or presenter, that any red button content is present.

e) No red button: There is no red button content available.

- Category Four – Style of announcement/referral

This category examines the style of the language that is used by the continuity announcer/presenter to contextualise the interactive content. There are four values;

a) No announcement/referral: As value d) in category three.

b) 'Red button:' The announcement specifically mentions the red button.

c) 'Interactive:' The announcement refers specifically to the content as being interactive.

Values b and c are designed allow for a measurement which takes into account the terminology being used by a particular broadcaster.

d) Both: The announcer refers to both the red button and interactivity. For example an announcement like, 'press the red button to go interactive,' or 'go interactive by pressing the red button.'

- Category Five – Navigation

This category measures the method by which the user is made aware of the amount and options of the available interactive content. There are three values;

a) Multiscreen: Where interactive content appears as a series of video thumbnails which can be individually selected.

b) Index: Where the user of the interactive content is offered a choice through a text based menu led system.

c) Direct to Content: Where there is no menu but the viewer is taken directly through to some form of content.

- Category Six – Optionality

Optionality measures the amount of choice that is available for the viewer to navigate once the required value in category five has been identified. The values were numbered as one through to twenty one in case of a large number of options available.

- Category Seven – General Content

The measurement for this category explores whether or not the interactive content is applicable to the programme currently being broadcast. There are therefore just two categories;

a) Programme specific.

b) Non-programme specific.

Categories eight, nine and ten specify in greater detail the nature of the general content. An additional category was added, partially programme specific.

- Category Eight – Programme Specific Content

Where the content available was considered to be directly supporting the programme being transmitted at the time.

- Category Nine – Partially Programme Specific Content

Where the content available had an indirect relationship with the programme being transmitted. Examples of this would be games being based on characters, which appeared in the programme being transmitted, and news items appearing through the red button which had appeared through the main transmission at some point during the day.

- Category Ten – Non Programme Related Content

  Where the red button material was completely arbitrary to the programme being transmitted.

Categories eight, nine and ten were measured against a total of 38 values. The 38 values consisted of material which had been found to be available through the red button menus throughout the previous year.

- Value 0 – Absent (where no red button content was found to be available)
- Value 1 – Games
- Value 2 - Competitions
- Value 3 - Voting
- Value 4 – Audio Options
- Value 5 – Radio programme web cam feeds
- Value 6 – Programme highlights
- Value 7 – Programme repeats
- Value 8 – Blogs
- Value 9 – SMS Texts
- Value 10 – Simulcasts
- Value 11 – Popular sport

  For the purposes of value 11, popular sport is defined as any sport that is shown either regularly on terrestrial television or appears within the sample times on Sky Sports One. These would be football, rugby league, rugby union, athletics, cricket, formula one, snooker and tennis.

- Value 12 – Minority sport

  For the purposes of value 12, minority sport is defined as any sport that appears purely as red button content. In recent times the BBC has carried hockey, gymnastics, netball and swimming only on its red button stream.

- Value 13 – Pop music concerts
- Value 14 – Classical music concerts
- Value 15 – Forums
- Value 16 – Timeshifting

- Value 17 – Participant profiles

- Value 18 – News teletext

- Value 19 – Weather teletext

- Value 20 – Sports teletext

- Value 21 – General teletext

- Value 22 – Politics teletext

- Value 23 – Sports multiscreen

- Value 24 – News multiscreen

- Value 25 – Non scheduled programming

  For the purposes of value 25 non scheduled programming is where it could be found that an entire programme or event was being shown away from the main channel and schedule. The purpose of this value was to establish if the red button stream was being used at times as an additional television channel.

- Value 26 – Main Index

- Value 27 – Highlights

- Value 28 – Access to other interactive content

  This would be the appearance of other red button content appearing as a separate option, for example Sky Active.

- Value 29 – Programme Searches

- Value 30 – Upgrade details

- Value 31 – Business and Markets information

- Value 32 – Travel News

- Value 33 – National Interest

- Value 34 – Travel offers

- Value 35 – Gambling

- Value 36 – Olympic Torch Relay

- Value 37 - Other

All of these options appeared at some point on the red button menus, of the channels in the sample, through a Virgin Media+ box. In some cases there are subtle differences. Games were differentiated from competitions. ITV1 offer

competitions based on the programmes that are shown and offer cash prizes. Boomerang offers games and a small charge is paid to access the content.

- Category Thirty Six – Purpose

  The final category measures the aim of the interactive content. There are five values;

  1. Educational – the content provides an experience from which the viewer can become more knowledgeable. Examples of this would be the BBC's additional red button content for Waking the Dead (2000 – 2011) and Walking with Beasts (2001). For Waking the Dead (2000 – 2011) the viewer could access additional content after the main broadcast which explored the realism of the techniques used in the programme. Walking with Beasts (2001) provided additional content that ran in tandem with the main broadcast. This content included text, graphical and video content, which took a more scientific look at the animals included in the programme.

  2. Entertainment – the content serves no other purpose then to provide material which is escapist in nature. One good example would be gaming content. However, a further example would be content like the 'Fanzone' additional commentary provided by Sky Sports during broadcasts of football matches. The commentators are fans of the clubs playing the match, so the impartiality that is demonstrated in the main broadcast is removed. A music event which was being shown exclusively through the red button would also fall into this category.

  3. Commercial – there is some sort of financial gain to the content such as the competition category, which has been separated from the games category for precisely this reason. However, there could also be charges for gaming content.

  4. More choice – the content offers the viewer more choice to a particular programme. This could be the ability to choose various

options as part of a sports or music broadcast. Examples of this could be switching between matches or stages, which are not a part of the traditional television broadcast, through a multi view application.

5. Informational – the content informs the audience in some manner. This could encompass specific content such as participant profiles but also teletext services and timeshifting. This is due to the fact that the user has to access some sort of index in order to access information. Therefore this is the most problematical value. After the pilot study was run the decision was taken to add some more specific values that would differentiate between the specifics of the information that was identified;

o Hard news: The information is political or is seen in the national interest.

o Soft news: The information is about celebrity, entertainment or sport.

o Timeshifting: The information leads the user towards accessing previously broadcast content.

o Public interest: The information provides something that could be of general interest, for example, weather.

o Event: The user is led to a large event. This can be large scale events such as sport tournaments or music festivals.
These sub-values appear on the coding sheet as 'Informational 1, 2, 3, 4 and 5.


6. Cross channel content – the content offers the viewer the opportunity to access the red button content of another channel. Examples would be Sky Active being available through all three Sky channels, and CBeebies being available through CBBC.

3.2.4h Coding Sheet

An Excel spreadsheet was constructed based on the descriptors, categories and values. A coding handbook was also produced to aid referencing during the data collection, this appears in appendix A.

## 3.3 Pilot Studies and Data Collection

3.3.1 Initial pilot study

A pilot study was carried out during the week of the 18th July 2011. An hour from each portion of the sample was measured using the Virgin Media platform. Once the Excel spreadsheet was complete the data was transferred to SPSS to allow a more flexible manipulation of the information. Initial investigations revealed few errors in the design of the methodology. However, once an SPSS codebook was generated the time values were seen to have been entered incorrectly. The correct values were inserted into the data, quickly resolving the issue. Additionally, a further value, 'no content,' was added to categories nine (appearance), ten (announced or referred), eleven (style of announcement or referral), twelve (navigation), thirteen (optionality), fourteen (general content) and sixteen (purpose). This value added a representation to the code book, as opposed to a blank space, which made the data easier to read once it had been outputted through SPSS.

3.3.2 Extended pilot

Because the amount of data to be collected had grown substantially, it was agreed that an extended pilot would be carried out. A week's worth of data was collected between the 15th and the 21st of October 2011. Unlike the previous pilot, which only measured an hour of programming, the extended pilot measured all red button content across the sample using the 'time 2' descriptor, eight until eleven in the evening. The platform used was a set top box provided by Virgin Media.

The advantage, of running the extended pilot, soon became apparent. As there was more scope for data collection, more attention could be given over to the content. Fifteen minutes of each programme was viewed, which allowed plenty of time to see how much of a presence the red button actually had. Likewise, there was also more opportunity to observe how much referral there was by presenters towards red button content. Some minor problems also manifested themselves. During the first night of collection it was found that category seven, general content, did not take into account that both programme specific and non-programme specific content could co-exist on one indexical menu. In this case, as well as non-programme specific content, there was the option to access alternative commentary for BBC1's Strictly Come Dancing. This problem was easily resolved by creating an additional value, 'Both.' This was subsequently dropped as a value for the data collection proper, as it was found that both values 1 and 2 could be entered onto the spreadsheet and recognised by SPSS.

Additionally, it was at this stage that the informational sub-values, one through to five, were separated out from the main purpose category and given their own space on the coding sheet with simple 'yes' and 'no' values. This decision was made as it was found on the first night of data collection that it was possible for more than one of the informational sub-values to be present.

As there were a total of twelve slots that were filled, due to each channel being watched for fifteen minutes, and only eight channels represented in the sample, some channels were measured twice each evening. It was therefore felt that for the data to be equitable the next evenings collection would begin in order of the channels, as they were outlined in the data set. For example, if the last channel measured in the ten thirty to eleven slot was value one, BBC1, the next evenings collection would begin with value two, ITV1.

### 3.3.3 Data Collection

Initially two periods of data collection were to have taken place. One would have been in January 2012 and the other in April 2012. Each period of data collection would have sampled one week's content, including Saturdays and Sundays. Weekend television schedules are structured differently to a weekday therefore comparisons would be drawn between the two. It was felt that collecting data from two weeks, four months distant from each other, offered the possibility to check just how much, or little, change in the content there had been during that period.

However, problems arose when trying to find one place that offered both Freeview and Sky Digital platforms, which could be accessed without disrupting any social or domestic activities. The first area under consideration was a bar area, which would be closed during University term time, but access proved difficult. The second area, which would be where the collection eventually took place, is a family home. It was decided that a shorter amount of time, one hour per day, would be measured but that the process would be over a greater number of days, 24 as opposed to 14. Data collection occurred for six days of the week, typically Monday through to Saturday. Each programme was to be viewed for half an hour, which allowed for fifteen minutes, per platform, to be measured. By taking this approach two things would happen. The first was that there would be a greater variety to the content measured. The second was that the data could be collected domestically with the minimum of disruption. Data was recorded on an Excel spreadsheet. The following day the data was imported into SPSS so that a clear and manageable numerical dataset could be generated. Any handwritten notes that had been made were typed up and used as a further procedure for reviewing the data.

Data collection took place during the summer of 2012, from June through to September. This resulted in a data set being generated which represented the sample accurately. A channel from the sample was selected to see if a red button icon appeared. If the icon appeared a five minute interval was observed to see if the icon remained constant or disappeared before that time period had elapsed. Once this had been established the red button was pressed on the remote control.

If no red button icon appeared, the button was pressed to ascertain if the there was any hidden content or none was available. Measurements were taken depending on what appeared once the red button was pressed. Data was collected by myself with no co-researcher. As the main methodological approach was content analysis, and self-designed, I felt it a personal responsibility to gather all the data.

Once the data collection was started it was found that three channels were unavailable on Freeview; Sky1, Sky Sports 1 and Boomerang. Combined, these three channels accounted for eighteen units of analysis. These measurements were discarded, so as not to skew the results from the units of analysis where the channels were available. Once these measurements had been discarded the dataset comprised of a total of seventy eight units of analysis. The result is that unless otherwise explained $n$ = 78. While a channel was represented for a half hour period it was measured twice, fifteen minutes for each platform. Numerically, 78 represents the number of fifteen minute intervals where data could be recorded. I acknowledge that 78 is not a large sample. However, the times sampled represented peak viewing times and coincided with major events. Both these factors meant the sample was representative of red button content, and there was potential to find a significant amount of material that could be considered to be interactive.

After the June data collection period it was noticed that there was a large amount of measurements under the 'other' value. The measurements were analysed to identify exactly what the value represented. Consequently a further eleven values were added to the specific content category from July onwards;

- Main Index
- Highlights (as in packages offered by subscription broadcasters)
- Access to other interactive content (Cbeebies, Sky Active)
- Programme searches
- Upgrade details
- Business and Markets information
- Travel news

- National interest ('Around the UK' etc.)

- Travel offers

- Gambling

- Olympic Torch Relay (the data collection took place at the time of the build up to the London Olympics)

The 'other' value was still included on the coding sheet as a method of recognising any content, which for some reason didn't appear on the coding sheet as a specific value. Once each month's data collection was completed the Excel spreadsheets were transferred onto SPSS datasets (electronic copies available in appendix B).

**Chapter 4 Results and Findings**

**4.1 Introduction**

Before the methodological approach to this research was established four initial field interviews were carried out. The aim of the interviews was to gauge the state of interactive applications at two of the main British broadcasters, the BBC and ITV. As the initial aim of the research was to explore whether technological convergence had instigated a change in the way television was used the internet appeared heavily in the conversations. Three interviews took place at the BBC's White City complex and one at ITN's headquarters in London, between November 2006 and April 2007. These were with;

- Chris Berthoud, the then Assistant Editor of BBC News Interactive
- Rahul Chakura, the then Controller of BBCi
- Lindsay Charlton, the then Managing Director of ITV Local
- Marc Goodchild, the then Executive for Innovation Development in Factual and Learning at the BBC.

The outcomes of the interviews provided a range of opinions and attitudes as to how interactivity could be used by television. All interviewees' agreed that the way television was being used by consumers was changing. There were, however, differences as to how consumerism would change. Additionally there were differences of opinion, between the BBC and ITV, as to how the content would be delivered. I will begin this short section by briefly looking at how it was perceived that interactive television would be consumed before looking at the two main differences in delivery. Finally I will address how the broadcasters were attempting to adapt to new forms of content delivery.

For Berthoud, how interactive applications would be viewed through television screens depended on the form the material would take,

'if you are looking at your TV in your living room you don't want to read 500 words of text about something, and then if you have really big text does that mean that you can't watch any video because it's squashed into a corner' Berthoud, 2006, appendix C, pg. 241

Goodchild (2006, appendix F) presented increased consumerism as a screen size issue as 'television will migrate out of the living room and other things will migrate into the living room' (ibid. pg. 294). As a result 'the relationship you are naturally trained on one definition when you look at it changes when you're ten foot away from it, three foot away from it and half a foot away' (ibid). The specific nature of the content is addressed by Chakura (2006, appendix D), 'depending on the right consumer needs we pick the right content, the right metadata, in the right places and then play with it in the way (that's) appropriate' (ibid. pg. 251). This then leads to greater choice as the consumer 'is now in charge of the experience, will make choices because choice is broader but also it's easier for you to make selections, it's easier for you to find the content you require' (Charlton, 2007, appendix E, pg. 257).

The two main British broadcasters were, at the very least, examining the idea of interactive television as recently as seven years ago. Throughout the interviews the term interactive is heavily used. Both broadcasters also see that the need of the consumer is paramount, when offering interactive applications. When dealing with the specifics of how the content was to be delivered there was a sharp difference between the two organisations. The BBC saw interactive television applications as additional content, which would appear alongside traditional programming through what was then referred to as a new 360 degree policy (Bennett, 2008 (b)). Evidence of this was made apparent when discussing new commissioning policy, 'the commissioning of the interactivity will happen at the same place as the commissioning of the programme in fact it will happen at the same time as the commissioning of the programme' (Chakura, 2006, appendix D, p. 245). However, for ITV, interactive television was seen as something that ran parallel to scheduled content and was 'useful to the individual citizen and also make it interactive so if you have a strong opinion about something you can interact with another group' (Charlton, 2007, appendix E, pg. 264). Rather than develop material that existed

underneath scheduled terrestrial programming, and was accessed through the red button, ITV launched a website called ITV Local in 2005.

Both Chakura (2006, appendix D) and Charlton (2007, appendix E) admitted that there was a level of anxiety coming from colleagues involved in producing traditional television content. Charlton anticipates a period of cultural change and re-education, 'I don't think they're antagonistic, I think that any large business that's been around for a period of time 30, 40, 50 years has conventions and it has a culture' (Charlton, 2007, appendix E, pg. 280). Therefore, 'it's a way for large organisations to adapt more quickly and therefore they have to educate their own teams about not being frightened of this new world, embracing this new world' (ibid). Chakura admitted that opening up television producers to the idea of interactivity had been difficult as, 'a TV exec producer does not see that as a key part of their job, it's not been the focus' (appendix D. pg. 245), however, 'in the last two years especially with Mark Thompson coming on board digital has spread to the centre of the BBC's agenda' (ibid).

The clear split, between ITV and the BBC, represented just how contentious the idea of interactive television was less than ten years ago. Policy differences in how interactive content could be delivered are clear, with the BBC's 360 strategy and ITV's moves towards a style which was more internet television. In addition to the research aim to clarify whether interactivity has become ingrained into the experience of television, what will also emerge is if the broadcasters' policies which existed in 2006 and 2007 have been upheld.

The following chapter presents the results of the data from the collection period, which occurred between June and September 2012. Structurally the presentation of the results follows the logic of the coding sheet, starting from establishing how much content there is broadly, and then gradually becoming more detailed as the chapter progresses. The units of analysis for which data was unavailable, because the channels were not present on Freeview, were discarded. The measurements in the first part of the findings is for each 15 minute collection period, which means

that for tables 4.1 through to 4.17 *n* = 78. From table 4.18 onwards the unit of analysis is each red button option available, which means *n* = 358.

The content which had been recorded as 'other' for the June data collection was analysed further, to identify specifically what the measurements represented. This was made easier as comprehensive notes were taken as the data collection was occurring. Once the specific applications had been established they were added to the coding sheet and measured accordingly. For this write up the values that were identified and separated out from the 'other' measurements, from the June data collection, have been added to the totals for that month's measurements. Data collection then continued throughout one week each in early July, August and September for an hour each day.

The results begin by establishing how much red button presence there is before moving on to examine how the content appears, and is signified, in section two. Section three examines in more detail how the content is signified. To differentiate between the two levels of signification section three is headed 'signposting.' The chapter then moves onto discuss how the user of the red button navigates to the content, before the number of options which appear are discussed. If the content is programme specific, or not, is discussed in the general content section. Pen-ultimately the number of appearances, for each option that have been measured, and whether the options support the programme being shown, or not, is quantified and analysed. The final set of tables present the purpose of the specific content values. Where the numbers are large enough, the results of the tables are presented as percentiles[1]. When numbers are smaller, or there is a wide variation in measurements, the tables are presented numerically.

---

[1] Percentiles are presented the decimal point has been removed and the numbers rounded up for the purposes of clearer presentation.

**4.2 Presence**

The first series of tables measure the amount of red button presence throughout the sample. Presence here is defined as whether any red button content was available. The manner in which the content appeared occurred in two ways. The first was if there was some sort of graphical icon which acted as a signpost to the content. Secondly, presence was acknowledged if content became available once the red button was pressed on the remote control even if there was no graphical signpost.

Table 4.1 – Total amount of red button content availability by platform

| Value | Freeview | Sky | Totals |
|---|---|---|---|
| Presence | 24 (31%) | 42 (54%) | 66 (85%) |
| No Presence | 6 (8%) | 6 (8%) | 12 (15%) |
| Totals | 30 (38%) | 48 (62%) | 78 (100%) |

Total *n* = 78 for table 4.1 based on each platform being accessed at 15 minute intervals. The availability of red button content relates to RQ 1 as the total amount of red button content presence was measured.

Table 4.1 establishes that there is a significant amount of red button content available across both platforms. In total, the 66 appearances of red button content, being available, account for 85% of the dataset. The 12 measurements of no presence account for 15% of the dataset. Proportionally, there was a greater red button presence available through the Sky box, 54%, than through Freeview, 31%. However, three channels that appeared in the sample were unavailable on Freeview. Two of these were Sky channels, Sky 1 and Sky Sports 1. The other was one of the children's channels, Boomerang. For these three channels to be unavailable on one of the platforms explains as to why there is a lower proportion of red button content on Freeview.

Table 4.2 – Total amount of red button availability by channel

| Channel | Presence | No presence | Totals |
| --- | --- | --- | --- |
| BBC1 | 12 (15%) | 0 (0%) | 12 (15%) |
| ITV1 | 0 (0%) | 12 (15%) | 12 (15%) |
| Sky1 | 6 (8%) | 0 (0%) | 6 (8%) |
| BBC News Channel | 12 (15%) | 0 (0%) | 12 (15%) |
| Sky News | 12 (15%) | 0 (0%) | 12 (15%) |
| Sky Sports1 | 6 (8%) | 0 (0%) | 6 (8%) |
| CBBC | 12 (15%) | 0 (0%) | 12 (15%) |
| Boomerang | 6 (8%) | 0 (0%) | 6 (8%) |
| Totals | 66 (85%) | 12 (15%) | 78 (100%) |

$n$ = 78 for table 4.2. Each platform was selected at 15 minute intervals meaning that each channel was viewed for 30 minutes. The results of table 4.2 relate to RQ 1 as the total amount of red button content offered by the channels was measured.

How much the individual broadcasters provide the red button content can be seen from the breakdown of channels in table 4.2. ITV1 stands out as being the only channel to not offer any red button content on either platform. Of the remaining seven channels, proportionally, all offer 100% red button presence.

**4.3 Signification and Appearance**

The following tables measure how the viewer is alerted to the red button content. The data will be presented through three tables which measure how the content is signified by platform, channel and genre.

Table 4.3 – Total amount for how the viewer is alerted to red button availability per platform

| Access | Freeview | Sky | Totals |
|---|---|---|---|
| Signposted | 20 (26%) | 21 (27%) | 41 (53%) |
| Un-signposted | 4 (5%) | 21 (27%) | 25 (32%) |
| No access | 6 (8%) | 6 (8%) | 12 (15%) |
| Totals | 30 (38%) | 48 (62%) | 78 (100%) |

$n$ = 78 for table 4.3 based upon whether an icon signifying red button content availability appears. Measurements occurred at 15 minute intervals for each platform. The results inform RQ 1, in terms of amount, but also RQ 4, because of the iconographic signification of the red button content to the viewer.

The majority of content is signposted, 53% of the units of analysis. When there is red button presence on Freeview it is generally signposted, 26% of the total. Proportionally, signposted material represents 84% of the available red button content for Freeview. Through the Sky box red button content is signposted and un-signposted equally. The reasons for this disparity will be explored further below. Table 4.4 presents the results of red button signification by channel and is presented overleaf.

Table 4.4 – Total amount for how the viewer is alerted to red button availability per channel

| Channel | Signposted | Un-signposted | No Access | Totals |
|---|---|---|---|---|
| BBC1 (Freeview) | 3 (4%) | 3 (4%) | 0 (0%) | 6 (8%) |
| BBC1 (Sky) | 3 (4%) | 3 (4%) | 0 (0%) | 6 (8%) |
| ITV1 (Freeview) | 0 (0%) | 0 (0%) | 6 (8%) | 6 (8%) |
| ITV1 (Sky) | 0 (0%) | 0 (0%) | 6 (8%) | 6 (8%) |
| Sky1 (Freeview) | n/a | n/a | n/a | 0 (0%) |
| Sky1 (Sky) | 0 (0%) | 6 (8%) | 0 (0%) | 6 (8%) |
| BBC News (Freeview) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| BBC News (Sky) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| Sky News (Freeview) | 5 (6%) | 1 (1%) | 0 (0%) | 6 (8%) |
| Sky News (Sky) | 0 (0%) | 6 (8%) | 0 (0%) | 6 (8%) |
| Sky Sports 1 (Freeview) | n/a | n/a | n/a | 0 (0%) |
| Sky Sports 1 (Sky) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| CBBC (Freeview) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| CBBC (Sky) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| Boomerang (Freeview) | n/a | n/a | n/a | 0 (0%) |
| Boomerang (Sky) | 0 (0%) | 6 (8%) | 0 (0%) | 6 (8%) |
| Totals | 41 (53%) | 25 (32%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.4. Each platform was selected at 15 minute intervals meaning that each channel was viewed for 30 minutes. The results are informed by whether an on screen icon appeared and address RQ 1, for quantity, and RQ 4, as the viewer can be alerted to the content available.

BBC News and CBBC are the only channels to proportionally offer 100% signposted access across both platforms. Both Sky1 and Boomerang only offer un-signposted access through the Sky box and are unavailable on Freeview. Sky News and BBC1 split between signposted and un-signposted. Of the two channels that split signposting, BBC1 is the most consistent channel, across both platforms, with half the content being signposted and the other half being un-signposted. All six examples of Sky News appearing on the Sky platform are un-signposted, with all but one measurement for the channel through Freeview being signposted. Why this is, and whether the content for Sky News is significantly different across the two platforms, will emerge through further analysis and discussion.

Table 4.5 Total amount for how the viewer is alerted to red button availability per genre

| Access | News | Documentary | Music | Reality TV | Gameshow | Drama | Movie | Sport | Totals |
|---|---|---|---|---|---|---|---|---|---|
| Signposted | 17 (22%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 11 (14%) | 0 (0%) | 12 (15%) | 41 (53%) |
| Un-signposted | 7 (9%) | 1 (1%) | 2 (3%) | 2 (3%) | 0 (0%) | 12 (15%) | 1 (1%) | 0 (0%) | 25 (32%) |
| No access | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 2 (3%) | 8 (10%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Totals | 24 (31%) | 3 (4%) | 2 (3%) | 3 (4%) | 2 (3%) | 31 (40%) | 1 (1%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.5. Each platform was selected at 15 minute intervals meaning that each genre was viewed for 30 minutes. The table informs RQ 1 because the total amount of icon appearances was measured. RQ 4 is also addressed, as whether or not a specific genre alerts the viewer to red button content is measured.

The only genre which has near parity, between un-signposted and signposted content, is Drama. For the news genre the majority of content is signposted. Sport only appears in the signposted column, suggesting that there is more realisation of the red button for that genre than any other. In total the 15%, for sport, represented double the amount of the total appearances for red button presence on Sky Sports 1. An explanation for this is the coverage of the 2012 London Olympics, Wimbledon tennis championship and the Euro 2012 football tournament on the BBC during the data collection period.

**4.4 Signposting**

The following series of tables explore further how the red button is signposted. There are four key measurements;

- whether the icon is available constantly

- appears for more than five minutes and is then hidden

- appears for less than five minutes before disappearing off the screen

- does not appear at all, but still offers content.

The tables comprise of measurements across platform, channel and genre. An additional table is provided to measure if the content is verbally signposted by a presenter or continuity announcer.

Table 4.6 Total amount for how the graphical icon appears on screen per platform

| Platform | Constant | More than five minutes | Less than five minutes | No icon but content appears | No red button or content | Totals |
|---|---|---|---|---|---|---|
| Freeview | 10 (13%) | 0 (0%) | 10 (13%) | 4 (5%) | 6 (8%) | 30 (38%) |
| Sky | 19 (24%) | 0 (0%) | 2 (3%) | 21 (27%) | 6 (8%) | 48 (62%) |
| Totals | 29 (37%) | 0 (0%) | 12 (15%) | 25 (32%) | 12 (15%) | 78 (100%) |

$n$ = 78 for table 4.6 based upon each platform being measured at 15 minute intervals. The results inform RQ 3, as how the viewer is alerted to red button content is more specifically addressed.

No examples were recorded of a graphical icon appearing for more than five minutes, before becoming hidden, during the data collection period. The graphical icon either appears constantly throughout the transmission of a programme or disappears after a short period of time. This means that the broadcasters see no middle ground when alerting the viewer to red button content, as no icon appears for a significant amount of time before disappearing.

Analysing the results from the two platforms separately reveals a sharp difference in how precisely the viewer is alerted to the red button content. For Freeview the signposted content is split equally between the icon appearing constantly and for less than five minutes. By comparison the Sky box registers 24% for constant and just 3% for appears for less than five minutes. The suggestion from the results of table 4.6 is that some constant signposting by one channel, on the Sky box, becomes hidden after initially appearing on the screen for a short period of time through Freeview. Additionally table 4.6 establishes that the greater proportion of the hidden un-signposted content is through the Sky box.

Table 4.7 Total amount for how long the graphical icon appears on screen per channel

| Channel | Constant | More than five minutes | Less than five minutes | No icon but content appears | No red button or content | Totals |
|---|---|---|---|---|---|---|
| BBC1 | 4 (5%) | 0 (0%) | 3 (4%) | 5 (6%) | 0 (0%) | 12 (15%) |
| ITV1 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (15%) | 12 (15%) |
| Sky1 | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) | 0 (0%) | 6 (8%) |
| BBC News | 11 (14%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Sky News | 0 (0%) | 0 (0%) | 5 (6%) | 7 (9%) | 0 (0%) | 12 (15%) |
| Sky Sports 1 | 6 (8%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) |
| CBBC | 8 (10%) | 0 (0%) | 4 (5%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Boomerang | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) | 0 (0%) | 6 (8%) |
| Totals | 29 (37%) | 0 (0%) | 12 (15%) | 25 (32%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.7. Each platform was selected at 15 minute intervals meaning that each channel was viewed for 30 minutes. The results inform RQ 3, as the manner in which the channels alert the viewer to red button content is addressed.

Table 4.7 suggests a difference in how the red button icon appears on the Sky channels. All content on Sky Sports 1 signposts constantly whereas on Sky 1 content

is available but the viewer is not made aware of its presence. The Sky News channel offers a slight majority of content being hidden, 9% of the total.

For the BBC channels table 4.7 reveals a difference between BBC1 and the two niche BBC channels. All three channels signpost red button content constantly, but the difference in how often contrasts sharply. For constantly sign posted content BBC1 offers 5% of the total. By comparison CBBC offers 10% and BBC News 14%. Additionally, all the remaining content for CBBC, 5%, and BBC News, 1%, is signposted for less than five minutes before becoming hidden. A total of 4% of the content available, through BBC1, is signposted for less than five minutes, the remaining 6%, over a third of the material for the channel, can be accessed but the viewer is not made aware of its presence.

Table 4.8 Total amount for how the graphical icon appears on screen per genre

| Genre | Constant | More than five minutes | Less than five minutes | No icon but content appears | No red button or content | Totals |
|---|---|---|---|---|---|---|
| News/Current Affairs | 11 (14%) | 0 (0%) | 6 (8%) | 7 (9%) | 0 (0%) | 24 (31%) |
| Documentary | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 2 (3%) | 3 (4%) |
| Music | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 0 (0%) | 2 (3%) |
| Magazine/Lifestyle | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Reality TV | 1 (1%) | 0 (0%) | 0 (0%) | 2 (3%) | 0 (0%) | 3 (4%) |
| Gameshow | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 2 (3%) |
| Drama/Sitcom/Soap | 7 (9%) | 0 (0%) | 4 (5%) | 12 (15%) | 8 (10%) | 31 (40%) |
| Movie | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 1 (1%) |
| Sport | 10 (13%) | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Totals | 29 (37%) | 0 (0%) | 12 (15%) | 25 (32%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.8. Each platform was selected at 15 minute intervals meaning that each genre was available for 30 minutes. The results inform RQ 3 as how the broadcasters present red button content availability for each genre was measured.

The majority of red button content for sport is signposted constantly, 13% of the 15% total. For news/current affairs nearly half, 14% of the 31% total, is signposted constantly. Conversely, only 9% of the data finds that signposting occurs for the genre which has the largest amount of content, drama/sitcom/soap, but does offer the highest measurement for un-signposted content, 15%.

In summary, as a whole, there is a slight majority of red button content that is signposted constantly. That BBC News and CBBC offer the two largest proportions of constantly signposted content suggests that there is a more focussed approach to the red button for these two channels. While the totals for all three BBC channels are equitable, the results for BBC1 are more spread out. The only Sky channel that offers any constantly signposted content is Sky Sports 1.

Table 4.9 – Total amount of verbal announcements (continuity announcer or presenter) during data collection period.

| Announced or referred | No announcement or referral | No content available | Totals |
|---|---|---|---|
| 0 (0%) | 66 (85%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.9 as each platform was accessed at 15 minute intervals. The results inform RQ 4, as the broadcaster's willingness to promote red button applications verbally to the viewer was measured.

During the data collection period there was plenty of opportunity to capture some sort of announcement, as the 2012 European Football Championship, Wimbledon and the 2012 London Olympics were all being broadcast. The results from this table suggest that the practice is not as widespread as was anticipated.

**4.5 Navigation**

The following tables measure how the red button content is presented to the viewer once accessed. Two areas are addressed. The first is whether the content appears as a menu or not. Secondly, if it is found that content is accessed through menus, how many options are available, at any one time, will be presented.

The first two table's measure how the content appears once the red button is pressed and measure appearance by platform and channel. Three potential options are measured. The first is whether the content appears as a series of video thumbnails, referred to as multi-screen, secondly whether the content is indexical in the form of a text or picture based menu format and thirdly whether content appears immediately; direct to content. The second set of table's will examine the number of options available through the menus and will represent the data as platform, channel, genre and time.

Table 4.10 – Total amount for how red button applications are presented

| Value | Freeview | Sky | Totals |
|---|---|---|---|
| Multiscreen | 0 (0%) | 0 (0%) | 0 (0%) |
| Index | 23 (29%) | 42 (54%) | 65 (83%) |
| Direct to content | 1 (1%) | 0 (0%) | 1 (1%) |
| No content available | 6 (8%) | 6 (8%) | 12 (15%) |
| Totals | 30 (38%) | 48 (62%) | 78 (100%) |

$n$ = 78 for table 4.10. The red button on the remote control was pushed at 15 minute intervals. The results for table 4.10 relate to RQ 3, as how the red button applications are presented to the viewer were measured.

A large majority of content is made available through indexical menus, with consistency across both platforms and channels. The one measurement of 'direct to content' was for Sky News on the 6th June (see below). Table 4.11, options by platform, is presented overleaf.

Table 4.11 – Total amount for how red button applications are presented per platform

| Options | Freeview | Sky | Totals |
|---|---|---|---|
| One | 5 (6%) | 0 (0%) | 5 (6%) |
| Two | 0 (0%) | 0 (0%) | 0 (0%) |
| Three | 0 (0%) | 4 (5%) | 4 (5%) |
| Four | 6 (8%) | 5 (6%) | 11 (14%) |
| Five | 0 (0%) | 9 (12%) | 9 (12%) |
| Six | 5 (6%) | 12 (15%) | 17 (22%) |
| Seven | 0 (0%) | 4 (5%) | 4 (5%) |
| Eight | 7 (9%) | 7 (9%) | 14 (18%) |
| Nine | 0 (0%) | 1 (1%) | 1 (1%) |
| Direct to content | 1 (1%) | 0 (0%) | 1 (1%) |
| No content | 6 (8%) | 6 (8%) | 12 (15%) |
| Totals | 30 (38%) | 48 (62%) | 78 (100%) |

$n$ = 78 for table 4.11. Each platform was measured at fifteen minute intervals. The results refer to RQ 3, as how the red button content is presented to the viewer per platform was measured.

The 6% of the total for one option on Freeview will be explained later. If these are ignored a pattern emerges. Freeview offers an even amount of options, as all the results are for four, six or eight. The numbers for the Sky box are more arbitrary. With 22% of the total, six can be seen as the optimal number of options.

The advantage of a menu led system means that there can be more options available, to anyone wishing to press the red button. When multiplying the number of options and the number of appearances together we find a total 357 options for red button content. This total ignores the one example of 'direct to content' and

the twelve appearances of no content being available. How the channels present
the options to the audience is shown through Table 4.12.

Table 4.12 – Total amount for how red button applications are presented per
channel

| Options | BBC1 | ITV1 | Sky 1 | BBC News | Sky News | Sky Sports 1 | CBBC | Boomerang | Total |
|---|---|---|---|---|---|---|---|---|---|
| One | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 5 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 5 (6%) |
| Two | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Three | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 0 (0%) | 4 (5%) |
| Four | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 1 (1%) | 8 (10%) | 1 (1%) | 11 (14%) |
| Five | 0 (0%) | 0 (0%) | 5 (6%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 3 (4%) | 9 (12%) |
| Six | 10 (13%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 1 (1%) | 0 (0%) | 2 (3%) | 17 (22%) |
| Seven | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 0 (0%) | 0 (0%) | 4 (5%) |
| Eight | 2 (3%) | 0 (0%) | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 14 (18%) |
| Nine | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) |
| Direct to content | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) |
| No content | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Totals | 12 (15%) | 12 (15%) | 6 (8%) | 12 (15%) | 12 (15%) | 6 (8%) | 12 (15%) | 6 (8%) | 78 (100%) |

*n* = 78 for table 4.12. Each platform was selected at 15 minute intervals meaning
that each channel was viewed for 30 minutes. Measured is the manner in which the
channels present red button applications to the viewer, the table refers to RQ 3.

BBC News is the most consistent channel, accounting for 15% of the 18% total for
eight options. The majority of the content to offer six options was for BBC1, 13% of
the 22% total. A similar pattern emerges for four options, with CBBC accounting for
10% of the total 14%. What also emerges through table 4.12 is that CBBC accounts
for all measurements for three options. Why a third of the content for CBBC would

offer only three options will be explored through further discussion. Table 4.12 shows that all cases of one option are for Sky News.

Table 4.13 – Total amount for how red button applications are presented per channel

| Genre | One | Two | Three | Four | Five | Six | Seven | Eight | Nine | Direct to content | No content | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| News & Current Affairs | 5 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 4 (5%) | 0 (0%) | 12 (15%) | 1 (1%) | 1 (1%) | 0 (0%) | 24 (31%) |
| Documentary | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 3 (4%) |
| Music | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) |
| Magazine & Lifestyle | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Reality TV | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 3 (4%) |
| Game show | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 2 (3%) |
| Drama, Sitcom, Soap | 0 (0%) | 0 (0%) | 4 (5%) | 9 (12%) | 6 (8%) | 4 (5%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 (10%) | 31 (40%) |
| Movie | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) |
| Sport | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 7 (9%) | 4 (5%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Totals | 5 (6%) | 0 (0%) | 4 (5%) | 11 (14%) | 9 (12%) | 17 (22%) | 4 (5%) | 14 (18%) | 1 (1%) | 1 (1%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.13. Each platform was selected at 15 minute intervals meaning that each genre was viewed for 30 minutes. The results refer to the manner by which the broadcaster's present red button applications to the viewer by genre, so relate to RQ 3.

The most consistent genre is Sport, with 9% and 5% of the total for six and seven options. News/Current Affairs' 31% of the total dataset is more spread out. 6% of the total is for one option, for the Sky News content on Freeview, and 15% for eight options on the BBC News channel. The remaining 8% for News/Current Affairs are all for red button content for Sky News on the Sky platform. Three quarters of the

measurements for the Drama/Sitcom/Soap genre are clustered between three and six options.

Table 4.14 – Total amount for how red button applications are presented by the time values in the sample

| Time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Direct to content | No content | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:00 – 16:30 | 0 (0%) | 0 (0%) | 2 (3%) | 6 (8%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 (10%) |
| 16:30 – 17:00 | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 1 (1%) | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) |
| 17:00 – 17:30 | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 (10%) |
| 17:30 – 18:00 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 6 (8%) |
| 18:00 – 18:30 | 0 (0%) | 0 (0%) | 2 (3%) | 2 (3%) | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) |
| 18:30 – 19:00 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 4 (5%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) |
| 20:00 – 20:30 | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 5 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 (10%) |
| 20:30 – 21:00 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 6 (8%) |
| 21:00 – 21:30 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 2 (3%) | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) |
| 21:30 – 22:00 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 0 (0%) | 0 (0%) | 4 (5%) | 8 (10%) |
| 22:00 – 22:30 | 1 (1%) | 0 (0%) | 0 (0%) | 1 (1%) | 1 (1%) | 1 (1%) | 0 (0%) | 0 (0%) | 1 (1%) | 1 (1%) | 0 (0%) | 6 (8%) |
| 22:30 – 23:00 | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 1 (1%) | 4 (5%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (8%) |
| Totals | 5 (6%) | 0 (0%) | 4 (5%) | 11 (14%) | 9 (12%) | 17 (22%) | 4 (5%) | 14 (18%) | 1 (1%) | 1 (1%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.14. Each platform was selected at 15 minute intervals meaning that each time value was observed for 30 minutes. As the purpose of the table is to establish patterns in when red button applications are offered to the viewer the results relate to RQ 4.

The 8% of the total between 17:00 – 17:30 suggest that this is a peak in the amount of red button content available, as this measurement represents the single largest number throughout the time values.

Between eight o'clock and eleven o'clock in the evening there are less options for the viewer to access, but there is a cluster of appearances for eight options. These occur for 3% of the time between 21:00 – 21:30 and 5% each for 21:30 – 22:00 and 22:30 – 23:00.

**4.6 General Content**

The following tables establish how much of the red button content represents programme or non-programme specific material. Programme specific refers to the content that was found to relate directly to the programme being shown, for example additional commentary for a sports event. Non programme specific is the content which has no relationship with the programme being transmitted, for example a teletext news based service appearing during a drama. Once again, the values will be cross tabulated by platform, channel and genre.

Table 4.15 – How red button content relates to scheduled television programmes by platform

| Platform | Programme specific | Non-programme specific | Direct to content | No content | Totals |
|---|---|---|---|---|---|
| Freeview | 0 (0%) | 23 (29%) | 1 (1%) | 6 (8%) | 30 (38%) |
| Sky | 4 (5%) | 38 (49%) | 0 (0%) | 6 (8%) | 48 (62%) |
| Totals | 4 (5%) | 61 (78%) | 1 (1%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.15 as the red button was pressed on the remote control at 15 minute intervals. The purpose of the table is to establish whether any of the content is directly relational to the programme being shown, so refers to RQ 1.

Table 4.15 suggests a lack of programme specific content on the red button, which appears for only 5% of the dataset, with all the appearances on the Sky box. Most of the red button content, 78% of the dataset, is non-programme specific material.

Table 4.16 – How red button content relates to scheduled television programmes by channel

| Channel | Programme specific | Non-programme specific | Direct to content | No content | Totals |
|---|---|---|---|---|---|
| BBC1 | 3 (4%) | 9 (12%) | 0 (0%) | 0 (0%) | 12 (15%) |
| ITV1 | 0 (0%) | 0 (0%) | 0 (0%) | 12 (15%) | 12 (15%) |
| Sky 1 | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| BBC News | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Sky News | 1 (1%) | 10 (13%) | 1 (1%) | 0 (0%) | 12 (15%) |
| Sky Sports 1 | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| CBBC | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Boomerang | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| Totals | 4 (5%) | 61 (78%) | 1 (1%) | 12 (15%) | 78 (100%) |

$n$ = 78 for table 4.16. Each platform was selected at 15 minute intervals meaning that each channel was viewed for 30 minutes. As the table refers to the amount of red button content, which was directly relational to the programme being shown the results apply to RQ 1.

The majority of instances of programme specific material appear on BBC1. There is one example of programme specific material on Sky News. No programme specific material was recorded for Sky Sports 1 during the data collection period, although it is widely known that in the past the channel has provided such services.

Table 4.17 – How red button content relates to scheduled television programmes by genre

| Genre | Programme specific | Non-programme specific | Direct to content | No content | Totals |
|---|---|---|---|---|---|
| News/Current Affairs | 1 (1%) | 21 (28%) | 1 (1%) | 0 (0%) | 24 (31%) |
| Documentary | 0 (0%) | 1 (1%) | 0 (0%) | 2 (3%) | 3 (4%) |
| Music | 0 (0%) | 2 (3%) | 0 (0%) | 0 (0%) | 2 (3%) |
| Magazine/Lifestyle | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Reality TV | 0 (0%) | 3 (4%) | 0 (0%) | 0 (0%) | 3 (4%) |
| Gameshow | 0 (0%) | 0 (0%) | 0 (0%) | 2 (3%) | 2 (3%) |
| Drama/Sitcom/Soap | 0 (0%) | 23 (29%) | 0 (0%) | 8 (10%) | 31 (40%) |
| Movie | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 1 (1%) |
| Sport | 3 (4%) | 9 (12%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Totals | 4 (5%) | 61 (78%) | 1 (1%) | 12 (15%) | 78 (100%) |

*n* = 78 for table 4.17. Each platform was selected at 15 minute intervals meaning that each genre was viewed for 30 minutes. With the table examining the amount of red button content being directly relational to the programme being shown RQ 1 is informed.

The majority of the general content appears for news/current affairs (31%) and drama/sitcom/soap (40%). A majority of the programme specific measurements were for sport (4%).

**4.7 Specific Content**

Table 4.12 identified that a total of 357 red button options were available through the menus during the data collection period. For this next series of tables, the dataset which recognised the menu less 'direct to content' in table 4.10 (the measurement for Sky News on June 6th) was once again added to the sample, giving a total $n$ = 358. The twelve examples of no content available, which represented ITV1's portion of the dataset, were discarded for this set of results.

The first table quantifies the type of red button content by their number of appearances and whether they were programme related. As the data that is being analysed is more specific, an extra measurement appears here, partially programme related. Partially programme related refers to material that has some relationship with the programme being shown, for example a game featuring a character from the programme being shown, news items which could relate, in part, to the main broadcast or highlights of a proceeding element of a major event, for which a current part of the same event is being transmitted. Table 4.18 is presented overleaf, for presentation purposes percentages are placed next to raw numbers, instead of underneath. The table is presented overleaf;

Table 4.18 – What the specific red button content consists of and whether the application relates directly to scheduled programmes

| Value | Programme related | Partially programme related | Non-programme related |
|---|---|---|---|
| Games | 0 (0%) | 4 (1%) | 33 (9%) |
| Competitions | 0 (0%) | 0 (0%) | 1 (0.2%) |
| Audio Options | 1 (0.2%) | 0 (0%) | 0 (0%) |
| Programme Highlights | 0 (0%) | 2 (0.5%) | 0 (0%) |
| Blogs | 0 (0%) | 0 (0%) | 12 (3%) |
| Simulcasts | 0 (0%) | 0 (0%) | 1 (0.2%) |
| Popular Sport | 0 (0%) | 0 (0%) | 2 (0.5%) |
| Pop music concerts | 0 (0%) | 0 (0%) | 2 (0.5%) |
| News Teletext | 0 (0%) | 16 (4%) | 47 (13%) |
| Weather Teletext | 0 (0%) | 0 (0%) | 22 (6%) |
| Sports Teletext | 0 (0%) | 0 (0%) | 43 (12%) |
| Sports Multiscreen | 2 (0.5%) | 0 (0%) | 2 (0.5%) |
| News Multiscreen | 0 (0%) | 5 (1%) | 3 (0.8%) |
| Non-scheduled programming | 1 (0.2%) | 0 (0%) | 1 (0.2%) |
| Main Index | 0 (0%) | 0 (0%) | 36 (10%) |
| Highlights | 0 (0%) | 0 (0%) | 6 (2%) |
| Access to other interactive content | 0 (0%) | 0 (0%) | 14 (4%) |
| Programme searches | 0 (0%) | 0 (0%) | 5 (1%) |
| Upgrade details | 0 (0%) | 0 (0%) | 12 (3%) |
| Business and markets information | 0 (0%) | 0 (0%) | 12 (3%) |
| Travel News | 0 (0%) | 0 (0%) | 13 (4%) |
| National Interest | 0 (0%) | 0 (0%) | 16 (4%) |
| Travel offers | 0 (0%) | 0 (0%) | 6 (2%) |
| Gambling | 0 (0%) | 0 (0%) | 12 (3%) |
| Others | 0 (0%) | 4 (1%) | 22 (6%) |
| Totals | 4 (1%) | 31 (9%) | 323 (90%) |

*n* = 358 for table 4.18 as each application found through the menus was measured.

The table informs RQ 2 as the specific information carried through the menus is presented.

More detail emerges here as to the exact nature of the four measurements that were found to be programme specific. The audio option appearance was for

additional commentary that was being shown as part of BBC1's coverage of the Euro 2012 football tournament. An appearance of a sport's multiscreen was for the BBC's coverage of the 2012 London Olympics. Finally, the non-scheduled programming was Sky News' coverage of a breaking news story for which previous content was being shown in tandem with the live programme.

Teletext based options comprised over a third of the total options, 57%. Alongside the news, sports and weather teletext, these can be expanded to include the main index, business and markets information, travel news and national interest options. News teletext is the most common type of red button content, 18% of the sample. Most of the partially programme related material, 52% proportionally of the total for that measurement, was news teletext. An example of this would be the material carried as part of the Sky News red button content, where the teletext headlines were in some part related to the running order of the programme being transmitted.

Sports teletext is also well represented, with 43 appearances. All are non-programme specific, and account for 13% of the 323 total. By comparison, the news multi-screen, which is a collection of video thumbnails, registers eight appearances and sports multi-screen only four. However, the news multi-screen accounts for 16% of the partially programme related material and the sports multi-screen 50% of the programme specific content. So the multi-screen options are not widely used but provide material which has more in common with the programme being transmitted when they do appear. How the options appeared through the platforms is presented overleaf in table 4.19. Percentages are once again presented next to raw numbers rather than underneath.

Table 4.19 – What the specific red button content consists of by platform

| Value | Freeview | Sky |
|---|---|---|
| Games | 6 (2%) | 31 (9%) |
| Competitions | 1 (0.2%) | 0 (0%) |
| Audio options | 0 (0%) | 1 (0.2%) |
| Programme highlights | 1 (0.2%) | 1 (0.2%) |
| Blogs | 6 (2%) | 6 (2%) |
| Simulcasts | 0 (0%) | 1 (0.2%) |
| Popular sport | 1 (0.2%) | 1 (0.2%) |
| Pop music concerts | 0 (0%) | 2 (0.5%) |
| News teletext | 24 (7%) | 39 (11%) |
| Weather teletext | 12 (3%) | 10 (3%) |
| Sports teletext | 14 (4%) | 29 (8%) |
| Sports multi-screen | 0 (0%) | 4 (1%) |
| News multi-screen | 0 (0%) | 8 (2%) |
| Non-scheduled programming | 0 (0%) | 2 (0.5%) |
| Main index | 18 (5%) | 18 (5%) |
| Highlights | 0 (0%) | 6 (2%) |
| Access to other interactive content | 7 (2%) | 9 (3%) |
| Programme searches | 0 (0%) | 5 (1%) |
| Upgrade details | 0 (0%) | 12 (3%) |
| Business and markets information | 6 (2%) | 6 (2%) |
| Travel news | 8 (2%) | 6 (2%) |
| National interest | 9 (3%) | 7 (2%) |
| Travel offers | 6 (2%) | 0 (0%) |
| Gambling | 0 (0%) | 12 (3%) |
| Others | 3 (0.8%) | 20 (6%) |
| Totals | 122 (34%) | 236 (66%) |

*n* = 358 for table 4.19. The 358 units of analysis are the specific content found through the menu's and inform RQ 2.

The majority of the content on both platforms is teletext based, although proportionally there is a greater amount on Freeview. Through the Sky box teletext options accounted for 115 appearances, proportionally around half, 49% of the red button options for the platform. For Freeview the seven teletext options appeared a total of 91 times which proportionally represented three quarters, 75%, of Freeview's options.

Closer examination reveals that there were ten types of content on Sky that did not appear through Freeview. Five of the examples are video based; simulcasts, pop music concerts, sports multiscreen, news multiscreen and non-scheduled programming. Another three instances were highlights, programme searches and upgrade details. Clearly the upgrade details only appear through the Sky box as this acted as an encouragement, to subscribers of Sky TV, to add to their current package. The final option which appeared through the Sky box alone was for audio options.

Table 4.20 – What the specific red button content consist of by channel

| Value | BBC1 | ITV1 | Sky1 | BBC News | Sky News | Sky Sports 1 | CBBC | Boomerang |
|---|---|---|---|---|---|---|---|---|
| Games | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (2%) | 0 (0%) | 0 (0%) | 31 (9%) |
| Competitions | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Audio options | 1 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Programme highlights | 2 (0.5%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Blogs | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) |
| Simulcasts | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.2%) | 0 (0%) |
| Popular sport | 2 (0.5%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Pop music concerts | 2 (0.5%) | 0 (0%) | 0 (0% | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| News teletext | 10 (3%) | 0 (0%) | 0 (0%) | 23 (6%) | 18 (5%) | 0 (0%) | 12 (3%) | 0 (0%) |

| Value | BBC1 | ITV1 | Sky1 | BBC News | Sky News | Sky Sports 1 | CBBC | Boomerang |
|---|---|---|---|---|---|---|---|---|
| Weather teletext | 9 (3%) | 0 (0%) | 0 (0%) | 12 (3%) | 1 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Sports teletext | 14 (4%) | 0 (0%) | 0 (0%) | 12 (3%) | 1 (0.2%) | 16 (4%) | 0 (0%) | 0 (0%) |
| Sports multiscreen | 4 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| News multiscreen | 2 (0.5%) | 0 (0%) | 0 (0%) | 1 (0.2%) | 5 (1%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Non-scheduled programming | 1 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Main index | 12 (3%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) |
| Highlights | 0 (0%) | 0 (0%) | 6 (2%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Access to other interactive content | 2 (0.5%) | 0 (0%) | 6 (2%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (2%) | 0 (0%) |
| Programme searches | 0 (0%) | 0 (0%) | 5 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Upgrade details | 0 (0%) | 0 (0%) | 6 (2%) | 0 (0%) | 0 (0%) | 6 (2%) | 0 (0%) | 0 (0%) |
| Business and markets information | 0 (0%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Travel News | 1 (0.2%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| National interest | 4 (1%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Travel offers | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 6 (2%) | 0 (0%) | 0 (0%) | 0 (0%) |

| Value | BBC1 | ITV1 | Sky1 | BBC News | Sky News | Sky Sports 1 | CBBC | Boomerang |
|---|---|---|---|---|---|---|---|---|
| Gambling | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (3%) | 0 (0%) | 0 (0%) |
| Others | 8 (2%) | 0 (0%) | 4 (1%) | 0 (0%) | 9 (3%) | 4 (1%) | 1 (0.2%) | 0 (0%) |
| Totals | 74 (21%) | 0 (0%) | 27 (8%) | 96 (27%) | 48 (13%) | 38 (11%) | 44 (12%) | 31 (9%) |

*n* = 358 for table 4.20. The content measured is the specific red button applications by channel. The table informs RQ 2, as the applications carry the specific information through the red button stream.

The channel which offers the most red button content is BBC News, with 96 total appearances. The majority of the content for this channel is text based with only one instance of an option which can offer video, news multiscreen. BBC1 offers the next largest number of content, with a total of 74 options. The content is more varied, than for BBC News, with audio options, programme highlights, popular sport, pop music concerts, sports multiscreen, non-scheduled programming and access to other interactive content all registering appearances, albeit in small numbers. There are also smaller numbers for the teletext based content for news and sport, as well as the national interest and travel news; business and markets information does not appear at all on BBC1's red button options. CBBC is the only channel to offer blogs as a specific option, offers two more examples of news teletext and provides four more opportunities to access other interactive content than BBC1.

On Sky Sports 1 sixteen of its thirty eight options were sports teletext, along with another twelve options, which allow the viewer to gamble. Both Sky Sports 1 and Sky 1 have six measurements apiece, which offer viewers the chance to upgrade their current packages. Sky 1 has the most general options, with the majority of its applications linking back to programme searches, access to other interactive content and programme highlights.

Sky News provides the broadest set of options. The expected news teletext and news multiscreen options appear, together with lesser measurements for weather teletext, sports teletext, and one example of non-scheduled programming. There are also measurements for games and travel offers, six each. The narrowest set of red button options was on Boomerang, which only offered games.

**4.8 Purpose**

The final set of table's measure the purpose of the specific content, and will be cross tabulated by platform and genre. As all the specific content values were counted for these tables, *n* = 358.

Table 4.21 – What the purpose of the specific red button content consists of per platform

| Value | Freeview | Sky | Totals |
|---|---|---|---|
| Educational | 0 (0%) | 1 (0.2%) | 1 (0.2%) |
| Entertainment | 4 (1%) | 22 (6%) | 26 (7%) |
| Commercial | 9 (3%) | 32 (9%) | 41 (11%) |
| More choice | 3 (0.8%) | 9 (3%) | 12 (3%) |
| Cross channel content | 6 (2%) | 6 (2%) | 12 (3%) |
| Hard news | 28 (8%) | 51 (14%) | 79 (22%) |
| Soft news | 24 (7%) | 49 (14%) | 73 (20%) |
| Timeshifting | 0 (0%) | 0 (0%) | 0 (0%) |
| General news | 49 (14%) | 45 (13%) | 94 26% |
| Event | 0 (0%) | 0 (0%) | 0 (0%) |
| Advertising or promotional | 0 (0%) | 21 (6%) | 21 (6%) |
| Totals | 123 (34%) | 235 (66%) | 358 (100%) |

*n* = 358 for table 4.21. The specific applications have been collated into sub-headings to determine their purpose. The results of the table inform RQ 2.

The largest measurement is for general news, which accounts for over a quarter of the total. Content measured under this heading is split equally over the two platforms. The suggestion, which stems from this result, is that a small majority of red button content is for services offering local news, weather and travel updates, and a main index of services. The next largest measurement is for hard news; national and international news headlines, as well as business and markets information, for which the Sky platform accounts for nearly two thirds of the content. Sports, celebrity and entertainment news, which comprised the soft news value, accounted for the third largest measurement, with a majority of the content appearing through the Sky box.

A combination of advertising or promotional and commercial content accounted for 15% of the material appearing through the Sky box, but only 3% through Freeview. It was anticipated that the results would find that there was more of this style of content available through the Sky box, and how 3% of the content found its way onto Freeview will emerge from the results of table 4.22 below. Further analysis of table 4.22 will also explain the 7% of the content which was considered to be entertainment, the majority of which appeared on Sky. Before the data collection began it was envisaged that there would be more of this style of content. As mentioned earlier an example would be the 'fan zone' function used by Sky Sports 1 during transmission of football matches, whereby two supporters of the teams playing would provide alternative commentary. As this has appeared on the red button in the past, as an alternative to the main commentary, the rather more biased and less restrained manner in which the match was presented suggests a more entertaining, superficial, experience. However, with a low number of appearances the suggestion is that broadcasters do not use the red button for material providing an entertaining experience, which could detract from the scheduled broadcast. A single measurement for educational was barely enough to register, one measurement equals 0.2% of the total.

Table 4.22 – What the purpose of the specific red button content consist of per channel

| Value | BBC1 | ITV1 | Sky1 | BBC News | Sky News | Sky Sports 1 | CBBC | Boomerang | Totals |
|---|---|---|---|---|---|---|---|---|---|
| Educational | 1 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.2%) |
| Entertainment | 5 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (1%) | 0 (0%) | 2 (0.5%) | 15 (4%) | 26 (7%) |
| Commercial | 0 (0%) | 0 (0%) | 4 (1%) | 0 (0%) | 9 (3%) | 12 (3%) | 0 (0%) | 16 (4%) | 41 (11%) |
| More choice | 8 (2%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (3%) |
| Cross channel content | 2 (0.5%) | 0 (0%) | 4 (1%) | 0 (0%) | 0 (0%) | 1 (0.2%) | 4 (1%) | 0 (0%) | 11 (3%) |
| Hard news | 12 (3%) | 0 (0%) | 0 (0%) | 34 (10%) | 21 (6%) | 0 (0%) | 12 (3%) | 0 (0%) | 79 (22%) |
| Soft news | 22 (6%) | 0 (0%) | 10 (3%) | 12 (3%) | 1 (0.2%) | 16 (4%) | 12 (3%) | 0 (0%) | 73 (20%) |
| Timeshifting | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| General news | 26 (7%) | 0 (0%) | 3 0.8% | 50 (14%) | 1 (0.2%) | 0 (0%) | 14 (4%) | 0 (0%) | 94 (26%) |
| Event | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Advertising or promotion | 0 (0%) | 0 (0%) | 8 (2%) | 0 (0%) | 4 (1%) | 9 (3%) | 0 (0%) | 0 (0%) | 21 (6%) |
| Total | 76 (21%) | 0 (0%) | 29 (8%) | 96 (27%) | 44 (12%) | 38 (11%) | 44 (12%) | 31 (9%) | 358 (100%) |

*n* = 358 for table 4.22. As the purpose of the content is measured by channel, table 4.22 informs RQ 2, for the information carried, and RQ 4, for the audience experience.

14% of the appearances for general news were available through the BBC News channel, which represents the largest measurement for a single option. The next largest is for the 9% of the total for the hard news option, again through the BBC News channel. Boomerang accounts for the largest amount of commercial and entertainment based content, 9%.

Although the majority of the entertainment content, 4%, appeared through Boomerang, there were measurements for the option recorded for BBC1, Sky News and CBBC. BBC1 offered a pop concert, a series of short films about London, a quiz based on a popular drama series during the August data collection, and a world music event during September. All the entertainment content on Sky News was for games, which were offered on Freeview. As it was not clear if there was any cost to access the games the content was measured as entertainment, and accounts for the 1% for entertainment content on Freeview in table 4.21. The CBBC content was additional video material, which appeared in June and September and was labelled as CBBC Extra. The 4% which accounted for the entertainment content on Boomerang was for games during June and July. As with Sky News there was no obvious cost to the content so the options were measured as entertainment.

It would be expected that the majority of the commercial and advertising or promotional content would be available through the three Sky channels. Commercial is where the broadcaster is actively seeking to encourage the viewer to spend money. There is also ambivalence between what was coded as being commercial and advertising or promotional. An example of this can be seen when viewers have the opportunity to upgrade their packages through the red button on both Sky 1 and Sky Sports 1. All measurements for Sky 1 register the chance to upgrade existing packages as being commercial, as does the data for June and July on Sky Sports 1. For Sky Sports 1 this was changed during August and September to advertising or promotional. The gambling options which are offered on Sky Sports 1 are clearly commercial, as are the travel offers which appear through Sky News on Freeview. 4% of the commercial options appear through Boomerang. The service provider Boomerang used for the August and September data collections changed. It was clear through the new menu that viewers would be charged to access games.

The confusion that was caused by the upgrade details was an anomaly. Advertising or promotional material, which promoted either products and services offered by the parent broadcaster or provided space for advertisements, appeared on all three Sky channels. Both Sky News, through the Sky box, and Sky Sports 1 offered advertisements. Sky 1 provided examples of advertising or promotional content

through all measurements, in that tabs appeared through the red button, which offered the chance to see what programmes the broadcaster suggested the viewer watch, TV Picks and Highlights.

## 4.9 Key Findings

What emerges from this chapter is that there is a significant amount of red button content available to the viewer across the two platforms. Most channels offer content 100% of the time, through indexical menus, which offer a wide variety of options. However, the majority of the content is text based. Much of the content is teletext in style and informational on the Freeview platform. The Sky platform, while offering informational services, also offers more text based services, which are designed to encourage subscribers to watch specific programmes or upgrade their existing package. Only a small proportion of the red button content offers video content and is, on occasions, used to broadcast material away from the parent channels. There is red button content, which offers the viewer the opportunity to access material which adds to the programme that is currently being shown, usually during live transmissions, but the evidence from the data is that this does not happen very often. When it does, it is predominantly sports based. Most of the red button content, which was available during the data collection period, did not add to, or even refer to, the programme that was being transmitted. The only channel in the sample that offered no red button presence or content was ITV1.

**Chapter 5 Discussion 1**

**5.1 Introduction**

This chapter provides a more detailed analysis of the results and findings, which emerged from the previous chapter. However, the chapter begins by further assessing the outcomes of the series of field interviews carried out in 2006 and 2007, which were introduced in section 1.6 of the introduction. The interviews were conducted with employees of the BBC and ITV who were responsible for exploring how television could utilise elements of interactivity.

Structurally the remainder of the chapter is based around the four research questions, which were identified in the methodology. Where necessary, some of the data is re-presented as tables. As with the previous chapter all percentiles have been rounded up to allow for clearer presentation. This process resulted in a +/- variation of 1% for some of the tables, as the results from tables, presented in the previous chapter, have been combined. Additionally, the majority of the tables only present for channels and platforms where content was found to be present.

**5.2 Past broadcasting attitudes towards interactivity**

Field interviews were conducted in 2006 at the BBC with Chris Berthoud, the Assistant Editor of BBC News Interactive (appendix C), Rahul Chakura, the Controller of BBCi (appendix D) and Marc Goodchild, the Executive for Innovation Development in Factual and Learning (appendix F). The intention here is to analyse the past attitude of the BBC towards the potential for interactive television. Whether this potential has been realised will be addressed when broadening the discussion out to include my own data. A brief discussion, of what the BBC felt was the style of content, which could be perceived as being interactive, provides a

foundation on which to build further discussion. The interview with Lindsay Charlton, the Managing Director of ITV Local (2007, appendix E), has been discarded, due to the demise of ITV Local. As ITV1 was the only channel in the sample to not offer any red button content there are political ramifications as to why ITV Local was not developed further. The suggestion is that ITV Local did not function within the political economy of commercial broadcasting. In style, the service was very much in keeping with a public service remit, as user generated content was encouraged, and much of the content was news based. However, the ITV Local experiment failed, not only as internet television, but was not shifted over to the red button and marketed as an interactive television experience. As has been established earlier, ITV Local drew sizeable numbers of users, 700,000 (Charlton, 2007, appendix E, pg. 265), however only attracted short visit times. If that practice had continued, which the suggestion is it did, then the service would have not provided the level of service that was originally envisaged. Therefore, it seems that ITV decided to absorb the news element of the service into the wider itv.com website and drop the 'local' tag.

### 5.2.1 Key findings from the interviews

The key finding, which emerges from the interviews carried out in 2006 and 2007, is the positive attitude towards the concept of interactive type services through the red button. Two key issues emerged from the interviews. The first was that there was little mention of text based services. The only time text became a major discussion point was Berthoud's concern (2006, appendix C) that text and video material would struggle to co-exist on the same screen. Chakura (2006, appendix D) briefly mentioned text based services as a part of his role as Controller of BBCi. From this finding we can see that teletext based services were not seen as being a crucial part of the BBC's interactive policy eight years ago.

Away from text content, the second key finding was the exploration of how audio and video material could be used to enhance interactive applications. The question for the audio and video content is one of narrative enhancement. For Goodchild

(2006, appendix F) this was the most important element of interactive television, '(W)ith my teams I go what's the narrative of what's happening here, with Live8 it's eight different narratives in eight different parts of the world, which at various times collided, and that works very well for interactive TV' (ibid. pg. 298). Goodchild (ibid.) believed that this was where Sky had misunderstood the potential of interactive television, an example being Sky Sports 1's coverage of Premier League football through the red button. 'The thing about football is there's one narrative, it's the narrative of the ball and Sky missed out on that. They went, we go to multi view and you go to different players, giving more choice doesn't help in a world where there's only one story to follow' (ibid). Therefore, for Goodchild (ibid.), the key to interactive television is identifying one basic element of the programme or event and focussing on it. In the case of the BBC's Wimbledon coverage in 2006, which offered a choice of twelve matches, the game itself was that key element, 'the thing about Wimbledon is that there are 12 narratives all happening at the same time so it's easy to work out how you do it' (ibid).

The content, described by Goodchild (2006, appendix F) above, was accessed through a multiscreen or multiview option. For Chakura (2006, appendix D) the ability to offer the multiple streams of video content using this method is 'the staple of the red button service' (ibid. pg. 244). What applications of this type offer is the opportunity for the BBC to offer the viewer a degree of choice as by 'using interactivity we can make information available to you all the time' (ibid). The red button coverage of Wimbledon, a sporting event, and Live8, a global music concert, provides good examples of how one application, the multiscreen, can be used in a variety of ways. This offers the broadcaster the flexibility to use a template of an application to provide the viewer with a choice of material.

A final key finding was that both Chakura (2006, appendix D) and Goodchild (2006, appendix F) referred to interactivity when describing the multiscreen application. Implied here is that development of applications, which carried audio visual elements, were seen as the best way of enhancing programmes, and that enhancement was seen as being an interactive experience for the viewer.

## 5.2.2. Critical analysis of interviews

As there is a predominance of text based material represented in the data, collected in 2012, we can see that the policy being put forward in 2006 has been reversed. Text based applications are at the heart of the red button stream, simply because so much was found through the content analysis. Berthoud's (2006, appendix C) concern, about how textual content would appear, has been addressed. To recap, the issue was whether text would be too small to read, and if it was enlarged, the fear was that the video material would be squeezed into a small amount of the screen. While teletext material was found on some of the Sky channels the BBC offered the majority of this content. The working practices, which were in evidence in 2006, whereby the text based team and audio visual team would work together to provide content for a story appearing on the BBC website, does not happen for the red button in 2012. What emerges, from the results and findings of the data collection period, is a clear differentiation, between the text and audio visual based content, as there is no video on the BBC text based services and no text on the BBC multiscreen applications.

It is clear, from the outcomes of the field interviews eight years ago, there was a drive from broadcasters towards providing a service which was seen as being interactive. However, at this stage it is worth re-visiting what is meant by the term interactive. The narrative examples provided by Goodchild (2006, appendix F) focussed on offering the viewer more choice, in the sense that additional content could be selected, and then viewed. Early experiments with interactive content included 'a spread of innovation going that is interactive narrative, we're never going to be able to do that in a linear programme so we've done interactive narrative events off the back of a programme' (ibid. pg. 291). However, during the interview Goodchild (2006, appendix F) acknowledged that 'there's no such thing as a completely free narrative, you're always going on a route which is being devised by someone' (ibid. pg. 288). What these comments highlight is that the term interactive had a very loose meaning when the interviews were held. Interactive,

semantically, meant content that the viewer navigated to, away from the main programme being transmitted. Therefore, multiscreen services presented, for the BBC at the time, an interactive like experience, because content existed in addition to the main transmission.

A further issue which relates to the multiscreen functionality, being pushed by the BBC, was the lack of brand new material that was produced. Chakura (2006, appendix D) pointed out that he was not responsible for producing new content, but re-packaging material for exhibition on the red button. In this respect the red button is 'seen as a channel, almost like a service to the viewer and I think that the key difference would be it's seen as an aggregation channel more than a commissioning channel' (ibid. pg. 243). Therefore pushing the red button on the remote control is merely a method of accessing another channel. The difference is that in 2006 the channel was seen as something that could provide supporting content to programmes, in addition to text based services. Sky was also offering content through the red button. Therefore the potential for a television experience which could be considered as being interactive was large. What the data collection period in 2012 established was that there is still text and multiscreen services in existence, as is seen from the results and findings chapter. However, whether the content that exists currently provides an interactive experience or not, and what form the material takes, I will discuss in further detail by discussing the results of the data collection within the context of the four research questions. Where necessary I will refer to all the field interviews, including with Peter Schofield, the Senior Technical Manager for BBC Broadcast Red Button, conducted in the summer of 2012. The interview with Schofield revealed that there had been a rolling back of red button services in recent years at the BBC. Repeated requests for interviews with Sky were made but with no success. As the previous chapter has highlighted, the Sky channels in the sample offered only text based material with the exception of Sky News.

## 5.3 RQ 1. What amount of interactive television is there?

A significant amount of red button content exists. However, very little of the material can be considered to be interactive, because of the lack of a direct or partial link through to the programme being shown. Therefore we find none of the applications envisaged by Gilder (1991), who proposed, among other things, '(W)ith artful programming of telecomputers, you could spend a day interacting on the screen with Henry Kissinger, Kim Basinger, or Billy Graham' (ibid. pg. 40). Likewise, the ambitious red button projects which were a part of series,' such as 'Walking with Beasts' (2001), are no longer prevalent. As a result of the lack of interactive services the implication is that direct audience participation with a programme is not a widespread practice. How the lack of interactive applications can be seen in table 5.1, which is presented overleaf;

Table 5.1 – Paucity of interactive content cross tabulated by platform and channels

| Platform | Programme specific/partially programme specific | Non-programme specific | Direct to content | No content | Totals |
|---|---|---|---|---|---|
| Freeview | 0 (0%) | 23 (29%) | 1 (1%) | 6 (8%) | 30 (38%) |
| Sky | 4 (5%) | 38 (49%) | 0 (0%) | 6 (8%) | 48 (62%) |
| Totals | 4 (5%) | 61 (78%) | 1 (1%) | 12 (15%) | 78 (100%) |
| | | | | | |
| Channels | | | | | |
| BBC1 | 3 (4%) | 9 (12%) | 0 (0%) | 0 (0%) | 12 (15%) |
| ITV1 | 0 (0%) | 0 (0%) | 0 (0%) | 12 (15%) | 12 (15%) |
| Sky 1 | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| BBC News | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Sky News | 1 (1%) | 10 (13%) | 1 (1%) | 0 (0%) | 12 (15%) |
| Sky Sports 1 | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| CBBC | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Boomerang | 0 (0%) | 6 (8%) | 0 (0%) | 0 (0%) | 6 (8%) |
| Totals | 4 (5%) | 61 (78%) | 1 (1%) | 12 (15%) | 78 (100%) |

$n$ = 78 as the data analysed was collected at 15 minute intervals per platform, which meant that each channel was viewed for 30 minutes. Cross tabulating the general content data in this way allows for RQ 1 to address broadly how much interactive content appears.

The findings of table 5.1 are skewed by the ITV1 sample appearing, for which no red button material of any description was found. Additionally the programme and partially programme specific findings are combined. When these two elements are separated, and the ITV1 data discarded, it was found that 1% of the total is

programme related material, 9% partially programme related and 90% non-programme related.

The low volume of programme related material will be analysed in more detail below. Before that occurs I will analyse the 9% of the sample that was found to be partially programme related in more detail. The partially related material was found on three channels, BBC1, Sky News and Boomerang. This was content found to have an indirect link between the red button material and the programme, for example highlights of an event being shown on the red button at the same time as continuing coverage of the event on the main channel.

Table 5.2 Red button content which was partially programme related cross tabulated by platform and channel

| Platform | Partially programme related material |
|----------|--------------------------------------|
| Freeview | 1 (0.2%) |
| Sky | 30 (8%) |
| Total | 31 (9%) |
| | |
| Channel | |
| BBC1 | 2 (0.5%) |
| Sky News | 25 (7%) |
| Boomerang | 4 (1%) |
| Total | 31 (9%) |

$n$ = 31 for table 5.2. The 31 units of analysis were separated from the 358 specific applications, which were found during the data collection. By presenting this data RQ 1 is able to compare the partially programme related material between platforms and which channels provide the content.

Significantly, the channel which accounted for the largest amount of partially programme related material was Sky News. All of the partially related material for

the channel was available through the Sky platform rather than Freeview. The material offered was a combination of news teletext and news multiscreen. Of the channels measured, Sky News provided the most stylised red button coverage. As a 24 hour news channel, the content was material that had been generated throughout the course of the day and then re-presented in a condensed fashion. The combination of the video and text based services, which was anchored by material generated for the parent channel, meant there was a consistency between the look and feel of the red button content and programmes being shown. This method, of delivering red button content, differed sharply from the other 24 hour news channel in the sample, BBC News, which, for the majority of the time, used text based services, which relied on the BBC website for source material.

Small amounts of partially related programme material were also found on Boomerang and BBC1. For Boomerang the red button material was exclusively games. If an icon appearing in the menu had a representation of the programme being shown the content was considered to be partially related. The only partially programme material found on BBC1 was video highlights of the Royal Boat Pageant, which was showing on the red button at the same time as a concert, which was part of the 2012 Diamond Jubilee celebrations.

The partially related material provides further evidence of a lack of interactivity and represents a grey area in previous research. What is not discussed, in the literature that is reviewed in chapter two, is the red button stream being used in this way. None of the partially programme related material enhanced the programme that was being shown so could not be considered as being interactive. The games which were found on Boomerang suggest active participation. However, this is not in the spirit of the participation that was envisaged by Andrejevic's (2008) savvy viewer or Ross' (2008) concept of teleparticipation. The Boat Pageant and news content was material that pre-existed, so reinforces Chakura's (2006, appendix D) assertion that the red button stream re-presents material.

That 1% of the data was found to be programme related material represented a disappointing return. Only two of the channels in the sample provided programme related material, as is shown in table 5.3.

Table 5.3 Specific programme related material cross tabulated by platform and channel.

| Platform | Programme related material |
|---|---|
| Sky | 4 (1%) |
| Total | 4 (1%) |
| | |
| Channel | |
| BBC1 | 3 (0.8%) |
| Sky News | 1 (0.2%) |
| Total | 4 (1%) |

*n* = 4 for table 5.3. The four units of analysis were separated from the total 358 specific red button applications. Presenting the data like this helps RQ 1 establish which platform and channels offers the programme specific material.

None of the programme related material appeared through Freeview. As all the programme related content was available only on the Sky platform suggests that Freeview cannot carry the same amount of material as its performance, technically, is inhibited.

For Sky News the programme related material provided on-going, rolling coverage of a developing news story (the murder of a British family in France) on September 7th 2012. The story was also being extensively covered on the parent channel, and provided an example of how the red button can be used to provide an option to the broadcaster. In this case a news editor can move coverage, of an evolving story, to the red button stream to make room for other stories to appear through the main broadcast. This provides an example of what would have been considered interactive television in the past. The viewer does navigate away from the main

transmission to view a specific story, an example of Chakura's (2006, appendix D) view that content can be more readily available.

Table 5.3 finds that, for the BBC at least, if there is going to be any red button material directly supporting programming it will be on its flagship channel. Placing the content, which supports the programme, onto the channel that attracts the largest audience means that a greater number of people can potentially access the material. What the content specifically consisted of appears in table 5.4.

Table 5.4 Programme specific content appearing through BBC1 supporting a transmitted programme.

| Content | Appearances |
|---|---|
| Sports Multiscreen | 2 (0.5%) |
| Audio options | 1 (0.2%) |

$n$ = 3 for table 5.4. The three units of analysis were separated from the 358 specific red button applications found in the data collection. Table 5.4 allows RQ 1 to establish what the content is through the channel which offered the most programme specific material.

The policy of re-packaging and re-presenting pre-existing material for the red button, as outlined by Chakura (2006, appendix D), which was found for the partially programme related applications, extends to programme specific content. The audio option was for coverage of the Poland v Greece football match, as a part of Euro 2012, on the 8th June. This consisted of the option to switch to the Radio 5live commentary or to turn both the radio and television commentary off entirely, leaving just the ambient sound of the spectators. Providing these options was easy for an organisation of the size and scope of the BBC to do. As Schofield (2013, appendix G) pointed out, 'its content that's being produced elsewhere in sport for another platform, it's possibly material they already have on hand' (ibid. p. 332). However, the style of television and radio commentary is very different, so this option is unlikely to add a great deal to the overall experience for the viewer.

A similar example was found during the BBC's coverage of the 2012 Olympics. However, for the London Olympics the red button content was very different, to the football coverage, simply in the amount of content that appeared. BBC1 offered a sport's multiscreen, which consisted of twenty four separate video feeds to watch various events not being covered in the main broadcast. Such was the size and scope of the coverage that 'the Olympics was a very special case and there were arrangements with the actual platform operators, with Sky, with Virgin and with Freesat to augment the service way beyond what it would normally be' (Schofield, 2013, appendix G, p. 305). As the only broadcaster of the Olympic Games, and with the event taking place in London, the BBC mobilised all its resources towards the event, including the red button content. However, the opportunity to access the multi-screen only existed as one item on the indexical menu, which appeared on the screen once the red button was pressed. What this demonstrates is the flexibility that the red button potentially provides, insofar as other information was being carried in addition to the large event.

Video coverage of the Olympics was available through Freeview, but with only two video streams. The coverage was also buried as a link through the sports teletext option and was not specifically signposted or identified in the menu. What this example offers is evidence of the difference in capabilities across the two platforms. Freeview's lack of capacity is highlighted by the Olympic coverage on the platform. What the BBC,

> did was to reuse an existing application which was a system called My Sport Now which is where it's bound into the sports index but essentially what we did on Freeview was reuse an existing application to do the switching because there wasn't the need to build something bigger and Freeview as a platform didn't have the capability to do it.
>
> (Schofield, 2013, appendix G, p. 329).

Those who were optimistic about interactivity's role in the future of television have not had their expectations met. The majority of the material that was found offered no interactive elements. Gaming content demonstrated traits, which could be

considered to be interactive, as the viewer had a degree of control over what happened next. Minimal content that supported programming material was found but did not offer much interactivity. This content was found mostly on the BBC, and was material readily available elsewhere, which was then added to the red button stream.

**5.4 RQ 2. What information is carried by the red button content?**

As only a minority of red button content relates to programmes being transmitted, the non-programme specific content, carried by the rest of the material, is broader in its scope than was anticipated. Limited news and sports video content was found, through multi-screen applications. On the Sky channels and Boomerang the material was generally more commercially orientated. For most of the time the BBC utilised informational text style applications. However, teletext applications were also found on some Sky channels. The three largest measurements were for news teletext, sports teletext and main index, 35% of the total $n$, which represented 67% of the total for teletext based services alone. I will begin this section by discussing the three largest teletext options in greater detail, before moving onto discuss commercial content.

As expected the majority of the news teletext appeared on BBC News and Sky News, as they are 24 hour rolling news channels. BBC News and Sky News accounted for 41 appearances of the total 63 for the stand alone news teletext option, identified in tables' 4.18, 4.19 and 4.20. The expectation that Sky Sports 1 would account for the majority of the sports teletext appearances was realised, the 16 appearances for sports teletext on the channel providing a small majority for that option.

The implication is that the BBC's public service remit extends to the red button content, and becomes stronger when analysing the results further. All three BBC channels in the sample offer news teletext. Only Sky News offers the option on the Sky channels. Both BBC1 and BBC News offer a sports teletext option, but only Sky

Sports 1 does for the Sky portion of the sample. That the BBC spreads news and sports based content, across all three channels, establishes the public service nature of the corporation. The BBC clearly sees the red button stream as a way of offering a variety of applications, the majority of which do not have anything in common with the programme being transmitted.

The argument I put forward, in answering RQ. 1, is that only a small minority of red button applications can be considered to be interactive, these being games. A lack of interactivity does not mean that a public service broadcaster like the BBC cannot utilise the red button stream to democratise television for the viewer. As the example above demonstrates, the BBC, in spreading text based informational applications over a number of channels, allows the viewer to access a variety of material. Further evidence of the BBC having a more democratic policy, to what it uses the red button for, is seen through the use of the main index. This option offered the viewer an index of all the applications that could be accessed through the red button. With 36 appearances across all three BBC channels, 12 each, this was the most consistent option, in terms of appearances, throughout the entire sample. Providing this option allows the BBC to offer all its teletext material to the viewer through one application. Individual teletext applications can then be inserted into the main menu, when deemed necessary, by the red button content scheduler. While doing this removes a level of optionality, as the viewer has to do one less click through, it also means that editorial decisions extend to the menu items on offer. Conversely, by offering an index, which includes all the services on offer, and, if the viewer chooses to spend time browsing, the audience can access the application of their choice. The content is used across different channels so is uniform in its style to satisfy the needs of a channel with a multi-genre schedule, BBC1, as well as a niche channel, BBC News. CBBC stands apart as offering content which is specifically branded, although, when looking at the content in more detail, the news stories are the same in terms of where they appear in the running order and how they are written.

While the above addresses how teletext content is delivered, the information was also presented by other methods. I will now address the information that was found by genre, beginning with news. 68% of red button content is news based information, which includes teletext and multi-screen applications. The 68% total for the news content is a combination of material that was considered to be hard news, which accounted for 22% of the total, soft news, 20%, and general news 25%. These results will be analysed in further detail beginning with the hard news option.

Table 5.5 The Hard News value cross tabulated by platform and channel

| Platform | Hard news |
| --- | --- |
| Freeview | 28 (8%) |
| Sky | 51 (14%) |
| Total | 79 (22%) |
| | |
| Channel | |
| BBC1 | 12 (3%) |
| BBC News | 34 (10%) |
| Sky News | 21 (6%) |
| CBBC | 12 (3%) |
| Total | 79 (22%) |

*n* = 79 for table 5.5. The 79 units of analysis are the total number of the red button applications which, when combined, offered a hard news option. Presenting the data in this manner enables RQ 2 to establish how the hard news content through the red button is offered to the viewer.

Hard news was a generic title, which consisted of the news teletext, news multi-screen and business and markets information options. It would be expected that the two rolling news channels would provide the majority of the hard news content and this proved to be the case.

Sky News manages to achieve a level of red button content sophistication, which is very specific to the channel, but not applicable to the other Sky channels in the sample. This is managed by combining text, a compilation of the headlines, and video, which is lifted from broadcasts. In doing this Sky News manages to produce a hybridised teletext and multiscreen application. By using material, that has already been transmitted, and what could also still be on-going or breaking stories, the red button content is partially programme related, because there is a direct relationship to the parent broadcast.

In providing content in this way, Sky News has managed to achieve a more visually stimulating and comprehensive red button service. The suggestion is that the BBC finds itself more constrained, as it is bound by its PSB remit to produce red button content across all its channels, and because of organisational factors. As Schofield (2013, appendix G) states, the text based elements of the BBC red button service are produced separately from the video and audio material. This would explain why there is not more text based material available through audio visual applications and vice versa. As the content is produced by two separate departments so both methods of delivering red button material are seen as being disparate. All three Sky channels in the sample can generate red button content geared towards their perceived audience, because, as a non-public service broadcaster, the organisation does not have the same limitations placed upon it.

From the results it is possible to identify differences in attitude between the broadcasters. For example, all three BBC channels offer at least one news based option. Conversely, only the Sky News channel offers news based content from the three Sky channels. There is more demarcation between the Sky channels. Clearly, Sky 1 is where the viewing audience would go for general entertainment, Sky Sports 1 for sports and Sky News for news. This extends to Sky's red button content, with all the hard news based options being found through Sky News. Further to this the news content was only offered through the Sky platform, games and travel offers were available for the channel on Freeview. Sky, through the Sky box at least, considers its audience to be more focussed. The advantage of what the BBC does is

to allow the audience to access news and sport text based content across the spectrum. Sky does the opposite to the BBC; viewers watching the news channel get more news based content, viewers watching the sports channel get more sports based content.

Further evidence of the broader scope of red button content though the BBC channels, compared to the Sky channels, was found when exploring the soft news category, which comprised of any sport and entertainment news content. For the purposes of this analysis the blogs, which appeared only through CBBC, have been included.

Table 5.6 The Soft News purpose value cross tabulated by platform and channel

| Platform | Soft News |
|---|---|
| Freeview | 24 (7%) |
| Sky | 49 (14%) |
| Totals | 73 (20%) |
|  |  |
| Channel |  |
| BBC1 | 22 (6%) |
| Sky 1 | 10 (3%) |
| BBC News | 12 (3%) |
| Sky News | 1 (0.2%) |
| Sky Sports 1 | 16 (4%) |
| CBBC | 12 (3%) |
| Totals | 73 (20%) |

*n* = 73 for table 5.6. The 73 units of analysis which were found to offer soft news were separated from the 358 specific applications. Presenting the results this way allows for RQ 2 to compare the values presence across platform and channels.

The results for the soft news category were the most evenly spread across the channels. A small majority of content appeared on BBC1, and was a mixture of sports and entertainment content. CBBC provided entertainment content through the blog application. Although the application offered no direct interaction, the CBBC blog was the only example of this style of content that was found. The trigger for the application acted as a sub menu through which a wider variety of content could be accessed. This included additional video content, presenter profiles and horoscopes. More developed sports content was expected to be found on Sky Sports 1, however, the total 4% of the content was for a single sports teletext application only. The rest of the content, on Sky Sports 1, was concerned with commercial applications and will be discussed further later.

The general news applications accounted for 25% of the total data, and were a combination of the weather teletext, travel news and national interest options, the latter two also being teletext applications. Instances of all these three options appearing together were found on BBC1 and BBC News. General News stands out as being the only area through which more content is available on Freeview than Sky. The table is presented overleaf;

Table 5.7 The general news purpose value cross tabulated by platform and channels

| Platform | General News |
|---|---|
| Freeview | 49 (14%) |
| Sky | 45 (13%) |
| Totals | 94 (26%) |
| | |
| Channel | |
| BBC1 | 26 (7%) |
| Sky 1 | 3 (0.8%) |
| BBC News | 50 (14%) |
| Sky News | 1 (0.8%) |
| CBBC | 14 (4%) |
| Totals | 94 (26%) |

*n* = 94 for table 5.7. The 94 units of analysis which were found to offer general news content were separated from the 358 total of specific applications. Presenting the data in this way enables RQ 2 to be discus the general news material in more depth across platform and channel.

There is significantly more material available on BBC News than any other channel. As was found in the previous chapter, BBC News was the most consistent channel, in that it offered the same amount of content, for the majority of the time, across both platforms. Text based applications can be considered the best method of imparting information, as the viewer can easily navigate to the material that they wish to access, and the text can then be read. Video content needs to be viewed, so the viewer, potentially, has to sit through other material before being able to view the content that interests them.

BBC News is a 24 hour rolling news channel, with a demographic attracted to receiving factual information, both from the main transmission and the red button

content. General news applications do not provide hard news, for example international and political content. Likewise, soft news, for example entertainment and sports material, is not applicable under this heading. However, weather, travel and regional style content is a staple of any news broadcast. As the BBC is a public service broadcaster it has an obligation to provide a broad range of scheduled programming content across all its channels. Even the BBC news channel has opt out programmes, which provide a broader context to everyday news reporting. The example of the content found through BBC News is evidential that the obligation the BBC has to provide a wide range of services extends to the red button.

That the other channels in the sample don't have the same obligations as the BBC can be found from the results for the commercial and advertising or promotional purpose values, which account for 17% of the total. The majority of that total is for the commercial purposes and is spread across the non BBC channels in the sample.

Table 5.8 The Commercial material purpose value cross tabulated by platform and channel

| Platform | Commercial |
|---|---|
| Freeview | 9 (3%) |
| Sky | 32 (9%) |
| Totals | 41 (11%) |
| | |
| Channel | |
| Sky 1 | 4 (1%) |
| Sky News | 9 (3%) |
| Sky Sports 1 | 12 (3%) |
| Boomerang | 16 (4%) |
| Totals | 41 (11%) |

*n* = 41 for table 5.8 as the data is specific values found which offered commercial material and were separated from the 358 total of applications available through the menus accessed through the red button. Separating the data in this way allows RQ 2 to address commercial material in more detail.

While all three of the Sky channels offer some form of commercial content the largest measurement was for Boomerang. The reasons for this have been established in the previous chapter and relate to a lack of clarity in determining as to whether there was a financial element during the first two months data collection. This was subsequently clarified for the final two months' measurements.

In addition to a comprehensive red button news service Sky News also accounts for 3% of all commercial content. All the commercial content for the channel appeared on Freeview. The viewer could access an option, which offered travel offers as well as games. Content was accessed via a further push of the red button, which then took the viewer though to a basic menu, where the two options were separated out. There was no application offering news based content. The travel offers were considered to be commercial, because it was clear that there was potentially some sort of financial transaction.

That the content is so different across the two platforms for the same channel implies one of two things. Firstly, it is possible that Sky is holding back on offering more comprehensive red button content, through Freeview. This could be seen as an attempt to lure new subscribers to the Sky platform by offering superior red button content. Secondly, and more likely, is that there is not enough bandwidth to offer a similar service to the Sky platform through Freeview. However, this last point raises a crucial question. Why not offer a cut down text based news service rather than the unconnected travel and games content?

Sky Sports 1 is the only channel to offer gambling options. These options are clearly available through this channel to promote betting on sporting events. Two options were available, Sky Bet and Sky Vegas, the first is a traditional betting application, and the second promotes game playing with gambling elements added. Potentially

an ethical question is raised, as it is possible to access these applications any time of the day. It was found that these options were available throughout both timeframes when data was collected. In addition, the Sky channels used the red button stream to promote other services on offer. How this was presented to the viewer can be seen overleaf in table 5.9.

Table 5.9 The Advertising or Promotional purpose value cross tabulated by platform and channel

| Platform | Advertising or promotional |
| --- | --- |
| Sky | 21 (6%) |
| Total | 21 (6%) |
| | |
| Channels | |
| Sky 1 | 8 (2%) |
| Sky News | 4 (1%) |
| Sky Sports 1 | 9 (3%) |
| Total | 21 (6%) |

$n$ = 21 for table 5.9. The 21 units of analysis which were found to offer advertising or promotional content were separated from the 358 specific red button applications available. Presenting the data in this way allows RQ 2 to develop a more detailed discussion in what information of this type is offered through the red button.

The content for Sky 1 was all found to be directed at advertising or promotion in some way. Even the element that was measured as public interest, the programme search option, was arguably directing the viewer to look for programming content that was unavailable to them. If the viewer found something they particularly wanted to watch, but the programme was not a part of their subscription package, the opportunity existed to upgrade. The same argument could be used for the Highlights and TV Picks options that were found through Sky 1, albeit these applications were less subtle in their direct promotion than the programme search.

The discussion now explores gaming content in more detail. Games accounted for the third largest total for a single option, 11% of the total, behind news teletext (13%) and sports teletext (12%). Therefore games, the closest that the content measured came to being interactive, was the single largest option to offer more than a text based service. Simply by the size of the measurement, it can be argued that games can be a consistently viable part of the red button experience. That the majority of the gaming content was found on one channel also suggests a method by which a particular demographic, in this case, children and young adults, can be targeted.

Table 5.10 The Games purpose value appearances by channel

| Boomerang | Sky News |
|-----------|----------|
| 31<br>(9%) | 6<br>(2%) |

$n$ = 37 for table 5.10 and is separated from the 358 examples of specific red button content. Presenting the data in this way allows for RQ 2 to analyse in more detail what gaming content the red button carries.

The majority of the games appeared on Boomerang, but, and as has been established above, limited gaming content was also available on Sky News through Freeview only. Some of the content that was found on Boomerang was found to have a partial link to the programme being shown. To reiterate, the menu for Boomerang differed from other menus, as the games on offer were represented by icons relating to characters from shows that were aired through the channel. If an icon appeared relating to the programme being shown the content was considered to be partially specific.

The games content provided mixed results as to whether the purpose of the options was commercial or just purely entertainment. All the measurements for games on Sky News were considered to be entertainment. This was because there was no obvious charge at the moment the menu was accessed, although it was clear that the travel offers option, which appeared alongside, would at some point require a financial transaction.

With the change of service provider for Boomerang, from August onwards, what became clear was that there would be a charge for the gaming content. From these results it is clear that it would have been found that there was an additional cost for the gaming content, which was measured as being entertainment in June and July, if the links had been followed through. It is hard to see how commercial broadcasters, like Sky News and Boomerang, would benefit from offering content of this nature for free. Therefore the suggestion is that if the games link had been followed through Sky News on Freeview, it would have been found, as for Boomerang, that there would have also been a charge.

Discussion so far has concentrated on the information provided by those applications which registered large measurements. The majority of the information that was carried by the content was found to consist of teletext services, commercial material and gaming applications. To conclude this section of the chapter an exploration of content for which there were much smaller counts, and therefore needs acknowledging, will take place. What will be highlighted will be the options which have small counts, but represent a diversity of content. Additionally the options which were measured as 'other' will be discussed, as this was content not expected to be found.

Programme highlights, simulcasts, popular sport and pop music concerts all registered low counts but were present. For programme highlights the content was edited coverage of the previous days Royal Boat Pageant on June 4th on BBC1. The simulcast content was the CBBC Extra option, which appeared on CBBC on June 7th. Two examples of popular sport appeared on July 3rd on BBC1. This was coverage of the Wimbledon tennis tournament and was not a multiscreen, because there was only the option to navigate to one match rather than a choice of matches. In the past this has been a multiscreen option, and was raised as a good example of an interactive application by Goodchild (2006, appendix F). A pop concert by the band Blur appeared on BBC1's red button stream on August 1st and 5th.

All these options were available through BBC channels only and were spread across the platforms. The Royal Boat Pageant and Wimbledon options were available on both Freeview and Sky, the CBBC Extra and Blur concert were available on Sky only. All this content is video based, but that there is such a wide variety of content reinforces the suggestion that is emerging throughout this chapter. The BBC has more commitment to providing a broader, more flexible, style of service than the other channels in the sample.

For clearer presentation of what was recorded as 'others' the results are presented below in table form.

Table 5.11 What the specific material consisted of under the 'others' value

| Other | Platform | Channels |
|---|---|---|
| Olympic Torch Relay | Freeview | BBC1 |
| Advertisements | Sky | Sky News, Sky Sports 1 |
| Entertainment Extra | Freeview | BBC1 |
| Lottery Results | Sky | BBC1 |
| TV Picks | Sky | Sky1 |
| London Collection | Sky | BBC1 |
| Merlin Quiz | Sky | BBC1 |
| Summer of Mela's | Sky | BBC1 |

Table 5.11 presents clearly the specific material that was measured under the 'other' value during the data collection period.

The advertisements, entertainment extra and TV picks options have all been discussed earlier, so do not need further explanation here. When examining the other options all were found on BBC1. Of particular interest is the London Collection, a compilation of films about London, which appeared in the same menu as BBC1's Olympic sports multiscreen. This option only appeared during the first

week of the London Olympics and can be seen as a method of providing a different angle to the city where the games were taking place. Additionally the Summer of Mela's, a world music event, was placed on the red button, rather than having a transmission slot on the main channel, providing an example of how the BBC can use the red button stream to satisfy its public service remit by covering culturally diverse events.

The initial conclusions, which emerge from this section, are that content supporting the main programmes, or add video and audio content to the red button stream, exist, but are minimal. Informational teletext services offer the majority of content for public service programming. Advertising and commercial applications are used the majority of time for channels which do not have a public service remit. Woods (2007), argument that television is taking on characteristics of the internet appears to have developed. The red button content that has been found spans the overtly informational to the explicitly commercial. In between are audio, video and advertising applications. Information carried by the red button is similar to what would be expected to be found through internet pages. However, this does not mean the aesthetic feel and method of accessing the content is in keeping with the style of the internet. I now move the discussion towards how the red button content is presented to the viewer.

**5.5 RQ 3. What does interactive television look like?**

All of the red button content originally appeared as part of an indexical menu which offered a series of options. This section of the chapter will revisit the indexical menu options before introducing two key elements, which will be discussed further in the next chapter, namely an evolved teletext based service, and the red button stream as a further television channel. I will then briefly return to the signposting of the content.

To help the analysis, table 4.12 from the previous chapter is presented once again on the next page;

Table 5.12 - Total amount for how red button applications are presented per channel

| Options | BBC1 | ITV1 | Sky 1 | BBC News | Sky News | Sky Sports 1 | CBBC | Boomerang | Total |
|---|---|---|---|---|---|---|---|---|---|
| One | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 5 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 5 (6%) |
| Two | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Three | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 0 (0%) | 4 (5%) |
| Four | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 1 (1%) | 8 (10%) | 1 (1%) | 11 (14%) |
| Five | 0 (0%) | 0 (0%) | 5 (6%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 3 (4%) | 9 (12%) |
| Six | 10 (13%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 1 (1%) | 0 (0%) | 2 (3%) | 17 (22%) |
| Seven | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (5%) | 0 (0%) | 0 (0%) | 4 (5%) |
| Eight | 2 (3%) | 0 (0%) | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 14 (18%) |
| Nine | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) |
| Direct to content | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) |
| No content | 0 (0%) | 12 (15%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 12 (15%) |
| Totals | 12 (15%) | 12 (15%) | 6 (8%) | 12 (15%) | 12 (15%) | 6 (8%) | 12 (15%) | 6 (8%) | 78 (100%) |

*n* = 78 for table 5.12. The table allows the reader to quickly recap on the number of options available through the red button.

As was discussed above, the vast majority of the content for BBC News was teletext based. These applications are the least data intensive so more options can be offered. Further evidence for this is provided when comparing BBC News with CBBC. The majority of the time BBC News offers eight options and CBBC four. Having only half the options, through CBBC, provides space for the variety of content appearing through the blog application, which includes video material. While a discussion of the technicalities and limitations of the platforms, which carry the red button, is not what I intend the above point is important. What it serves to

highlight is the technical capacity of what the broadcasters can offer through the red button.

With so much of the content being text based, it can be argued that the majority of the red button content is merely a digital version of Ceefax and Oracle, the BBC's and ITV's pre-existing teletext services. This argument is furthered when it was found that for the BBC 'up until February, March this year (2013) most of the text service that you saw was fed from Ceefax in London, you didn't see it on TV but it was still lurking around in the background' (Schofield, 2013, appendix G, p. 331). Established here is that the technology, which underpinned the Ceefax service, has been utilised to support red button. While there are audio visual elements to the BBC's red button service, they are not as ascendant as they were in 2006. An example would be the removal of both the multi-screens used for coverage of Wimbledon and the news on BBC1 and BBC News.

The menu system is the audience's first experience of what appears through the red button. It is a first level of interaction, attention then shifts to what content is on offer. What can be questioned is whether or not the menu system represents a technological shift in the way that television can be used. The remote control has been used to access teletext services since the 1980's. Therefore the menu led system is a tried and trusted method of accessing additional content. What can be concluded is that although the look of the menus has evolved the method of accessing material has not.

Two findings emerge here. Firstly, the teletext based material is just an evolution of pre-existing teletext based services like the BBC's Ceefax and ITV's Oracle. The second is that when video content is available the red button stream acts in the same way as a normal television channel. This also helps explain why, for the BBC, audio, video and text are seen as separate entities and why there is very little crossover between the three. Audio and video applications can be offered because of advances in channelling data down cables, and from satellites, through techniques which compress the information. Text would easily be able to be transmitted in this way, as it is less data intensive.

What we can see is that no new technology has been developed to support red button applications. The technology the red button stream utilises is a combination of contemporary methods of providing video and audio content and a pre-existing method of delivering text. Where this is particularly evident is three examples of content provided by the BBC. The content acts in a tiered system of complexity, with essentially three levels to the look of the applications on offer. At the first level there is the basic teletext service, which offers nothing more than a text based application. The second level is the video content of the pop concert type, whereby the red button stream becomes another television channel. Thirdly, the multiscreen provides the viewer with a video feed which offers multiple choices.

The experience of the viewer on Sky News, through the Sky platform, and Boomerang is very different, than on the BBC. For both these channels there is only one level to the content once the menu is accessed. The viewer, accessing the Sky News content, selects a story for which the video becomes active. On Boomerang, once a game is selected the viewer shifts into game playing mode. While the same level of optionality, as is provided by the BBC, is not achieved through this red button content there is no need for it to be. Firstly, both channels are specialist channels so, unlike BBC1, do not need to offer a variety of content. Secondly, as the channels are not affiliated to public service broadcasters, they do not have to provide a variety of content as the niche BBC channels do. Differences exist between the public service and commercial broadcasters, in terms of the political systems that the content represents. With the differences between the content offered by the channels, and the amount of material available, the viewer needs to be told that the content exists. I will explore this further to conclude the section.

With over half of the red button content being signposted, the broadcaster's commitment to alerting the audience to the materials presence is clear. However, slightly less than two thirds of the content is signposted on BBC1, as is demonstrated by table 5.13.

Table 5.13 How BBC1 alerts the viewer to the presence of red button content by time

| Time | Constant | Less than five minutes | No icon but content appears | Totals |
|---|---|---|---|---|
| 17:00 – 17:30 | 3 (4%) | 1 (1%) | 0 (0%) | 4 (5%) |
| 20:00 – 20:30 | 1 (1%) | 4 (5%) | 3 4% | 8 10% |
| 21:00 – 21:30 | 0 (0%) | 0 (0%) | 4 (5%) | 4 (5%) |
| Totals | 4 (5%) | 5 (6%) | 7 (9%) | 16 (20%) |

$n$ = 16 for table 5.13. The table is comprised of the results that were found for how BBC 1 signposts red button content and provides RQ 3 with a discussion point regarding how the viewer is alerted to red button content.

Further investigation reveals that the time and the programme being shown are the key elements here. All of the measurements, for un-signposted content on BBC1, occur after eight o'clock in the evening, with the majority after nine o'clock, which represents peak viewing time. As a result of this the channel was showing programmes that would potentially yield large viewing figures; in this case the Diamond Jubilee Concert, Turn Back Time – The Family and a drama, The Accused. The channel does not want to detract attention away from these programmes, by alerting the audience to content that is available through the red button. For the Sky channels, Sky Sports 1 alone offers 100% content which is signposted. As has been established above Sky Sports 1 is the only channel which offers gambling options. By alerting the audience that red button content is available on the channel the potential is greater for the viewer to access the gambling applications. While the signpost does not specifically relate to those applications by alerting the viewer that there is material available generally the broadcaster stands to potentially gain financially.

A surprising result is the signposting for Sky News. On Freeview the content was signposted for the majority of the measurements. As the content includes travel offers, for which there would be a financial transaction this makes sense. However,

and as has been previously established, the red button content for Sky News on the Sky box is arguably the most comprehensive. It is therefore surprising that the content is not signposted. The implication is that the channel would like to benefit financially from its red button content on Freeview. However, the channel does not want to detract the attention of its viewers away from the main broadcast on its parent platform. While the content available has been found to be the most comprehensive, it is only there because it has existed in another form on the parent channel. Therefore the content is cost efficient as well as useful to the viewer, should they access it. The look of the material was also subtly different to the other channels. While there was a menu led system, there was no specific news teletext option, as there was on all the BBC channels. Instead the viewer could access a particular story as a text option for which the video then became active.

What this section has established is that the overall look of the red button stream is a development of a well-established menu system. The only difference between the menu system's, that were used for the old teletext services or for contemporary websites, is that signposting is used as a way of establishing that there is content available. No new technology has been developed, which is bespoke to the red button stream. In addition there are two levels of interaction for the majority of the channels. The first of these is the initial push of the red button, revealing a menu from which options can be chosen. Secondly, the viewer then accesses an application. The phrase interaction is used lightly here. Pushing the red button and accessing material does not make television an interactive medium. It is the content itself which determines interaction. What the results of the data collection have established is that there is, at best, a minimal level of interactive applications. Whether the red button applications enable a new level of experience to television viewing will conclude the chapter.

### 5.6 RQ 4. To what extent does interactive television add to the experience of television?

This, final, section of the chapter examines if there is any red button content which directly adds to the audience's experience of television. Teletext options, which comprise the majority of the content, are just an extension of services which have been available for a long period of time. These services existed long before enhanced and dedicated services were identified by the ITC (2001). For this section I will focus on enhanced television content, as was envisaged by the ITC in 2001, which were seen as applications adding experientially to a programme being broadcast. My content analysis found very few measurements for material which could potentially enhance a programme through the use of interactivity. Small measurements were registered for the entertainment, more choice and cross channel content. The smallest measurement registered was for educational content. This section will, in addition, examine multi-screen applications in more detail.

The BBC's obligation to providing more informational red button content clearly does not extend to the other two elements of the BBC's primary objectives, to educate and entertain, as only low numbers of this type of material was found. However, BBC1 offered the one option that was considered to be educational, red button coverage of Springwatch (2005 - ). Four examples of entertainment content were found on BBC1. A pop concert by the band Blur, the collection of films about London, a quiz based on the drama Merlin, the parent programme for which had been shown the previous evening, and a world music event called Summer of Mela's. All these examples were available through the Sky box only. CBBC offered an additional option called CBBC Extra. Again, this option appeared on the Sky box only, and showed video content related to the channel. This option only appeared in June and September and indicates that the bandwidth needed was unavailable in July and August, because coverage of the Olympics was using up all the available video streams.

All five examples, for entertainment on the BBC, were video content and reinforce that the red button stream is seen by the BBC as an additional television channel. By placing the content on the red button the BBC is finding a place for content to appear without having to schedule for it on the main channels. Additionally, the pop concert and the world music event were not attached to any programme, so cannot be considered to be enhanced content, as defined by the ITC (2001), as the experiential input from the viewer is minimal. The one example of content considered to be educational barely registers at all, one measurement of an application represented 0.2% of the total. However, the Springwatch (2005 - ) application did represent good use of the red button stream.

The Springwatch (2005 - ) content was additional material which appeared through the red button on BBC1, alongside concurrent coverage through a scheduled transmission on BBC2. This was the only example of content which displayed characteristics of Caldwell's (2003, cited in Everett and Caldwell (eds.)) theory of 'second shift aesthetics' (ibid, pp.127-143), whereby the programme content was continued through the red button. As a result this content can be considered as enhancing the viewer's experience of the programme. What was provided was the opportunity for the viewer to navigate away from the main channels to continue to view the content. This suits both the broadcaster as coverage can be continued elsewhere, and not take up another chunk of time within the schedules, and the viewer who is offered the choice to view more Springwatch (2005 - ) programming. However, this content offers an example of how the economies of scale for red button television can determine the style of the material.

For Springwatch (2005 - ) 'you have live webcams of birds' nest or something that's not an extension to the existing content it's something that's additional to it' (Schofield, 2013, appendix G, p. 313). Therefore additional content has to be produced to continue the red button coverage, which incurs additional cost. The costs are not just for the technical aspects of the content but also for the logistics, 'someone somewhere in the BBC is having to sit and look at the footage to check for compliance' (ibid. p. 333). Despite the financial limitations of producing content

of this type, what this example does is offer further evidence that the red button can be used to provide the viewer with additional content, away from the main transmissions. In this respect the content appears to offer the viewer more choice. However, the coverage offered the viewer the opportunity to continue to view content after the main transmission had finished so was measured as non-scheduled programming. What was achieved was to progress the narrative of the programme beyond the transmission time and was, in this instance, also cross channel content. This suggests Goodchild's (2006, appendix F) policy of using red button content to drive a narrative strand forward is still in place, it is just not as widespread as was envisaged in 2006. The programme specific content for Sky News, the coverage of a developing news story, was also measured as non-scheduled programming. What Springwatch (2005 - ) and the news story provided are applications which potentially offered a combination of content enhancement, non-scheduled programming, and, subsequently, more choice. The confusion in measuring the content does serve to demonstrate the flexibility for which the red button stream can be used. However, some content was less problematical in determining its purpose. Content, which was only measured as offering the viewer more choice, will be discussed in more detail below.

More choice was material providing the viewer with additional content linked to the programme being shown and accounted for 3% of the total, the majority of which appeared on BBC1. Table 5.13 emphasises not only how little content there was that offered the viewer more choice of content, but also the paucity of channels which provided the option.

Table 5.14 The More Choice purpose value appearances per channel

| Channel | Total |
|---------|-------|
| BBC1 | 8 (2%) |
| Sky News | 4 (1%) |

*n* = 12 for table 5.14. The table allows RQ 4 to discuss as to how often more choice of red button content was offered to the viewer by only two channels in the sample.

The 2% of the total, for BBC1, accounted for eight examples of content which provided more choice, across both platforms. The red button stream was used to offer the viewer the opportunity to watch the previous day's coverage of the Royal Boating Pageant, at the same time as the Diamond Jubilee concert was showing, through both Sky and Freeview. Additional commentary for the coverage of Euro 2012, on Sky only, and live coverage of Wimbledon, through both Sky and Freeview, were both offered through the channel, in June and July respectively. Finally the additional Olympics coverage in August offered the viewer more choice of content through the sports multi-screen, on the Sky platform. The content available through Sky News was the general news content which was related to the main transmission.

What is implied from these results is that the broadcasters are open to the idea of offering something other than informational content through the red button. However, the size of this set of results and findings confirm that there is a certain amount of reticence to detract from the main transmission. Additionally, the example of Springwatch (2005 - ) highlights how resource intensive this type of material can be. It is therefore worthwhile to acknowledge that all the material that was found to offer more choice had been previously transmitted or was being covered as part of a large scale event. The Boating Pageant had been shown on BBC1 the day before the concert, Sky News' content, as has been discussed above, was material which formed a part of the day's news agenda. For the Olympics, the BBC was committed to cover every event, some of which was then pushed to the red button stream.

A further example of the red button stream, providing the audience with more choice, can be seen through the use of the multiscreen options. This style of content is unique to the red button and provides the audience with a degree of

choice, as the viewer can select from a variety of video material through one option on the menu. Multiscreen applications were found to offer two genres, sports and news. Combined, the multiscreen applications account for only 12 appearances, 3% of the total 358 options available. The measurements for the options, while only having a small total, provided a broad set of results. Half the sports multi-screen was programme related content. A majority of the news multi-screen was for partially related content.

Table 5.15 The Multiscreen applications appearances by genre

| Multiscreen | Programme related | Partially programme related | Non programme related |
|---|---|---|---|
| Sports Multiscreen | 2 (0.5%) | 0 (0%) | 2 (0.5%) |
| News Multiscreen | 0 (0%) | 5 (1%) | 3 (0.8%) |

$n$ = 12 for table 5.15 and represents how the application which provides the most video material appears.

The programme specific material for the sports multi-screen was BBC1's coverage of the London Olympics on the Sky box during the August data collection. The two appearances for the sports multi-screen, which were recorded as non-programme specific, were both on BBC1. The first was during coverage of the Diamond Jubilee Concert, the second while a drama, 'The Accused,' was being shown.

What the results suggest is that the BBC is willing to show sport through the red button, which then acts as a temporary BBC sports channel. In so doing, the BBC offers the viewer the choice of drama through the main channel or sport through the red button. For the Olympics there were so many events taking place that the expectation would be that some form of additional content would be made available, alongside the main broadcast.

As was established above, Sky News provided all the partially programme specific material for the news teletext option, which appeared in combination alongside the news multi-screen. As the material being shown was lifted from the days broadcast, and Sky News is a rolling 24 hour news channel, nothing less than this would be expected. The multiscreen was seen as being one application, so each appearance was only counted once. There was a variety of news teletext options available on the channel, which is why there are five recorded appearances of the multiscreen, as opposed to 18 for the teletext option. The three examples of the news multi-screen, which were considered to be non-programme specific, were found on BBC1 and BBC News in June and July. No other examples of this option were found on the BBC channels throughout the rest of the data collection. One of the primary reasons for this was the BBC cutting the number of video streams available for general red button content from July of 2012 onwards (Schofield, 2013, appendix G). As a result of this reduction in services one of the first elements to be cut was the news multi-screen.

The decision by the BBC to cut the video streams was because 'there was a content analysis done to basically look at the use of the simultaneous streams to work out how often we were showing more than one event on those streams' (ibid. page 318). What the analysis found was that, for a large proportion of the time, the channels allocated to provide simultaneous video options were redundant, so the decision was made to compress this type of application down to one stream. This cut in bandwidth meant the demise of the news multiscreen but not the sports application. The suggestion is that sports content is more popular than news. Evidence of this would be that;

> the first time we actually got any kick back from not showing the kind of depth of multi-screen content that we had done before was around the snooker world championships in February, March time, that was the first event where the viewer's said, where's the multichannel options, everything up until then we'd had very little feedback on.
>
> (ibid. p. 319)

The cutting of the video streams provides another example of the economies of scale, which have prevented interactive television being developed, as the optimists of the 1990's and early 2000's predicted. Rather than finding ways of filling the channels, the BBC opted to remove the bandwidth to save costs. As there is more evidence of sports multiscreen content, than news, we can see that the BBC uses the application to carry sports content, for which room cannot be found in the schedules. The disappearance of any news multiscreen during the data collection from July onwards can be explained as the BBC has a digital channel which offers 24 hour news programming. There is no comparative channel for sport. Therefore the policy towards red button content, for the BBC at least, has reversed since 2006. Chakura's (2006, appendix D) assertion that the multi-screen applications were the cornerstone of, what was then, being called an interactive experience is no longer true. As was established at the beginning of this chapter, there is a relatively low count of multi-screen options, across all the channels in the sample, in proportion to the amount of text based applications. What we find from this is that large multi-screen applications, while having a place within the red button stream, are not used as much because of the resources required to provide the content. This means that large video intensive applications do not fit the current political economy in the broadcast sector.

A final area where it would be possible for the red button stream to offer the viewer more choice is cross channel content, or access to other interactive content. However, with only 4% of the total, there is a sense that the broadcasters are either testing whether viewers will choose this option or are deliberately filling space. CBBC was the channel which offered this option most, with access to the red button content on its sister station, CBeebies. Offering content of this nature is an obvious move. CBBC and CBeebies are part of the same corporation and share similar demographics. As there is crossover between the two channels this is an attempt to satisfy both audiences. An additional finding from these results is that this option was offered through Freeview only. With Freeview being seen as the most public service of the two platforms, because of its stakeholders, this could be a service which the BBC encourages because of its PSB remit. This view is reinforced by BBC1

offering access to the CBBC Extra Blog in one instance during July. As this was in the middle of the BBC's coverage of Wimbledon the indication is that this option was placed in the menu, for this date, to replace the children's content which would normally have been shown on the main broadcast[2].

The other interactive content which was found on Sky 1 was the option to access Sky Active. This calls into question what actually appeared through the red button on Sky 1. The name Sky Active suggests a broader interactive service, but it is hidden behind other content. It appears that Sky did not see Sky Active as a front end that acts as a portal in a similar manner to the menu led system, which appears on the BBC. Sky 1's red button content is seen as something with which to push other products and offer advertising space, rather than in any way developing an interactive application.

In conclusion, this chapter has served to dispel the notion that television is an interactive medium, in the manner envisaged by Gilder (1990), Swann (2000) and Bazalgette (2010). The fundamental problem with these pieces of research is that it is forgotten that television remains a visual medium that is designed to be watched. Any navigation away from the main transmission disrupts the narrative flow that has been the cornerstone of the success of television. There is no logical explanation for either the broadcasters or the audience to navigate away from transmissions, to do the sorts of web like activities suggested by these authors. It is also possible to argue that neither is red button television as developed as Bennett (2008b) envisaged, whereby red button and web based content would work in tandem to provide a more holistic experience. For this to work the set top box technology, providing the red button content, would have to link directly to web sites therefore rendering the red button services found in this research redundant.

There is currency in Bennett's (ibid.) argument when discussing the BBC's attitude to red button content. What this research has found is that there is more variety and more of a consideration for the audience through the red button on the BBC.

---

[2] BBC1 was still showing scheduled children's programming at the time of the data collection period.

That all the programme specific material was found through BBC1 provides evidence of this, as does the use of the red button stream to transmit content which wouldn't normally be scheduled, for example the Summer of Mela's, the Blur concert and the London Collection. What the content does not do is provide the experience as fully as Bennett (ibid.) describes, when discussing the coverage of the D-Day landings. The implication from Bennetts (ibid.) work is that this type of coverage would become normal. Field interviews carried out with Chkaura (2006, appendix E) and Goodchild (2006, appendix F) suggested that this was a policy that the BBC wished to pursue.  However, during the data collection period only two examples of this were found, the Olympic Games and Springwatch coverage.

For the other broadcasters the main function of the red button is to advertise services or to generate income. Examples of this can be seen from the options to upgrade Sky packages, the games available through Boomerang and the gambling applications offered by Sky Sports. What can be concluded is that the BBC achieves the closest to realising the notion of interactive television, but that the phrase is merely just a buzzword used to explain something that is not traditional television.

What emerges, so far, from the discussion of the research is that traditional scheduled television still has a place in the media landscape. The red button options are just an additional broadcast stream where information can be placed. With a few exceptions the material is informational text based or advertising and commercial material. As I discussed above, the reason for this could be that the broadcasters do not want the audience to be distracted away from the programmes being transmitted. In this respect television had managed to strike a happy medium. There are options for the viewer, but the applications accessed are not interactive. The only interaction is choosing to navigate away from the main programme by using red button. Through the use of the red button streams the broadcasters give the impression that television offers something more than it has in the past.

**Chapter 6 Discussion 2**

**6.1 Introduction**

The following chapter builds on the initial discussion and refers back to the previous academic work identified in the literature review. Three main concepts have been identified for discussion, broadcasting policy, convergence and political economy.

By discussing the policy of the broadcasters towards red button content the attitudes between the commercial and public service providers becomes clearer. Additionally, and by referring back to the work of Bennett (2008 (b)), I will further discuss the BBC's perceived shift to a '360 degree commissioning strategy' (ibid, p.278), using BBC1's coverage of the 2012 London Olympics as an example. As was found from the initial field interviews, in the past this was seen as a crucial BBC policy.

Whether television has taken on the characteristics of other media forms will be addressed in the convergence section of the chapter. In this section I will build on the results and findings of the previous two chapters to further expand the discussion, as to whether red button television is really interactive or is more just an informational service. Additionally, by drawing on Silverstone's (2007) work on the mediapolis, I will explore issues of the aesthetics of the red button content and consumer choice. The final section will discuss the political economy of red button television by addressing the work of Gilder (1990), Swann (2000) and Wood (2007), authors who presented an optimistic model of what interactive television could and would be.

## 6.2 Broadcasting policy

### 6.2.1  Commercial

In the literature review I make the naïve assumption that there is little red button content on ITV because the space had yet to be harnessed for commercial use. While it proved to be the case that ITV1 was the only channel to offer no red button content, there was material available that was commercial on the Sky channel's and Boomerang. As the public service remit is not as crucial as it is for the BBC, the Sky channels and Boomerang can use the red button as an income generating stream. It was found that there were differences in the approach of the channels to achieve this further financial gain. For the Sky channels the viewer is steered towards products BSkyB offers. Boomerang has games, which it charges the viewer to play. When following the link through, the packages of games on offer are similar to the content that was found through Sky News on Freeview, and have little to do with the icon representing them. The advertising, promotional and gaming content will be discussed further, in sections 6.2.1a and 6.2.1b.

As it is not a company that is made up of individual channels, which are then subscribed to, ITV has no provision for product upgrades to existing packages. Nor does ITV provide bundles of packages, which provide telephone, broadband and television services, as Sky does. Games need development and would therefore be a risky proposition for ITV to offer, even if it were to buy in pre-existing packages, as it seems Boomerang does. Therefore the major commercial broadcaster in the UK has been sidelined as it cannot offer anything that benefits it financially, other than advertising. It makes no sense for the red button to be used purely for advertising so ITV finds itself occupying the middle ground between a big public service broadcaster and media conglomerate. As a result it cannot benefit from the red button so chooses not to offer any content.

### 6.2.1a Advertising or promotional

That content, geared towards promoting other packages is common on the Sky channels, suggest the successful 'everydaying' of material which exists beneath the main transmission. A section of the literature review, 2.6.2, addresses whether or not interactive television could be or has been incorporated into the everyday television experience. However, while the existence of red button content is now assumed, interactivity is not commonplace. An analysis of the Sky channels provides clear examples of this lack of interactivity. Advertisements on Sky News and Sky Sports 1, which appear alongside the news and sports teletext content, provide examples of advertising material. However, Sky 1 offered content for which the majority was either advertising or promotional with the Highlights, TV Picks and Upgrade applications.

What was marketed heavily at the turn of the century as a new televisual experience has been heavily diluted. With the exception of Sky News none of the links, which were found on any of the Sky channels, took the viewer to anything that related to the programmes that appeared on the schedule. On Sky 1 there was a link through to Sky Active, the main interactive service promoted by Sky. However, this link did not appear on the other two Sky channels, Sky Sports 1 and Sky News. The commitment to an interactive service, which was strongly hinted at in 2008, has been pushed into the background. Furthermore, the red button services that do appear on Sky 1 are solely concerned with promoting other Sky products and providing advertising space. While Sky Sports 1 does provide a sports news teletext service, there is also gambling and additional advertising space. No clear examples of programming enhancement were found on Sky 1 and Sky Sports 1 during the data collection period.

Given the amount of marketing that red button services received initially on Sky (Bennett, 2006), it is surprising that, at the very least, there was no sports multi-screen through the red button on Sky Sports 1. It can be concluded that for Sky Sports' the red button is used for what it sees as marquee events, for example Premier League Football, Test Match Cricket and Formula 1 motor racing. As these

events are the product of the bidding wars that Horsman (1997) identifies, Sky wants to be seen to be providing a more comprehensive viewer experience. In this respect Sky is following the BBC, which has to provide red button content. Sky cannot be seen to be offering less of a service than the BBC, so resources the marquee events heavily. This does not extend to lesser programming, and a red button sports multiscreen offering highlights of other sporting events would distract the viewer from the main transmission. Sky Sports 1 does not want to detract attention away from its programming, other than to offer support for marquee events, and instead offers a less comprehensive text based service for the majority of the time.

6.2.1b Games

As the work of Selfe and Hawisher (2007) identified, games are an interactive experience, because to a limited extent the player is controlling the narrative. How successful the player is at doing this determines how far the narrative progresses. In this respect the games found through the red button stream, for Boomerang on the Sky platform and Sky News on Freeview, could be seen as good examples of interactive television. This is in part true, because games have only been available, through television, since the advent of red button services. However, the nature of game playing is what makes the content seem to be interactive. In reality the content that was found was not in keeping with the spirit of interactive television, as put forward by Gilder (1990) and Swann (2000). Both authors envisaged that interactivity would open up the television set to be more sociologically beneficial. Gaming, as a genre, exists independently from other forms of entertainment with its own sociological and cultural values. The games that were found through the red button are simple commodities, as both Boomerang and Sky News see the content as a method of financial gain. Primarily, the applications are used for income generation, as there is no promotional element to the content. Rather the icons, of characters from shows on Boomerang, which appear in the menus are used to draw

the viewer towards the gaming content. In this respect the icons are used to promote the games, rather than the games promoting the programmes.

For Boomerang, only when the channel changed the look of its red button services, halfway through the data collection period, was it obvious that there was a fee to access the games that the channel offered. As Boomerang is a channel aimed at children, games are a good way of keeping the audience engaged. However, the ethics of the channel can be called into question by charging for the red button content. As the channel is only available through the Sky box there is already a charge to receive the programmes which are transmitted. To add a further fee for the red button content, particularly for a channel which is aimed specifically at children, could be questioned morally. The channel does not indicate that there is any red button content available through the use of an icon on the screen, so can argue that it is not deliberately trying to sell the games on offer. That Boomerang does not signpost any of its content potentially helps the ethical concerns that I raise above. By not being signposted the viewer has to find the games rather than being directed towards them. It is possible, however, for a young person to stumble across the content accidentally; potentially accessing a game without the knowledge of the person who pays the subscription.

An unexpected result from the data collection was the appearance of games on Sky News through Freeview. The red button content for the channel was very different on the Sky platform. For Boomerang to offer gaming content does make sense, simply because of the audience the channel attracts. The games offered on Sky News are far removed from the content transmitted by the channel. That the content is so different, from the material on the parent channel, serves to strengthen the argument that the applications are placed through the red button stream because they can be. Therefore as the technology exists it may as well be utilised and the red button stream, in this example, is used as a purely commercial venture. However, it is unlikely that the demographic Sky News attracts would be game players, which strengthens the inference that the gaming content is there to merely fill space.

By offering red button content that is unrelated to the main programmes, which is not what happens through the Sky platform, there is a benefit for anyone subscribing to Sky Digital. As was highlighted in the previous chapter, the difference in red button content can be used as an enticement for potential new subscribers. However, and as has also been highlighted in Chapter 2, Freeview has a comparable share of the market to the Sky platform, 10.2 million compared to 10.1 million ([www.freeview.co.uk](www.freeview.co.uk), [www.corporate.sky.com](www.corporate.sky.com)), therefore it makes business sense for Sky News to try and benefit financially though the platform. The content was commercial because, as was identified in the previous chapter, on Sky News there was an implication that there would be a charge for accessing the gaming content.

Aside from the games that were offered on Boomerang being themed around characters from programmes that appeared on the channel, there was no evidence that the content was designed to enhance the audience experience of a programme. Therefore, the most interactive elements of the content that was found, the games, are used simply for income generation. The opportunity for any interactive television applications to be produced, which generated income by attracting more viewers, has not been developed. There is no attempt at providing any sort of educational content on Boomerang and no news based content on Sky News on Freeview. Suggested here is that those who were optimistic about the future of interactive television misjudged the political economy and passive viewing experience of television. The material provided on the red button for Springwatch (2005 - ) highlighted the issue of political economy, because of the commitment towards resourcing the content. Likewise, that the majority of the red button content did not support the programme being transmitted suggests that the broadcasters see two distinct styles of offering the audience material. For subscription and satellite broadcasters, commercial, for public service, informational.

## 6.2.2 Public service

Content was found to be more aesthetically uniform across the three BBC channels (BBC1, BBC News and CBBC). What this suggests is that, unlike Sky, the BBC channels have a consistent strategy as to how red button content appears to the viewer. The strategy employed by the BBC extends to all arms of the organisation, television, radio, on line and red button, in an example of Bennett's (2008 (b)) 360 degree commissioning strategy. What I will examine here is whether the uniform strategy extends to the design and spread of red button applications, offered by the corporation.

## 6.2.2a The BBC's strategic consistency

As the last chapter found, the BBC's strategy has led to a considered house style. The only difference in the look of a BBC red button page was for CBBC, where the only major change was the colour scheme. CBBC's layout and typeface was the same as BBC1 and BBC News. Across the BBC channels, in the sample, there is more consistency, for example a news teletext service appeared regularly across all three channels. The BBC appears to have more commitment to using the red button more methodically, than the commercially orientated channels. An example of this can be seen by the general news, hard news and soft news applications appearing across all three BBC channels. Both news teletext and news multiscreen appeared through BBC1. BBC News carried news teletext, news multiscreen and business and markets information. Additionally, CBBC offered a news teletext service, which is the same as appears on BBC1 and BBC News in terms of content, but is rebranded as 'Newsround,' the name of the news programme which appears daily on the channel.

Why the BBC has this approach is explained by the institutional dynamics of the organisation. The BBC is obliged to provide a red button service, 'it's part of the service licence that there be BBC on line red button,' (Schofield, 2013, appendix G, p. 310). Pressures imposed because of the Royal Charter and the BBC Trust informs the attitude towards the red button stream. As a result the material is markedly

different than that of ITV, which offers no red button content, and Sky, which offers, for the most part, promotional or explicitly commercial content.

One way for the BBC to further its public service remit, to incorporate on line services including the red button stream, is to use a '360 degree commissioning strategy' (Bennett, 2008 (b), p.278). For Bennett (ibid.) this policy would make for a more inclusive general service, as each programme and interactive application would benefit the other. Chakura (2006, appendix D) reinforced this by stating that interactive content would be commissioned at the same time as a programme. However, what the previous chapters found is that there is little evidence of this occurring through the red button. While the BBC was found to offer more options for its viewers, than commercial channels, there was very little linkage directly through to the programme being shown. For example, the news teletext options did not follow the headlines and stories which were found on the BBC News channels. Instead the text was directly lifted from the BBC website. This looks like a good example of 360 degree thinking, as it demonstrates cross platform support. It can be argued that there would be little point in re-writing the stories, for the red button, when the text already exists on the website. Likewise, the additional commentary for a football match, which was found in the June measurements, was being simulcast by BBC Radio 5live. These two examples demonstrate efficiency as to how the BBC uses material, which has been produced for other platforms, through the red button. Those who were optimistic, about the potential for interactive television, would express disappointment as to the lack of supporting material available through the red button. For example, there were no background details on a particular news story, or player profiles and tactical analysis for the football match.

There was, however, an example of how the 360 degree strategy can be used effectively, during the data collection period, in the BBC's coverage of the 2012 London Olympics. For the two weeks that the games were covered there was blanket television coverage on BBC1 and BBC3, the website and red button. On the red button;

Sky, Virgin Media and Freesat will offer audiences access to up to 24 live streams, while there will be an additional 24-hour channel of extra BBC Olympics content available via the BBC Red Button for audiences with Freeview and BT Vision.

(www.bbc.co.uk)

Web coverage was equally developed, offering, 'a page for every sport, country, athlete and venue. The coverage includes live updates, Twitter visualisations and comments from across social media' (www.bbc.co.uk).

Applications were also available through mobile phones and tablets. All three elements were promoted heavily on the BBC's television coverage, though not so heavily that an announcement appeared during a period when data was being collected for BBC1. A combination of all the applications across all the platforms represent the 360 degree strategy which Bennett explores through his examination of the BBC's coverage of the 50th anniversary of the D-Day landings (2006). However, as the BBC is the country's chief broadcaster, the expectation would have been that the coverage of an event as large as the 2012 Olympics would have been as comprehensive, especially as the games were staged in London.

When focussing on the red button content for the Olympic Games a key issue arises. The content was purely video, no ancillary material appeared, for example, text based athlete profiles. The significance of offering content of this style, and for the rest of the material that was found to be programme specific, is that the BBC does not see the red button as an interactive path. This is very different from the attitude ten years ago when a red button application for Walking with Beasts (2001) offered a variety of material, not just additional video content. While the overall coverage of the games was in keeping with the 360 degree strategy, the red button was simply used as an additional television channel. Events which were considered as not being applicable to the audience, watching the BBC1 and BBC3 coverage, were pushed down to the red button stream. Rather than offering an interactive application through the red button, the decision was made to utilise the BBC's website, through which a mixture of video, text and social media material was all

shown. However, what the red button content enabled was the opportunity for the viewer to navigate away from the main broadcast and access sports' that never usually receive continuous live coverage.

The example of the Olympics does offer a good example of the 360 degree joined up thinking that the BBC now employs. Various applications developed for red button TV, web and mobile technology meant that the corporation could offer comprehensive overall coverage. However, with the red button stream being used simply as an additional television channel there is further evidence of the dilution of what would have once been flagged as an interactive experience. While the web and mobile applications offered a variety of content, television showed pictures and nothing else. However, the evidence is that the audience want this sort of service as across the two weeks of the games the BBC attracted '24 million (hits) just on the video content alone' (Schofield, 2013, appendix G, p. 323).

In conclusion to this section it can be seen that Sky sees the red button as a space for commercial enterprise. The attitude of the BBC sees the red button stream as a place where material can appear for which there is no space in the schedules, typically this is true of video based content, with the text based content maintaining a constant presence. However, not all content on Sky was commercially driven and events like the Olympic Games do not happen every day. Therefore, while the red button can be used in the manner suggested, 360 degree programming has not become an everyday experience, or a staple of the commissioning strategy. The attitudes of the broadcasters, addressed in this section, can be seen to be very different by using the examples identified. I will now further develop whether television has taken on characteristics of technological convergence. I will compare this with the finding that the bulk of the material found through the red button was informational and text based.

**6.3 Convergence**

6.3.1 Interactive convergence

Neither Andrejevic (2008) nor Jenkins (2006) suggest that convergence necessarily makes for a more interactive experience. The focus of both these authors is what convergence means for the audience. Jensen's (2010) assertion, that it was inevitable that technologies would converge, implies a more interactive experience becoming ingrained into the audiences' personal experience, as existing technologies are used differently. An example of this would be mobile phones, which are now used for much more than just making calls. I will use the following section to discuss how accessing the red button content can lead to confusion as to whether television has taken on characteristics of a convergent medium. Finally I will briefly explore why my research points to the opposite occurring, that television is an example of where convergence has not occurred.

6.3.1a Accessing red button content

The implication that television has become more interactive is based on the digitalisation of the medium. As television, through red button applications, can now offer more services so, for some (see Gilder 1990, Swann 2000 and Bazalgette, 2010), interactivity is assured. However, my research suggests that much of the proceeding academic work has been based on what could be, rather than what actually exists. Insufficient account is taken of television's appeal as a non-interactive medium and the economics of programme enhancement. That red button services are in use is not in doubt, but the red button on the remote control itself, and the existence of the applications, does not necessarily lead to an interactive experience.

How the viewer is made aware of the applications, before accessing them, warrants further discussion. Every example of red button content, which was found during the data collection period, was accessed through indexical menus. The look of the menus highlights the convergence argument, insofar as the red button on the remote control is being used as a conduit through which material is accessed. As

the red button is used in this way television has adapted an internet style method of usability. Comparatively, the menus are similar to the way that information is accessed through the internet. Pressing the red button is a substitute for a mouse button click. In this respect Urrichio's (2004) and Everett's (2003, cited in Everett and Caldwell (eds.)) analysis of the changing function of the remote control is reinforced. However, what I wish to focus on here is what the menus, which are accessed, look like. While it is important that the remote control has become a more important tool, the way that the viewer is encouraged to navigate towards content is equally crucial.

There were differences in how the menus looked. All the BBC channels provided menus in the right hand side of the screen over the programme being shown. Textual tabs made the viewer aware of the options available. The games on Boomerang were accessed through a horizontal menu, with graphical representations of characters from programmes shown on the channel. There were variations in the way that Sky presented its menus, broadly opting for a full screen layout with the programme content being relegated to a video thumbnail. The menus act as home pages through which more content is accessed. However, television has developed its own method to allow viewers to access the material, for example Sky News on the Sky platform had a series of video thumbnails in the right hand side of the screen. These became active once the corresponding option was selected on the textual menu in the left hand side of the screen. By adopting the indexical menu system the appearance, once the red button is pushed, does take on characteristics of the internet. This does not necessarily mean that the television set has now become a converged technology. Rather than arguing that television has incorporated internet style methods of accessing content, my research raises a clear question; how else would the content be accessed? All the major broadcasters have reached the same conclusion that the indexical menu is the best way for the viewer to access the red button content.

6.3.1b Non-convergence

There are bound to be similarities between the way that the remote control is used to access red button content and the mouse to access web links. However, the idea of using the remote control and indexical menus to access additional material through a television is not new, as teletext services were available from the 1970's (www.switchhelp.co.uk). Remote controls for some models of television set had a "text" button to access these services, and a row of coloured buttons by which specific items could be accessed once the menu became active. The majority of the red button material, found during the data collection period, was teletext based. These applications have evolved aesthetically, since the digitalisation of television, but essentially still perform the same function. Rather than red button television being a part of the whole contemporary convergence debate, it can be seen as an extension and development of a pre-existing service, which now includes limited video and audio options. Instead of adopting practices from other, newer, forms of communications media, the opposite has occurred. Red button television has regressed to being an updated version of early teletext services as opposed to a completely new way of interacting with the medium. In this respect red button television has not taken on characteristics that are recognisable as being elements of a converged technology. The opportunity for the audience to directly participate through the use of red button applications is not prevalent. Therefore red button television does not fit the model for convergence as put forward by Jenkins (2004).

## 6.4    Consumer choice

Television, in Great Britain, has become increasingly commodity driven since the late 1980's (Horsman, 1997), when Sky was granted permission to offer a subscription based service. Where there used to be viewers who were members of an audience, there is now an audience who are seen as consumers. Interactivity and red button applications were initially a large part of this commoditisation and were flagged up as a new way to experience television (Bennett, 2006). A key concern of Katz (2008) is that the commoditisation of broadcasting leads to a less democratic medium, ironically because there is so much choice available to the

viewer. As there is more information so there is more responsibility placed onto the audience to access a wide variety of material, which would not have happened in the past when there was less choice. Therefore the whole issue of choice is central to the political debate around British broadcasting, as the various regulatory bodies have emphasised. This has spread to what interactive television would be and do. I begin this section of the chapter by looking at the issue of choice through the red button in more detail. The concern of audience responsibility is taken further by Silverstone's (2007) mediapolis, the space where political and social mediation is now more common place. I will examine further as to whether red button television fits into this new virtual space in the second half of this section.

### 6.4.1 More choice

The red button does provide the opportunity for the television viewer to access material away from the main transmission. In this respect, this opportunity offers more choice. However, during the course of the data collection for this research, once the menus were accessed very little material was found which provided supporting content for the programme being shown. Nor was there much additional video and audio material available on the red button providing the viewer with the opportunity to watch content, which was not appearing on the main channel.

To briefly re-cap, exceptions appeared mostly through BBC1, with the previously discussed Olympics coverage and additional commentary for football matches providing material that supported scheduled programming. Pop and world music concerts, Wimbledon coverage and a collection of documentary's about London provided additional video content. However, the most considered and comprehensive red button content was found through Sky News on the Sky platform, with its condensed version of the day's news. Both BBC1 and Sky News provided differing examples of the styles of comprehensive red button content. I will offer a brief comparison as to how the differing content for these two channels determines the attitudes of the broadcasters for the rest of this section.

For much of the supported material and additional content to appear on BBC1 implies that the BBC's strategy for red button is to provide more choice on its flagship channel. The other two BBC channels in the sample, BBC News and CBBC, provided material that was more in keeping with their respective demographics. BBC News offered almost exclusively text based informational content, whereas CBBC did offer some additional video based material through its blog application. However, all the content which offered an enhanced service was found on BBC1. This suggests that, as well as being a flagship channel for the broadcasting of programmes, BBC1 is seen as being the place where the potential of the red button can be realised. Conversely, Sky News differed sharply from the other two Sky channels, Sky 1 and Sky Sports 1, in that the material was in keeping with the programmes being transmitted, and offered a video as well as a text based application. The attitudes of the broadcasters towards the red button can be seen through the example provided by the two channels. For the BBC, the policy implies that supportive red button content should be spread around genres or events on a channel which receives its largest viewing figures, BBC1. Examples of this are the Springwatch and Olympic coverage in addition to the commentary from the football match.

Both BBC1 and Sky News approach the issue of consumer choice differently. BBC1 offers the most variety of content, but Sky News plays to its strength as a niche channel. These approaches raise the issue of how choice is defined. BBC1 is a channel which offers a wide variety of programming content and this is reflected in its red button content. The opposite is true with Sky News, as it is a 24 hour rolling news channel, which leads to a lot of repetition in terms of programme content. However, the strength of Sky News' red button content is in it being able to use the repetitious nature of the main transmission to provide the material.

Another use that the red button stream has on Sky News is to provide rolling coverage of an on-going or developing story. Evidence of this was seen once during the data collection period, with the murder of the family on holiday in France. The ability to do this provided a choice, to the viewer, to follow the story once the attention of the main channel had switched elsewhere. However, while the

example provides evidence of a method of offering the viewer more choice, that it only appears once, in a four month cycle, suggests it does not happen that often. What the example does is highlight potential confusion by Sky News as exactly what to do with the red button. To further confuse the issue, the content was measured as being non-scheduled programming, because the channel reacted to the breaking story. There is more choice, but the content was not signposted, nor was the viewer told by the newscaster, through an announcement or referral, that the story could be followed in more detail by pressing the red button. For BBC1 the opposite was true with specific signposts towards the Olympic and commentary content. However, the news based red button content on Sky News was all that appeared, apart from a small advertising slot in the bottom right hand side of the screen. The supported content that was found on BBC1 appeared alongside other non-programme specific material.

## 6.4.2 The mediapolis

For Silverstone (2007) the mediapolis is the virtual space where political and sociological discussion takes place. One of the key themes of Silverstone's (ibid.) research is that it is now not only easier for the individual to access information, but also easier to put forward their own ideas. Early research (for example Gilder 1990, Swann 2000 and Bennett 2008 (b)) suggested that interactive television and red button applications would be absorbed into this new virtual space. With more methods to access and provide information, the perception is that the user of media technologies has more choice as to how that information is given and received.

The differences in the content, in particular available through BBC1 and Sky News, highlights the potential strength of the red button stream in terms of offering the viewer more flexibility of choice. BBC1 can use the red button to provide material for which there is no room in the schedule. For Sky News the red button content can be used as a method of delivering news in a condensed, packaged manner. Both channels occasionally offer the viewer an element of choice but the method of

providing choice only points towards the potential of red button content and raises two issues with the channels. The first is that the majority of the content on BBC1 is still text based information. There were only three examples of programme supported content and three of additional video material across a four month data collection period. Secondly, the comprehensive appearance of Sky News' material was off-set by the viewer not being told that the content was available through any on screen graphical representation.

These two problems exemplify the issues surrounding red button television content. By using Silverstone's (2007) mediapolis, as a basis for explaining public mediation, we can see red button television does not offer the same amount of choice as other forms of media content delivery. In this I include certain elements of scheduled television. Rolling 24 hour news channels frequently encourage viewers to provide user generated content. This does not happen through the red button. Therefore there is no mediated space for society to occupy on the red button, a stipulation of the mediapolis. Mobile phones, computers and even the television broadcasters encourage participation, which verges on the interactive. None of this participatory experience is done through red button television. Therefore the choice that the consumer is offered through the red button to engage with television, interactively, is, at best, minimal or, at worst, non-existent.

This is not to suggest that the potential for the audience to interact with a broadcaster does not exist. The broadcasters encourage the audience to interact, but using more traditional methods, for example providing pictures and videos through electronic means. This is particularly true of news based content, and has proved to be a viable method of generating content and engaging the public, especially at the BBC (Wardle and Williams, 2010). Rather than providing the audience with vast amounts of material, which supports programmes through the red button, the broadcasters can encourage public participation through user generated content. This not only encourages public participation, it is also a more cost efficient method of interacting with the audience.

**6.5 Political Economy**

I begin this section by re-visiting preceding literature to debunk the idea of interactive television. As a recurring theme of the thesis is that there are very few examples of content which enhances programmes, and therefore suggests a lack of interactivity, it is necessary to re-position what was once deemed interactive television. Therefore, the section closes by establishing red button television, as something that is separate from interactive television, and suggests where interaction actually takes place with television programmes.

6.5.1  'Interactive' television

In the literature review I cite Gilder's view that television is the 'tool of tyrants' (1990, p.35). He goes on to suggest that television will be replaced by a device called the telecomputer. However, television has not been super-ceded by the telecomputer and the optimistic vision that Gilder (1990) and Swann (2000) put forward, for interactive television, has not been realised. Nor has the ITC's summarisation that there were two distinct strands of interactive television, dedicated and enhanced (2001), been fully developed. To briefly re-cap, dedicated interactive television would allow shopping and betting style applications. There is evidence of minimal development of this style of content, the gambling applications available on Sky Sports 1, for example. Likewise, there was minimal evidence of enhanced interactive content, the Olympics and additional commentary, but, once again, this was not as developed as was suggested by the ITC (2001). Nor was there any direct evidence found of viewers being able to interact with advertisements.

As Curran (cited in Fenton, 2010) identifies, new methods of potentially delivering content are traditionally greeted with much excitement and expectation. Ultimately these new developments are toned down, or disappear entirely. My aim in this chapter is not to maintain that the early experiments in interactive style television services were unnecessary or failures. Rather, the experiments by the BBC with programmes like Walking with Beasts (2001) and the red button applications, which

were trumpeted by Sky in the early 2000's, proved how far television as a medium could be pushed.

Instead, my central argument is that interactive television has not developed as far as has been previously suggested, by both the broadcasters and academics. The logistics and resources, needed to develop interactive applications, have been directed elsewhere. Winston (1998) explored how technologies traditionally undergo an evolution. Rather than being used for data analysis, digitalisation has meant that computers are common in households as entertainment centres and fact finding tools. DAB digital radio is also now becoming increasingly prevalent, both in the home and in cars. Television has not been immune to this sort of evolution with high definition images becoming normal. Additionally, set top boxes which deliver the television content are becoming more advanced, offering television channels, video on demand services (see for example, Virgin Media's recent addition of Netflix to its services through its TiVo box) and red button content.

6.5.2 'Red button' television

What was once seen as interactive television has been supplanted with a red button service more in common with pre-existing teletext services. The broader interactive services promoted ten years ago no longer appear, which suggests a backward step, or at the very least a lack of evolution. Interactive television has suffered the same fate as Betamax video tape in the 1980's, and digital audio tape (DAT) and mini disc in the 1990's. Each of these examples was seen as being improvements on existing technologies; VHS videotapes, audio cassettes and compact discs. The potential for interactive television was realised through applications of the kind that supported programmes like Walking With Beasts (2001). However, the potential was not built upon, which implies that interactive television was not seen as economically viable by the broadcasters or accepted by the audience. If a new technology, or in this case a method of providing content, is to be deemed successful it has to fit the applicable political economy and, in the

case of interactive television, be seen as useful by the audience. The problem for the optimistic view, of what red button television was supposed to have been, is that both Gilder (1990) and Swann (2000) failed to take the two key issues of political economy and audience acceptance into account.

Where television programmes have become more interactive is by having a more vocal audience. Audience members now discuss television programmes through social media outlets. This style of interaction is more in keeping with Ross' (2008) and Andrejevic's (2008) work on audience participation. Any interaction with television programmes do not happen through the television set but around it. The audience are more content to discuss programmes, and use this as a way of enhancing their experience of the medium. Broadcasters recognise this and do not attempt to detract the audience away from the programmes being shown by offering enhancements or discussion forums through the red button. Gillan (2011) points out that the American networks use their web based activities as a method of drawing back audiences to the programme being broadcast by offering short clips or teasers on the internet. This point is reinforced by Charlton, who also saw that ITV Local, as well as being used as broadband internet television and a place for user generated content to be uploaded to, as;

> I believe that broadband pushes people back to broadcast a good example, which I think you should have a look at, is Desperate Housewives. Desperate Housewives is the most valuable programme on US television. Amazingly successful and amazingly valuable in terms of sponsorship and advertising, the last series the producers put every episode on the internet before the first show played on conventional telly now some people were horrified by this, the actual result was more people watched Desperate Housewives.
>
> (Charlton, 2007, appendix E, pg. 280)

The conclusion, which emerges from this discussion, is that interactive applications and interactive television does not fit the political economy of the current broadcasting environment. Where the political economy is satisfied is with a non-interactive red button stream, which occasionally offers material that supports

programming content. Furthermore, the supporting material is content which has been produced and can be used in another format away from the red button stream.

## 6.6 Lack of interaction

My argument throughout the discussion chapters is that there is a distinct lack of interaction through the red button stream. This section builds on the previous political economy section to forward the argument as to why interactive television has not developed. I use the first part of this section to explain why the concept of 'interactive' television has not been realised. The section ends with a discussion centred on the idea that red button television is not interactive.

### 6.6.1 Explaining 'interactive' TV

In addition to Gilder (1990) and Swann (2000), for Wood (2007) the assumption is that interactive television was the only way forward for the medium and that, not only would the broadcasters' resource it, but audience acceptance was assured. Wood (2007) argues interactive television is very much a part of the current media landscape, as the space, which exists under the main broadcasts, has taken on characteristics of the internet. To access the red button content the viewer has to navigate to and through it using the remote control, which in its own right is a style of interaction. My research repudiates this kind of idea. Because a series of actions needs to occur, before the content can be accessed, does not guarantee an interactive experience. If this were to be the case then television has been an interactive medium since its inception. The viewer has always had choice and the opportunity to select, even if it is just to switch the television set on or off.

For Rada (2000), interactivity confirms the viability of a communications technology as its uses become more acceptable to the general population. A typical example of this would be computers, which were initially only used for specific professional and research purposes. It was only with the advent of the internet and connectivity

that the computer spread from the workplace to the domestic home. As television was developed, as something which would provide a method of transmitting material straight to the home, it didn't have to make the transition that computers did, in order to gain broader acceptance. However, what television has had to do is respond to a threat from other communications media, which impinge on its sociological space. Television has also had to absorb digitalisation, which has led to the LCD screen, Smart TV's and set top boxes, which now appear in electrical stores and living rooms. The red button is a part of this but the experience is non-interactive.

Therefore the term 'interactive television' was a phrase used to explain the experience available through the red button. In this respect the red button services which were offered as part of early experiments were arguably not interactive. Taking Walking With Beasts (2001) and the service provided by Sky Sports, for its Premier League football coverage in the early 2000's, as examples provides evidence of this. For Walking with Beasts (2001) the viewer was able to access additional information about the animals discussed in the programme, 'making of' style documentaries and expert opinion, all accessed through a multi-screen. While this content provided lots of additional choice of material to select from, the viewer was never fully in control of what appeared.

The same is true of the Sky Sports content, which consisted of additional commentary, different camera angles and the option to follow a different player during the course of the game. While these applications were marketed as being interactive, the material was selected by the producers of the programme. In the case of the 'player cam' option the footballer being followed was switched during the course of the game so, when the option was selected by the viewer, the content was at the discretion of the match director. For the application to have offered anything approaching an interactive experience every player would have been able to have been followed, which would have required a further 22 cameras and operators, as well as more video feeds through the red button. This would have not been impossible to do, but would have been costly. Therefore political economy becomes the important determining factor on what material appears and

when. The practice of providing material in the style of Walking With Beasts (2001) and Premier League football continues presently with applications like the Olympic coverage, only in a manner which is more in keeping with traditional television coverage. A summary of why red button content is not interactive follows below.

6.6.2 Non interactive TV

Evidence of content which was non-interactive was found throughout the data collection. An example of this was the Olympics coverage which was discussed earlier. The coverage was comprehensive but, that the content did not contain anything other than video feeds, highlights the lack of interactivity available through the red button. For those with the optimistic view, of what interactivity would mean for television, the content would have been a disappointment. For the viewer, who wanted to access material away from the main broadcast, the content added value. Therefore, in this instance, the red button stream lacks interactivity but offers more consumer choice. The viewer still had to navigate to the content through the remote control. However, the content was more televisual material, which could be viewed, it was not interactive.

A further example of a lack of interactivity is the amount of red button content which was teletext based, the applications for which account for two thirds of the material found. That so much of the material is of this type demonstrates how the notion of a more interactive service has been pushed into the background. The broadcasters are content to provide a service for a large proportion of the time, which has proved to be viable in the past. Additional content and applications are provided occasionally because the technology allows, not because it is seen that there is any need from the broadcasters to encourage more audience interactivity.

Broadcasters do not want the audience to be interacting with television through the red button all the time. An example of this is the lack of signposting, which was found on BBC1, for flagship drama programming like The Accused. The further examples of the Olympic and teletext content demonstrate how interactivity does

not fit into the political economy of television. Schofield (2013, appendix G), provided an example of this when revealing that two separate departments provide the content for the BBC red button.

Schofield also suggested that the red button stream was seen as 'essentially a digital version of Ceefax' (appendix G, pg. 304). This attitude is confirmed when analysing the results, which find that the majority of channels red button content is text based. There are clear reasons as to why this would be. Text is less data intensive than audio and video, and can be updated more efficiently. While audio and video material were found during data collection, the amount of text based services available suggest that the red button stream has not evolved as far forward as was previously thought, see (Bennett, 2006, 2008(a) and 2008(b), Woods, 2003).

However, the broadcasters are happy to offer informational content daily and additional video material for large one off events. If television had evolved in the way that Gilder (1990), Swann (2000) and Bazalgette (2010) suggested then there would be less need for the audience to watch the programme being transmitted. This is not in the broadcasters interests. The business that both a public service broadcaster, like the BBC, and a subscription based service, like Sky, are primarily concerned with is still scheduled television content.


## 6.7  Broadcasters like to be seen to be 'interactive.'

So far this discussion chapter has established that interactive television is a misnomer, semantically, technically and practically. However, broadcasters such as the BBC, who have to provide additional content as part of a public service remit, have to explain to the audience that red button television exists and what it can do. Commercial broadcasters like Sky have to make their consumers aware that additional content is available underneath the main transmission. Two examples, of how the red button content can be used, are the Sky Race Control application, which appears on the Sky F1 channel supporting Sky's coverage of Formula 1 Grand Prix, and the BBC's Antiques Roadshow play along quiz. One further example is the

method of signposting that the BBC use to alert the audience that red button content is available.

6.7.1 'Sky Race Control' and Antiques Roadshow

As no referrals or announcements were found during the data collection, it can be concluded that the broadcasters do not attempt to draw the attention of the viewer's towards the red button content through verbal announcements. However, away from the channels which were in the sample, presenters on Sky F1 frequently direct viewers towards the channel's red button content used during coverage of Formula 1 Grand Prix. Schofield (appendix G) also highlighted a piece of content that was not captured during the data collection period. This was the Antiques Roadshow play along quiz. I introduce these two examples, at this late stage in the study, because the channel on which they were being shown was not a part of the sample, or the programme was not being shown whilst data was being collected. Both offer good examples of how red button television can offer, at the very least, enhanced content so therefore warrant limited discussion.

For Sky's F1 application the content, also available on the Sky Sports website, is a mixture of race trackers, on board car cameras and highlights, and is packaged as 'Sky Race Control' (http://www1.skysports.com). While not providing the exception to the rule that this discussion has suggested, the content does provide a good example of what the red button is capable of. As the content is available on multiple platforms it is a further example of convergence. In addition, the content is a good example of realising the potential of what the red button can be used for, and is in keeping with the sort of application being heavily marketed in the early 2000's. The application has elements of the style that was found with Walking With Beasts (2001), insofar that it is a multiscreen, which offers additional video and text content.

A further good example of red button content, which provides audience enhancement, is the Antiques Roadshow Quiz. Schofield (2013, appendix G pg.

335), points out that the application is very successful, with audience hits in the 'millions.' The application is also easy to produce and simple to navigate around. Audience members are encouraged to play along with the quiz which links to the programme, when it is being transmitted. This would have been seen as a good example of programme specific content, had it been showing while the data collection was taking place. In addition as the viewer plays along as the programme is being transmitted the application can be considered as actually being interactive.

What these two examples demonstrate is the red button being used to provide, in the case of Sky Race Control, the style of content which this discussion has found to be lacking for the rest of the time. The Antiques Roadshow example provides evidence that the red button can be used as a simple yet effective device. That no content of this style was captured, during the data collection period, reinforces what emerges from this, and the two previous chapters; that the red button is not used to its maximum potential for the majority of the time.

6.7.2 Signposting

The implication from viewers being encouraged to use applications, like Sky Race Control, is that the broadcasters want to be able to say that television has become more interactive. Further evidence of this was found through channels in the sample where signposting was present. It was found in particular that the BBC directed the viewer towards red button content, by providing a graphical icon in the right hand top corner of the screen. Again, by using the example of the BBC's Olympic coverage on the Sky box, it can be seen how the broadcaster wanted the viewer to be aware that other content was available. For the duration of the games, when accessing BBC1, what could be seen in the top right hand side of the screen was an icon of the Olympic rings and a red button. The semiotic connotation of this was clear; press the red button for more Olympic coverage. However, on pressing the red button, instead of directly accessing the Olympic coverage, a menu appeared offering a series of options. The BBC used this technique more than once

during the data collection period. For the additional commentary on the Euro 2012 football an icon appeared with 'additional commentary' super imposed on it.

This is not an example of directly misleading the viewer, as the option to access the Olympic coverage was there. What the example does demonstrate is that the broadcasters sometimes suggest a more immediate path through to specific content. If this had been the case, and the viewer had accessed an Olympic specific menu, then the experience would have been more interactive in style and spirit. However, neither the aesthetic style, nor spirit, by which the content is designed and implemented, necessarily means that what is provided is an interactive experience. In reality the material was a further navigation away than the graphical representation on the screen suggested. What this example demonstrates is that, through the use of a graphical signpost, the BBC wanted to make it look like the material accessed was specific to the icon. That this was not the case serves only to demonstrate a further lack of interactivity.

## 6.8 Conclusion

This discussion has suggested that the broadcasters want the red button content to have the look and feel of an interactive experience. Examples of this are provided by applications like the Sky Race Control and the use of signposting by the BBC generally, but specifically for their Olympics coverage. However, the red button content cannot be considered as being a part of a convergent technology as the majority of the material is teletext based, which has been available through television sets for a number of years. Nor can the experience for the viewer, who chooses to use red button content, be considered as an example of convergence as television has not taken on characteristics of other media forms. The lack of material which supports programmes and the prevalence of teletext based content, found during the data collection period, support these assertions.

Because of the lack of variety the red button path does not provide a method of communication. In order to be seen as interactive the red button content needs to be seen as promoting communication, or providing some kind of experience in

addition to what is being broadcast. That this does not happen for the vast majority of the time, means that the early predictions for interactive television have not been realised, despite experiments by the broadcasters during the early stages of digital television. Because television is a medium, which is designed to be watched, the broadcasters do not want the medium to be so interactive that there is an impact on scheduled television. Despite the broadcasters wanting to be seen as providing a more interactive service this does not happen. If interactivity had become a common place element of television then the audience would have had their experience of viewing television disrupted. This is not in the interests of either the audience or the broadcasters.

**Chapter 7 Conclusion**

**7.1 Introduction**

This research's primary objective was to explore whether television had taken on characteristics which could be considered as being interactive. As chapter one established, there has been much debate about what interactivity could mean for television, and the impact on the audience which views the content. Additionally the threat towards television becomes a secondary research consideration, when discussing interactivity. As content can now be viewed using a variety of technologies the place of television, as a technology, has been undermined.

The key methodological approach was to measure the amount of red button content available. This was justified epistemologically on the basis that all the work that was found, which related directly to interactive television, was discursive in nature. Additionally, the interactive content that was discussed at the BBC in 2006 was accessed through the red button. There has yet to be work generated which looks directly at the amount and type of red button content. In addition scholars such as Gilder (1990) and Swann (2000) positioned interactive television from a broad context, which incorporated everything from a new style of television technology to video on demand applications. Bazalgette (2010) and Woods (2007) are assured that the future of television lies in it becoming a more interactive medium. While I acknowledge the recent additions to the debate, with the development of Smart TV's and the addition of services like Netflix to set top box services, I have not included these technologies and applications in this study. This is in part because they are relatively recent developments, but also because they are not attached to any particular channel or broadcaster. By measuring the amount of red button content available I have achieved a study which not only measures the material available but also the broadcasters' attitude to 'interactivity.' The field interviews, which bookended the data collection for the

content analysis, proved to be crucial in forming a narrative arc as to how television, as an interactive medium, has developed in the past eight years.

This concluding chapter will begin by briefly recapping the main findings of chapters four, five and six before moving on to consider the methodological implications of the study. Two elements which were raised in chapter one, and have been consistently raised in the discussion chapters, participation and enhancement, will then be developed in relation to the results, findings and subsequent discussion before I will conclude the thesis and offer my final thoughts.

## 7.2 Key findings

7.2.1 Data collection period findings

Four key findings emerged from the analysis of the data collection period;

1) Very little content, which could be considered as being interactive, was found to be present, but there was a significant amount of material available through the red button services.

2) All channels offered a mixture of teletext and audio visual material, with the exception of Boomerang, which offered games exclusively.

3) Channels with a public service remit provided material that was largely informational. Broadcasters with a commercial remit provided content that was largely designed to promote products or gain financially.

4) The majority of material that introduced elements of interactivity was found on a public service channel.

5) Of the material that was found the majority of it was teletext based.

7.2.2 Discussion findings

The lack of material that was interactive represented a major disappointment. In spite of the claims that have been made, by some academics, over the past twenty years, it is clear that television has not evolved into an interactive medium. The reasons for this were explored in the discussion chapters;

1) Through the use of signposting, or calls to action, the broadcasters sometimes want to create the illusion of interactivity.

2) For the majority of the time, the broadcasters do not want to distract the viewer away from the main scheduled transmission.

3) The majority of the material that was found is an evolution of pre-existing teletext based content.

4) Interactive television, as was initially hypothesised, does not fit the political economy of the current broadcasting landscape.

5) While the content that was found was not interactive, there is limited enhancement of the audience experience, when applications are developed which offer a degree of choice to the viewer.

6) Participation on a large scale is not encouraged. The only example of direct audience participation was found through one quiz, which registered only one appearance. The example was raised during a field interview, with Schofield (appendix G) in 2012, but the application was not captured during the data collection period.

## 7.3 Methodological considerations

7.3.1 Introduction

A significant amount of data was collected during June to September 2012. In all the data collection period yielded 96 separate units of analysis, 12 for each channel. A total of 66 units of analysis registered red button content. Of the 30 units of analysis which did not, 12 were for ITV1 and the remaining 18 were for channels which did not appear on Freeview. One week's worth of content was collected per

month. This provided ample time for the spreadsheets to be transferred into SPSS for analysis, and for notes to be written up before the process began again.

There were few coding errors. Because of the robust design of the content analysis, these were soon picked up and rectified. In particular the red button content for Sky News caused confusion, as it appeared as both a teletext and multiscreen service. After some deliberation it was decided that the service was a teletext application as the text content was more obvious than the video content. Additionally the text content acted as a trigger which activated the video content, although the discussion chapters acknowledge the existence of both applications. That a red button application could offer more than one of the criteria for a service was not anticipated and had not been found during the pilot studies. As this only occurred during data collection for one channel, on one of the platforms, and was quickly rectified, meant that the results and findings were unaffected.  A grey area emerged, when measuring the Springwatch red button content on the BBC, and the programme specific material available through Sky News. Both these examples were measured as non-scheduled programming. The purpose of the Springwatch content was measured as being educational and the news content as being hard news. In hindsight, both these applications offered the viewer more choice, as they allowed navigation away from the scheduled programming towards additional video content.

## 7.3.2 Aims

Adopting the quantitative content analysis approach, as opposed to a qualitative discursive or case study methodology, provides the study with accurate, sustainable data from which emerges solid and reliable results. Initial disappointment with the results, due to the lack of interactive content that was found, was tempered by the realisation that the aim of the research was to find out what red button content actually is. In this respect the research has managed to successfully achieve two fundamental objectives. The first is that there is now an accurate mapping of what red button content is and looks like. Secondly, the current attitude of the

broadcasters towards red button content, that is 'interactive like,' has been established.

The strength of using content analysis, as a primary source of data, is that solid unequivocal results can be presented based on numerical factors. What is less clear, by using content analysis, is how one of the other aims of the research can be explored, the impact on the audience. What a well designed content analysis can do is infer results. By establishing what material is available means inferences can be made as to what the audience stands to gain, if anything, from the red button content.

The initial field interviews, carried out at the BBC and ITV, in the winter of 2006 (appendices, C, D, and F) and the spring of 2007 (appendix E), provided a solid foundation on which to compare what was found during the data collection period. Likewise, the field interview with Peter Schofield (appendix G) at the BBC in Salford, in the summer of 2013, provided another good source of primary data. However, that an interview with Sky could not be arranged meant that the field interview portion of the methodology was skewed towards the public service element of the sample. While the points discussed with Schofield were useful, and helped understand issues that arose from the content analysis, as a representative from Sky could not contribute meant that only inference could be used when analysing the data from that broadcaster's channels.

### 7.3.3 Sample and platforms

The channels which comprised the sample were chosen to provide a range of public service and commercial broadcasting. As only one channel, ITV1, was found to offer no red button content a wide variety of results were generated, which provided vital data when discussing the attitudes of the broadcasters. It is difficult to see how adding other channels would have significantly affected the results and findings. If it had been known that ITV1 offered no red button content, in advance, then another channel may have been selected in its place. However, that a channel within the sample did not offer any red button content provided a telling result in itself,

especially as that channel, along with BBC1, is the most watched on British television.

With the Sky set top box and Freeview, which was available through the television used for the data collection, being the two platforms selected, the thinking was that the widest possible variety of results could be gathered. However, that there were channels which were unavailable on Freeview meant that there was more data generated for the Sky box. While this did not affect the results of the study, in terms of identifying red button content for the individual channels in the sample, it did mean that an accurate comparison between platforms could not be carried out. This was particularly frustrating, as when channels did appear on both platforms significant differences were found in the presentation and style of the material, for example BBC1 and Sky News.

Adding another platform to the dataset would have been difficult. This was because the data collection was carried out in a domestic setting. Ideally Virgin Media would have been added to the platforms analysed, but as this set top box would have been measured independently from the other two comparison between times and dates would have been impossible. Additionally a Virgin Media HD+ box was used for the pilot studies and the content which was found was very similar to what was found through Sky and Freeview during the data collection proper. Since the pilot studies were carried out the HD+ platform has been replaced by a TiVo box. This is significant because, as the interview with Peter Schofield (2013, appendix G) was able to establish, the BBC services available through this box are different, as this system is being used to pilot the new BBC 'connected' red button. The Sky and Freeview services available on the BBC channels, during the data collection period, were 'broadcast' red button applications. Therefore, to have used the TiVo box as a part of the study would have meant comparing, for the BBC channels at least, a completely different system of offering red button content.

**7.4 The red button as 'participation'**

7.4.1 Introduction

A major part of the literature regarding any form of participation was based on cross platform participation, insofar as the viewer or fan contributes to internet based chat rooms (see Andrejevic (2008), Griffin-Foley (2004) and Ross (2008)). Where direct participation was found, to exist directly with a television programme, Enli (2009) expressed concern at the manner in which the spirit of the experience, in this case voting, was carried out.

Examples of audience participation have existed in the past through the red button. The BBC's Test the Nation (2007) encouraged the audience member to,

> (A)t the start of the show press the red button on your remote control to access the interactive service and then follow the on-screen instructions. When the test starts you will be able to answer the questions as they appear on screen using your colour fast-text keys.
>
> (www.bbc.co.uk)

The example, Test the Nation provides, highlights the ability of red button applications, which encourage more involvement for the viewer. However, my argument in the discussion chapters has pointed to a distinct lack of a participatory experience through the red button. This section will provide the first part in concluding what the audience experience of interactive or red button television is. To enable this I have identified two key components of participation, the first being 'active,' the second 'implied.'

7.4.2 Active participation

Content considered as active participation had to offer a two way return path. For any participatory experience to be fulfilling, the user of the material has to receive some sort of communication back from the application they are accessing. Internet pages can provide this experience, for example the users of Television Without Pity

receive comments from the producers of the shows being discussed (Andrejevic, 2008), the chat rooms Ross (2008) examines allow fans of programmes to communicate with each other electronically.

As the majority of the red button content could not be considered as being interactive, the conclusion is that the overall participatory experience, for the viewer, is not active. The games, which were found through Sky News on Freeview and Boomerang on Sky, were the most active material found, purely on the basis that the viewer makes decisions as to what happens next during gameplay. An application which offered a significant amount of audience participation, 'The Antiques Roadshow Play Along Quiz,' was not measured during the data collection period but highlighted in a field interview. What is worth pointing out is that the play along quiz which supports the Antiques Roadshow (1977 - ) was the only example of this kind of content to be given. The only other comparable application was the quiz based on the popular drama Merlin (2008 – 2012). As the parent programme had been shown the previous evening there was clearly no direct participation between the viewer and the programme.

Accessing a particular news story through the red button, or watching a piece of video content, through either Sky News' or BBC1's menus, does not promote the type of active experience that Gilder (1990) foresaw, when predicting that politicians and entertainers would make themselves available to answer questions from viewers. A further conclusion that this research has found is that the red button experience is just another passive method of viewing television content. The policies of the broadcasters towards the red button stream means that the viewer has essentially another channel to access, which provides text as well as video applications, rather than an interactive service, which active participation would enable.

### 7.4.3 Implied participation

One of the key findings of the discussion chapter is that the broadcasters like to be seen to be interactive. However, what this research has found is that the red button stream is essentially just another method of viewing content. As there is limited participation there is also limited interaction. Any attempt by the broadcasters, to suggest interaction, is therefore implied rather than explicit.

The obvious method that the broadcasters use to imply participation is signifying that the red button content is available, through the use of signposting. By flagging up that content exists, through the red button, the broadcasters are alerting the viewer that the option to navigate away from the main transmission exists. By using specific graphical signposts, as was found in the case of the BBC, the suggestion is that the viewer is being offered the opportunity to directly participate with the material being shown. Evidence of this was found during broadcasts of the 2012 Olympics. Additionally, the CBBC signpost constantly directed the viewer through to the CBBC Extra service. My conclusion here is not intended to suppose that the BBC is deliberately misleading the viewer. As my interview with Peter Schofield (appendix G) revealed, the BBC has to provide the red button services it does, as a part of its public service remit. In this respect the BBC is in a difficult position. The red button for the BBC cannot be the perfunctory service that was found through Sky 1.

Therefore the policy of the BBC is to provide signposting which relates to the programme being shown. If a programme is sport related the signpost will direct the viewer towards the red button sports content which is available. Likewise, if a news bulletin is being shown the signpost relates to the general news application. The problem is that once the red button is pushed a menu with a series of unrelated options appears, rather than the viewer being linked directly to the sports or news material. The implication here is that there is limited active participation as some sort of content relating to the programme being shown is flagged. The participation does then not happen because a menu with a series of options appears.

**7.5 The red button as 'enhanced experience'**

7.5.1 Introduction

That red button television does not offer the viewer an active, let alone interactive, experience does not mean that there is no enhanced element to the applications. To illustrate this point I will expand on the notion that the red button stream offers the viewer more choice. This will be achieved by exploring two further elements which emerged from the discussion chapters. The first is the multiscreen options, the second is un-scheduled programming.


7.5.2 Multiscreens

Much of what has been concluded so far in this research has suggested that the potentiality of the use the red button has not been realised. However, an advantage of the red button stream is that the opportunity exists to offer material that would not work through the normal method of scheduled transmission. Evidence of this was found through the multi-screen options which appeared. The multi-screens were used for news and sports content. Both BBC1 and Sky News provided examples of how these applications can be used, to provide the viewer with a degree of flexibility in accessing content.

The multi-screens offered the viewer an element of choice. The examples of BBC1's 2012 Olympic coverage and the news multi-screen, offered on Sky News, have been examined in some depth in the discussion chapters. In terms of offering the viewer more choice the applications provided a series of events or stories that could be selected. This does not happen through the main transmission stream, but if it did it would, ironically, be a fine example of interactive television. So, by using the red button stream to offer the applications two objectives were achieved. The first is that the broadcasters can provide coverage more efficiently. In the case of the BBC's Olympic application the corporation could provide coverage of events live at

the same time as the main transmission. This is not only more efficient, it also confirms the BBC's public service remit by providing coverage of minority sports. For Sky News, the day's headlines can be presented on one screen complete with video coverage.

The second objective, which is achieved, concerns the audience. Viewers are offered a degree of flexibility in how content is watched. The chance to view a particular event during the Olympics provides a comprehensive amount of choice. To be able to see the daily news through one screen, rather than watch an entire bulletin, means that the viewer can access a particular story that interests them. This is where Charlton's notion of 'snacking' (2007, appendix E pg. 258) becomes foregrounded. For the Olympic coverage the viewer could access sports that would not normally be televised, and so can make a decision as whether to watch a particular event or move onto some other content. In the case of the Sky News coverage the viewer can access the text banner, which activates the video attached to the story and can then click around the application to find the content they wish to view.

While it is possible to conclude that the multi-screen applications offer enhanced content there has still to be a degree of reservation as to just how much more choice is offered to the viewer. The BBC bought in more bandwidth for the Olympic coverage, and the Sky News content is all material that has already been shown on the parent channel. Editorially, decisions are made as to what to offer the viewer and when. Therefore, the multi-screen content is subject to the same restrictions, which concerns all television programming, in that someone decides what it is the viewer can choose from. Further to this only 12 appearances for both the sports and news multi-screens were captured during the four month data collection period. The conclusion is that the multi-screen applications do offer an enhanced experience for the viewer, but the proportionally few number of appearances means that they are no longer seen as being the main method of providing red button content, as they were in 2006 (Chakura, 2006, appendix D). As there are multiple video streams being used, for these applications, more bandwidth is used.

With video being more data intensive, therefore using more volume, the multiscreen is an expensive method of providing content through the red button.

### 7.5.3 Un-scheduled programming

Another advantage, of the red button stream, is that it can be used to show content which is difficult to find room for in the main schedules. The multi-screen options provide the audience with a choice of genre specific content; un-scheduled programming allows the opportunity for more niche style content to be shown. Evidence of this was found through the BBC, with pop concerts, documentaries, a world music event and programme highlights. No un-scheduled programming content was found on the majority of the Sky channels or Boomerang.

The implications for content of this style appearing in small numbers are clear. By offering the un-scheduled programming the BBC is using the red button to satisfy its public service remit. As a policy this makes perfect sense. The audience numbers for the Summer of Melas world music festival and London Collection documentaries would, in all likelihood, not be large. There is, however, a potential audience for both of these pieces of content. Using the red button, as another television channel, allows the BBC to theoretically satisfy the demands of a broad audience. The same can be said for the pop concerts. Placing this content on the red button satisfies fans of the band in question (Blur), who may want to watch, without the BBC having to use up time on any of the four main scheduled channels. For Sky News, the viewer had the option to follow one particular story, at one point during the data collection period. That live coverage was enabled away from the main transmission demonstrates the flexibility the red button can offer. Likewise, on the red button, the content can be looped, or at the very least be repeated multiple times. Therefore the viewer has more freedom in deciding when to view the content. While the conclusion that is drawn from this analysis argues that using the red button stream in this manner is a good thing, there is a problem. None of the content listed above was signposted or referred to by a presenter, so people viewing the main channels were unaware of its existence. In the absence of any

referrals or announcements, as well as signposts and listings for red button content, how do viewers, interested in seeing the content, know it is there?

## 7.6 Overall conclusions

### 7.6.1 Introduction

This research began by identifying two differing arguments. The first was that interactive television was a logical evolution of the medium. Secondly was the suggestion television had lost its sense of place, in what was becoming an increasingly converged media landscape. What this study has achieved is to occupy the middle ground. The knowledge, which has been gathered, points towards a dilution of the ideas that were put forward by Gilder (1990), on what interactive television could be, and Katz's (2008) assertion that television was a medium in its death throes. In this penultimate section of the study I present the overall conclusions that the study has found. To enable this I return to the polemic which began the study by first using Gilders (1990) 'telecomputer' as a framework for discussion. I then move on to discuss the 'death of television,' as envisaged by Katz (2008), before offering a final conclusion.

### 7.6.2 The 'telecomputer'

A recurring theme in this, and preceding chapters, is the lack of interactive content that was found during the data collection period. The clear conclusion is that interactivity, as was proposed by Gilder (1990), Swann (2000) and Bazalgette (2010), has not appeared. Instead, rather than the red button providing interactive material, the majority of what was found turned out to be an evolution of pre-existing teletext style services. This was true across all the channels in the sample, irrespective of being public service, commercial or subscription based. At no point was there found to be any direct two way communication between the viewer and any of the content. The material found, during the data collection period, which

was closest to a directly participatory experience, was the games found on two of the channels.

The findings of the study represent a key conclusion. Interactivity, in the manner that was suggested fifteen years ago, has not emerged as a part of the common television experience. Nor does that interactivity fit into the political economy of the current broadcasting system. There are differentiations between the public service broadcaster and the commercial channels, as to how the red button stream is used. For the commercial channels the main interest in the red button is to sell products or gain financially. There are teletext and multi-screen applications available on Sky Sports 1 and Sky News (on the Sky platform only), but they appear alongside gambling services and advertising banners. By using the red button in this way Sky is attempting to make the red button services fit into the political economy, but stops more interactive applications from becoming available. The same can be said to be true of the games that are offered through Boomerang.

As the BBC cannot do this the current attitude of the corporation is to provide a largely information based service, through the use of teletext applications. However, the BBC is also interested in providing more video based services, particularly around large sporting events. The problem that the department, responsible for the red button services, has is a funding cut, brought about by the 'Delivering Quality First' review. As a result red button video channels have been cut because they were unused for a large proportion of the time. A by-product of this is that, when demand is expected to be high, the BBC buys in extra space to meet the expectations of the audience. While this makes good economic sense the flexibility that the BBC had seven years ago is now restricted. Additionally while in the past all red button applications were produced bespoke, there is now a template which defines the parameters of the material. Therefore the BBC cannot offer a fully comprehensive service, in the style of the Olympics, all the time, because of a diminished resource base, to that which was present in the past.

### 7.6.3 The Death of Television

This research is concerned with the red button content available through the remote control. However, as the material is accessed through the television set the impact on the medium cannot be ignored. The material that was found is not traditional television content, as the video content is not scheduled in the same way and does not appear in any listings pages, instead it is just video. Text based informational material has no direct correlation to any form of video content as it is designed to be read rather than watched.

Katz's (2008) fear was that television was losing its democratic values, rather than the medium disappearing from the living room. One of the primary reasons for beginning this research was to try and establish if any interactive television applications could aid the democratic process Katz felt was lacking. On the surface the lack of content, that was interactive, suggests that interactivity does not aid this process in any way. Attempts were made but were not continued. However, what the study has managed to ascertain is that there is content which offers the viewer more choice. This is for the two reasons, which keep recurring; the first is that the video content available can be delivered in a different manner to traditional television content through the use of multi-screens. Secondly the red button stream can be used as an additional channel to provide content for which there is no room for in the normal schedules. The problem with the latter conclusion is that only the BBC chooses to do this, the Sky channels and Boomerang do not. Therefore it is the attitudes of the broadcasters which influence the democratic values, which concern Katz. Ultimately, if television has lost its democratic values, it has been with the aid of the broadcasters. Therefore it is the responsibility of the broadcasters to uphold the values that television has had in the past.

### 7.6.4 Conclusion

The knowledge that this study presents clarifies the position of interactivity regarding television content. 'Interactive television' is just a phrase which is used to explain content that appears away from the main schedules through the red button

on the remote control. Red button television, as it should be called, offers little of the direct participatory experience, which is expected of truly interactive applications. The red button does provide the audience with a comprehensive informational service through the various teletext options which exist. Additionally, with events like the Olympic Games and Glastonbury, the BBC has made it possible for the audience to access a choice of content beyond the normal schedules.

What red button television does not do is provide the level of service that was being suggested in the latter part of the 1990's and early 2000's. The political economy and political will of the broadcasters will not allow this. What can be concluded from the results, findings and subsequent discussion chapters is that interactive television as a concept does not exist. There is scope for the audience to access other material through the red button. However, this is just another method of carrying information and distributing content. As the red button stream is in reality just another television channel, any improvement the audience gains is minimal.


## 7.7 Final Thoughts

As Jensen (date unknown) suggests the business of defining interactive television is difficult, at best. This research has not been able to contribute to that definition, other than to conclude that interactive television, as it was first positioned, does not exist. My conclusion is that the interactive television experiment has failed in the sense that the ambitious projects which were suggested by academics, and actually achieved by the BBC and Sky, in the early 2000's, have not become common practice.

This does not mean that interactive television as a concept will be forgotten about. As my interview with Peter Schofield (2013, appendix G) intimated, the technology that is currently being used in most households, to access red button applications, is now becoming archaic and difficult to maintain. Since work began on this study technologies such as TiVo boxes and Smart TV's have been launched. What I have

explored here is a service the BBC refers to as broadcast red button, the corporation is now in the process of rolling out what it calls connected red button. This is available to me, as a Virgin Media customer, and looks radically different to what was measured during the data collection period. While I do not intend to suggest that my research is out of date, it will, after all, take some time for connected red button to exist on all set top boxes, interactive television may well be re-launched in a different way to what was attempted ten years ago. In this respect the research needs to be on going, as it is clear that the technology of television will continue to develop, with all that entails.

Applications like Sky Race Control and the Antiques Roadshow play along quiz suggest that there is still some scope for interactive style applications to be developed. The multi-screen applications, which support the Sky News content and large events broadcast by the BBC, provide a level of flexibility in providing content to the audience. Therefore the red button stream does have a place and a use within the current broadcasting environment. That the BBC are continuing to develop red button services, through the new 'connected' service that is currently being rolled out, suggests that, for the BBC at least, further evolution of red button material is occurring. I do, however, end on a cautionary note. The connected red button services on offer are more directed towards catch up services. A quick press of the red button on my TiVo box through the BBC allows me to access material that has been previously shown together with un-scheduled material. The problem is that there is no general multi-screen or quiz based applications, although a multi-screen functionality is available for coverage of the 2014 World Cup. By offering the amount of video content, that connected red button allows, the BBC may provide the audience with more choice to view programme material, but the interactivity, that was heralded as recently as 2010 by Peter Bazalgette, has been even further removed.

It is therefore possible to surmise that the future for the red button is to be used as an enhanced video on demand application. The recent launch of the BBC's connected red button has coincided with a major marketing campaign, by Sky, for its own catch up services, which offers box sets of major dramas such as Game of

Thrones (2011 - ). What we could be seeing is a further evolution of the way that the red button is used. As Gillan (2011) and Charlton (2007, appendix E) outlined, broadband internet services have been used as marketing devices to pull viewers back to broadcast television. The focus for the red button could be to do the same thing. Therefore the red button would no longer be used as a tool to provide additional enhanced content and text services, but as a method of supporting broadcast television to enable larger viewing figures. This practice is in its infancy in the UK, and provides another strand for researchers of television to explore now that the interactive television experiment of the late 1990's and early part of the 21$^{st}$ century is over. The red button, which was seen as a method of providing interactive content, has been supplanted by a red button, which provides catch up services of scheduled material that has already been shown. Television broadcasters needed to explore the idea of the medium becoming more interactive but, in the end, rejected the idea. Therefore television has developed another method of confirming its place as the primary delivery mechanism for audio visual content through catch up services.

**Bibliography**

Andrejevic, M. (2008) Watching Television without Pity: The Productivity of Online Fans, Television & New Media, Vol. 9, No. 1, pp. 24-46

Arroyo-Canada, F. and Gil-Lafuente, J. (2012), Considerations of Interactive Digital Television as Advertising Media, Journal of Promotion Management, Vol. 18, No. 3, pp. 306 - 318

Bar, F. & Sandvig, C. (2008) U.S. Communication Policy after Convergence, Media, Culture and Society, Vol. 30, No. 4, pp. 531-550

Barkhuus, L. (2009), Television on the Internet, Conference paper, CHI, pp. 2479-2488

Bazalgette, P. (2010) Digital Technology and the Future of Television, Delivered 16.11.10

BBCi heralds new interactive era, available at http://news.bbc.co.uk/1/hi/entertainment/new_media/1643259.stm (accessed 24.07.13)

Bennett, J. (2006) The Public Service Value of Interactive Television, New Review of Film and Television Studies, Vol 4, no. 3 pp. 263-285

Bennett, J. (2008 (a)) 'Your Window on the World:' The Emergence of Red Button Interactive Television in the UK, Convergence, Vol 14, no. 2, pp. 161-182

Bennett, J. (2008 (b)) Interfacing the Nation: Remediating Public Service Broadcasting in the Digital Television Age, Convergence, Vol. 14, No. 3, pp. 277-294

Bennett, J. & Strange, N. (eds.) (2011) Television as Digital Media, USA, Duke University Press

Beyer, Y. Gunn, S. E. Arnt, J. M. and Ytreberg, E. (2007) Small Talk Makes a Big Difference: Recent Developments in Interactive, SMS Based Television, Television and New Media, Vol. 8, No. 3 pp 213-234

British Sky Broadcasting Group PLC Unaudited results for the nine months ended 31 March 2011, available at http://corporate.sky.com/documents/pdf/latest_results/Q3_1011_Press_Release accessed 05.07.2011

Brunsdon, C (2003), Lifestyling Britain: The 8-9 Slot on British Television, International Journal of Cultural Studies, Vol. 6, No. 1, pp. 5-23

BT Vision adds 30,000 new customers, available at http://www.digitalspy.co.uk/digitaltv/news/a319162/bt-vision-adds-30000-new-customers.html accessed 05.07.2011

Buy Sky now – get bundles and offers on HDTV, Broadband and calls, available at http://www.sky.com/shop/, accessed 09.08.2011

Carey, J. (1997), Interactive Television Trial and Marketplace Experiences, Multimedia Tools and Applications, No 5, pp. 207-216

Cavazza, M. Robinson, T. Francis, S. Perotto, W. & Cashman, N. (2000) The Virtual Interative Presenter: A Conversational Character for Interactive Television, Virtual Reality, no. 5, pp. 82 - 94

Cauberghe, V. and De Pelsmacker, P. (2008), The Advertising Impact of an Interactive TV Program on the Recall of an Embedded Commercial, Journal of Advertising Research , September 2008, pp. 352 – 362

Christophers, B. (2008), Television's Power Relation in the Transition to Digital: The Case of the United Kingdom, Television and New Media, Vol. 9, No. 3, pp. 239 - 257

Cooke, L. (2003), British Television Drama – A History, UK, BFI

Creeber, G. (ed.) (2001), The Television Genre Book, UK, BFI

Crisell, A. (2002) An Introductory History of British Broadcasting (Second Edition), UK, Routledge

Crisell, A. (2006) A Study of Modern Television, Thinking Inside the Box, China, Palgrave

Dawson, M. (2007), Little Players, Big Shows: Format, Narration and Style on Television's New Smaller Screens, Convergence: The International Journal of Research into New Media Technologies, Vol. 13, No. 3 pp.231 - 250

Deacon, D. Pickering, M. Golding, P. and Murdock, G. (2007), Researching Communications; A Practical Guide to Methods in Media and Cultural Analysis (2nd Edition), UK, Hodder Arnold

Debrett, M. (2009) Riding the wave: Public Service Television in the multi-platform era, Media, Culture and Society, Vol. 31, No. 5, pp. 807-827

Debrett, M. (2010) Reinventing Public Service Television for the Digital Future, Malta, Intellect

Department for Culture, Media and Sport & Department for Business, Enterprise and Regulatory Reform, (2009), Digital Britain - The Interim Report

Ellis, J. (2000) Seeing Things, Television in the Age of Uncertainty, UK, I. B. Tauris and Co.

Enli, G. S. (2009) Mass Communication Tapping into Participatory Culture: Exploring Strictly Come Dancing and Britain's Got Talent, European Journal of Communication, Vol 24, No. 4 pps. 481-493

Everett, A. and Caldwell, J. T. (eds) (2003), New Media – Theories and Practices of Digitextuality, USA, Routledge

Fenton, N. (ed) (2010) New Media Old News, Journalism and Democracy in the Digital Age, UK, Sage

Fiske, J. (1987) Television Cultures, UK, Routledge

Fitzwalter, R. (2003) The Dream That Died, The rise and fall of ITV, UK, Matador

Freeview reaches sixty million boxes and TVs milestone, available at http://www.freeview.co.uk/Press/2010/Freeview-reaches-60-million-boxes-and-TVs-milestone accessed 05.07.2011

Frisby, C. (1999), Building Theoretical Insights to Explain Differences in Remote Control Use Between Males and Females: A meta-analysis, Journal of Current Issues and Research in Advertising, Vol.21, No.2, pp59-76

F1 on Sky Sports, available at http://www1.skysports.com/formula1/racecontrol/, accessed 17.01.14.

Gilder, G. (1990), Life After Television – The Coming Transformation of Media and American Life, USA, W. W. Norton and Company

Gillan, J. (2011), Television and New Media – Must Click TV, no printing information, Routledge

Gunter, B. (2003), Digital information provision via interactive television: Understanding the digital consumer, Aslib Proceedings: New Information Perspectives, Vol. 55, No. 1/2, pp.43 - 51

Griffen-Foley, B. (2004) From Tit-Bits to Big Brother: A Century of Audience Participation in the Media, Vol. 26, No. 4, pps. 533-548

Gripsrud, J. (ed) (1999) Television and Common Knowledge, UK, Routledge

Gripsrud, J. (ed.) (2010) Relocating Television; Television in the Digital Context, Great Britain, Routledge

Goodwin A. and Whannel (eds.) (1990) Understanding Television, UK, Routledge

Gunter, B. (2004), The prospects for e-government on digital television, Aslib Proceedings: New Information Perspectives, Vol. 56, No. 4, pp. 222-233

Haagerup, U. (2006), Media Convergence: 'Just Do It,' available at www.nieman.havard.edu/reportsitemprint.aspx?id=100281, accessed 21.02.14

Hartley, J. (1999), Uses of Television, UK, Routledge

Havick, J. (2000), The Impact of the Internet on a television based society, Television in Society, No. 22, pp. 273-287

Head, S. W. (1954), Content Analysis of Television Drama Programs, The Quarterly of Film, Radio and Television, Vol. 9, No, 2, pp. 174-194

Horsman, M. (1997) Sky High: The Inside Story of BSkyB, UK, Orion

House of Lords, (2009), Select Committee on Communications, 2nd Report of session 2008-09, Public Service Broadcasting: Short Term Crisis, Long Term Future


Howard-Williams, R. (2011), Consumers, crazies and killer whales: The environment on New Zealand Television, International Communication Gazette, Vol. 73, No. 1-2, pp.27-43


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/ratings/genre-overview/5043127.article?blocktitle=GENRE-OVERVIEW&contentID=37678 accessed 25.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/07/06/h/d/c/Genre-Overview.pdf accessed 28.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/08/10/t/i/w/Genre-Overview.pdf accessed 28.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/09/13/s/z/o/Genre-Overview.pdf accessed 28.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/06/08/n/j/r/Top-100.pdf accessed 28.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/07/06/n/o/s/Top-100.pdf accessed 28.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/08/10/e/m/u/Top-100.pdf accessed 28.05.13


http://www.broadcastnow.co.uk.libaccess.hud.ac.uk/Journals/2012/09/13/c/f/b/Top-100.pdf accessed 28.05.13

ITC, 2001, Guidance to Broadcasters on the Regulation of Interactive Television Services, available at www.ofcom.org.uk/tv/ifi/guidance/legacy/vrs_code_notes/i_tv/itc_broadcasters_i_tv_word.doc accessed 09.09.09

ITC, 2002, ITC Annual Report 2002: Overview of Commercial Television – Access, Choice and Competition, available at http://www.ofcom.org.uk/static/archive/itc/itc_publications/annual_report/2002/Overview_of_Commercial_TV.asp.html (accessed 09/09/09)

Jenkins, H. (2004), The Cultural Logic of Media Convergence, International Journal of Cultural Studies, Vol. 7, No. 1, pp. 33-43

Jenkins, H. (2006) Convergence Culture, UK, New York University Press

Jensen, J. F. (date unknown) Interactive Television: New Genres, New Format, New Content, Proceedings of the Second Australasian Conference on Interactive Entertainment, Sydney, Australia

Jensen, K. B. (2010) Media Convergence; The three degrees of network, mass, and interpersonal communication, GB, Routledge

Katz, E. (2008) The Death of Television, Lecture, Delivered 09.12.08

Kelly, J. (2002), Interactive Television: Is it Coming or Not, Television Quarterly, Vol 32. No. 4, pp. 18-22

Kian, E. M. Mondello, M. Vincent, J. (2009), ESPN – The Women's Sports Network? A Content Analysis of Internet Coverage of March Madness, Journal of Broadcasting and Electronic Media, Vol 53, No. 3 pp. 477-495

Kolodzy, J. (2006), Convergence Journalism; Writing and Reporting across the New Media, USA, Rowman and Littlefield

Koolstra, C. & Bos, M. (2009) The Development of an Instrument to Determine Different Levels of Interactivity, International Communication Gazette, Vol. 71, No. 5, pp. 373-391

Krippendorff, K. (2004) Content Analysis: An Introduction to Its Methodology, USA, Sage

Lacey, N. (2000), Narrative and Genre – Key Concepts in Media Studies, China, Palgrave

Lange, U. T. (1997), Dedication – The Culture of Private Communication in a Realm of Uncertainty in European Communications Council Report 1997, pp. 150-167

Levy, S. and Nebenzahl, D. (2007) The influence of product involvement on consumers' interactive processes in interactive television, Market Lett, vol. 19, pp. 65-77

Li, X (2006), Internet Newspapers – The Making of a Mainstream Medium, USA, LEA

London 2012: BBC launches 'Digital Olympics' coverage, available at http://www.bbc.co.uk/sport/0/olympics/18071080, accessed 05.07.13

Lopez-Nores, M. Rey-Lopez, M. Pazos-Arias, J. Garcia-Duque, J. Blanco-Fernandez, Y. Gill-Solla, A. Diaz-Redondo, R. Fernandez-Vilas, A. Ramos-Cabrer, M. (2009), Spontaneous interaction with audiovisual contents for personalised e-commerce over Digital TV, Expert Systems with Applications, vol. 36, pp. 4192 - 4197

Lotz, A. (ed.) (2009), Beyond Prime Time, Television Programming in the Post-Network Era, USA, Routledge

Marra, R. Moore, J. Klimczak, A. (2004), Content Analysis of Online Discussion Forums: A Comparative Analysis of Protocols, ETR&D, Vol. 52, No. 2, pp.23-40

McCluhan, M. (1974) [1964] Understanding Media, UK, Abacus

McGrane, B. & Gunderson, (2010), Watching TV Is Not Required, USA, Routledge

Meroywitz, J. (1987) No Sense of Place, the impact of electronic media on social behaviour, USA, Oxford University Press

Nacar, R. and Burnaz, S. (2011) A cultural content analysis of multinational companies' web sites, Qualitative Market Research: An International Journal, Vol. 14, No. 3, pp. 274-288

Napoli, P.M. (2010), Audience Evolution: New Technologies and the Transformation of Media Audiences, USA, Columbia University Press

Nicholas, D. Huntington, P. Williams, P. Gunter, B. (2003) First steps towards providing the UK health care information and advice via their television sets: an evaluation of four Department of Health sponsored pilot services, Aslib Proceedings, Vol. 55, No. 3, pps. 138-154

Noam, E. Groebel, J. Gerbarg, D. (eds.) (2004), Internet Television, USA, Lawrence Erlbaum Associates

Ofcom (2008a) The Communications Market 2008, available at http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr08/ (accessed 28.07.10)

Ofcom, (2008b), Ofcom's Second Public Service Broadcasting Review, Phase One: The Digital Opportunity, Consultation Document, available at http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/broadcasting/dig398.htm         (accessed 09.09.09)

Ofcom, (2009),  Ofcom's Second Public Service Broadcasting Review, Putting Viewers First

Oftel, 1998, Digital Television and Interactive Services: Ensuring access on fair, reasonable and non-discriminatory terms, available at http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/broadcasting/dig398.htm_(accessed 09.09.09)

Ofcom, (2010), Communications Market Report, available at http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr10/downloads/ (accessed 03.09.10)

Ofcom, (2011), Communications Report UK, available at http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr11/UK_CMR_2011_FINAL.pdf (accessed 12.04.12)

Ofcom, (2012), Communications Market Report 2012, available at www.ofcom.org.uk/cmr (accessed 18.07.12)

OfCom, (2013), Communications Market Report 2013, available at http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr13/2013_UK_CMR.pdf (accessed 28.02.14)

Owen, B. (1999), The Internet Challenge to Television, USA, Harvard University Press

Paek, H. Beom, J. Hove, T. and Yu, H. (2011) Theories into practice: a content analysis of anti-smoking websites, Internet Research, Vol. 21, No 1, pp.5-25

Pallant, J. (2010) SPSS Survival Manual (4th Edition), Singapore, Open University Press

Palmer, S. (2006), Television Disrupted, The Transition from Network to Networked TV, USA, Focal Press

Potts, R. Runyan, D. Zerger, A. Marchetti, K. (1996), A Content Analysis of Safety Behaviours of Television Characters: Implications for Children's Safety and Injury, Journal of Pediatric Psychology, Vol. 21, No. 4, pp. 517-528

Quiring, O. (2009), What do users associate with 'interactivity'?: A qualitative study on user schemata, New Media Society, Vol. (11), no. 6, pp. 899-920

Rada, R. (1995) Interactive Media, USA, Springer-Verlag

Reedy, S. & Wilson, C. (2009), Interactive TV Tries Again, Telephony, May 2009, Prism

Riffe, D. Lacy, S. Fico, F. G. (2005) Analyzing Media Messages – Using Quantitative Content Analysis In Research, USA, LEA

Robins, K. & Webster, F. (1999), Times of the Technoculture, UK, Routledge

Ross, S. (2008), Beyond the Box – Television and the Internet, Singapore, Blackwell Publishing

Schirra, S. Sun, H. and Bentley, F. (2014), Together Alone: Motivations for Live-Tweeting a Television Series, available from http://web.mit.edu/bentley/www/papers/paper653.pdf (accessed 25.04.14)

Schultz, T. (1999), Interactive Options in Online Journalism: A Content Analysis of 100 U.S. Newspapers, Journal of Computer Mediated Communication, Vol. 5, Issue 1, pp unknown

Selfe and Hawisher (eds), (2007) Gaming Lives in the 21st Century, USA, Palgrave

Silverstone, R. (1994) Television and Everyday Life, UK, Routledge

Silverstone, R. (2007) Media and Morality, on the rise of the mediapolis, GB, Polity

Spigel, L. & Olsson, J (eds). (2004) Television After TV – Essays on a medium in transistion, USA, Duke University Press

Slater,  A. Tiggemann, M. Hawkins, K. and Werchon, D. (2011), Journal of Adolescent Health, other details unknown

Swann, P. (2000) TV dot Com; The Future of Interactive Television, USA, TV Books

Sylvia, M. Chan-Olmsted & Louisa S. Ha (2003), Internet Business Models for Broadcasters: How Television Stations Perceive and Integrate the Internet, Journal of Broadcasting & Electronic Media, Vol, 47, No. 4, pp. 597-616

Syversten, T. (2003), Challenges to Public Television in the era of Convergence and Commercialisation, Television and New Media, Vol. 4, No. 2, pp. 155-175

Teletext and Ceefax after digital switchover (date unknown), available at http://www.switchhelp.co.uk/faq_teletext.html (accessed 11.06.14)

Test the Nation (2007), available at http://www.bbc.co.uk/testthenation/howto.shtml#dsat (accessed 15.03.14)

Thomas, L. (2008) Alternative Realities, Cultural Studies, Vol. 22, No. 5, pp. 680-699

Thurman, N. (2008), Forums for citizen journalists? Adoption of user generated content initiatives by online news media, New Media and Society, Vol. 10, No. 1, pp. 139-157

Top 30's – w/e 08.07.12, available at http://www.barb.co.uk/viewing/weekly-top-30? (accessed 09.08.13)


Top 30's – w/e 09.09.12, available at http://www.barb.co.uk/viewing/weekly-top-30? (accessed 09.08.13)


Toscan, C. Jensen, J. (eds.) (1999), Television of the Future – or: The Future of Television? Aalborg, Aalborg University Press


Tremayne. M. (ed) (2007) Blogging, Citizenship and the future of the media, New York, Routledge


Tskleves, E. Cosmas, J. Aggoun,  A. & Loo, J. (2009) Converged Digital TV Services: The Role of Middleware and Future Directions of Interactive Television, International Journal of Digital Multimedia Broadcasting, Vol. 2009, Article ID 643680, pp. 1-19


Turner, G. & Tay, J. (eds). (2009) Television Studies After TV, Great Britain, Routledge


Urrichio, W. (2004), Television's Next Generation: Technology/Interface Culture/Flow, (cited in Spigel, L. and Olsson, J. (eds.), Television after TV, Essays on a Medium in Transition), USA, Duke University Press


Ursu, M. et al. (2008), Interactive TV Narratives: Opportunities, Progress, and Challenges, ACM Transactions on Multimedia Communications and Applications, Vol 4, No. 4, Article 25


Van Dijk, J. (2006), The Network Society (2nd edition), Great Britain, Sage


van Dijk, J. and de Vos, L. (2001), Searching for the Holy Grail: Images of Interactive Television, New Media and Society, Vol. 3, pp. 443 - 465

Virgin Media – First Quarter 2011 Results, available at http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NDIyNDQ5fENoaWxkSUQ9NDM2NDk2fFR5cGU9MQ==&t=1 accessed 05.07.2011

Wardle, C. and Williams, A. (2010), Beyond user generated content: a production study examining the ways in which UGC is used at the BBC, Media Culture and Society, Vol. 32, No. 5, pp. 781-799

Waters, R. and Jamal, J. (2011), Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates, Vol. 37, No. 3, pp. 321-324

Xiao, Y. Du, X. Zhang, J. Hu, F. Guizani, S. (2007), Internet Protocol Television (IPTV): The Killer Application for the Next Generation Internet, IEEE Communications Magazine, November 2007, pp. 126-134

Webster, F. (1995), Theories of the Information Society, UK, Routledge

Williams, R. (1974), Television, U.K. Routledge

Winston, B. (1998) Media Technology and Society; A History: From the Telegraph to the Internet, UK, Routledge

Wise, K. Seungjo, L. Lang, A. Fox, J. Grabe, M. (2008), Responding to Change on TV: How Viewer Controlled Changes in Content Differ From Programmed Changes in Content, Journal of Broadcasting & Electronic Media, Vol. 52, No 2, pp. 182-199

Wood, H. (2007) Television is Happening: Methodological considerations for capturing digital television reception, European Journal of Cultural Studies, Vol. 10, No. 4, pp. 485-506

The 2011 Open coverage on the BBC, available at http://news.bbc.co.uk/sport1/hi/golf/6103550.stm (accessed 14.07.2011)

# Appendix A


# Coding Handbook

Coding Handbook

1. Time

    1 = 16:00 – 16:30

    2 = 16:30 – 17:00

    3 = 17:00 – 17:30

    4 = 17:30 – 18:00

    5 = 18:00 – 18:30

    6 = 18:30 – 19:00

    7 = 20:00 – 20:30

    8 = 20:30 – 21:00

    9 = 21:00 – 21:30

    10 = 21:30 – 22:00

    11 = 22:00 – 22:30

    12 = 22:30 – 23:00

Each half hour time slot contains two measurements. Fifteen minutes is observed on Freeview and fifteen minutes through the Sky box. Each fifteen minutes data will have its own coding sheet.

2. Platform

      1 = Freeview

      2 = Sky

3. Genre

      1 = News/Current Affairs

      2 = Documentary

      3 = Music

      4 = Magazine/Lifestyle

      5 = Reality TV

      6 = Gameshow

      7 = Drama/Sitcom/Soap

      8 = Movie

      9 = Sport

4. Channel

      1 = BBC1

      2 = ITV1

      3 = Sky 1

      4 = BBC News Channel

5 = Sky News

6 = Sky Sports 1

7 = CBBC

8 = Boomerang

5. Red Button

1 = Instant access which is signposted

2 = Hidden access where access is granted but not signposted

3 = No access to any content

This is where the sample splits into Sample A and Sample B. If the value is found to be 3 then coding stops. The coding sheet will be allocated as Sample A. If the value is found to be either 1 or 2 then coding will continue as Sample B.

6. Appearance

1 = Constant appearance visible at all times

2 = Appears for more than five minutes then is hidden

3 = Appears for less than five minutes before becoming hidden

4 = No appearance but content available

7a. Announced or referred

    1 = Before programme as part of continuity announcement

    2 = During programme

    3 = Both 1 & 2

    4 = No announcement or referral


7b. Style of announcement/referral

    1 = No announcement or referral as 4 above

    2 = 'Red button' mentioned

    3 = 'Interactive' mentioned

    4 = Both 2 & 3


8. Navigation

    1 = Multiscreen, a series of video thumbnails

    2 = Index, a picture or text based menu system

    3 = Direct to content


9. Optionality

    1 – 21 = The number of items available through 1 & 2 in navigation

10. General Content

1 = Programme specific content related to the programme currently being transmitted

Value 1 is defined as content that appears which is additional to the scheduled programme. For example;

Sky Sports 1's option to follow a particular player during a football match;

BBC1's additional commentary during Strictly Come Dancing which describes the techniques used for a specific dance;

BBC1's 'car tracker' option during coverage of Formula 1 Grand Prix.

2 = Non programme specific content, there is content but it is not applicable to the programme being transmitted

11. Programme specific material. 12, Partially programme related material. 13, Non-programme related material

A measurement of what is there and what is not, coded as follows;

0 = Absent

1 = Games (as appears on Boomerang)

2 = Competitions (as appears on ITV1)

3 = Voting

4 = Audio Options (such as additional commentary)

5 = Radio programme web cam feeds

6 = Programme highlights (as in condensed versions of previously broadcast content)

7 = Programme repeats

8 = Blogs

9 = SMS Texts

10 = Simulcasts (for example backstage footage at awards/reality/quiz shows)

11 = Popular sport (football, rugby league, rugby union, athletics, cricket, formula one, snooker and tennis)

12 = Minority sport (anything that doesn't appear in 11)

13 = Pop music concerts

14 = Classical music concerts

15 = Forums

16 = Timeshifting (iPlayer, Sky Anytime, ITVPlayer, 4oD)

17 = Participant profiles

18 = News Teletext

19 = Weather Teletext

20 = Sports Teletext

21 = General Teletext

22 = Politics Teletext

23 = Sports Multiscreen

24 = News Multiscreen

25 = Non scheduled programming (where the red button is used to show a specific event or programme away from the main schedule)

26 = Main Index

27 = Highlights (as in packages offered by subscription broadcasters)

28 = Access to other interactive content (Cbeebies, Sky Active)

29 = Programme searches

30 = Upgrade details

31 = Business and Markets information

32 = Travel news

33= National interest ('Around the UK' etc.)

34 = Travel offers

35 = Gambling

36 = Olympic Torch Relay (the data collection took place at the time of the build up to the London Olympics)

37 = Other

14. Purpose

1 = Educational (for example additional content to nature programmes)

2 = Entertainment (for example 'fanzone' on SS1)

3 = Commercial = (for example games and competitions)

4 = More choice (additional content at events, switching stages or sports)

5 = Informational (The need to separate the informational data has led to the split which necessitates the sub category below)

6 = Cross channel content (where red button content offers the viewer the opportunity to access content on other channels specifically, for example CBBC offers the opportunity to access CBeebies red button content)


14a. Informational

1 = Hard news (politics or in the national interest)

2 = Soft news (entertainment or sports news)

3 = Timeshifting (iPlayer, Sky Anytime, ITVPlayer, 4oD)

4 = Public interest (weather etc.)

5 = Event (a large scale sporting event, music or comedy festival)

6 = Advertising or promotional (the red button content is used to promote programmes, packages and other options such as upgrades)

# Appendix B


# SPSS Datasets

Electronic versions of the SPSS Datasets are available through Dropbox at;

June: https://www.dropbox.com/home/SPSS%20Data%20June%202012

July: https://www.dropbox.com/home/SPSS%20Data%20July%202012

August: https://www.dropbox.com/home/SPSS%20Data%20August%202012

September:

https://www.dropbox.com/home/SPSS%20Data%20September%202012

# Appendix C

# Transcription of interview with Chris Berthoud

**Interview with Chris Berthoud; 16.11.06**

**AF** If you could just begin by telling me your name and what you do?

**CB** My name is Chris Berthoud I have a very complex job title, I'm an Assistant Editor of the Programmes Team in News Interactive so essentially my main activity is working on the BBC News website but from the programmes perspective so I'm the bridge between programmes and news. So everything that news does which includes red button TV, the news website any kind of mobile activity, that kind of thing.

**AF** Right, the thing that I want to ask you about first of all is the content management side of the website, how do you manage to do it all, because it's all native content management, because sometimes the stories seem to be updated by the time that they were put up there and sometimes if they're updated they move about depending on what happens so how does that actually work?

**CB** I suppose the actual content management system itself which is called CPS, I think that stands for Content Production System, everything is template, every journalist at BBC News interactive uses the same system but in terms of the way that the stories appear and their whereabouts and how they're promoted and whether they're given top priority or lower priority is entirely editorial so there's no automation in the actual placing of stories and equally obviously when it's time for a story to be updated that's clearly done by a journalist and then a decision is made once they've updated it whether that warrants it being at the top of the website or slightly lower down, whether it's a pure news story or whether it's a feature there's various kinds of gradations of news story dependent on what it is, whether it's breaking news or whether it's a more considered piece.

**AF** And does the journalist themselves provide the content or do you take from a radio or a TV broadcast and then you write for the web or do the reporters do bi-media basically?

**CB** I suppose one would call it an organic system, it's a mixed economy, there are quite a lot of journalists up on the 7$^{th}$ floor of television centre whose only job is to write stories for the news website and there are something like a hundred journalists sat up there writing 24/7 news stories, they look at wires, they look at any type of input they write stories based on breaking news and any other stuff and that's kind of, and in a way that's the core of the news website but equally clearly there's bits of journalism that comes from other parts of the BBC so the Today programme breaks a lot of stories Newsnight does a lot of great journalism. Essentially there's a sort of, it's not chaotic but there's a, you know, a system in place which try to tell journalists around the BBC to tell the website when they have a great story, our team is partially responsible for that because we have good relationships with a lot of programmes and I think it's fair to say that on some occasions the person that's in the programme will write the story and publish it on the website but at the moment it's separated, normally the programme person does their radio piece, does their TV piece but they don't have the technical know how to put it on the website so another journalist has to do that we are trying to aspire to a situation where more journalists around the BBC could do both radio and TV and put stuff on the website but we're not there yet.

**AF** And where's the editor? The editor for the BBC website, where's the person who makes the decisions?

**CB** He's in television centre, there are, and you won't be surprised to hear a few levels of editor for example there's a head of BBC News interactive a guy called Pete Clifton, he's got overall responsibility but for day to day decisions about what are the biggest stories what should be top priority, what's maybe less important that's a guy called Steve Firman who's the overall editor of the news website, see what I mean, so essentially it's a hierarchy and above where we're sitting now in White City it tends to be the technical development side of things, my team which is just next door is the programmes team which is a bit of a hybrid between longer term development stuff and kind of day to day journalism, we run several websites including Tomorrow, Correspondent, This World and Panorama and also try to spot journalism, like a great story on the Today programme, some Radio 4 documentary that exposes something or other, you know, we try and spot that and try and encourage the producer or the presenter or somebody involved in the programme to write something and then we will help make sure that it goes up on the news website.

**AF** My next question was going to be who is responsible for the look and the design of the website, whose responsibility is that or is it a more evolutionary thing were people bring things to the table and sometimes they're incorporated and sometimes they're discarded and is there a democracy or is there someone's final say?

**CB** It's a bit of both, there is one person and he is called Max Gatley and he is responsible for design across the whole news website and but within that we sort of petition for things we have our special things. There are lots of people around the website are asking for things all the time and you know frankly we want to keep the site updated looking like something in the 21<sup>st</sup> Century we see rivals doing exciting things and we say we what to do that or we want to do something completely different and so there is quite careful processes of people proposing

new ideas that get signed off in the usual way that a big company works and so, in answer to the question there is one person who has responsibility.

**AF** And in terms with, because on of the things I said to you when we spoke on the phone two or three months ago now was how it felt that there was unity within the way that the website was put together and the way the news worked and the teletext was put together and you said, good because it isn't really like that when you're in a big company like this, so how does everybody work together how does, what fascinates me is the whole technological side of this website the BBC have in the sense that you can go here and click here and hear the interview from the Today programme or read the story or see the news report or you can see a teaser for a feature for Panorama or Newsnight or something like that and then you get, which are more like I think transcriptions of things, more in depth analysis of things that I assume would have gone out on Newsnight or something like that which are then put up on the website, how is that relationship managed? And become so successful as it clearly is if I'm saying to you it seems that everyone is singing from the same songsheet, I'm not saying that you said they weren't but there's obviously going to be problems if someone says you can't have that yet, how does it work?

**CB** That's a very good question, I think part of it is that the website seems seamless is because there is this core of people who are all doing the same thing and they are all, there product is making sure the stories are all as up to date as possible, I would say within the same team there is an audio video team and team and they will be monitoring News 24, so programmes that's our job as well so they will be looking out specifically for material to go onto the news website and there will be two editorial meetings a day to decide which pieces will be thrown up let's say for example that there's a big politics story like the Queens speech so there's always going to be one journalist doing the text stories for the politics index but at the morning meeting at 9.15 somebody from the AV team will have piped up and said well there's going to be coverage on News 24 and it's been on the Today

programme and they will say verbally what it's been on and then the people writing the story will say Oh I really like that Today programme pieces can I have that for my text story, so it is literally people talking to each other and being offered things and things are tied together properly because a human being has made the decision if you see what I mean. I think automated systems have their place but you can't beat someone saying well I did hear the piece it was great and I think it should definitely go on as a speech piece, if you see what I mean?

**AF** Yes. About convergence then, what we're talking about is this sense that everything can come together which is what the web was always about but what we were just saying back there in the restaurant it's not really worked out the way that either of us thought it was going to but where do you see it going because you do get more video on the web you do get the listen again facility and all this kind of thing, where do you see it going, where do you see it evolving to and where do you see things not necessarily crossing over from the telly and radio side of things but where do you see web based things crossing over the other way?

**CB** That's a big question, I've always, well not always, felt for quite a long time that once we saw web content and the way that web technology and the two way nature of the web on a TV like device, and I was particularly keen on these media centres were you could show web video and you could also see websites in TV environment, that for me was the moment when I could really see how the web is potentially going to take over everything that the TV can do as soon as you can start to watch channels, as soon as you can watch again and listen again via a PC but on a nice flat screen or whatever it is that for me is the moment where you might not need two devices you can effectively do the same, it'll look like a TV but it will be driven by a PC, and I mean IPTV is taking a long time to come but I'm sure it is just around the corner. Looking the other way around, we're already at the stage with the news website where we are pushing news content onto an interactive TV platform, so we're pushing out headlines we're pushing out images that are on the

web site but they can be picked up again on a digital TV, so a natural extension of that to me is why don't we add to that and have much more text much more of the standard web stuff that we see on a day to day basis but we push it out through the red button, again I don't think it's happening as fast as I was expecting but I still feel that it probably will happen, I mean the big inhibitor for me is just how far away from the screen if you are looking at your TV in your living room you don't want to read 500 words of text about something and then if you have really big text does that mean that you can't watch any video because it's squashed into a corner. So there are a number of practical things for me that mean tat the TV is not a particularly good text environment but on the other hand I think that there's a happy medium whereby you can watch pictures and still see great TV but you're offered to the side then you are at the moment or somewhere on the screen much more text, quiz type things that are interactive which are now standard on the web site but you're not really seeing them on the TV that much.

**AF**  When you do see it on the TV it tends to be bigged up doesn't it? It's not like it's what normally happens is it? It's like when the material is there it's push your red button because you can do that.

**Conversation then turns to a proposed MA course and is not relevant.**

# Appendix D

# Transcription of interview with Rahul Chakura

**Interview with Rahul Chakura November 16<sup>th</sup> 2006**

**AF** If you could tell me your name and your job title please?

**RC** Rahul Chakura, my job title is controller BBCi which means that I commission the content that goes on the red button service.

**AF** I was going to ask you because you're the controller of BBCi, not knowing much about the BBC's internal structure the whole ethos behind being controller of something that is convergent is it the same as it would be for BBC1 and BBC4 or is it a completely different animal altogether?

**RC** Say that again. I understand the first part of the question but not the second, say it again.

**AF** It's almost as if BBCi is viewed as a separate channel like BBC1 is, as BBC 4 is, do you see what I mean? So how does your job as someone who pulls in lots of different media sources differ from someone, like the controller of BBC1, where they're worried about programming, is it all just content?

**RC** Some of the key difference is, yes it's seen as a channel, almost like a service to the viewer and I think that the key difference would be it's seen as an aggregation channel more than a commissioning channel because most of the content, a large amount of the content is already produced, my job is to take this content that appears on the BBC an re-package it as a new service, while for the BBC1 controller a significant amount of the content is created from scratch for the channel, it's completely new content, new drama, new soaps, my job is to not necessarily create

the new content but to put the package together, putting the interactive packaging together making it feel like a service to the consumer and making it available all the time.

**AF** And what do you look for? What's the remit? Because when we talk about BBCi, we're talking about the website, the digital text service the red button service

**RC** It's primarily the red button service but I also include the digital text, it's a broad remit. When the remit was set out people didn't really understand what could be done so it was set out for things that would enhance programming and related to existing programming so we've taken that and really we're only constrained by technology in seeing how far we could push the remit it's a whole range of services that we have behind the red button, on one end we have the staple of the red button service which is the multi-screen views which is saying using interactivity we can make information available to you all the time, the bit of the information that you're interested, but again most of the information there we haven't commissioned new but we've packaged in such a way that meets a certain consumer need, and that need is can I get the information when I need it? And I don't want to be driven by the schedule of the channel, or even the schedule of the News 24 because in reality you could argue why put the multiscreen access when you have a 24 hour news channel but the reality is that most people when they go to News 24 the story that's running in not one they're interested what they want to do is press something and find out what happened in the World Music Awards last night at Earls Court, they're not interested in what's happening in Iraq today so they want that, and they want it when they want it. So it's that degree of level of choice that's being offered by interactive it's not about creating new content, even though I believe that new content will emerge but it's too early at the moment for that content to emerge.

**AF** I was going to say, because what I want from you today is an overview of where we are now in terms of interactive content and the way that things are converging it just seems to be such a broad remit to what you do, because I assume you also are responsible for the multi view stuff we get during the Olympics and the World Cup and Wimbledon and all that kind of thing but then there's the red button Test the Nation stuff?

**RC** For the red button I'm not directly responsible for that, there's a separate person in the television group who commissioning, having said that all this is changing, there's a big announcement next week, so by the end of that announcement all these responsibilities will shift around quite a bit. The world we are moving to is intergrating these content decisions at the heart of normal content because what has happened up to now is that someone would commission Test the Nation or Celibrity Scissorhands and we would say how do we put interactive stuff on top of that, we're moving to a world where the person commissioning Celebrity Scissorhands at the same time is thinking about the interactive elements around it.

**AF** So that's really interesting, so it's moving away from where you say for example over here is where the interactive stuff happens, you're also trying to get the people over the road in TV Centre to think about the way that they present their programmes, and I should imagine that's a bit of a struggle, because they, how long have you been doing it?

**RC** It is a struggle it's never been seen as a key part of the job producers, a TV exec producer does not see that as a key part of their job, it's not been the focus, but in the last two years especially with Mark Thompson coming on board digital has spread to the centre of the BBC's agenda and one of the key changes he's made is that as of the next fiscal year the commissioning of the interactivity will happen at the same place as the commissioning of the programme in fact it will happen at the

same time as the commissioning of the programme, we're calling it 360 commissioning and it's going to be interesting to see how that pans out. I was in a meeting the other day where TV commissioners were talking about their plans for the next summer season, they're already talking about how the interactivity will be there.

**AF** Right and has that been a struggle to get to that point?

**RC** It is going to be, it's going to be a difficult one or two years as we learn, as people learn new skills because commissioners don't have all the skills of interactivity they're going to have to learn new skills and the organisation will have to learn about how to meet, because it requires different kinds of organisation models to make this happen, so I think it's going to a painful couple of years, we're going to make a lot of mistakes in the next one or two years but in the end we have to get it right. I mean it will happen when they commission the next series of Springwatch or something like that, they'll do it, the first time they do it they will think right this is Springwatch a TV idea and I'll put a website here and the next time they do it they may think I'll do it in a completely different way, maybe talk about the web first and the TV second and I believe that will be an evolution of the learning process.

**AF** Can I ask what's you background?

**RC** My background is classic consumer marketing.

**AF** Right so you've not got any television or radio experience?

**RC** No, I might be the only person in this area that doesn't have that! My boss doesn't have it!

**AF** So how many people are now working…

**RC** In total at the BBC I would estimate around 110. Totally across the BBC, maybe 110 to 130.

**AF** Right so, one of the things I was talking about with Chris because Chris is involved with the website end of current affairs and I was saying to him that there seems to have been a shift across from radio and television to web based activities do you see any time when the reverse will be true when it'll be a complete two way negotiation of a  flow of information between two areas, in the sense that what you've got at the moment on the website is you've got this opportunity to read a story and click and watch a bit of video and maybe listen to an interview you don't really have that opportunity when you're watching the television  other than the multi screen stuff, do you see that…

**RC** I think, I do except in maybe two to three years that you'll be able to go to that big screen and press a button and click a story that you want, it's six stories that we give you at the moment I definitely see that but I mean the technologies exist today it's a question of how much time it'll take to enter peoples homes. It's not far.

**AF** How far, when do you think that will be?

**RC** I think that there will be some box with this capability, where you can do this by the end of next year.

**AF** Really?

**RC** At least a few hundred boxes yes. I mean the technology's out there, there's been problems with legacy.

**AF** So do you still see then, let's get really wild here, fifteen twenty years down the line because at the moment what I've been talking about with people this morning is that people, one of the things I talked about with Marc was is the reason that people aren't aware of interactive TV as much as they should be is because there's a lack of an audience because at the moment people don't have the televisions or set top boxes that are equipped to deal with it, so basically you still get people talking about the three main areas, so with our courses at Huddersfield we've got a television course a radio course and a print course, now what we're thinking of doing is offering an MA in online journalism for example but do you see a time when people will forget that there's a television and a radio and a print based media and there is just one converged media?

**RC** First of all were you started in terms of people using, actually Marc may not know this but we get more than 10 million people using the red button every week almost 1 and a half to two million every day so it's a reasonable size of the population and in terms of people who have capability, who have set top boxes as of now it's around 76% of the country who have a set top box under the main telly now it doesn't mean that all tellies have it because most people have more than one telly at home some people still have a second or third telly still receiving analogue.

**AF** But you see there's a psychological side to it as well isn't there, there's a sort of oh my god I've got a television in my living room with a PS2 underneath it that I play games on using my TV but I can listen to CD's using that PS2 but I don't – I use my hi-fi.

**RC** Oh I agree. I don't think everything will converge in fact I have a different point of view, I think it will diverge. If you, so what's, convergence is a very bad word, it's misleading, what is converging is the underlying distribution technologies that's all becoming IT based, so that means it makes it very easy for me to put any content anywhere in the world on any device easily, what emerges therefore is more devices that are specialised towards a consumers need if you look at your own habits you've got more screens in your own home and on your person than you had three years back?

**AF** Yes, I will have when I move house.

**RC** All of us have more devices around us so rather then talking about convergence we're ending up having more things around us.

**AF** Exactly I've got more digital things. Well I don't have a digital set top box yet but I hope to, I've got a, radio, a CD player, a PS2 I'll be getting an HD ready TV which I'm hoping to have a digital tuner in it as well for when I move house so yes I'd not thought of it like that, you're the first person to say that to me that on the one hand there's convergence occurring on the other hand there's divergence as there's digital technologies and all it's doing is…

**RC** It's like what's the best metaphor for that is electricity, and that's the best because electricity is so fluid more electrical devices because it became so easy to get electricity anywhere. Now just because electricity converged every electrical source in your home did not mean that you had one bulb to illuminate the whole house it's not a great metaphor but that's what I mean. You have different needs for electricity and different needs therefore for your content sometimes you just want audio content because you're not in a position to (unintelligible) so you need a different device.

**AF** I subscribe to Sky but I would never dream of listening to radio stations through my television, if I want to do that I switch on my digital radio.

**RC** Yes but there are some people who would say, a lot of people do listen to Sky's radio channels through their TV but that's more of a ambient, it's something in the background, you're watching telly and you want to do something else so you switch it onto a radio channel.

**AF** It's because I'm over 35! I listen to radio 4 and I would never have dreamed of listening to Radio 4 on the telly, Radio 4's for the radio!

**RC** Kid's have radio. There's mobile phones with radio and I'm sure that kids will have some devices with radio on a big telly like that, you will always have a big telly, bigger and bigger, you're never going to lug it around because it's your converged device and you want to take it with you, no you'll move around and in every room you'll have that device, and it's not the perfect screen for computing and transactional work, you'll have a different screen, you'll have more screens, in fact in my home the screens are increasing by the month, because the kids getting her own computer so if I could really count the number of screens in my home, we've

already got two laptops a computer one telly, that's four a couple of iPods that's six.

**AF** I was going to say an iPods only a Walkman with a hard disc isn't it.

**RC** So convergence is only true in the sense that content will become more liquid, you'll be able to take it anywhere you want if you put it in the right pipe and content can flow the pipe is smaller the smaller the liquid will flow the pipe is larger content like HD can flow through that no issues with that I agree with that. I won't say 100% it will be there but at some point in the future all distribution will use the same technology some will still come through different physical things but the underlying technology will be the same, physically it might come through satellite or cable or wireless etc but like technologies will be the same. But I think in terms of the consumer devices, consumer experiences it will diverge.

**AF** So having said all that about the way we consume it will diverge what you're doing here is converging different methods of communication sometimes onto one platform sometime disseminating onto a couple.

**RC** I think that what we would say is that you have what we try to do is bring the content services together, put them together and have the right metadata and then we want to be is in the situation depending on the right consumer needs we pick the right content, the right metadata, in the right places and then play with it in the way appropriate so we are at the very beginning of interactive TV. Interactive TV is not a medium in itself it's just an instrument where we can provide forms of content and package it right and right at the beginning what we are providing and where we are providing are number 1 it's consumer needs quite a bit, number 2 it's

technological constraints, I would like to do lots more and we will do it but it's going to take some time.

**AF** So what would like to do?

**RC**  I would love to do for example something with have ambitions to do is, we're going to this on demand world, I want through a telly if you're interested a library you could access everything for the last week.

**AF** So like the listen again thing through the website?

**RC** Exactly. Telly view again, why not? You know why should I be a slave to the scheduling, which on one side is fascinating but on the other puts pressure on programmes don't have a big audience.

**AF** Yes but if people can watch programmes when they want, I mean there's some programmes that I want to watch, but I can't, well I could, I could tape them but them you never get around to watching them. Could it not help those programmes that have small audiences?

**RC** Yes, oh yes. I mean it works both ways, it works in the sense that the reality is that people who watch it's still a large amount I mean on average 3 hours and 40 minutes a day, and how much of that will they fill with the blockbusters because in a scheduled world all the good programming is put around the same time on all the channels and you do miss some of that programming on other channels because slightly more attractive programming is on at the same time say on BBC1. Now if

you're given the opportunity to watch all those five programmes that are on at 8 o'clock but one after another you may just fill up your 3 hours 40 minutes with those programmes and never go to any daytime programming.

**AF**  And the interesting thing there is that the networks wouldn't have to go against each other to get competition so it's a more democratic way of watching and producing television.

**RC** It becomes, programme content becomes more like a normal product because there's no other product that I can think of that says you have to be at the supermarket at 8 o'clock if you want to get that product if you come at 8.30 then I'm sorry but that product is no longer on the shelf.

**AF** It's be a very bad supermarket wouldn't it? I mean one of the reasons why I wanted to get in touch with you guys is because I'm, it seemed to me that the BBC was taking the interactive side of it a lot more seriously than ITV.

**RC** ITV is crap! Sorry!

**AF**  It's alright, because I had, yes you're right and I always assumed that when interactive started it was because of the divergent nature of ITV so round by us you've got Yorkshire telly and Granada in Manchester and all that but because of all the merging but there doesn't seem to be any sense that they're willing to…

**RC** ITV and technology doesn't go together, OnDigtial, Friends Reunited, I'm sorry I shouldn't be slamming my competitors I think that what they're looking for is quick

returns on their interactive investment so they're just focussed on the sort of things that just bring immediate advertising or call based revenue but we've taking the more pragmatic slightly long term committed view of interactivity because we think it's in out audiences interests we're going to spend and the numbers indicate that basically we get 15 to 20 million using our service every month and I actually told this to ITV I said look if you do what I do all you need to do is make half a quid from each person a month and you can easily do that and you're sorted.

**AF** Whereas Sky seem to be going down the sort of, I've got Sky at home and I switch their interactive service on for the football and it's gimmicky it's player cams and all that sort of thing and the BBC has always been able to do things, I don't know if I'm biased here, but the BBC has always been more stylish than so its sports coverage for example is always better than ITV's. When I'm watching the World Cup or something across both channels, I just lament the loss of F1 so much on the BBC it just seems that the BBC are able to pull it off with much more panache than ITV do it's not as crass if you like, that's a bit of strong word to use and it's the same with Sky, now is the reason why the BBC able to plough all this money into the BBCi area and they're not gimmicky and experiment and yes make mistakes in trying to make things better is that because you're a PSB?

**RC** I think that being a PSB helps, definitely, being a PSB helps we're able to take a longer term view and we're also able to, take a longer term view which means we take a bit more risks and think about things differently for the audience, OK not spending too much we don't spend that much money in fact it's one of the cheapest services in the BBC.

**AF** Why is that, is it because the technology…

**RC** It's because of the number of audience we get the cost is more variable because of the outputs, the cost of sending out multi screen news is the same if one person watches it or 2 million watch it, and because we have high audience numbers our cost per audience member is pretty low. And we would like to continue that!


Interview ends

# Appendix E

# Transcription of interview with Lindsay Charlton

**Interview with Lindsay Charlton MD of ITV Local**

**AF** So yeah the PhD is going to be on interactive TV and convergence my whole ethos is that what we're starting to see now I think what's happening is television is evolving, and I think it's evolving in two ways, I think it's evolving in the sense that, on the one hand it's evolving because you're getting things like HD especially 1080p HD which I've seen and looks fantastic so in one sense you're getting extremely high quality things coming through your television at home and everyone is buying those they're all HD ready so that will have to happen because everybody's waiting for it. And I think the other thing that's happening is television content is removing itself from television per say, so a television is no longer a television it's just a screen that receives content and that content is now also appearing on computer screens that appear like the one here in front of us and it's being used in a variety of different ways. It's either being used as a snippet of information or it's being used to back up other forms of media that's where the convergence side of it comes in so I'm, so the screen we've got in front of us for ITV local homepage, yes we've got video and it's video because it's live television, it's television, it's being broadcast on television at the same time but down the side you've got stories that you can choose to see down the right hand side, but down the left hand side there's another menu which takes you to all sorts of interesting untold areas that you can't do on television without at least pressing a button and navigating your way around it, it's all in front of you and what's happening is that in one way television is diverging but the way that the media delivers information is converging as well.

**LC** Hmm, a lot of points to what you've said. I think that the principle point for my generation the broadcaster decided what you would receive and in the last ten years that has collapsed, not only because of the internet but also because of satellite which with an EPG allows you to move around content seamlessly the user the viewer the consumer, the same person is called many different things in this multimedia world is now in charge of the experience will make choices because

choice is broader but also it's easier for you to make selections, it's easier for you to find the content you require. The business of television on the internet is still one we're learning about, for instance, ITV Local is conventional television put onto the internet you can watch a full TV programme, you can watch a full news programme, you can even watch a full documentary but what we're also finding is that people aren't watching for long periods of time on ITV Local, they're watching for something between two to four minutes it seems to me that what they're doing with our video is snacking with the video. Now that's sort of accidental for us, now a news programme lasts for half an hour but it's made up of a lot of elements that only last a few minutes, a classic news package whether it's national or local is only two or three minutes long what we're presenting is the news as video on demand so again people can go to ITV Local and decide they want to find that story about bluetongue in Guildford and just watch that story about bluetongue in Guildford and it lasts three minutes and that's fine thank you and then they switch off and do something else. Our weather is similar, weather forecasts are roughly anywhere between 60 seconds to two and a half minutes long so they're an easy snack, now that seems to tie in exactly with the experience of the YouTube phenomenon. YouTube is phenomenally interesting and successful but no-one is watching long form television on YouTube, what they are watching is clips and companies like CBS and the BBC are already are promoting their programmes by using the power of this new internet phenomenon but what they are putting onto the internet are not full programmes what they are putting on the internet are the promotions for their programmes. So what I'm very interested in with ITV Local is broadband is expanding my brand to an on-line market for a start it makes the content that was available as analouge only for five hours a week available twenty four hours a day on demand and it is obviously getting much more value out of conventional content that a broadcaster makes. I think what it's doing is proving the American experience that broadband can also force people back to broadcast. You see the point you made about people watching television in a different way I think that's only partly true because, let's give you an example, 16 million people watched the World Cup Final on ITV1 just recently for the rugby final, 10 million people watched XFactor last Saturday, 10 million people watched strictly Come Dancing last Saturday, 7 or 8

million people regularly watch Eastenders, Emmerdale, Coronation Street and so on and so on, five million people watch TopGear on the Sunday night on BBC2. So there are some people who say that volume television has now disappeared well it's not 10 million every night but if you've got a place where it's four or five million every night and up to 10 million gather to watch one thing it's still, a broadcast medium is still a very powerful place to put television and it's an incredibly powerful place to market to people and sell to people if you're a commercial broadcaster. The other analogy I would use because we're all pioneers in this space if you're doing something like ITV Local. The other thing we're learning here is how people consume, now the other analogy I've been beginning to think about is everybody said in the 1950's that television would kill the movie nobody would go to the cinema anymore because they could sit in the box was smaller but you could watch everything there and you could watch film too on your television. Well as we know, the film industry has been astonishingly successful in the last twenty or thirty years.

**AF** But it had to adapt didn't it, it had to change, it had to evolve, it had to move away from what it was doing, especially the Hollywood stuff?

**LC** But did it? You see it tried to become more popular it went for the mass audience, the blockbuster movie, which I suppose began in the 70's with Jaws and ET all those sorts of films you can trace most of the movies that started that are around now, you can trace their lineage back to that approach to the audience they became much more user generated in terms of the CGI they use, the effects that they use and so on and so on, but fundamentally the structure of a movie which is about 120 minutes is still the same. Now what's interesting with ITV and the programmes we have but actually we've been doing 90 minute dramas for a television audience after the half hour you get for Coronation Street and Eastenders the best length for a drama is an hour and therefore a repeat drama let's say four one hours and if you enjoy hour number one you're going to come back and watch

hour number 2, those conventions haven't actually been destroyed by this thing called the internet, the big change is the ability to select content and watch when you want to watch, which comes back to one of my phrases that I use for ITV Local, your PC can become a TV. So it's how you use, there is a view, Anthony Lilley, who is an advertising guru and he did a lecture last week and he said quite clearly, conventional broadcasters think that the internet is for delivering television it isn't, or if they think that's all it's about they're making a big mistake. The internet is about social networking, and video, so what we're doing with ITV Local and we've just launched it with grass roots sports we've actually added YouTube to ITV Local.

**AF** Yes I noticed that last week. I had a bit of spare time so I had a look. And I noticed that this new grass roots sport had appeared on the site and it was 3G clips of kids missing penalties and scoring penalties and what not. I thought that was interesting.

**LC** Well it leads into another area that I'm sure you want to talk about which is where citizens are making lots of video, there was one specific area which we have a lot to do with in our regional programmes which is sport as an interest and here we were saying it's not just about watching sport it's about you the viewer playing sport so we're going to provide something for it, but what we gave them was first of all a very easy way to upload video and secondly the ability to socially network to create your own groups, post comments, send to a friend, all of those internet conventions that we've learnt that people will want with an internet television service. But again the funny thing is it's still short form TV. These aren't clips, I've seen one item lasting eight minutes, eight minutes is a very long time on ITV Local for an individual item of content and one of the things is that the documentary channel, if you go to our documentary channel you'll find literally hundreds of, dozens of hours of high quality documentary's people aren't watching them full length and there's something about the internet experience which is only capturing their attention for a short time before they want to go and do something else.

**AF** And that's, if I can lead onto another point, what I think is interesting about ITV Local, years ago when I first looked at the BBC website, you also had that sense of cohesion with the BBC website because of the way that organisation is structured, and the way that it works, even out in its regions. It still all plugs into central London whereas I always though the problem with the ITV website was nobody really knew what to do with it because it was still in that era when you had Tyne Tees and Yorkshire and Granada, in my immediate area there were three television providers within that area who were all independent of each other it was a franchise they were going for, they weren't part of the same company. Now has the restructuring of regional television helped you to provide this sort of thing and the other thing that I was going to ask was does that then make it easier for you to pull this together because it still seems to me that what's happened is that ITV's come together to form this one company which is all going through Granada and what you've actually managed to succeed in doing with this is you've managed to take it back into the regions, broken it down and structurally is that what's happened?

**LC** I think what we've done with ITV Local is revived the idea of the old confederate brands there was Granada, Tyne Tees, Anglia and so on. We've managed to revive those we had existing infrastructures in all those regions you had news teams, you had programme teams, you had weather teams and so on. We had brands that are often 40 or 50 years old, we had good audiences for our regional news on ITV1, we had news and programme services that the public trusted because it came with the Tyne Tees brand with the Anglia brand and so on and so on. But what broadband and the internet gave us the ability to do was exploit and maximise those brands and that content but deliver much more. What I'm trying to do with ITV Local is give our viewers added value in terms of added local information based underneath the ITV umbrella. I think the problem with any big organisation, it's worth reading what Sir Michael Lyon said today about the BBC, the BBC's too London centric, I think everyone's always known that, it's had big offices in Bristol and Manchester but it's

largely a West London mentality. ITV was always a confederacy and there were always bigger companies than others, and your right it's been coealesed into a single company but within it are different tribes and different heritages and different loyalties to individual groups around the country based on the old ITV map. And I think that's the power of ITV and I think that's why Sir Michael Lyons says we've been doing I think the job better in the regions than the BBC, we have more of an identifiable personality within Tyne Tees, in Wales, well maybe not as much as BBC Wales, but in Tyne Tees, in Granada, in Anglia and so on maybe than the local BBC does. That's not to say that they don't put a lot of resources into local news because they do but it may often feel like it's London talking to me and what I've said to our teams is that if you go onto ITV Local Tyne Tees it should look and feel very different to ITV Local West Country, they're two entirely different areas, different landscape, different interests, different heritage, different problems all those sorts of things, we're trying to reflect the diversity across the regional space with ITV local.

**AF** Because the other question I was going to ask was you've kind of done it the other way around to the way that the BBC has done it, the BBC has the well established BBCi website and has had that for ten years now and what they've done is put video into that as the technology has allowed it and progressed. What you done with ITV Local is and that's where I got to that point whereby, and that's where I say is it easier because despite the company having regional centres it is potentially one company, you know ITV Ltd.

**LC** ITV Ltd plc. In clarification it's run by Granada, Granada was the dominant group, but I'll tell you what's interesting now hardly anybody uses the word Granada anymore unless you're in Manchester it's about ITV and I think when you look at ITV as a corporation those brands have disappeared I mean but if you look at what ITV means those brands still appear and you know we're modernising and expanding as ITV Local.

**AF** But what you've done is you've done it the other way round to the way the Beebs done it, you've built, the central thing is the television content and everything else is built around that whereas what the Beeb's done is add things on as they've evolved. Does that make it different?

**LC** Well I still call ITV Local, it's clearly a website because it's got a dot com address and a dot tv address but I call ITV Local it's an internet television service rather than a website the distinction for me is this, a website is something that's predominantly text which you're adding video too, we were predominantly television and we've begun to add text and different services so I think there is an inherent difference between out approaches that's partly to do with resource, we can't possibly begin to compete with the BBC when it comes to their expenditure in online services, we wouldn't even begin to try, we felt however that we needed a 24 hour offering in a multimedia age, we couldn't just pretend that we were going to keep a reputation at six o'clock at night once a day so how would we do this, well what we had was we do spend literally 10's of millions of pounds on news and weather across the country, it was only seen for five and a half hours a week so we were based on two things, first, could we use broadband to get into the local marketplace and two we've got literally bucket fulls of content which are seen for five and half hours a week so why wouldn't we start to reuse that material, and the television was the easy part for us because that's what we do, what we've been learning is the internet side of it.

**AF** So I suppose what this does is, you say that the resources the Beebs got, so it can do a News 24 and it can do the internet site bit and everything plugs into everything else. The last time I was down there I spent some time in their web newsroom as it were and someone showed me how their content management system works and the infrastructure and the level of flexibility is just phenomenal

but because of the resources and funding they've got they can keep News 24 going even if there's times when people aren't watching it, there will be times when people will be watching it the problem with the ITN rolling 24 hour channel was ITV always has to have that influence of advertising revenue and if people aren't going to be prepared to pay what it needs to keep it going then it's going to stand or fall on that isn't it? Do you see this as a replacement for the ITN news channel that once was or is it something that's different from what the BBC do or is it something that's stand alone in that respect?

**LC** Well it's certainly no replacement for the ITN news channel it was always about the word local and what I want it to be is an information and content rich site which is useful to a user and is available on any device or platform so the ITV Local of the future I want people to be able to go on to ITV Local and certainly get their news and weather and certainly find a plumber, and buy and sell something but also actually, well my kids are going to go to the local school I wonder what their GCSE results are like, I can find that in there as well. So I want to personalise ITV Local and make it useful to the individual citizen and also make it interactive so if you have a strong opinion about something you can interact with another group on ITV Local where you can post your opinion and so on so it's going to be about community and interactivity but fundamentally founded on good information because if you've got good information and good video then people will come to us and return to us because we're a useful internet site so I think that's the destination for us.

**AF** I mean I didn't mean to disparage the ITN News channel...

**LC** But the ITN news channel to compete with the CNN's, the Bloomberg's and the BBC News 24's of this world was impossible for ITV so commercially it didn't stack up and if we didn't have an audience and we didn't have advertisers then you're

absolutely right we have to make decisions which are based on our business is it worth it is the business benefit for doing an ITV news channel, well a lot of journalists will say of course we should, but ITV has bills to pay, the important thing for ITV is that we generate enough revenue to create great original content which is saleable in the UK and can generate audiences but is also saleable world wide so that's the prime objective of our spend and you're right it could have been the gardening channel but it happened to be the news channel, it didn't stack up but has losing it damaged our reputation, I don't think so, especially as we're in the local space and we're putting all this information on eleven different services.

**AF** Because that's always been ITV's strength hasn't it it's locality it's environment if you like. One of the things that my PhD supervisors were talking to me about was audience and how the audience are using. ITV Local's a relatively new thing isn't it, the launch was last month wasn't it, have you had any audience feedback any audience statistics to measure how many people are using it?

**LC** We're sitting here on November the 2$^{nd}$ and I don't mind telling you that we've got 700,000 viewers of video on ITV Local and we've got 4 million page impressions and the average visit is two and a half minutes and the bounce rate is down to about 30% so what we're finding is audience growth, audience retention and the profile is raising. In terms of the feedback, another lesson in terms of the internet for the broadcasters I don't think really understood until they saw the power of some of these amazing brands on the internet, feedback is fundamental to us in keeping this dynamic and keeping it useful to our users so yes we asked for a lot of feedback, how searchful is it, is it easy to use, does it buffer too long, we constantly constantly try to improve ITV Local and in a years time it may look radically different to this again so the feedback is fundamental to what we do. We've just started a lot of research with people to ask them what they think of ITV Local, is it useful, would they use it a second time, what do they like, don't they like and so on and so on, so all of that's underway but there the ball park figures at the moment.

**AF** It's an area that I've got to look into you see, they asked me what are you looking into here and I said everything! And they said you can't do that for a PhD. So they thought I was coming from too much of a technical angle and I said I will do that because my background is in technology anyway but one of the things that I'm trying to do is break way from just talking about technology. I think it was interesting what you were saying about citizenship because citizen journalism is a buzzword that we hear more and more, that what's happening as society becomes more empowered through things like 3G phones and the ease in how to send information from those phones which are actually not phones anymore, something like that, something like ITV Local and the your news page on the BBC was that another main driving force behind what you were trying to do was it all as the citizen journalism has come on board with the grass roots sport for example is that something that you were always intending to do or is it something that's come through this audience research? Were the audience saying we want more of a say in what goes on here?

**LC** Partly that, but it really came to me, ITV Local is an old model it really contains ITV Local everything you would have got from a great local newspaper 25 years ago, news, weather, features, you can buy, you can sell, there's sport and you can certainly have your say on the opinion page. But if you look at ITV Local it's basically got all of those functions and with my own newspaper background although it's a long time ago people like to interact with what's going on in their communities on lots of different levels and therefore I always believed that the citizen journalism or the users response was going to be fundamental to our success. So what we found when we launched in Meridian was that there was awful lot of video that was being made by the public which was actually surprisingly good quality, I wasn't surprised as desktop editing on laptop computers has been around more than a decade, video cameras on VHS have been around since the early 1980's so some of my colleagues were surprised but I wasn't, it was also quite high quality stuff, people

make short films about their lives, so yes fundamental to where we were going was that we would be the first port of call for video citizens journalism and that's still my ambition that's one of my ambitions for 2008. I think your point about the technology is throwing myself, I've spent a lot of time with technology even though I'm certainly not a technologist in the last couple of years because what switched me on for ITV Local when I found Talos I found a technology which created television quality sound and video on a PC screen, if you've got half a meg and you go full screen on your PC at home it pretty much looks and sounds like TV so that's where I started if your offering telly it'd better look like telly.

**AF** That's a fundamental point. I've been since I went to the Beeb six months ago I went in July it's struck me that the video content across all sides, certainly across ITV Local, it's having a few problems with those fireworks there, but…

**LC** It is but that'll be my internal network here actually..!

**AF** But the technology seems to be improving in terms of getting good looking pictures onto…

**LC** There are lots of systems I mean I don't like buffering I'd much rather have Flash, the reason we didn't go for Flash is that Flash didn't go full screen and it didn't encode at higher bit rates we encoded all the way up to 1.8 megabytes to begin with actually everything from half a meg up is fine but we deliberately encoded at higher bit rates so that those with higher quality broadband could get a good quality experience. It's always a difficult one this because the grass roots stuff on YouTube for instance is not high quality when it comes to sound and picture but it doesn't stop tens of millions of people going to watch it, so I think that

conventional broadcasters have to be very careful when they start using words like quality you can easily get lost using that word.

**AF**  Yes I agree but do you not think there's a level whereby someone will accept watching something on YouTube that's been shot by an amateur using low level technology and they will accept that it is an amateur doing that using that low level technology but when it comes round to broadcasting institutions they're used to seeing television from through their normal television receiver that they wouldn't accept that on something like this?

**LC** I think that it's more to do with the veracity if it's a clip of a kid falling off a roof which you get on You've Been Framed or YouTube I don't think people care that much what quality it is, it makes them laugh you know that'll be fine. You've Been Framed has been one of our biggest programmes for fifteen years it began by using dodgy VHS video and people did daft things and it got big audiences so at that level no. Professional news looks like professional news and we are getting a lot of video which is looking as professional as news packages on an ITV regional show because there's a lot of media literacy out there. I think the distinguishing feature is the veracity or trustworthiness of what's being reported and therefore what people are looking for is something they can trust in terms of content, therefore if you make a film about the closure of your local hospital it can be passionate but it better be accurate because people are likely to see through that. The other thing that we do is we comply everything we receive so I'm very interested in getting as much citizen journalism video content as I can but if you send me a film about our local hospital shouldn't be closed down it's going to be stamped opinion, that's your opinion because I don't expect you as the protester to balance it up. However, newspapers always been full of opinion, it's called a letters page or someone writes a feature so for me all of these things are available inside this thing called ITV Local.

**AF** The thing that's impressed me is when you do go full screen on this and you did demonstrate it in Leeds and I did go back to my computer and tried it at home and at work is the quality of it and also what I like is this works on OSX and the iPlayer doesn't the BBC iPlayer doesn't.

**LC** No neither of us works on Macs sadly but I think that will be our next operating system. Yes true.

**AF** But I've been impressed because I've got the BBC iPlayer at work because I can't have it at home because there I'm OSX. It's the quality, I mean I missed an episode of Top Gear a couple of weeks ago because I was out one Sunday night so I downloaded it and watched it in bite size chunks because I was at work and I had ten minutes here and ten minutes there and I had a quick flick at it all in the name of research of course and it didn't like it was disjointed as a programme because I was choosing when to watch it.

**LC** No it's interesting a programme is normally constructed of bits, it's not like a movie where if you miss the middle 20 minutes that's going to be an issue and you're going to be following the movie when you come back. Top Gear's a classic magazine format, that magazine format's never changed, Top Gear's got about seven items each item a link, a package, something in the studio then onto the next item, so watching Top Gear in chunks, dead easy no problem at all, it's the same with our news programmes, it's the same with all factual programmes, well not all factual programmes that's not true but the magazine style format is ideal to be watched in chunks.

**AF** But I've been impressed with how quickly it's got to the point where we can see quality images like that because it wasn't there a year ago.

**LC** No ITV Local's two years old if you'd have looked at ITV Local in 2005 you'd have found the same quality but the Telvos operating system is getting on for three years old and there was some small channels using it when we chanced upon Telvos, the only other operating systems there are, there's Flash people like BrightCo and there's new technologies coming along in terms of quality but the thing with Telvos from Narrowstep, I think by the way that you should go see a man called Jollo Jones it's IOLO Jones, Iolo was a former TV camera man and the simple story for Iolo is that he loves technology and he was in Los Angeles once and his beloved Wales were playing rugby and he had 150 channels in Los Angeles and he still couldn't find Wales and who they were playing and he thought this is daft, this thing called broadband and the internet I should be able to watch exactly what I want to watch when I want to watch it so he found a company called Narrowstep and the Telvos operating system and Telvos stands for television operating system, so he is an internet television pioneer, secondly with Iolo he's a real visionary in terms of where it's going, he's learnt, I would Andrew with what you are doing definitely go and see Iolo, if you go to Narrow step the website just drop an e-mail to contact there, did you get that, Narrowstep.com and I would certainly go and talk to Iolo.

**AF** Right, can I try and steer the conversation back to audiences and society, because being into my technology this is the thing I've got to step back from.

**LC** I do think it does come back to the content you know, the technology's nothing, it's like a house with no people there's no function.

**AF** So who's using ITV Local?

**LC** I think to be candid where we are at the moment Andrew we don't who's using ITV Local we certainly know from our early work at Meridian that the people watching ITV Local are younger and net savvy people which contradicted the idea that regional news must inevitably die out because the audience for regional news is aging, well it's aging only because they are the only people watching television at six o'clock in the evening live largely and the same with mothers with small children, the other audience the male audience isn't around at six o'clock. Actually everybody's interested in their local news it could be what's happening in my street, it could be what's happening in my town but it's big news, people are interested in the local news. I wasn't surprised that young people started finding local news on the internet what is starting now is a whole series of research because we need to know what other people are using ITV Local.

**AF** And where do you see that, although you say you don't really know who's using it yet.

**LC** I think it's about niche. We're going to have a music competition soon, unsigned bands we did at Meridian it worked a treat, we're going to have a national unsigned bands competition and I know we will have uploaded hundreds and hundreds of songs from singers and bands so is it about young people yes it is if we promote correctly they will upload to the music channel. Well they come onto ITV Local, I doubt they watch the news or the weather they'll come and see the music. Grass roots sport, well actually the people using grass roots sport, I doubt they're spending too much time yet on documentary's and horoscopes, they're coming to see the football.  So I think the other great thing about this technology is niche, we need to be clear about which niches we're after, what we're providing, you can't say we're after everybody but you know in a way we're after the audience that ITV gets, a family audience and it's about people's ordinary lives, that's the sort of content, the information they need to lead those lives.

**AF** And do you see it developing away so you won't be using the news feeds from Calendar, Meridian, ITV London down here, do you see it developing into standalone productions or is that not the point of it? No not at all, at the moment I see the news on the ITV regions which we've said will be here until at least 2014, we're not even into 2008 yet we will be using our regional news for the foreseeable future. I've always felt, if I go again to my point about trust and brand is that one of the reasons that people send us their content is because they see it under those letters ITV and Meridian, and Granada and so on and so on, so that's a nice place to be, trust, so underneath the professional content in inverted commas on ITV 1 the public can find its place.

**AF** But the other thing that's interesting and I don't know if every local region's dong this but what Judith and Mark are trying to do up in Leeds is as many of the local universities interested in the concept of what ITV Local is that's why I ended up speaking to them. Now we've already had some students that have put some stuff on there, now it wasn't drama it wasn't documentary, it wasn't anything like that, it was a news piece, something that was being driven by the University of Huddersfield and Calendar had got wind of it and Mark e-mailed me and, sorry, Judith rang me and said could a couple of your students just do an interview and we did, and it was uploaded within an hour of them receiving the tape, which was bang in the middle of the postal strike so we had to bike it across, and what's interesting about that, you say you're going for niche audience by getting HEI's involved in it because there are more students out there then there has been before, in the ITV Yorkshire area there's Huddersfield, Bradford, Leeds Met, Sheffield, Sheffield Hallam, Lincolnshire, Hull, all these areas and that's a lot of people I mean we've got...

**LC** Oh it's a massive niche but I think it's what their interest is, I don't mind saying that one of the things we're working on is with the British Sports University at the moment because sport is massive in universities dozens and dozens of teams and disciplines so we're already talking to them about those teams uploading their material onto ITV Local.

**AF** The interesting thing is the BBC in Leeds and Calendar, I mean we've got some of our graduates working at Calendar but they wouldn't ring me up and say Andy there's a news story happening in Huddersfield today you couldn't send some of your students out to film it for me they wouldn't do that they'd send one of their crews over to Huddersfield now ITV Local ring me and say could you do this for us and I think that's where it's interesting, well it's another level of interest really.

**LC** There's a big education job in internet television first of all telling people that there's television on the internet you've got to convince them that there is and that it's got quality but the other thing is to encourage people that if you make video about your own lives that we are here as your free channel on ITV Local. So that is very much part of our strategy, telling people about the way that they can interact with us because some will find it the early adopters it's about encouraging people to make video and we'll find a place for it because most people, people are looking at ways to get their voice across and it's very difficult these days it's dispersed in so many ways to get your opinion across  so that when it comes under ITV, well it could be bigger community let's put it that way in terms of what goes on in the local space.

**AF** And when you talk about people snacking on clips I think that's a very interesting point as well because I think the other thing that ITV Local is very good at, and I'll give you one particular example of that is putting great television on there from the archives which wouldn't necessarily be shown because there's no place for it in the

schedules and on the ITV Local Yorkshire site there is a great Calendar from 1975 and it's Austin Mitchell hosting a debate between Don Revie and Brian Clough because Brian Clough had been sacked by Leeds United, and it's half an hour long and I've never got more than four minutes into it because I watch it at work and students come along and I wouldn't think of going up to my office at home and watching half an hour of it, if it was on telly I would but I wouldn't do it at home watching through the computer I don't know if it's a generational thing because, whisper it, I'm nearly forty...

**LC** I think you may have put your finger on it, you still see a computer screen in front of you even though you know that you've got the opportunity to watch that full length interview with Revie and Clough but you've also got the ability to scroll through it and I think that it probably is a generational thing and you know it's there you can go back anytime and look at it. Our archives are full of fantastic stuff you know regional classics you might call them every region's got one.

**AF** It's a fantastic piece of television, I didn't even know it existed...

**LC** Just sitting there on a shelf in a tape box somewhere!

**AF** And it works on so many levels, because it proves that convergence works because this is something from 1975 that's been sat on a shelf and is now being re-launched.

**LC** A good example of the long tail.

**AF** And it's just a fascinating look into the world of football back then and you realise how much has changed because Revie looks at Clough at one point and he's got thunder in his face because he's destroyed his club and all that kind of stuff I can't imagine that happening in this cynical day and age.

**LC** Yes I know what you mean, I think I remember the original, it was an extraordinary piece. Regional probably have quite a few of those so that's the other great strength a broadcaster has struggling to understand the internet, we've got the content because it does come back to content but although long form television isn't working for me as much as I'd like. If I look at one of our best documentary series in Meridian it was called Country Ways it was basically about the British landscape now every single ITV region has done a show about the landscape we all love our outdoors and what have you, the countryside. Most of those programmes were constructed of lumps of programme rather like any magazine, there's three minutes here and four minutes there and so on and so on, it's probably what we'll do in the future is deconstruct our half an hours and if people want them on internet TV to be three to five minutes we can deconstruct them and reuse that content in different ways so I think that we've got to be even more imaginative of the content that we own, if it's just sat there for half an hour that doesn't mean to say, like in the clip that you just mentioned that we can't take five minutes out of it and make something really interesting, nostalgic and entertaining.

**AF** If we go to this generational thing, going back to that, this snacking notion that I don't seem to be able to do, I can watch a news report, watch a whole news report and that's fine and I broke up an episode of Top Gear because like you say it's structured in that way, you can watch it in one big narrative flow or you can actually break it up but when I watch a feature film and I'd hazard a guess that you're the same from the way you've been talking you like to watch it from beginning to end.

**LC** That's the way it's constructed as a narrative, it's deliberate, if you've got two hours to fill then as a director I want to make sure that your attention is there from minute number one to minute 120.

**AF** Except on DVD you get chapters...

**LC** Well generally I don't watch chapters, funnily enough when I watch my kids watching a movie I see them watching a whole movie I don't see them snacking through chapters.

**AF** No I just thought it was something I may have missed that this generational thing that I've just mentioned that the younger generation may have got used to this option to snack if they wish, they might not choose to but maybe they're more likely to snack on television because they're used to having that option from watching DVD. They might not necessarily from a movie but they might from a music DVD.

**LC** Oh they might for a music DVD the conventions of content construction have never changed because in terms of film they're already 80 or 90 years old in terms of television they're 70 years old and so on and so on. And therefore the technology does not change the content, you might take the content and deliver it in different ways but fundamentally you know, Hollywood still makes a movie at around 120 minutes or just over, 120 to 150 minutes, because that's what audiences enjoy consuming and the best dramas are 60 minutes and the best soap operas are thirty minutes and the best comedies are 30 minutes, Friends, Frazier, The Family and so on and we do that because it's worked and it's provable, and it's proved to work and 20 minutes doesn't work and 40 minutes doesn't work. It's true that there's segments and there's advertising to be put in but that's the way that people enjoy

that long form content. Now one of the things with ITV.com is that ITV.com has the most fantastic archive of content but what we're finding is of course because what we're saying with ITV.co is that you've got Ant and Dec, you've got Champions league and you've got archives of all our great dramas and entertainment shows, we're still trying to persuade people to watch them because they're long form because you'll be watching them on a PC screen so broadcasters are still grappling with how you get this fantastic archive of content out to their audiences and accidentally as I say the great thing about ITV Local is the very nature of television that we began with especially news and weather is snackable you can watch it in short sequences. Where this is all taking us I don't know, we're all pioneers, one day you may set off on a journey and you might find yourself in a completely different destination to the one you thought you would!

**AF** That was going to be my final question to you, where do you think it will go, you can't ever see an end to it?

**LC** I think the internet is a delivery system and communications system in terms of social networking in communications it's clearly the most powerful devised, in terms of delivery it may do exactly the same further down the line than analouge or satellite. For instance the set top boxes coming on to the market things like BT Vision fundamentally deliver television down a copper wire, conventional television, the BT Vision box that I've seen, I think it's well worth you looking at the BT Vision box, are you a BT broadband customer?

**AF** No, I'm on Virgin Media.

**LC** Fine but if you can get one installed then it's well worth seeing because it's TV on demand with long form telly but those boxes are proliferating now so people will

buy them from Curry's and plug them in and so if I stopped 20 people in the street and said how does the analouge television system work I bet if I found 1 in 20 who could tell me I'd be surprised and therefore what I'm saying is that as more and more technology arrives and people plug it in they won't know if it's coming down the internet or whether it's coming from satellite or whatever else what they want is something to watch when they turn it on and they want the ability to control it.

**AF** Which comes into the interactive side of it.

**LC** Yes absolutely.

**AF** It's about control, it's about the audience controlling what they see now it's not about, have you read television by Raymond Williams? Where he talks about television as flow, the schedules are constructed flow which leads from one to the other, in a very linear way, in a very considered way and obviously in a very structured way because you're hitting those peak times and you're hitting those certain audiences and what you're getting is these very short sequences which are put together, it's paradigmatic. You're getting this schedule out of short units. Do you think that notion is completely breaking down now because of like you say the video on Demand, ITV Local, because of what the BBC are doing with their iPlayer and Channel 4 with 4OD, I mean to me because of interactive television and I've always thought and I said this to Justin And Claire when I saw them on Wednesday and they were grilling me about interactivity, I deliberately put interactivity, not interactivity but interactive television, I don't think that interactive television is total control because that's gaming, interactive television for me is choosing what you want to watch when you want to watch, so it's Wimbledon when you can press the red button and choose which match you want to watch when the World Cups on.

**LC** It's about choice, interactivity should be about choice and information in my view, also we find that when there's good content people don't want to interact, why? Because they're watching the content.

**AF** But do you think that this notion of schedules is now starting to fall apart so for example Top Gear is on at eight o'clock on a Sunday night and I've watched it on a Monday lunchtime.

**LC** Well it's interesting with Top Gear and with Coronation Street two examples from the two major broadcasters is that's true you can watch both of them in two different places, you can watch Corrie on ITV.com it's not affecting our audiences or anything, it's not affecting that you can do that with Top Gear, and I'm a Top Gear fan myself, most guys are, although there are a lot of women who watch it, the fact is that I look forward to 8 o'clock on a Sunday evening. Now I don't think that the schedule has died at all and although people like choice people also lead busy lives and sometimes want something organised for them and therefore knowing that the news is on at 10 and that Top Gear is on at 8 and that Corrie's on at 7.30 is quite useful.

**AF** Psychological isn't it?

**LC** Yes, and volume is not what it was but volume has not disappeared on the contrary it's still there, appointments to view are still there if the event's big enough and if you give people the right programme and X Factor and Strictly Come Dancing are two examples they come to you, they find it. You give them great shows they come to you both of those shows you're talking 9 10 million strong

audiences, given the choice that people have on a Saturday night now technologically and otherwise that's a fantastic power that conventional television still commands in my view. So I don't think that broadcasters should look at the internet and shout woe is me they should look at the internet and say opportunity. But the other thing is instead of us being in charge you'd better listen to your audience, you'd better understand what your audience is doing how they're consuming what they really want from you because being prescriptive will not work anymore.

**AF** But do you think because I'm picking up from you a little bit of a sense of antagonism from the traditional televison-ists if such a word exists towards things like ITV Local would that be true?

**LC** No I don't think they're antagonistic I think that any large business that's been around for a period of time 30 – 40 – 50 years has conventions and it has a culture and anything starts up with lots of energy then it becomes and orthodoxy and it takes on systems and reactions which are sort of predictable, and anybody who lived in broadcasting for the last 50 years and I lived in them quite a lot myself to be honest you had a pretty predictive world where you controlled the content the outlets for your content were very limited and you had a stranglehold on the revenue so that tends to make you respond in ways that have always been successful that all started to erode quite quickly in the early 1990's when Sky arrived and the internet was born and cable and etc, etc, etc. Therefore I really think it's a way for large organisations to adapt more quickly and therefore they have to educate their own teams about not being frightened of this new world, embracing this new world. Analouge on its own will not necessarily sustain you we need to be wherever our audience is but the other interesting thing is that I believe that broadband pushes people back to broadcast a good example is which I think you should have a look at is Desperate Housewives is the most valuable programme on US television. Amazingly successful and amazingly valuable in terms of

sponsorship and advertising, the last series the producers but every episode on the internet before the first show played on conventional telly now some people were horrified by this the actual result was more people watched Desperate Housewives.

**AF** Why?

**LC** Because it's driving interest back to the series it stokes demand, it's another way of promoting and marketing and I think in terms of your studies at the moment in terms of where conventional broadcast is delivered in this world I would certainly look at the way that the Americans handle using the internet to push people away from the internet and back towards broadcast.

**AF** Do you think that the reason the audience were pushed back to broadcast because of broadband was, and going back to it again, snacking on Desperate Housewives and then what they were doing was saying I'll watch all of that when it's on and then feedbacks into the natural order right I'll snack, oh the first two minutes, oh that looks good, when's it on 10 o'clock Wednesday night I'll watch that.

**LC** And because it's instant too the thing with ITV Local is that we've got the news, but that was the news that had been broadcast but what I wanted was breaking news, if we've got this fantastic piece of 24 hour technology, when news happens at 10 o'clock in the morning in Manchester the ITV Local audience in Granada land can't wait until six o'clock in the evening they've got to have it at half past 10 it's got to have it immediately because the BBC are doing that CNN's website does that, Sky's website does that and so on, so we need to be instantaneous in terms of our reactions that's another great benefit of this technology.

**AF** But it's not at the moment is it?

**LC** It's not bad, it's not bad the best pictures are normally first on ITV Local.

**AF** When I used to work at the Beeb in Leeds we always used to be frustrated that Calendar always used to beat us first to a story.

**LC** Well at the moment we're beating them on, that's one of the ways I said we could take BBC online on was to have the best pictures first we're not a text service but we'll have the best pictures first. Because this is more of a TV service, and I hear they're going more down this line they're going to have 60 broadband channels this time next year apparently. Because they've been looking at ITV Local, seems like a no brainer to me but we'll see, we'll see what their plans are.

**AF** I think I've run out of things to ask you!

**LC** Well it's been interesting talking to you it's always interesting talking to someone about internet telly, I've really enjoyed that.

**INTERVIEW ENDS**

# Appendix F

# Transcription of interview with Marc Goodchild

Interview with Marc Goodchild – Executive Innovation development in Factual and learning at the BBC. 16<sup>th</sup> November 2006

**MG** Factual and Learning is a department that looks after all factual output except News and Current Affairs so its' everything like Lifestyle, Food, Gardening programmes through to the highbrow science, erm, Planet Earth, Natural History Unit. My job was looking after interactive TV, er, all of the factual and learning interactive TV output, I've now moved across into a development role working with TV development teams, my background was in TV, to work out how we intergrate the two, the three media, how we make the media better, to come up with cross platform ideas that sort of have a different life on different platforms, but its all mutually, it's sort of a symbiotic relationship across platforms rather than just multi-publishing.

**AF** Shall I explain what it is I'm hoping to do – what I'm hoping to do is a PhD and look, well the focus was going to be interactive TV and I'm initially starting off with that interactive TV but I think that as it goes along it will probably go down the path of total convergance, obviously convergence would already be a big part of that on the basis that television is now being used as a platform for so many other different things and also television stuff is appearing on other platforms such as web based media especially here at the BEEB. But what I wanted to do today was just put faces to names and just get a current idea of what the current state of play is so I can put that in a proposal and send it off to Cardiff, hopefully I'm going to do this through Cardiff University, hopefully early next week, then they've got it in good time because they want it by the end of November, they've agreed to take it, it's just a case of getting through all the paperwork, what I want to do is say that I've spoken to you and Chris and Rahul so that it gives it more weight, then what I'd like to do erm providing it all gets accepted and all that kind of stuff probably get in touch

with you because with it being a PhD it will probably take about five years, is probably get in touch with you every six months or so though it doesn't neccesarally mean visiting, although it'd be nice 'cos I like doing things face to face anyway and it's a good way of building up relationships anyway in that sense rather than trying to do through e-mail and phone conversations and at the same time as I'm talking to you guys about what's happening I'll be doing focus groups, audience research, an independent study to see what the current state of play is in interactive TV now and then do a comparison five years down the line when it will have changed enormously, hugely in terms of how the audience use it and in terms of not necessarily how you approach it but the new ways it will be used and how you will continue to be innovative in that sense, and the reason I chose the BBC is because I've looked at Sky News, I've looked at the BBC, I've looked at independent TV and the BEEB just seemed to be the best. So if I can just ask you what you believe the current state of play is with, I mean I used it last night because I switched the commentary over from the football to the Five Live, but that's a very minor thing in relation to what's happening so how do you view…?

**MG** My feeling is that we're probably reaching a tipping point where interactive TV has been, the platform has been, in the last five years let's say, has been quite a primitive technology but we've applied, one of the reasons why the BBC has been so successful, because we've applied a lot of creativity to finding solutions around a quite primitive platform, when I say interactive TV that's interactive TV through the current platforms of satellite, cable and freeview , I think interactive TV has never really been properly defined, use of the words very willy-nilly. For me there are two strands to interactive TV and they, I suppose, they provide a vision of what the future could be, and as the early adopters, the early players in the market we were sort of, a lot of us were trying to do what DVD's could do on TV, and actually the technology was not quite there. That said the penetration and the behaviours because we have been early adopters, the BBC, market leaders in the world about getting stuff we have a much greater understanding of the psychology's about the world and what people want and what they don't want and how things work and

also production processes that we can employ that are completely transferable into any other technology. So the two strands for me are, we call them BBCi and E-TV but there's essentially information on demand and there's enhancing TV programmes and different genres have played, have different strengths in those so one's about improving the experience of what you're watching on television and the other is about allowing content, video, text whatever to be available at your fingertips when you want it so it's a pooled technology.

**AF** So what would be examples?

**MG** All of the news multiscreens, at the moment those are loops because that's how we deliver it – it's a scheduled world people variously call it nearVOD, NVOD, near video on demand but essentially what you're doing, you're providing the information which is outside of a schedule or that people can go well I want to see the latest weather or see the latest headlines or I want to see, it's literally a pooled world, so all of the BBCi services which you see on the BBC bridge from sport to news we've been doing a few in factuals, which I'll come onto in a moment which to be honest haven't really penetrated because it's not, interactive TV is not the research tool of choice for most people its easy, its convenient but if you really want to find something out if you have a real desperate need for something you go on the web and research it so, factual because it's not about immediacy, you know it's the immediacy of the news and sport, shit I want to find out how they're doing on the match – find it. Factual's never been about immediacy, we introduce people to idea's, often it's you know the whole serendipity of television is that people come to a programme and they might start watching something about something they were never interested in so it's opening up opportunities they come to it by chance by the tone of a programme the emotional engagement of a programme, presenters and actually what a lot of factual TV does is open up a window on the world, so it's one of the things that we're wrestling with is we would learn from interactive TV that that near video on demand stuff doesn't draw in people because

not many people have a burning need to know so that will also influence and I'm sure that in the true video on demand world , not that many people at any one time have a desperate need to know how to, how you transplant a heart.

**AF** Yeah, but do you think part of the reason why not many people use it is because, is not because they don't want to know, is it because they don't know it's there because there's less penetration of digital TV at the moment?

**MG** It's not comprehensive, news is comprehensive, sport is comprehensive we'd have to be, to be the resource that people would want to use we'd have to be as comprehensive as google in that world because people come and they've got an issue which is why IPTV platforms, the web are certainly offering us more opportunity in that on-demand I need it now sort of foraging goal driven, goal orientated involvement. That said, so in factual, the big skew has been to the ETV stuff and what we've been doing is a lot more on the ETV which is giving, which is actually saying that TV is becoming more ambient as a delivery tool in a world of lots of media people's relationship with TV is a lot less deferential than it used to be, it's not the medium of choice for a lot of people, it's certainly, for a lot of people it's just on in the background, it's not were you go to get that real rich experience…

**AF** It's passive?

**MG** It's passive, so what we've been looking at is, and again this permeates into our other media as well is that if the first world is about being able to find the stuff when you need it, what you need, this is about how do you consume it differently? When you're sitting down and you're in play mode how do you consume it differently and what can interactivity, that's at all levels and it's horses for courses, how can that interactivity in certain circumstances enhance that experience? So it

might be a very simple standard long form documentary which inspires an interest in the subject and leaves certain things dangling and if that hard core, you know that subset of the audience that want to it might be that you actually want to go, I want to find out about those people who were mentioned in this programme, DVD extra type stuff. It might be that very simple things that we did very early on with Walking with Beasts was, it might be that the one size fits all is becoming less and less appropriate in a multi-channel world so when we did Walking with Beasts we new that Kenneth Branagh polarised the audience, either people loved him for his dramatic and moralising narrative but the hard core science audience hated him, so we went and did a special narration for them which was just straight fact less creating a virtual world with the voice of Dilly Barlow who was a Horizon voice, so that's sort of acknowledging that one size doesn't fit all. Then you take it deeper and say actually what can interacting with a programme do, add to TV that TV can't and I suppose the things that we've been playing around with is if you're in control of the narrative how can that add to your experience? A lot of people have written that off my personal feeling is that that is the essence of most computer games – there's no such thing as a completely free narrative you're always going on a route which is being devised by someone and computer games are very good, what happened in the early days of interactive TV, interactive AV media is that they tended not to be that good because it was left in the hands of students or someone like that who did something which wouldn't have worked as a linear piece, they were too esoteric so what we've done in that world is we've gone what are the stories that really play to that interactive narrative, what's the common vernacular that we've got? The classic one is Cluedo, sort of Agatha Christie. The human behaviours there already when you're when you're watching an Agatha Christie programme you're trying to guess who done it, so nearly everything we do boils down to human behaviour, if there's an interest to who done it can you turn that around in a factual programme as we did in Death in Rome which was, it's a Roman whodunit, it's the same as any programme it's CSI meets Agatha Christie the only difference is you're Hercule Poirot now, you're in charge of the investigation and you follow the threads and I think the reason why that worked was because it gave an extra level of emotional engagement, so there's one, the other I sort of talked

about one size doesn't fit all but there's the next step from that, which is personalisation in all sorts of ways and the one that was really successful which was our really big hit was How to Sleep Better last year which got six million people watching and we reckon about two million interacting, what was really interesting about it was that people who interacted were far more loyal to the programme, had a far greater in depth appreciation of the programme than our linear audience, and what that was, was here's a 90 minute documentary which is what we'd normally do which would be take an issue and we'd tell you the state of the nation what's keeping you awake at night. Whilst that's an interesting watch and you might be able to take some personal stuff out of it, what interactive TV can do can turn that into something about self actualisation so if we go back to Maslov's hierarchy, I don't know if you've done any psychology, the hierarchy of needs, self actualisation is one of them, here what we're able to do is to turn a medium which is very much an information medium into something about self exploration so within that programme it was just a standard documentary but at various times during the programme we turned the mirror, it wasn't a window on the world we turned it into a mirror saying OK you've just seen what our contributors are doing try it on yourself now and the way the programme goes you'll get extra layers of information textured or tailored back into your programming erm, and there's the final one theirs is sort of for me, well there are two more, there's one where there is a mechanism for participation and communications, I'd say that that's not really interactive TV that's just the technology two way devices…

**AF** Are you talking about Test the Nation, stuff like that?

**MG** Test the Nation, X Factor all of those, it's not a coincidence that most people are reverting back to pushing telephones because they make more money out of the telephone line but it is a two way tool – I don't think that's particularly special to interactive TV but it is a tool. A tool of convienience.

**AF** It's - I remember watching the first series of Big Brother and being aware that more than ever before the producers were relying on the audience to choose what would happen in terms of evicting and I think that switched a lot of people on to the idea of using interactive TV – I'm not saying it is interactive TV but as an evolutionary thing…

**MG** Absolutely, we've used it for Great Britons, we've even used it to very much drive a platform, that's less about convergence and more about you know it's about technical convergence not media convergence it's just saying that this device in your lounge can now send a message back.

**AF** Is it not as well about switching the audience away from being passive? And it being more of an active thing? And is that something the BBC is looking to do?

**MG** Yeah, I think that active around voting is a very primitive reflection of what people do, we've tried to do interactive TV Forums where people send text messages in and the problem with that is that whilst it works very well for late night, sort of 'cool' TV for those business models work on very small audiences, we did some sums and I can't remember the figures but if you just imagine that every e-mail is on screen for five seconds you're going to get through twelve in an hour, twelve in a minute which is, a lot! You're managing thousands of people but when you've got TV properties you might get 20,000 people e-mailing in you can't manage that number of expectations, it might be a multiple in it's still a unicast out so we haven't cracked that. But what we have done and what we're doing more of is trying to find things, those things don't work so well because everyone wants to have an individual dialogue and you've got to manage their expectations, send an e-mail they all want their name out on screen, what we try to do is where you go to

find other things where the creative endeavours of the community combine to the bigger sum of its parts and you represent that haute thing back to them, an instance of that was Digital Picture of Britain, what we did was working with the website became a competition about uploading your photographs and then we created an automated ambient TV channel out of the most rated photographs which we then pushed back onto interactive TV and the ambition was that you get a text message saying when your photo was going to be up on the screen, so that was one instance. Other stuff that we've done has been, we do things around Springwatch where you again everyone has an individual input about where they've seen daffodils blooming and that feeds into a single interactive map which can then be pumped back out onto interactive TV so I think it's about participation, yes but you've got to manage the expectations you know because I think that the promise with participation is that it's a two way relationship and actually voting, voting is fun it gets people at level but it actually for most of the thing is not a two way relationship and my suspicion with voting is that it only works really with people in jeopardy and in those circumstances you're quite happy to be anyone of a million anonymous people, most elements of participation a) you don't want to be – it's like going to a dinner party where too many people are speaking and you're only talking to one host, you want to be in a smaller environment but also you don't want to be one of a million but you don't want to be the anonymous voice whether it's by avatar or otherwise you want to be identifiable that you're different from the next person 'cos that's what communications all about, so I think that they're interesting and again the interesting thing about new technology is as technologies merge there'll be different ways to capture different point to point, well dialouge with the audience also to capture the peer to peer conversations which don't require us and there'll be a single message pumped out again.


**AF** Where do you think radio fits into all this?


**MG** Erm, radio's really interesting...

**AF** Because I've got a digital radio, I listen to it more than I watch telly now.


**MG**  Yeah, as an alternate medium, when you say where do I think it fits in, digital radio, I think radio has picked up very quickly partly out of necessity of the music industry a much more understanding, people's behaviour is changing much more rapidly and I think radio has had to come to that more rapidly so on the point of being on demand, you know, iTunes, podcasts all of that, organisations have had to come to terms with that. I think they're equipped to being better at dealing with that people already knew that when you're making a radio programme you have to think does this work, what's the context, what's the psychology of the people? Because radio is everywhere and can be anywhere whereas television for the last 30 or 40 years has been that box in the corner of the room and we built up the confines of the parameters in terms of people sit in front of that box which was predicated in the days when everyone got the box because it was the best thing since sliced bread and you can watch the Queen's Coronation, you know that's where we started, that's actually been a prevailing influence up until very recently and most programme makers therefore don't think how people are consuming, they still think these things are really important in the living room you know it's a medium that's pretty self defined and therefore for me to tell my stories. Whereas radio has known that it's got to fight with newspapers it's got to fight for listeners so I think that most radio producers have known for a long time been embracing, what do they call it, CRM, client relationship management. Just a completely different mindset whereas TV programme makers, in my book most of the people I work with, particularly in the factual community, you know they're auteurs they have a story to tell, they do not consider anything in that production context anything about that how people are consuming it. So that's why I think that radio's different so digital radio comes along, has the ability to tell you stuff, has the ability to give you ever more hours but also has the ability to be on different platforms and I think that muddle things up and we always joke about the radio team that they're

doing radio with pictures and that's television, but what I think what's interesting about it is that radio with pictures isn't television, television is, you know radio with pictures is however you want to do audio and visual, and my concern is that in the past we've always built the world, we're designing the car by the horseless carriage by designing what's gone before, we chip away at television, we try to make it something different but it's still that box in the corner of the room where people sit down, whereas when you start saying it's AV and audio and can be consumed in different ways that when you start freeing your mind and start saying how people want to consume stuff these days.

**AF** Is it ever going to not be that thing that sits in the corner of the room?

**MG** Do you think whether that will erode completely? Is that what you're asking?

**AF** I'm asking about mobile technologies I think.

**MG** For me what's interesting is, I think that we'll have lots more devices which will be able to take video, like the radio migrated out of the living room because it used to have the old wireless during the war and, so it migrated out and became a ubiquitous device and has different textures and different things at different times you probably wouldn't sit down and listen to short wave radio in your living room on your surround sound system or you know medium wave but FM plays really well sometimes, so the difference is the stuff in the car, I'm interested in that they haven't really done that much innovation around stuff that you listen to in the car, you know the biggest innovation with that is that it can interrupt with your travel news, that's sort of interactive. But TV, what's interesting about that is you don't change your ability to consume because you're hearing the same, what's interesting about television is, I think television will migrate out of the living room

and other things will migrate into the living room, what's interesting is the relationship with the size of the screen, well not size of the screen really, the sense of the optical nerve when you're looking at something that size is about the same but the relationship you are naturally trained on one definition when you look at it changes when you're ten foot away from it, three foot away from it and half a foot away from you and that's going to be become really fundamental when we move things away because, when you're in the lounge environment I'm not convinced that convergence will be done through keyboards on your lap.

**AF** I was going to ask you that because when I did my masters what I did was as a part of my dissertation was looking into all this, I gave myself 3 or 4 years off and then started thinking about the PhD but when I was doing the MA people were saying oh yes people will use computers instead of telly's and use a computer as a telly, now I don't think and at the time I didn't think that would happen, I mean yes you can use a computer and you can use the web to watch videos back and all that sort if thing but what I think is really interesting is that, it's a personal thing more than anything else is, I use my computer but I don't actually have a computer at home yet but I use my computer at work for surfing the web and seeing what's going on in the world and looking at the Leeds United webpage to see how appallingly badly they're doing all this kind of thing, I would never dream of watching a video clip for any length of time on it I might just watch a brief snatch or something but then I watch my television for watching television.

**MG** That's what I used to think, I disagree. Video clips will end up in all different places, I think we will watch video clips on PC's but it will be about it being appropriate to the relationship you have with your device, so in the same way you want to watch a blockbuster epic it's still better to see that in the cinema than watch it at home but there's other video which you might want to you know, but it'll be how to chop an onion or something, it's about that piece of information your illiciting from that piece of video. Where the issue has got confused is that we're

not talking about, it's not like you're going to replace the TV with the computer, actually it is, the technology, it will be a computer in your living room it just won't look like one, we impose what a computer looks like, so once you've got that TV which is driven by a computer which has the capability to do everything that a computer does, how much of it would you want to do on that further away screen? I suspect there will be more, I suspect that we will want to do more but although it's a ten foot screen, kids already do it, they plug their Playstations into it, but I don't do that at ten foot I do it at closer, but what the computer games industry has done was that they weren't selling the hardware of a monitor they knew that they were doing it for that screen that was that size so all the graphics had to fit, it had to be that televisual experience otherwise you would have had reams and reams of pages, they have quite simple navigational tools to get through, they've made a concerted effort so that text fonts follow the conventions of TV. Now, you could argue, you could easily argue why bother doing that, people could be getting further forward it could be on your PC, you could get text in there it doesn't really matter but if you apply that same skill that there's extra layers of interactivity that we have to layer onto this screen here and if you feel that there's a compelling audience need or motivation to do it on the TV I think we will find ways to do that on TV so the crucial driver for me is that interactivity has to enhance your viewing experience and not feel like a chore.

**AF** The interesting thing that I find, because the game I play, the only game I play is ProEvoultion Soccer and that when you play it it's like a televisual experience because you have replays you have the commentator, it's completely conventional and the other thing is that I went on holiday for a couple of weeks one year and I came back and I turned my Playstation on and I was confused for a moment my brain couldn't make the leap because it looked like I was watching television and I thought that is a really odd thing.

**MG** But when the technology's merge and you're able to do something, we've just done this game on the web called CDX which is what I call blended media. It's real video it's basically an adventure game around the Rome series but it's shot video of a character in a 3D Flash environment the reason we did that is because we wanted to have something that we can't take on games in their own space, we'd have to have so much money to do that, they take years to build but what we can do is we can take the different points of a computer game and one's about immersion, one is about being in control and one is about the characters, the characterisations, they're the key elements of a computer game now I would argue that it's the being in control that's the biggest seller of the computer games followed by the immersion, the immersions and the characterisations you don't invest emotionally in your avatar as much you invest emotionally in the immersion. So what we were saying is that maybe we have to compromise on the control aspect of it, so it's a bit smoke and mirrors, you don't have as many options but we can up the emotional engagement in the characters because that's what we do we're film makers we tell stories with actors and that's far more compelling, so what we've done is blend the two together. Now at the moment we have to do that on the web but you can see an alternative version of you playing your soccer which will never be photo real, but is a photo real world with slightly less interactivity but more realism and you get the emotional engagement that way. I don't think there's a rule about how interactive a product has to be, you think Pacman, it's very primitive but can be really compelling.

**AF** I'm going to have to go in about five minutes or so, but can I just ask in what it is you do exactly up here in terms of how many people work up here?

**MG** Well do you want me to talk about interactive TV team because I've just changed roles into this development role? The interactive TV team, we have one person who is dedicated to the BBCi stuff, we had a strand called live and learn which has been decommissioned, we've tried lots of things in that space, didn't

work, I think because of the reasons I said, it wasn't comprehensive, over the years it was basically a start up, the factual team, factual was written off, everybody said interactivity would be sport, entertainment. So we came from start up quite against the flow from the other nu-media teams were and recruited mostly TV people who were interested in the media to really see what we could do. We now do about twenty projects a year and most of those are about enhancing TV. Were we've been most successful is where we come up with integrated formats which is where at various points the programme turns active, but we've had quite a lot of success with sort of DVD extra stuff at the end of the programme. We've also tried to keep a spread of innovation going that is interactive narrative, we're never going to be able to do that in a linear programme so we've done interactive narrative events off the back of a programme.

**AF** There was an experiment with Holby City wasn't there?

**MG** Yes, we've done Holby City, we've done this thing called Death in Rome which was a very good one, if you want to book another time then we can show you some of these things and go through them, the problem is that it's very hard to archive them. So our strategy started off being what the BBC calls a landmark strategy, we were chasing the big projects because that's how we knew we could bring about a critical mass so when Life of Mammals came along we did something around that. As we've reached a critical mass and we know it penetrates, 12 million doing the (Athens) Olympics we did by an odd sequence of events Live8, Live8 fell into my lap so we did that and got 2 million people interacting, and again that is seen as the killer app of interactive TV, arguably that's not interactive, it's just extra channels, it's just channel hopping, but channel hopping within an environment, so no I think that's still a killer app.

**AF** One of the things that the BBC has done and it's done it for years actually because it did it at the 2002 World Cup for the first time and Wimbledon and the Golf...

**MG** Wimbledon 2001 was the first one...

**AF** Multi-view, what Sky did on its interactive package for the football was very gimmicky, it had player cam it had alternative commentary from fans, it had all that sort of thing the BBC didn't do that sort of thing, is that because you're a PSB?

**MG** No, no, no, when we first started off doing multi view it was sort of technology leading creativity and we do multi view and Wimbledon was the gift, you could go to any court, now I come from a traditional programme making background, the way I talk about it is narrative so the thing about Wimbledon is that there are 12 narratives all happening at the same time so it's easy to work out how you do it. The thing about football is there's one narrative, it's the narrative of the ball and Sky missed out on that. They went, we go to multi view and you go to different players, giving more choice doesn't help in a world where there's only one story to follow and I think the BBC did something and you'll have to check up on this but in our first forays into doing golf, they allowed you to see all the different tee's and the different holes and you thought that's not what I want to follow, what I want to follow is the narrative of Tiger Woods so they changed it. With my teams I go what's the narrative of what's happening here, with Live8 it's 8 different narratives in 8 different parts of the world which at various times collided and that works very well for interactive TV so I think that if you go back to narrative, that's why I think, I've seen various demos of motor racing, I've never seen one which works for me.

**AF** Sky tried it, they tried it for a season and then stopped it.

**MG** Because it doesn't add to the narrative.

**AF** Because what people want it wants you to tell the story.

**MG** And although technology is evolving the human mind isn't, we're still the same beings that we were when we were cavemen, you know we want stories, we have a relationship with pictures, even going back to text on screen I think there's something psychological...

**AF** ...we want heroes and villains...

**MG** But also when you talk about text books emerged as being something you pick up and hold there aren't many examples in the world were you have stories on the sides of buildings because if you think about it that would be the most democratic way of telling the news, you'd put it up on the side of a, you create one newspaper and it would be the size of a building and everyone could read it by standing there and look at it, we don't intrinsically do that we have certain relationships with levels of information that come from proximity TV is further away, TV is like looking at paintings, you go to a gallery, you step back from them.

**AF** When you frame a television shot you frame it in exactly the same way.

**MG** Exactly. So I think the key thing for me is absolutely about the narrative and also about the audience psychology get those to right you've got a good interactive service. You know what is it that people, and you don't have to start off from an

audience need, you can create that audience need, but what's the germ, what's the inspiration that you're going to dig up to satisfy that TV doesn't ordinarily satisfy, so we've been very critical internally where people have been saying that you can do something with the rushes from the programme, and you go, if it wasn't good enough for the TV programme then why does anyone want that?

**AF** And it's the first rule of TV, well corporate TV that you never show your client the rushes.

**MG** And the other thing is that a lot of people were wanting to do directors cut, and I spent the first couple of years going if you were Martin Scorcese I'd be interested! You're an anonymous director of a TV show that people don't consider to be directed, it's just there, so why would they want the director's cut, there are times that you do so the psychology has to be right and within that environment how are you telling the story and what I think is interesting is in news and sport immediacy is paramount go into any other media and the story is paramount which fundamentally has two different models in a multimedia world. News is about multipublishing so it's immediately on the platform that is most appropriate for you, whereas if it's narrative that's important then we're thinking what's the narrative that's driving you from one platform to another so you might start your journey on mobile but is there then a narrative which, you know, what are the benefits of going to other platforms or do you do something for purely one platform because narrative has a different relationship to different platforms you can't just multipublish.

**AF** That's excellent, thank you it's the 16<sup>th</sup> November 2006.

Interview ends.

# Appendix G

# Transcription of interview with Peter Schofield

**Transcription of interview with Peter Schofield – Senior Technical Product Manager for BBC Broadcast Red Button, TV and Mobiles Platforms for Programmes on Demand, Future Media. 27.08.2013**

**A.F.** So I've just got a series of questions to ask you, but really they're just kind of, this is what we call, I'm sure you're aware because you said you were doing a PhD, this is what we call a semi-structured interview, which is a fairly typical methodological device, for this sort of thing. But what I've been doing for the past, forever, it feels, is looking into this whole idea of what the future of television could be, because there was all this big, massive sort of hype about four, five, ten… five to ten years ago about the future of television being interactive and we're going to be able to do all this stuff with it, like choosing the endings of dramas, do all our shopping while watching the television, which we can do to certain extent with Smart TV's. There was one book I read whereby an American writer had suggested that what we'd be able to do is, what we'd be able to do is press a button on our TV and talk to Kim Basinger and Henry Kissenger, it's quite a while ago this. And it struck me as I was working through all this, because I went into this thinking, yes, interactivity is the future of TV. I'm coming out the other end of it thinking that it's not. Because you've got to have Kim Basinger and Henry Kissenger sitting in a room waiting to talk to people, in order for television to be a true interactive medium you've got to break down narrative conventions and you've got to stop people from watching the main broadcast and that's not really in anybody's interests. And it may be that radio is a much more interactive thing these days because we can use the web probably a little bit more efficiently and do that in slightly different ways and do different things. But the whole idea of this PhD came about out of this idea that interactivity was going to be there and the thing that started it all for me was abut eleven years ago, I was doing an MA and the first series of Big Brother was on, and Channel 4 went a real bundle on red button for it, there was different feeds for it on the website and it just struck me that you could build up your own narrative if you wanted, but they've stopped doing all that now which I think is quite interesting. The idea was let's see what's on, let's see what's out there and so I did

a content analysis of how much red button TV there was on and there was eight channels in the sample, sorry seven channels. BBC1, BBC News and CBBC, Sky1, Sky News, which is a weird one, a very weird one, and Sky Sports1 and Boomerang, so that I could do a comparison between CBBC and a standalone children's channel. And what's come out of it is that there isn't much! There's a lot of red button content, an awful lot of red button content, 358 examples of red button content over a week's period over a four month period, if you see what I mean, so I measured one week for four months…

**P.S.** OK, were you looking at calls to action for red button content?

**A.F.** I think you call 'calls to action' what I call 'signposting.'

**P.S.** There's different things here so, carry on!

**A.F.** So I found that there's 358 of them but only four instances were actually related to the programme that was on at the time. That was all on BBC1, sorry three of them were on BBC1 and one of them was on Sky News, and the three that were on BBC1 were all related to sports, because it happened to coincide with the Olympics and Euro 2012.

**P.S.** OK so you picked an interesting time to do it.

**A.F.** Yeah! And the one instance on Sky News was, remember the family that got murdered in the Alps?

**P.S.** Yes.

**A.F.**  They were running rolling coverage of that, or the looped coverage of that at the same time as people were talking about it on the main broadcast. So, essentially that's what I've been working towards but now the problem I've got is making sense of it because to be honest the results aren't as wa-hey as I thought they'd be so me and my supervisors thought it'd be wise to go out and talk to the industry so I'm trying to fix something at Sky, Sky News and Sky Sports but I got in touch with the BBC and here I am! So the two platforms that I used were Freeview and Sky. There are sharp differentiations between what you see on Sky and Freeview but we'll get to that so if we just work through the questions and see where we go…

**A.F.** So, generally what is the BBC's policy towards red button content?

**P.S.** Right, so essentially the red button for the BBC is a way of providing interactive content that both supports television broadcasts and it also provides essentially a digital version of Ceefax, so text content. So what you look at in the service is that it's essentially a combination of a video switcher, which allows you to show content that's not shown on network channels, and then you've got an audio switcher, which allows you to listen to alternative audio soundtracks alongside some events, and a text service which replicates the BBC's main text content elsewhere, so news, sport, weather, travel news, lottery results that kind of thing a lot of utility content that the BBC's done for years and years. So the policy's quite interesting because it's changed quite recently as a part of delivering quality first, DQF which is a cost reduction plan for the BBC. The broadcast red button service has been scaled back quite significantly in the past year, so since the Olympics the amount of video content we're able to show is much less than we could previously do. So what you had was a lot of platform variations, so on Freeview, which is the most limited

platform because of the technical constraints of it, the amount of bandwidth that we've got to place stuff, we only ever had one channel which we could show red button content, whereas on Sky where bandwidth is much more free, much more available but costs money, we have up to eight channels of content on Sky, on Virgin we have a similar kind of situation and Freesat is like a parasitic platform to Sky, so it sits on top of the Sky video and audio content, so it gets the same service as Sky broadly. As part of DQF we were made to reduce the costs of delivering red button and that meant reducing it to a single stream across all platforms, so that means we've got less flexibility in 2013 to what we had in 2012. And the Olympics was a very special case and there were arrangements with the actual platform operators, with Sky, with Virgin and with Freesat to augment the service way beyond what it would normally be. But since October/November last year we're now just down to a single stream, but there is an exception to that which is what happened this summer when BBC Distribution went away and bought additional capacity to support Wimbledon and Glastonbury coverage and we are currently using some spare capacity on the HD multiplexes and transformers that we use which gives us the option of using red button HD which is a limited service to show HD originated content that is either simulcast on red button or is simulcast on BBC3 or BBC4 which don't currently have HD outlets. So BBC1 and BBC2 have HD simulcast, BBC3 and BBC4 don't yet have that simulcast in place so this summer BBC red button HD was where you could get live HD content through that way.

**A.F.** So it's instead of creating new channels..?

**P.S.** It is but we have subsequently announced that BBC3 and BBC4 will be broadcast in HD from the end of this year/early next year, so it's a stop gap until November and essentially that capacity can be re-used, in the case of red button HD will be re-used for BBC3 HD and CBBC HD which use the same bandwidth but are split by time so during the day CBBC and during the night BBC3, so it's one channel but it carries two networks. If that makes sense…

**A.F.** Yes it makes perfect sense. Are you aware of the thing that Sky have put forward to OfCom?

**P.S.** I am, yes! We are doing a lot of work internally at the moment to answer the consultation and to go back to OfCom with the BBC's perspective on it…

**A.F.** Right, but you won't be able to tell me what that is?

**P.S.** Errr, no! Essentially we have a red button service our there which uses Sky's systems, and we see that continuing. It's quite interesting because red button as a concept is actually three or four different things, so the way that red button works on Freeview, Sky, Freesat and Virgin Liberate is very different, the technical platforms that run those systems are very different so it's essentially four completely different chains of service that operate, that are written in different languages, that have different technical capabilities and constraints. The closest are Freesat and Freeview, they both use the MPEG technology, but, yeah, red button is a sort of veneer over quite a lot of complexity behind the scenes.

**A.F.** Yes I mean because, basically what you've said is that the BBC's red button policy, is that there's three different strands to it, there's the teletext based strand, there's the audio switching side and there's the video switching side, and they're seen in isolation from each other?

**P.S.** As part of the way that red button was previously run in the BBC there was a team that was the ETV team, which looked after enhanced TV, so that's changes to audio and video services and a 24/7 team which essentially looked after the text

service, so when they were based in London they were two totally separate teams. The application that you see now is two separate applications which were joined in the navigation.

**A.F.** So why was that? Was it just the way the BBC works or..?

**P.S.** I think it probably was in part the way the BBC works! There's a lot of things that can be explained by that! It's also the specialism that's required in the different parts of the service so the video and audio switching parts are quite different in the technical expertise that are needed versus the 24/7 service. Since the move to Salford in 2010/2011 there was a switch in terms of the perspective of the department I worked for in that a lot of time, money and investment was put into connected red button which is the next phase on the red button story which is – traditional red button, broadcast red button is limited by the constraints of the technology. It has in most cases no return path so it has no way to go and grab more content apart from what's being broadcast over the air, and obviously with the changes of pace in the development of having your TV connected to broadband connections is more common is not ubiquitous by any means, whereas these services are pretty much ubiquitous you can connect them to a satellite dish, you can connect them to an aerial, they work, you get the service. With connected red button you're relying on someone buying a capable box, plugging it into the broadband, knowing how to use it so there's barriers to entry there that aren't necessarily there with broadband red button. But connected red button is seen as the future as far as the red button story and it's a way of bundling all of the BBC's interactive TV aspirations into one product. So connected red button almost becomes the shop window to the other product variations TV, so iPlayer on TV, news on TV, the sports app on TV, it's seen as an enabler to get that rich content enabled by broadband.

**A.F.** 'Cos that's an interesting point because even though I used Freeview and Sky as my main two platforms because there probably the two most used platforms, I'm actually a Virgin Media customer because of where I live, and it strikes me that what you're talking about with connected red button is a lot more prevalent through the Tivo than it is through the… The red button service through Virgin Media is a lot more like the red button content that I would expect a red button service to look like, is that because it's capable?

**P.S.** Yes, you've got two way interactivity, so what you see on Virgin Liberate is essentially an HTML 3.2 based interface it is two way, it's quite interactively backed to the application, back to the Virgin network, we don't do a lot of two way interactivity with that at all so the only other thing we would do with the other platforms in terms of interactivity is the return path for donation apps so essentially it's self-contained but the yes the Virgin one does transfer it back over IP because that's the way that technology works. What you see on Virgin TiVo is connected red button, that is the first iteration of connected red button which is bespoke to the Virgin TiVo box, it's in Flash AS2 the team here are working on a HTML version of it that will be on Freesat and Freeview. But it would work in the same kind of way, it's a very different experience to what you get on broadcast red button, it's a much richer interface…

**A.F.** It's more webby!

**P.S.** Yes it is. And that's part of the future media strategy which is around, what is it! One service which is BBC online, ten products, news, sport, weather and travel news, TV, radio, and a load of other things that you can find online! But then it's four screens, so the intention is that those ten products has four variations in its interface, a web version, a mobile version, a tablet version and a TV version.

**A.F.**  So this is all thought out, we're still on question 1 by the way, strategy and policy! So this is political, this is policy and is thought out, this isn't something that just develops and evolves, someone sitting on a floor higher than us would say, right do it this way, or…

**P.S.** Yes, so the way that we sit on the BBC is that TV platforms sit here in Salford, there's also a mobile platforms that sits on the same floor here, we report into a division of Future Media called POD, which is Programmes on Demand. POD has a sister division called N&K, News and Knowledge, they have a lot of the big products in there so homepage, news, sport, weather, children's, they all sit within this product division. These two then report up to Future Media, so we're part of Future Media, and Future Media then reports up to the Executive Board and then there's the BBC Trust which oversees everything that the Executive Board do, so essentially to get anything to happen it has to go up to the Executive Board, the BBC Trust has to approve it and say that it's a good use of licence fee payers money.

**A.F.** Right, which does actually bring me onto the next question, but before we do that, because it does seem to me that there is a very pronounced policy in place at the BBC, I don't see that as much on Sky, in the sense of what I've found, in the sense that apart from Sky News on the Sky platform the red button services were a bit.. well it was almost like we've got a red button so we'll put something there but we're not going to worry too much about it, whereas with the BBC stuff there's real though about what that content is and where it goes, where it sits and what channel it sits on. I assume that's because Sky is a lot more fractured as an organisation? I wouldn't know…

**P.S.** I wouldn't be able to second guess. What you see on Sky News with the multiscreen video is essentially what the BBC had in some shape or form before we cut the video streams late last year, we had this news multiscreen application which you could choose different video streams from…

**A.F.** I found one example of that appearing on BBC News! I don't know what date that was but I'm assuming it would have been June, I think it probably was, yes.

**P.S.** It went shortly after that. It went as part of the Olympics I think, it went because we needed the space for the Olympics, so it went at that point.

**A.F.** Specific appearances by channel, once on BBC News, two on BBC1, five on Sky News, that's specific values, that was all the content that I found appeared, all the different apps, you call them apps, I call them values because I was doing content analysis. So bearing that in mind, as a public service broadcaster does the BBC have an obligation then?

**P.S.** Yes we do, it's part of the service licence that there be BBC on line red button. It's in the Royal Charter which basically defines the purpose of the BBC, and the charter is then defined by the BBC Trust as service licence for each part of the BBC so all the radio stations have service licence, all the online services have a service licence, so yes we're covered under the on line red button.

**A.F.** And is it the case that because of that special obligation that the BBC made the decision to try and make the best of it and then scaled it back or has it proved that it's not worked as well as people wanted or this new connected red button service will be where everything's thrown at?

**P.S** There's the BBC's policy within this department is to look towards connected red button as being the future, so when the move was made from London to Salford the focus on broadcast red button was scaled back so the supporting team was scaled back in order to put those resources into connected red button, there's a core to the service that's still there now and even though we've been trying to find cost savings from red button in general the main generecised elements of the functionality are still there, you've still got the video and audio switching components, you've still got the text service and even though parts of the service have been scaled back from the fringes the overall purpose of what the service does is still consistent.

**A.F.** So bearing in mind that it's all being scaled back a little bit because of the connected red button, I mean what I was doing was looking at the old red button stuff, connected red button, it's not really there at the moment is it? It only really appears on Virgin?

**P.S.** Virgin is the initial phase of that and the reason why it's Virgin first is because it's capable. Also we had a very limited service on Virgin TiVo previous to it that had very little content, this was a way of filling the gap and there was a desire to not use broadcast red button to move that over to the TiVo platform, so yes, that's why connected red button appears there first.

**A.F.** So let's just re-jig question 3 a little bit, what was the resource base for the BBC red button service when I was doing my content analysis which was last summer, and how's that changed now a year later? The worry I have now, the problem with doing something like this is that it quickly goes out of date and so the resource base that I was observing working last year how big was that last year and how's it

changed now because of this pull back away from traditional red button to connected red button?

**P.S.** So you're looking for people..?

**A.F.** Yes, people, resources, departments, funding. With the BBC being a public service broadcaster and it's written into the charter that it has to provide these sorts of services then the funding has to be found for it, and I can imagine that there's some people, I mean I don't know but there will be people who'll rail against this a bit because they actually want to make television or radio programmes, I should imagine that there's that sort of conflict that could occur, potentially in an organisation as large as the BBC which having said that is committed to doing all three things.

**P.S.** Yes, I can't give you a straight answer on that because the way that the BBC operates there is the resource base for red button is very complicated. If you look at the video services, a lot of the video services are funded by their own programming department, so you've got Glastonbury the radio music division will put together the cost and people that are needed to put out the traditional network output for BBC1, BBC2, BBC3 and they'll also have a team of people working on red button. Well the actual workflow for the video is the same whether it is on the red button or BBC3. The way that it works is that there's commissioners who will commission for red button and that may or may not be directly related to something that's being shown at the same time on another channel or it could be something that is a supporting programme which is designed to be seen separately. So what you get on the red button is a combination of additional coverage that supports an event somewhere else, so that could be, say, Wimbledon, you have additional screens of content that is shown on red button, or it could be something that is additional content, that's over and above anything else that you're getting to

see. So, say something like Springwatch, you may have the main Springwatch programme but also you have live webcams of birds' nest or something that's not an extension to the existing content it's something that's additional to it. So say for sport they would show the Formula 1 on one of the main channels and after the programme has finished they would have a forum which is additional to that so it's a supporting piece of content. That's the two types of programming that get made for red button, I'm trying to think of another example…

**A.F.** There's the rugby league forum isn't there…?

**P.S.** Yes there is, they're all the same type of thing so what you'll see is the calls to action that you see on the service, they're either to looped content, so things that they show over and over again, they're short programmes either 15 or 20 minutes long, or it's something that appears in a specific window, so the F1 forum will be after the end of the race and for 30 minutes, and then after that 30 minutes is over you may go back to two hours of programming of some sort, so that the schedule chops and changes quite a lot depending on the nature of the programming that needs to be shown.

**A.F.** Does it need… I mean we were taking about the resource side of it but you can throw away the schedules a little bit can't you? Although I must admit that I was watching Glastonbury a couple of years ago and I was getting really annoyed that Neil Young never appeared! The Macabees always seemed to be on! And I didn't want to watch the Macabee's I wanted to watch Neil Young. And that was quite helpful because it made me realise that actually someone's making a decision about what content you see through the red button and that may not appease everyone because there's no way you can get everything on at any one time.

**P.S.** It's quite interesting that what happened this year, I was talking to one of my colleagues in sport, who was responsible for putting the programming together for the extra streams of Wimbledon for this year, and essentially what we had for Wimbledon was 301, which is the existing red button stream and on Freeview we had 302 which was the SD, standard definition channel, in addition to that and then we had 303 which was the HD version and essentially the HD version of 301. And then on Sky what we had was red button 1 which is the same as that really, red button 2 and red button 3 and then we had a HD variant of red button 1. Except on Sky we had some problems, but essentially the way that we thought it was going to operate was that 301 ad red button 1 on satellite was the same channel and 302 and red button2 was the same channel but no, he operated them as five separate channels so that he could pick and choose because he only had two channels to choose from on Freeview he had to make different editorial decisions as to which of the matches he should show on those in order to show as much of the match as possible. Because he had the three channels to operate here he could chop and change it, he could move it around a bit more but he was having to make more contended decisions around 301 and 302 to make sure that he was making the right choices of content that was going out on those channels and also that viewers that were watching something on those weren't suddenly thrown of it and shown something else because he's made the wrong decision or whatever.

**A.F.** Because the Olympics one, that was 24 channels on Sky, and I assume, was that a stipulation of the IOC  or was it a stipulation of the BBC?

**P.S.** It was the BBC's aspiration to show all those channels…

**A.F.** Right so the Sochi Winter Olympics won't be the same?

**P.S.** Sochi we'll have to wait and see what happens. The BBC's got plans but it's partly limited by the amount of material that we'll be bringing back from Sochi, that would be the main sticking point in terms of the amount of coverage but that'll be across all platforms, that'll be online and everything, that'll be how much live content are we bringing back by satellite and by fibre or whatever. That's likely to be the sticking point of what happens over there. In sport, as to what they decide to do and sport distribution and us, we're trying to work out how it's going to work. The options are wide open.

**A.F.** So the resource base is complicated!

**P.S.** It's complicated! It's very complicated! So that was a short explanation of the video side of it. For our team here we have eight people here who look after the development for broadcast red button, just to add a little complication to the mix all of outlive systems, all of our live servers and all that are all maintained by Redbeam Media, so we have a service agreement with Redbeam Media to actually run the red button architecture on our behalf so they look after all the servers and give them a kick when we deploy we have to go to Redbeam Media to do all that. Redbeam have also got the contract for play out so they play out the programmes for red button but also all the network channels. So when you see a programme played out on BBC1 it's not the BBC that's playing it out but Redbeam Media they're showing it, they control all the junctions between programmes and everything else.

**A.F.** So actually all the switching, right that had never occurred to me…

**P.S.** So all the scheduling is done by the BBC and then it gets handed over the wall and it's Redbeams job to play out and sequence so they have play out directors that

sit there and say sports running over a bit, they have to ring the relevant people and channels and say this is over running what do you want to drop, what do you want to do, what's the decision going to be, so they're in control of all the machinery.

**A.F.** I think you've probably answered this question, well what you've said is that Freeview isn't as capable a platform as Sky is because of the limitations on bandwidth and all this kind of stuff so therefore is the there a differing policy that exists within your department per platform?

**P.S.** The general rule on this is that we should be aiming for platform parity. And since November (2012) that's pretty much where we've been. So the general assumption is that if you can get it on one of the platforms you can get it on all the platforms, that's broadly true, certainly for the video content it more true than the 24/7 element of the service and that's mostly because of the period that a lot of these platforms were developed in that some are more capable than others so some of them have got games that the others haven't, broadly speaking they are now at parity, so when you were (collecting data) Freesat, Sky and to an extent Virgin would have been much more capable than Freeview.

**A.F.** Moving on to what I call signposting, shall I explain what I mean by signposting?

**P.S.** Yes go for it.

**A.F.** What I mean by signposting is just the way that the red button is presented to the viewer once they turn the television on and how long it appear on the screen

for and all this kind of stuff. This is where I need my little tables with my percentages. So the actual sinposting the actual way that the red button manifests itself in front of the viewer is very different across Freeview and Sky. So for example on Freeview the signposted content, the stuff whereby you see a red button appear constantly or disappears after less than five minutes is fairly equal, 26% for Freeview and 27% for Sky. But with unsignposted content which is stuff which is hidden behind the main programme and you're not told it's there, it's radically different, there's only 5% of that on Freeview and 27% of that on Sky. Now when you break that down into channels what you end up with is that 50% of the content on BBC1 is signposted and 50% isn't but that BBC News and CBBC pretty much signpost all the time, so that's what I mean by signposting.

**P.S.** Right OK, I'll give you a quick walkthrough of what happens here, if I go to BBC News you should get what we call a trigger here, that's what we call those, so that's a trigger when that appears. Now when you press that, on Sky you can press either text or the red button and they both go to the same place, so what comes up next is the bridge…

**A.F.** So the menu is the bridge…

**P.S.** Yes the bridge is what links you to the either the text content or to application content, that could be a video switching service, an audio switcher, it could be a quiz or it could be games, it depends on which channel you go to. So when you go into news, so some channels have a persistent trigger so news is one of them so every time you into news that trigger will appear and stay on screen for a period of time and then disappear. For BBC1 and BBC2 in particular what happens is that you normally get triggers that correspond to a programme being shown at a particular time that support content that is about to appear on the red button that is linked to programme content appearing on BBC1 or BBC2 , so on BBC1, say for example on

Sunday night, Antiques Roadshow is just about to start. As soon as Redbee press the next button and it starts into the beginning of Antiques Roadshow so basically when the ident for BBC1 comes up before Antiques Roadshow the trigger will appear for the Antiques Roadshow play along quiz. So a lot of them are synced to the programme junctions because they want to signpost the audience to go press red so it's a call to action to and drive people into the service.


**A.F.** Right OK


**P.S.** So what you've got last year is differences between Sky and Freeview where what you've probably found is that Freeview had less interactive content available so what you may have found is as these services are all different so the bridges and the triggers work differently per platform so what you could potentially do is that if you have additional content that was only being shown on Sky because you didn't have the capacity to show it on Freeview you would have had triggers appear on BBC and BBC2 on Sky but not on Freeview and the bridges would have had links to that content that only appeared on Sky and not on Freeview.


**A.F.** Right I see yes, so that explains why the red button on Freeview during the Olympics said choose sport and what you went through to was what I call an indexical menu…


**P.S.** So when you chose that link at the top there for the Olympics it went into a totally different application that's very unlike anything we've done before…


**A.F.** Well no, what I found, this doesn't come out of percentages or anything like that, this comes out of note taking, so what happened was on Freeview, BBC1

during the Olympics you pressed the red button, well it'd come up and the trigger would say choose sport, you'd press the red button, and you'd go in there and actually, I don't know whether I caught it on a bad day or what but there was one time where there was no sports content at all other than sports text. Now I don't know if that's because I switched at exactly the same moment it switched over or what but what you had on Sky for the same transmission in the same channel was, I've forgotten what it said, I think it actually said sports home on Freeview and on Sky it said choose sport and there was a little icon of the Olympic Rings and you clicked there and at the top there you had the Olympics, you didn't get that on Freeview.

**P.S.** No you didn't, what you got was something that's very similar to what happens on the platforms now and this…

**A.F.** I mean not even at this level. When I did go down to this level I found something that was quite interesting but when you went through to the what I call the indexical menu that's what I based all these what I call specific values on, these all appeared in menus at certain points so there was like all of these at some point. Now what I found was that when I went to Freeview and it said sports home once when I clicked on it there wasn't any sport there and once there was sports text and when I did it on Sky I got the other trigger with the Olympic rings on it and it was much more prevalent up the menu, press here for extra Olympics coverage and you went through to the 24 streams there.

**P.S.** What we've essentially got here is, we've got different options on the bridge that we have a team based over in Quay House called central editorial platforms that basically schedule these bridges so they can change the items that appear on the bridge at any time and they are separate on each of the platforms and each of the channels. Now we can only really do it down to channels and platform we can't

at the moment break it down into SD and HD variants so you could show different options on an HD channel to the SD version of it or by region so we can't show a link to content just in say BBC North West, we can show it by nation but we can't show it by region so England is just treated as one nation and there's no variants below that. What normally happens now with just having the single stream is that most of the platforms are scheduled the same way so the bridge links are pretty much the same no matter which platform you look at, they look slightly different but they should have the same options really on them. Now that thing we've got at the top, the big red bar is what we call an ETV promo so that's basically a promotional item to an additional video stream. Now that can be shown like that or if we go and look on news you should find that there'd be a link there, that link there would probably have been the link to the sports extra video and that's like an ETV link that's not as prominent. You don't get ETV promos on BBC News, that's the first thing, they never appear and whenever you get news content on BBC1 or BBC2 that ETV promo that they've got at the top will always become smaller.

**A.F.** Right because that was something else I found, I think that's something we could touch on a little bit later if that alright? I mean the big difference for me in the BBC channels was BBC1 whereby you've got 50% of it being signposted and 50% of it not being signposted and I think that's quite interesting because it actually…

**P.S.** But you may find that because the bridges are different it's not signposted on that channel because it's referring to a programme that's not on that channel so if its ETV content that's supporting a programme on BBC2 you'd still be able to get to it through the bridge on BBC1 but it might not have been promoted with a trigger.

**A.F.** But what seemed to happen because if you look at signposting by genre, it's a bit unfortunate this because drama/sitcom/soap is by far the broadest genre in spread but only 9% of the signpost was signposted constantly for that genre, 5% of

it was for less than five minutes and 15% of it was no icon but content appears. Now if you then look at sport it's all signposted and that's sports content across, alright there's a specialist channel in Sky Sports 1 but it actually didn't offer that much red button content but there's an awful lot of sport going on on BBC1 at the same time. So it's like, my feeling on that it=s it's like if you've got a big drama like there was a drama called the Accused on whilst I was doing this you'd remove the trigger what I would call the signpost because you don't want to detract people away from the drama on which you've spent whatever it is now, ¼ million pounds per fifteen minutes or whatever, is there an argument for that as well?

**P.S.** Essentially you would only get a trigger if it was content that was related to what was on that channel, I've actually got a spreadsheet that gets sent to me every couple of days from a guy in London who does all the scheduling for these kind of things, he basically defines when the triggers appear alongside which programmes, what the issue is now is that we are so much more limited in what we show on the red button stream so we're only probably showing maybe three or four different programmes today on the red button channel, the one that's being shown at the moment is probably looping for 6,7,8 hours and then there may be something coming on later tonight but there's much less programming whereas last summer what you would have found is that particularly outside of the Olympics a lot more variation on what was shown on those ETV channels show you would have a got a lot more spread because there was a lot more ETV content being produced that would have been shown alongside programmes. So now what you're seeing are calls to action to specific pieces of content that may or may not be specific to what's on the schedule so you might get a situation where you've got a minority sport which is being shown via the red button but it's not being shown on BBC1 or BBC2 so during the day it could be the swimming championships, hockey, we had show jumping on last week. It's not being shown for the rest of the week on BBC1 and BBC2 although there would have been a point in the schedule where a trigger would have appeared to go to sport home or whatever. There would have been a specific call to action, it's quite unusual to see that because normally what you see

are calls to action to a specific programme so when Antiques Roadshow starts there's a play along quiz, the trigger appears alongside it. Normally what you find is that if you get any kind of sports coverage a link to sports home will be shown on screen even if there's no supporting content the link just relates to the red button for the sports text that's there so it really depends by genre, sport make a lot more use of the trigger and the ETV functionality than most genres.

**A.F.** Because the other thing is the other two channels, CBBC and BBC News, constantly there was a trigger  and the interesting thing about CBBC is that it was on both platforms it would be CBBC Extra or something like that...

**P.S.** So they have a permanent trigger which links to their own bridge and the content's specific to the children's genre. So you get the CBBC Extra blog, you press red you get to the standard CBBC bridge which is a different colour and has different options on it.

**A.F.** Not a lot today though!

**P.S.** No there should be Newsround on there but we've got some technical problems.

**A.F.** Right that's interesting! Because one of the things I did find was that, I can't remember what dates it was, but an option dropped out for CBBC at one point, it only offered three options on Sky but four on Freeview, this was when I was doing the data collection. I can't remember exactly which one it was, I think it was a link through to something called CBBC Extra.

**P.S.** There was a separate application called CBBC Extra that offered video content...

**A.F.** And for some reason that appeared on Freeview but didn't appear on Sky for two of the data measurements I did, so I don't know but that would explain why that happened! Because I think there was a question in here about where did it go!? So the two niche digital channels and I assume because you know your audience for those, it's not as broad is it, the programming?

**P.S.** No, you look at news and the reason that there's a permanent trigger there is that the news text service is continuous, it's there all the time, so it's to try and support that programming. With the CBBC Extra blog what you've got, that trigger should take you to the bridge which gives you the option for the blog, and there's other stuff in there I think, there's horoscopes and all sorts of weird stuff I think. So they can put on that bridge more or less link to anything they want.

**A.F.** You see that's not really a blog is it? It's almost a sub menu?

**P.S.** It is yes.

**A.F.** And I think I found presenter profiles...

**P.S.** There is yes, there's a load of stuff on there. And it's quite different to the way that t's presented on Freeview, you've got the same content but it's presented in a much less graphical way.

**A.F.** So the specific content, suggests that there's more variety of content through Sky than Freeview.

**P.S.** Yes, so there would have been last year (2012), yes. More channels, you'd have had a lot more variation, you see the sports multiscreen app could have given you a load of options on sport but you would have still had channels left over to show additional content for children's or...

**A.F.** But there's only 122 appearances of red button content on Freeview and 236 on Sky, having said that there were three channels unavailable, Boomerang, Sky 1 and Sky Sports 1, aren't carried through Freeview but you look down the list here and you've got all this rich stuff, everything from audio options to round the UK, which is national interest, with the exception of BBC News the largest amount of content, 74 appearances of content, BBC News had 96 but they all tended to be the same thing.

**P.S.** Yes, whenever you get a news broadcast then the trigger will appear.

**A.F.** So there's more variety of BBC red button available through Sky than through Freeview, is it simply because..?

**P.S.** There was more capacity at the time but as its, what happened as a part of DQF was that there was a content analysis done to basically look at the use of the simultaneous streams to work out how often we were showing more than one event on those streams, so it was essentially to work out how much value we were getting from this, and I think it was something like, I don't want to give you the statistic just in case it's completely wrong, like 23% of the time was when there was

more than one thing on it so a good 60 nearly 70% of the time all the other channels were completely redundant, they were not being used for any additional content so the BBC's tried to concentrate it down to just this one channel, there's a bit more chopping and changing in terms of the schedules but it's just a way to try and get the best value out of what's available. And interestingly since we did all that work in October November the first time we actually got any kick back from not showing the kind of depth of multi-screen content that we had done before was around the snooker world championships in February March time, that was the first event where the viewer's said, where's the multichannel options, everything up until then we'd had very little feedback on. And obviously for the big events this summer there was a decision made to buy additional capacity for a two week period to cover it off because we knew when we got to Wimbledon that you would get that request whereas having shrunk down from eight channels down to one you do significantly constrain the ability you have to show those events.

**A.F.** That was one of my main drivers for looking into this, that idea that you can move away from the main transmission and you could look at another football match during Euro 2008 I think was the first time I noticed it.

**P.S.** The thing you would have got from the BBC is that in days gone by we would have done some, much more complicated applications because we had the team to support it and each one would have been a bespoke build and it would have cost a lot of money and it would have been ground breaking and all the rest of it. So you think of things like Walking with Dinosaurs and...

**A.F.** Walking with Beasts. I actually went to talk to Marc Goodchild about that way back in the day, this is how long this has been going on, how long I've been thinking about this.

**P.S.** I mean the technology we're using here is very old hat, very, very old hat now, it's really very difficult to support, it needs a bit of love, because some of these devices here are ten nearly fifteen years old some of these and the audience have still got devices like these in the house as the main device and they are very, very difficult to support because they're so limited because if you turn the clock back fifteen years the technological capabilities of  these devices are so restrictive that it's amazing that you get anything out of them to be honest but some of the things that were being done in the early part of this century in terms of interactive TV were amazing when you consider the constraints of this technology. And what happened was that somewhere along the line there was a decision to standardise the frameworks by building products that could do the same and reduce the cost to support it because you could develop an amazing application for Sky that you didn't have the capability to do on Freeview and what we wanted to do was to try and genericise the application so you could release a standardised piece of interactive TV so Antiques Roadshow's a pretty good example, so the play along quiz is a standardised component and we could use the play along quiz for any other programme but Antiques Roadshow is one the more recent ones we've done but it uses standardised components behind the scenes so what you have is essentially an engine which allows you to create questions and form questions which tallies up the score as you go along in a kind of array and comes out with an answer at the end of it. So it's a relatively simple piece of gaming technology behind the scenes but it's reusable so if someone else comes along, say the National Lottery Saturday night quiz they could use the quiz engine to do the same thing because they've got the four options to do the questions and all that. So a lot of the children's games use the same functionality, they use the same four options and then calculate the score so we have play along quizzes and joint quizzes that do the same thing.


**A.F.** The thing that struck me ten years ago, it was ten years ago that I went to see Marc Goodchild and it was at White City and he gave me a little tour, I saw Rahul

Chakra as well and he gave me a little tour and he said here's our interactive design floor and there were hundreds of people just sat there designing stuff. But the other thing, is it simple, this is a fundamental question because I'm just looking at Freeview and Sky, is it just as simple as Freeview, there isn't the technological capability because it comes down an aerial as there is for Sky because it's coming from space on a satellite and there's more bandwidth or is it just the allocation?

**P.S.** It's bandwidth allocation so...

**A.F.** Hasn't Freeview got a bit of a raw deal then?

**P.S.** Well Freeview's a lot more constrained, you're getting it through an aerial so there's much less spectrum capacity. The way that all our digital TV works is that you have a block of capacity that is allocated and then that block is separated into other blocks. Most of those blocks have a big chunk and a little chunk. The big chunk is video, the smaller chunk is audio, whatever's left is data so that's for signalling and the part that you can't really use. So, in the old days when we had a shedload of cash, I don't know where it all went but apparently it's all gone, you might want to say BBC1, BBC2 and the timeshift and news so you've got to fix that bandwidth that you've got to play with, now with Sky you can just get another transponder so you could fit another set of channels in there, that's how we offer all the regional variations on Sky, we've got more transponders because we need that because the only way to get regional content is to have a duplicate of that channel which are regional content, so on Sky there will be sixteen variants of BBC1 shown in standard definition on Sky, on Freeview all you get is whatever the main transmitter in the area gives you, you get BBC North West here whereas on Sky you can be sat in the middle of Scotland but if your card says you get the Midlands you get BBC1 West Midlands, because it's all broadcast over the same capacity. What's happened over the years is to make the best of this bandwidth and to optimise it, so what we found is that the data component of it starts to get reduced because

they want the space for other things, either video channels or other audio channels or whatever, and because you've got a fixed amount of bandwidth to play with you start to turn the dials and we don't get the sticky end of the wedge but we get squeezed more and more. And that means that the carousel that the service plays into, so essentially this is carousel content that gets rotated around, so we have PAL content, plays out on the carousel, the box latches onto it, starts reading through the carousel and when it's got enough it'll show you the trigger, you'll press red. It's just a way of seeing the numbers Ceefax used to do a similar thing.

**A.F.** That leads me onto my next question, the Olympics coverage, I thought the BBC absolutely smashed the Olympics and all that. I went for a walk in the Dales on the day the Olympics started and there was someone in front of me going it'll be rubbish and nothing works and all this kind of stuff, and I thought that the BBC absolutely smashed the Olympics and it was a resounding success. The only problem I had with the Olympics was the video content on Freeview because there were a couple of streams because you could link through to the BBC3 coverage and the one video feed that Freeview had but it wasn't, if we go back to BBC news again for example. So what I found was, this is where I had this big confusion when it said choose sport or sport home on the trigger then you went into it and there was a sports index in there and then you went into the sports index and it was in there like it wasn't promoted at all whereas on the Sky platform it was made very clear to you if you pressed that button if you went into that part of the menu you were going to get a lot of Olympics coverage. Now, why was that?

**P.S.** Right so, what happened was that on Sky, Freesat and Virgin Liberate the platforms built their own applications to the BBC's spec so they built their own switching application because the BBC didn't have the capacity to do it in the time that was being allotted. With Freeview because the capacity is so much more constrained so you had the BBC allowing BBC 3 to show its output during the day what we did was to reuse an existing application which was a system called My

Sport Now which is where it's bound into the sports index but essentially what we did on Freeview was reuse an existing application to do the switching because there wasn't the need to build something bigger and Freeview as a platform didn't have the capability to do it so that's the reason that it didn't need as complicated an application whereas on the other platform because they had the access to the full 24 video streams we didn't have a solution in house that we could scale up to that kind of level. And the Commonwealth Games next year will prove interesting.

**A.F.** Right that's interesting then because it was astonishingly good!

**P.S.** We got the rewards from it because I think it's fair to say that red button was seen as being on the wane because everything was about connected applications, it was about the internet, it was about mobile, tablet, the other products. I think that it's publicly known that we got 24 million viewers to the red button coverage across the Olympics, which is a massive number.

**A.F.** Especially as only 17.5 million were on average watching it across the BBC.

**P.S.** Yes, that's a cumulative figure across the two weeks of coverage. On red button we normally do about 17 million people a week across the entire service, that's the text and the interactive TV elements of it but this was 24 million just on the video content alone and this year we got nearly 11 million for Wimbledon and nearly 6 and a half million for Glastonbury which to my mind shows the, I think there's some phrase being used within these walls, the red button habit is being continued on the aftermath of the Olympics. It's quite interesting in that the red button was a turning point and people have had to look again at broadcast red button as a platform for content distribution and people are saying we have to look at it because it got those numbers last year and what we saw was a tail off after the

Olympics were it went back down to its normal level and the interesting thing was whether when we got to this summer with Wimbledon and Glastonbury whether it would pick up again. Whether the reduction in streams would have put people of, they'd have lost interest and moved to connected applications but what happened was that people went back to red button in the same way that they had any other year really. So there's a lot of internal, discussion around how we get red button to service those events in the future, so the next events being Winter Olympics, Commonwealth Games, World Cup and various other stuff next year (2014). So, yes, there's a lot of talk going on.

**A.F.** Because it stuck out a little bit like a sore thumb. I thought, poor old Freeview it's getting left behind here.

**P.S.** Freeview's possibly going to get better in some ways because of the announcement from OfCom about the 600 mhz band towards the end of the year, and that presents some interesting opportunities for all broadcasters the challenge we have is actually a challenge we met first hand this year with Freeview, which is that we need to make our applications more aware of the users experience so the second channel 302 this year was not broadcast on a BBC multiplex, it was broadcast on a commercial multiplex which had some capacity that we bought from Archiva and that isn't universally available it's only available to people watching on the main transmitter not via a relay transmitter which if you look at the figures means that 25% of the people in Wales don't get 302, 17% of Scotland don't receive their television from a main transmitter so they wouldn't get that channel either so what we had to do is change the application to take that channel away if it wasn't in the users channel list and with what has happened with Freeview and the 600 mhz bandwidth we have to do the same thing again so that if there's additional red button channels found on one of those 600 mhz monitors isn't available to users we take them out of the list. What we'll get into is a really strange situation in what I said to you before about platform parity in that it remains broadly true but we may

find that in attempting to push the boundaries we end up with a mixed economy in the availability of some of the content particularly on Freeview.

**A.F.** So, right, I mean one of the things I've found, this may have changed now and it probably will is that the content I've found was teletext based, news teletext, weather teletext, sports teletext and if you include in that business and markets information, travel news, national interest, main index. All of that was kind of lumped together in this hard news, soft news , general news purposes which accounted for a huge amount 23% hard news, 20% soft news and 25% general news all that, you know, teletext with a bit of multiscreen thrown in. I think you've probably answered this question already but is that a policy decision, a technical one or a matter of resources, or is it all three?

**P.S.** It probably is all three, I mean what you see on the red button service today is a digital equivalent of Ceefax. We went through some quite significant pain earlier in the year to change the way that the red button service works in that up until February, March this year (2013) most of the text service that you saw was fed from Ceefax in London, you didn't see it on TV but it was still lurking around in the background to the point where it was being screen scraped off Ceefax and pushed through to the red button so the team went through an awful lot of pain trying to scrape that and push it through to the service. Which meant that some areas of the service got taken away but the text service is still vitally important and still part of the service license, it's in the policy but also because it's extremely well used. The interesting reason why is that when you look at a demographic of red button as a service it's old, it's very old, it's like 55 plus the majority of the red button audience. So when you compare that against the number of people that are online, broadband or whatever to a lot of the audience of red button this is the internet, this is it, this is as much as they get and between 25 and 30% of the users of red button don't use any other service, they don't use BBC online at all, which is quite

an amazing figure when you consider that 25% to 30% of 17 million that's a very large figure.

**A.F.** What happens when, Oh god this is going to sound horrible, what happens when these people, how can I say, start to disappear?

**P.S.** That's where connected red button comes in because you've grown people up with those brands like iPlayer, you're trying to focus around BBC Sport as a brand. A lot of the products are trying to act like a seamless service between what you get on website, what you get on mobile, what you get on tablet, what you get on TV so that you're getting the same portfolio of content across all those devices. Sport are probably the closest out of all of them in that the sport IPTV service that runs over broadband has probably the same level of video content that you can get anywhere on the service so it feels like a cohesive offer of content.

**A.F.** That leads nicely on actually, the programme specific content that I found, so that out of all this stuff that I found, the stuff that was actually linked to the programme that was on at the time was 5%, which is four appearances, the total is a little bit smaller for this part of the study. I mean I suppose, and if I were to go to Sky I would ask this question as well does this mean that the BBC see's the red button as being more attractive to the type of demographic that watch sport? Or is it just easier to attach stuff to sport?

**P.S.** See sport is ordinarily, it's content that's being produced elsewhere in sport for another platform, it's possibly material they already have on hand so say for example snooker if they're covering two tables at the World Championships and they're showing the first table on BBC2 then they are filming that material on the second table anyway it's coming back through the gallery here at Salford so for

them to push that out to red button it's a no brainer because the content's already there and they have the distribution mechanism to get it out to the public...

**A.F.** And I suppose it's the same for additional commentary at football matches...

**P.S.** Yes that's right, the content's, I don't want to say free, but it's already there coming through the building somewhere. So if you look at the Winter Olympics all that content is being brought back from Sochi so sports just got to find the best way to get it out of the door so that could be online but when you get to the broadcast side and the distribution deals are set up to get that out on broadcast, on the broadcast medium, whether it be Sky or Freeview if the bandwidth is there it's easy for them to get it out. For a lot of the other genres it's a bit more difficult because it would have had to have been produced separately to fit it...

**A.F.** Like the stuff we saw with Walking with Beasts and Walking with Dinosaurs..?

**P.S.** They're massive interactive productions. If you look at something like the Springwatch additional webcams and whatever, someone somewhere in the BBC is having to sit and look at the footage to check for compliance, it's a piece of content that's got extra costs attached to it, it's not something that's already there it's something that has to be produced by somebody else so yes, you'll find that in certain genres, sport is the easy one to deal with.

**A.F.** And also in addition to that, alright all the programme specific stuff that I found, the majority of it was on the BBC, BBC1, so there's specific content on BBC1 for sporting events, it's like you say the content already exists, because it's being

pushed through BBC1, if it was being pushed through BBC2 would you do the same thing?

**P.S.** Yes we would yes.

**A.F.** Right so it's not an attempt to say look at us, look what we can do, watch this!

**P.S.** No, it would be on the basis of what would be normally how important that sport is so the chances of you seeing an FA Cup match on BBC2 are pretty minimal whereas if it was hockey, say that the hockey was on BBC2 and there was additional coverage on the red button, they would link to it through BBC2 not BBC1 because it has the relational link between BBC2 and the red button coverage.

**A.F.** I'm kind of wrapping up now you'll be pleased to hear! You've kind of answered this before but I still think it's worth asking the question, it's in the questions and it's this, in the early days of digital there were high hopes for interactive TV which have not really come to pass any thoughts of why this could be or why this is?

**P.S.** I've kind of got a vested interest in this, and I've done a lot of looking around to find out why this is and a lot of it is down to cost, the cost of producing a bespoke interactive experience. As you say the experience of an interactive narrative almost like one of those adventure books that you bought when you were a kid, you want to know what happened when you did this go to this page, you want to know what happened if you did this then go to this page, I think that it's really, really interesting because it's an area that the platforms have the capability to do. I think that a lot of it is about the bespoke build we would have to do to support a specific

programme, part of it is to do with the commissioning process in that commissioners see their content as being TV and they seem to find it very difficult to work out the multiplatform opportunities for it so how could content be re-purposed for on-line, what on-line materials can you get to support it, if you have interactive TV how do you use interactive TV to support the programme? So they think about the brand of programme, the example I'm going to use is a team I used to work with in Birmingham, and that was the first series of Coast. On the first series of Coast they spent a bit of money creating some interactive content about coastal walks that had physical metal plated that went up to various places in the UK they were hung up on lampposts and it was designed to support the programme and they went walking round the coast of the Isle of Wight or something there was a sign on a lamppost, if you want to know more about this walk that's been featured on the programme then phone this number or scan the QR code and go to the webpage that tells you about what you're going to see as you go walking along. That's a bit of forward thinking but the reason that it was only done for one series is because it costs a lot of money to go into that kind of detail to produce that amount of content for it. And I think that's what it is, times are tight you know.

**A.F.** But what you're not saying is, I mean obviously economics plays its part but one of the reasons that I was leaning towards that is that television isn't a very interactive medium, it's very passive, pressing a button on a remote control is about as interactive as it gets because the audience likes to be led somewhere because that's the whole point of narrative structure, but what you're not saying is that's the only reason...

**P.S.** If people are willing to get involved with a programming concept which is actually a straight forward experience, so you look at the Antiques Roadshow play along quiz, got some good numbers for that, in the millions, whereas on the mobile app that runs alongside it, the mobile app uses watermarking it uses the audio to sync the app to the programme so that you can play the questions in the same way

so the application is time coded so that the next question starts at the right time so someone's got the right chunk of programming at the right time, it starts playing out from red b, the questions start playing out at the exact moment that the programme. That's a simple idea, it's a really simple idea that's fixed into the programme and the metrics for the amount of time that people stay in the quiz are very high, there's a, there's not a lot of dropping out, people getting bored and going back to the main programme, if people are in the quiz they tend to be in the quiz for the entire programme it's quite unusual because what you get with a lot of red button content is that people will go in, have a look around, get bored, not like it, go and do something else it's quite rare to have red button content that's that sticky. But you're right in that most people turn on the telly to watch something they don't turn on the telly to use it as some sort of interactive games device and this is interesting when you look at connected red button because connected red button is a lot more web like as you say a lot more rich graphically but when you look at the devices that are coming into the market right now, the smart TV's that are coming into the market, they're very complicated, you press a button and whereas on  a TV that's ten years old you get a TV picture appear that you can sit there and watch, now it's like oh here's the Samsung app store that you've got to press fifteen buttons to get out of!

**A.F.** I was playing with Youtube, a friend of mines got a Smart TV. I was staring at my TV the other night thinking should I go for a Smart TV, there's an advert on for it. I tried to use Youtube on it, it's impossible!

**P.S.** It's really interesting because I've been in some interesting philosophical debates with people on this floor, who work on connected red button and I don't know if it's just my time being on broadcast red button, I'm very much of the opinion that you have to make the applications and the experience feel very much like TV. You shouldn't be making it like this immersive game that you're supposed to play with to get the content you're looking for because ultimately they won't

bother so for me it's the video switching capability that we came up with this summer which was derided by some for being unbelievably simplistic! Basically that's why it was called the simple video switcher because it did exactly what it said on the tin, you pressed a button and went to a piece of video, you pressed another button and went to another piece of video, press the blue button, press that and there's the video no wandering around menus or choosing from a long list of video; 1,2,3 there you go that's it, I may well get pummelled for that in the future!

**A.F.** You're right! I think the beauty of the internet is its simplicity in that you can go in type something go to a website and click on something to get somewhere else.

**P.S.** I just think that we've got to keep in mind, particularly with the demographic of the audience that they don't want vastly elaborate experiences to navigate, to my mind they want something that's as simple to use as the TV the way they would any other channel and I think that's the thing that we have to do with red button is make it feel like another channel, a very different channel in terms of its content but it's not a channel, it's a stream but I think that the way we need to feel that way to use it is the same as you would use television elsewhere.

**A.F.** Final question proper. If the BBC had more resources what are the sort of things you would like to do?

**P.S.** That's a good question. How do I put this without getting into trouble.

**A.F.** You don't have to answer if you're going to get into trouble!

**P.S.** There's been a period where connected red button has been the future and where the focus has been of the department so broadcast red button has suffered and ended up in a void particularly with the move up from London. We are desperately trying to secure the future of the platform, a lot of the changes that are being made in terms of the reduction of the video channels and the removal of ceefax at the back of the red button system caused quite a bit of friction with the audience and the platforms are very old and they're showing their age and they're very brittle, they're not as robust as internet technologies which our experience with the Ceefax speed, the migration back of the system, we hit a major stumbling block with Freeview with the technical capabilities of some of the boxes that are in there, they have some memory constraints to the server that they were playing out to them broke because we sending too much content to them so we had to go back to the drawing board and scale back the content to try and fit the limits we had. So the devices are very limited the platforms are very old the technical skillset had to be maintained and is quite difficult to find and the audience have had a rough ride in the last year since the Olympics in terms of what we try to do to keep the service running. I think that we will get more money to put into broadcast red button because the audience isn't going away that quickly and the take up of connected devices is not as quick as some people thought so we think that broadcast red button is going to be around for a long time yet, possibly longer on some platforms than others. With Freeview and Freesat the eco system makes it quite easy to get connected red button onto those devices, with Sky as you can see from the consultation that OfCom ran this is a much more closed eco system, it's much more rigid, it's much more consistent, you go to any one of these Sky devices they all work the same in that product ring, the Sky + box that's made by Amstrad works the same as the Sky+ box that's made by Pace the actual product groupings have a lot of consistency in their environment, all the Sky HD boxes and all the Sky SD boxes work the same, it's a very fixed system to work with but trying to get connected red button onto those is going to be a whole lot more difficult than what it would be on other devices.

**A.F.** So do you think that this is why Sky are trying to do what they're trying to do?

**P.S.** There's a lot of interesting stuff in that consultation. We are not 100% sure why they're asking...

**A.F.** It looks like to me to be an attempt to stop other broadcasters form using the red button stream on Sky platforms which suggests that they may have found a way of maximising the commercial elements of it, maybe the success of the Olympics has made them think like that.

**P.S.** I think that a lot of it is that these devices are really old and have to support open TV as part of the spec, the newer devices the Sky boxes support open TV as an emulation layer and part of our thinking is that, as I say there's a genericised technology stack behind the scenes. The Sky HD boxes are quite old now and they have limited memory constraints which mean they want to do something else with that memory and they want to stop the emulation layer in order to regain that memory to do something else, I wonder if it's something to do with that and that the devices are quite memory constrained at the earlier end of the market because I don't think that they'd be able to stop it on the SD boxes but on the HD boxes because they've been around for a bit I don't understand where they would go in terms of their marketing because if you say that this is a Sky HD box but it's not been made since this date then it's going to be a difficult marketing message to sell. If they're introducing a new feature and you've got a Sky HD box from 2008 or whenever then you can't have it but you can if you've got a 2012 box. Could be, we don't know for sure, see where we get to with that.

**A.F.** One further question and it's an easy one to answer. If I have any further questions is it OK to get back in touch?

**P.S.** Yes. Course it is.

**A.F.** Thank you that's it.

**Interview ends.**