

**Establishing Methodologies for the Analysis and
Development of Interactive Documentary**

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Establishing Methodologies for the Analysis and Development of Interactive Documentary

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A thesis submitted in partial fulfilment of the requirements of
the University of Abertay Dundee for the degree of Doctor of Philosophy

September 2013

I certify that this thesis is the true and accurate version of the thesis
approved by the examiners

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(Director of Studies)

Declaration

I, Dayna Galloway, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I can confirm that this has been indicated in the thesis.

Signed _____ Date _____

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Abstract

This work explores the interactive documentary as a hybrid, emergent cultural form that has been shaped by the growth of digital interactive entertainment. Through investigation and analysis of the historical background of documentary, the research discusses the development of documentary film, examining the notions of truth, objectivity and authorship in factual media, and their relationship with existing understandings of interactivity. Critical parameters are then derived to objectify the process of deconstructing interactive and documentary media forms.

An inclusive view is taken on the categorisation and classification of interactive documentary, informed by the fundamental constructs of both traditional documentary and interactive media. The constructs and structures of interaction and narrative are highlighted to facilitate the identification and examination of existing examples of factual interactive entertainment– from computer generated documentary games to navigable filmic forms. The thesis proposes a range of characterisation frameworks for the study of interactive documentary and these are applied towards case study analysis of sixteen interactive productions.

The final work presented in this thesis proposes a theoretical framework for the analysis and development of immersive, interactive documentary experiences, encompassing the processes of content creation and consumption from the perspectives of both audience and director.

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Chapter 1. Introduction

Traditionally, documentary has been presented as an objective portrayal of fact: the actualité. In recent years, however, a new breed of 'dramatic' documentary that uses coercion; persuasion, and emotional manipulation on a par with any Hollywood epic has emerged to critical and commercial success. Contemporaneously, the world of interactive entertainment, and in particular the computer games technology, has evolved to the point at which near-realism can be displayed onscreen in real time. This, taken alongside the immersive interaction in which the industry specialises, and the dramatic techniques of engagement employed by the latest crop of documentary films suggests that we may be at the brink of a new cultural form: the interactive documentary.

The purpose of this work is to explore the new medium of interactive documentary as a valid cultural and artistic form, establishing an aesthetic and operational framework that will underpin its application and appreciation. In so doing, we aim to address the question – does the documentary form allow for the dynamic alteration of the core content or message in response to interaction? If so, what are the models of interaction that define this form, and how might they be applied in practice?

This research is concerned with exploring the theoretical underpinnings of the interactive documentary. In recent years there have been various attempts at developing entertainment software or systems that provide users with a factual, interactive 'documentary' experience, although arguably, none of these have

realised their promised potential. For example, *JFK: Reloaded* (Traffic Games 2004) is a “docugame” that challenges the player to assume the role of Lee Harvey Oswald and re-enact the assassination of President Kennedy to prove or disprove the lone gunman theory by recreating the famous three shots allegedly fired by Oswald. Similarly, *Kuma\War* (Kuma Games 2004) is a downloadable ‘reality game’ that provides the player with the ability to revisit actual events and situations that have occurred in both past and current global conflicts. However, in each case we have a goal-driven computer game scenario, and one may argue that the ‘documentary’ context simply provides background for a standard computer gaming experience. Interactivity has also been applied to more traditional filmic content and this hybrid form is represented by productions such as the automatic documentary generator *Vox Populi* (Bocconi et al 2005), the arcade machine *Dragon’s Lair* (AMS 1983), and the DVD release of *Final Destination 3* (2006). However, despite the underlying potential of such products they usually fall short of societal expectation and ultimately end up being regarded as a critical and commercial failure. The intention of this research is to gain an understanding of the reasons for such a negative reaction. This project will explore and refine the current understanding of the term ‘interactive documentary’ from the point of view of both creator and consumer. Therefore it will be essential not only to define ‘documentary’ but to explore the evolution of its meaning and its cultural significance in society. Through detailed analysis of the structures and techniques that operate successfully within other interactive and passive media forms such as computer games, traditional documentary and film, it is intended to extrapolate this knowledge towards the

formation of a text that establishes a creative methodology for the development of interactive documentary. The objectives of this research are to:

- Analyse and discuss the development of documentary film from its inception to its contemporary form.
- Examine the notions of truth, objectivity and authorship in 'factual' media, and the developments or consequences that arise when applied to the current understanding of interactivity.
- Analyse existing or emergent examples of 'factual' interactive experiences – from computer generated 'docu-games' to navigable filmic forms.
- Evaluate the cultural and technological issues that may influence and impact on such a production.
- Analyse the development of interactive forms and identify and evaluate technology that has the potential to facilitate and inform an engaging and rewarding interactive documentary experience.
- Establish a theoretical production framework for the development of an immersive, interactive documentary experience.

A review of literature is presented in Chapter 2, beginning with an exploration of the historical origins of the documentary, the characteristics that define it as a form and its relationship with truth, objectivity and persuasion. This chapter then moves into the territory of the interactive documentary, presenting current understanding and

critical perspectives on the emergence of the form and the perceived challenges presented by interactivity. An investigation into interactive narrative and gameplay precedes a section concerning the use of factual material in interactive entertainment, the role of the audience, and the potential for criticism and controversy.

Chapter 3 builds upon the conclusions of the literature review and proposes four categories for the classification of interactive documentary. Characterisation frameworks for evaluating interactive documentary are defined in response to these four forms, and this leads to the analysis of an expansive online debate, and the identification and rationale for the qualitative analysis of sixteen case studies.

Chapter 4 analyses and evaluates the debate and social interaction that features as part of an online community, and attempts to understand the emergent behaviours, patterns of participation and the audience's response to an initial television documentary broadcast.

Chapter 5 comprises the sixteen case studies of individual productions that either claim to be documentaries, or have been identified as demonstrating the inherent characteristics of documentary. Each case study is analysed and evaluated in terms of its similarity to documentary, its treatment and modes of representation, its content and the approach and quality of its interactivity.

In Chapter 6 the findings of the case studies are further evaluated through a process of visual cluster analysis to ascertain a holistic understanding of the forms and constructs of interactive documentary. The conclusions from this stage of the work

are then applied towards establishing a methodological framework for the analysis and development of interactive documentary and are presented in Chapter 7. The overall conclusions and the potential areas for future research are provided in Chapter 8.

Chapter 2. Literature Review

2.1 The Documentary

Nichols (2001, p.1) provocatively states that “Every film is a documentary”. Although at face value contentious, Nichols’s statement points at a fundamental truth, namely that all moving image can be argued to have some form of documentary value. Indeed while all film can be viewed as being reflective of a particular society at a particular time, it can also influence and drive cultural response. However, although the sentiment contained in this statement is true, it would be more accurate to state that ‘every film is a cultural document’, facilitating a retrospective analysis of, for example, changing fashions or recurring themes as explored by a particular director.

John Grierson was the first person to apply the term ‘documentary’ to a specific form of filmmaking, which he famously described as “the creative treatment of actuality” (Hardy, 1946, p.11). To this day his principles continue to exist at the forefront of public perception, so that the dominant cultural view is that “documentaries explore actual people and actual situations” (Rabiger, 1998, p.1). However, as we shall see, documentary has always been about more than an objective statement of fact and the form has, since its inception, used dramatic and emotive techniques to portray a partisan point of view.

2.1.1 Historical Origins

Early photojournalism can be considered as a forerunner to filmic documentary and established a number of conventions that remain connected to documentary filmmaking today. Rothstein (1986, p.18) highlights the photography of Eugene Atget as being demonstrative of traditional 'documentary' values. Atget's work is clearly persuasive, but persuades in a positive fashion, providing the viewer with a more truthful and direct representation of reality. Documentary film was essentially a logical progression from the initial forays into the moving image during the late 19th century. Filmmakers of the time would attempt to capture life as it happened, creating short films that featured a range of subject matter such as a train arriving at a station (*Arrivée d'un train en gare à La Ciotat*, 1895), or a group of people leaving their workplace (*Sortie d'usine*, 1895). Looking back, these films may appear primitive, but at the time they were seen as magical and life-like. The potential of this emerging cultural form to convey factual information to a large audience soon became apparent and filmmakers, photojournalists and reporters seized upon the technology and thus the newsreel was born. Originally, newsreels were short, silent films that covered a range of niche topics of public interest, such as Louis Lumière's *Arrivée des Congressistes à Neuville-sur-Saône* (1895) which features the reactions of photographic society members as the camera is pointed in their direction. The mass appeal of newsreel as a format was further increased through the production of content covering important historical events and travels in foreign lands, providing the public with the opportunity to 'experience' proceedings and places for themselves. With the advent of sound in film, the newsreel eventually embraced

this new technology and in the 1930s evolved to become the style with which we are most familiar, featuring rousing musical scores and commanding, authoritative narration (Hiley and McKernan, 2001, p.187).

Even the earliest examples of documentary are based around semi-fictional treatments or anthropomorphisation of their subject matter. Robert Flaherty's *Nanook of the North* (1922), is presented as an observational film that shows an Inuit family and the constant battles they face to survive the harsh Arctic climate. Before filming commenced, Flaherty studied Nanook's actions and daily routine to begin to piece together a 'reality-based' story template for the film. Flaherty then arranged for activities of relevance to the overall narrative to be re-enacted on film and 'directed' Nanook to achieve specific shots and scenes (Ellis and McLane 2005, p.21). In the edit room Flaherty would then construct a linear narrative from an accumulation of shots gathered through this method of direction. The continuity between shots maintains the illusion of reality and the impression that events took place in real-time and are not temporally fragmented. Although Flaherty's intentions were sincere, *Nanook of the North* contributes to the misinterpretation that documentary is a purely truthful and objective form. Nevertheless, Flaherty's approach was groundbreaking through its ethnographic intentions and the unique use of "the editing syntax of narrative film to portray a documentary reality." (Cook 2004, p.191).

Through the work and vision of John Grierson, the foundations and conventions of documentary were further established. Whilst traditional film was continuing to experiment with new aesthetics and visual language, Grierson saw the inherent

power of documentary to communicate a political manifesto. During a time of limited social awareness, Grierson and his team used documentary to bridge the class gap, highlighting the interdependencies between the rich and working classes (*Britain Through a Lens: The Documentary Film Mob*, 2011). From the noble depiction of the fishing industry in *Drifters* (1929) to a poetic portrayal of the postal train service in *Night Mail* (1936), the form rapidly evolved beyond consisting as a record of the historical filming of events. Whereas *Drifters* presented the output from extensive location shooting tied together as an informative narrative, *Night Mail* is arguably more representative of a heavily-authored, enhanced reality due to its use of scripted scenes shot in a studio, narrated verse by W. H. Auden, and a musical score crafted by Benjamin Britten (Parkinson 1996, p.124-125). The involvement of established arts practitioners such as Britten and Auden, further developed a documentary strand that presents a more emotive and expressive form of communication, whilst maintaining the overall aim of addressing public awareness and perception. Furthermore, Corner (1996, p.42) highlights this inherent duality found within documentary, arguing that - “The social purposes of documentary are not journalistic nor are they propagandistic – they are promotional, certainly, and didactic, but they are interwoven with the development of citizenship in modern society and with the cause of social democratic reform. As a practice and a form, documentary is strongly informationalist (and therefore requires a level of ‘accuracy’) but it is also an exercise in creativity, an art form drawing on interpretative imagination both in perceiving and using the sounds and images of ‘the living scene’ to communicate ‘the real’.”

2.1.2 Defining the Form

Nichols (2001, p.20-22) sums up the complexity of documentary by arguing that it is a term that cannot be as easily defined by traditional methods. “Documentaries adopt no fixed inventory of techniques, address no one set of issues, display no single set of forms or styles. Not all documentaries exhibit a single set of shared characteristics. Documentary film practice is an arena in which things change. Alternative approaches are constantly attempted and then adopted by others or abandoned.”

Hill (2007, p.47-55) suggests that documentary as a form of factual programming can be categorised and defined in terms of “the institutional settings within which documentary practice exists”. Breaking down the televised output of British documentary, Hill identifies –

- the specialist documentary, which is a thematic production covering the natural world, history, science or the arts.
- the observational documentary, which often follows a character through everyday events but ultimately presents a commentary or greater significance.
- general documentaries, which are classified by Hill as ‘traditional’ content that does not fully fit any of the existing categories.
- Investigative documentaries which focus on uncovering and exposing stories or incidents of social significance.
- Filmic documentaries which utilise the longer cinematic format to target a broader, global audience.

- Experimental documentaries which generally consist of emergent and innovative practices in factual filmmaking.
- And popular factual – which is now an accepted part of our television schedules, in the form of ‘reality TV’.

There is a degree of overlap between some of these forms and it would be more useful to establish a more accurate breakdown of the form based on the presentation style, authorial intention and the core communication aims.

In reference to Barsam’s (1992) critical history of the non-fiction film, Wells (2002, p.213-214) highlights Barsam’s list of potential categories of the non-fiction film and suggests that this method of categorisation attempts to determine the variety of approaches to utilising ‘actuality’ footage. Although the categories are broken down as - Factual film, Ethnographic film, Films of exploration, Propaganda film, Cinema-verite, Direct cinema, and Documentary – the separation of documentary as a specific category conflicts with Rabiger’s previously discussed notion of documentary as a collective term for a range of films that explore “actual people and actual situations”. Wells asserts that it is the particular treatment of the ‘actuality’ footage that therefore defines the context and purpose of the resulting form. This is explored further by Corner (1996, p.27-30) who focuses on the approaches to communication in documentary, and defines four modes of visual presentation -

“Reactive Observationalism” - This mode is more easily understood by the term ‘fly on the wall’, a method of film-making which presents material as it happened, recorded with the technology available at the time. The actuality footage in this

instance is determined by the observation of the camera operator in response to the immediacy of the situation.

“Proactive Observationalism” - This mode is again informed by the observation of the camera operator, but without the pressure of temporal factors, pre-determined decisions can be made to the selection and treatment of material.

“Illustrative Mode” - This mode uses visuals to support and directly portray the content of the scripted narration or commentary – a method which is ubiquitous in news broadcasting to facilitate clarity and continuity of communication.

“Associative Mode” - This mode utilises footage to provide a secondary level of reading along with the literal content of the scene – this can also be characterised by the use of symbolic and metaphorical communication.

All four of these modes, involve the authorial manipulation of content, albeit to different degrees, and present a motivation to move beyond the false notion of the camera as evidence. Clearly, directorial decisions and the editing process result in an authored ‘reality’, however before exploring issues of truth and representation, it is more prudent to consider the fundamental values which justify the existence of documentary as a valid media form.

In *Theorizing Documentary* Michael Renov (2003, p.21) presents four categories, with exceptional clarity, that define the purpose of documentary.

“1. To record, reveal, preserve

2. To persuade or promote

3. To analyze or interrogate

4. To express”.

While these categories are evidently analogous to the Griersonian motivation of crafting films which explore and promote social awareness, they still exist as aims that represent the intention of the form and therefore do not communicate a framework or deeper methodology for constructing a documentary. Grierson (1998, p.76) presents a grandiose, but no less accurate justification of the societal position of documentary, and the proficiency that is required to achieve profound, accurate and meaningful communication -

“When we come to documentary we come to the actual world, to the world of streets, of the tenements and the factories, the living people and observation of living people, but I charge you to remember that the task of reality before you is not one of reproduction but of interpretation. We have to give creative shape to it, we have to be profound about it before our documentary art is as good or better than the art of the studio . . . It is only good if its interpretation is a real interpretation, that is to say one which lights up the fact, which brings it alive, which indicates precisely and deeply our human relation to it.”

Documentary is arguably a pre-meditated endeavour, and whilst there may be serendipitous moments during the act of content acquisition, it is important to consider the role the film-maker undertakes in both influencing how that content is obtained and the methods and format in which it is ultimately represented. Nichols

(2001, p.138) presents six modes of documentary representation that are characterised by the dominant voice that exists within a documentary production. In most cases, each of these modes was informed by its predecessors and was often constructed and defined in response to the limitations or perceived qualities of an existing mode. The table below presents a summary of Nichols view -

MODE OF REPRESENTATION	CHARACTERISTICS	POTENTIAL ISSUES
POETIC	Reassemble fragments of the world poetically	Possible lack of specificity, too abstract
EXPOSITORY	Directly address issues in the historical world	Potential to be overly didactic
OBSERVATIONAL	Eschew commentary and re-enactment; observe things as they happen	Lack of history, context
PARTICIPATORY	Interview or interact with subjects; use archival film to retrieve history	Excessive faith in witnesses, naïve history, too intrusive
REFLEXIVE	Question documentary form, defamiliarize the other modes	Too abstract, lose sight of actual issues
PERFORMATIVE	Stress subjective aspects of a classically objective discourse	Loss of emphasis on objectivity may relegate such films to the avant-garde; "excessive" use of style.

Table 2.1 Nichols Modes of Documentary Representation

Evidently, all these modes of documentary exhibit a degree of authorial manipulation, which could be argued to be demonstrative of fictional practice, potentially resulting in misreading and accusations of manipulation of factual material. Bernard (2004) upholds the assertion of documentary as a story-telling

form, and whilst it may have differences with fiction, the underlying motivation across both forms to tell powerful stories using traditional narrative structures and devices remain true. Furthermore, Bernard emphasises the different approach that fiction and non-fiction creators must take and the great degree of responsibility that is inherent in factual media production - "Unlike dramatists, however, nonfiction filmmakers can't invent characters and plot points, but must instead find them in the raw material of real life...at the same time, if the film is to be documentary and not propaganda, this creative arrangement must result in work that adheres not only to standards of good storytelling, but also good journalism." Whilst fiction film is categorised by genres which are defined by a specific narrative structure, plot or aesthetic style, the documentary instead appears to be defined by the intentions, actions and voice of its creator. Consequently, the creative and editorial practice of the film-maker is therefore regularly questioned and debated due to the position of responsibility that documentary holds within society. Indeed, it is the relationship between creativity and truth which inspires much of the debate regarding documentary practice, and can lead to claims of betrayal, manipulation, and ultimately, audience mistrust (Mills 2011, p. 81-98).

2.1.3 Truth, Objectivity and Persuasion

It is perhaps the audience's misinterpretation of observational filmmaking that has led to accusations of narrative manipulation and dishonest practice. Bruzzi (2006) explores the impact that *cinéma vérité* and latterly, direct cinema have had on the documentary. As a form, *cinéma vérité* presents the audience with a narrative which

appears to have been constructed with minimal intervention from a filmmaker who is operating with greater flexibility and responsiveness due to the use of portable cameras. Arguably this limited onscreen intervention has fuelled the misconception that the filmmaker is purely a passive observer and that the film is a direct, and temporally accurate presentation of events, free from subjective opinion or emphasis of particular content. Indeed, Bruzzi cites an interview with Emile de Antonio, whereby he wholly rejects the notion of objective filmmaking – “Only people without feelings or convictions could even think of making cinéma vérité. I happen to have strong feelings and some dreams and my prejudice is under and in everything I do.” (Bruzzi 2006, p.70) Evidently, subjectivity has negative connotations in the non-fiction film, however it has been embraced by some as a method for enhancing and revealing broader truths and ideals. Barsam (1992) discusses the history and theory of cinéma vérité, and asserts that its origins began in the 1920’s with the work of Dziga Vertov. Vertov’s Kino-Eye manifesto, resulted in a style which focused on the process of acquiring and organising footage into a poetic representation of the evidence recorded by the camera. Perhaps one of the most important factors emerging from Vertov’s writings is his transparent communication of the thought process of the filmmaker and how they mentally construct the film during and after the filming process. (Nichols 2001, p.95-6) Whilst Vertov’s work demonstrates a positive moral and ethical stance, with clear cultural and social value – other forms of ‘non-fiction’ film also rose to prominence throughout this period.

The propaganda film already existed in motion pictures with D.W. Griffith's *The Birth of a Nation* (1915) and Sergei Eisenstein's *The Battleship Potemkin* (1925), but persuasion and manipulation would be taken to a far greater level in Leni Riefenstahl's production *Triumph of the Will* (1935) – a two-hour film 'documenting' the 1934 Nuremberg Rally. Described by Nichols (1991, p.165) as a "paean to fascism", *Triumph of the Will* is perhaps one of the most controversial films in the history of the moving image. However, the innovative cinematography, technical execution and artistic representation applied by Riefenstahl are worthy of recognition despite the subject matter promoting the Nazi party's ideology. During the Second World War the allies and the axis powers understood the power of the moving image and produced propaganda in support of their own cause and specific goals. Frank Capra's series of newsreels titled *Why We Fight* (1942-1945) were created to reinforce the need for American participation in the war. Each hour-long film utilised the creative skills and storytelling abilities of the cream of the American film industry, with animated segments produced by Disney, and the skilful construction of powerful montage sequences.

The considered construction of events and manipulation of scenarios continues to exist in documentary today. In *Bowling for Columbine* (2002) director Michael Moore uses shock tactics and engineered confrontation to construct a filmic investigation into American gun culture. Throughout the piece, Moore reveals his journalistic background with tenacious questioning of authority figures. However the scenes with the greatest impact tend to be the result of Moore engineering situations that will reinforce his point of view in spectacularly memorable ways. For

example, Moore visits K-Mart with survivors of the Columbine shootings in an attempt to return the bullets that remain lodged inside their bodies. Throughout this absurd set-up, Moore is shown on screen feigning naivety about the engineered situation, a method of practice categorized by Ronson (2002) as “faux-naïf”. This technique is frequently used by Moore and others, and can result in an engaging narrative and the revealing of deeply personal stories, but it can also raise important questions of truth and credibility. When a viewer bears witness to a filmmaker’s dishonesty with an interviewee, then who is to say that the viewer is not also being deceived?

Channel Four’s BAFTA winning documentary series *Wife Swap* (2003) is representative of the current format of television programme that is carefully researched and engineered to ensure dramatic conflict. The wives from two families with diametrically opposing world-views are exchanged for a period of two weeks and are thrust into a world that challenges their belief system, daily routine and sanity, resulting in engineered ‘car-crash television’. As with other popular ‘reality television’ series such as *Big Brother* (2000) and *Driving School* (1997) the audience is encouraged to play the part of the voyeur, peering into a constructed actuality of people’s everyday lives. The anticipation of action and reaction within a scenario is a key factor to audience engagement. Conflict and spectacle is the audience’s reward, and this appears to be heightened by encouraging viewers to become involved with the narrative. Viewers have been empowered with the opportunity to voice their opinion through phone and text message voting, yet this audience involvement can only be construed as being a crude form of interaction.

It is fundamental to the art of the filmmaker to practice the creative manipulation of 'reality' and documentary filmmakers are no different. There are several recorded instances of documentary makers resorting to desperate measures to ensure the successful achievement of the key communication aims and objectives of a production. One of these, the Walt Disney nature documentary *White Wilderness* (1958) was intended to showcase nature in the Arctic region of North America (Thompson 1958). However one element of this production resulted in the creation of a myth that continues to exist today. During one segment lemmings are shown undertaking a mass migration due to overpopulation. In the climax of their epic journey the lemmings follow each other off the top of a cliff in a deliberate group suicide. Woodford (2003) points out that the lemming scenes are a carefully constructed lie and that "the lemmings supposedly committing mass suicide by leaping into the ocean were actually thrown off a cliff by the Disney filmmakers". In a similar incident Charle (1988) describes a production requiring a scene of a lion taking to water to seize its quarry. To alleviate the need to spend vast amounts of time tracking a lion and waiting for this to occur naturally, "the cameramen threw a tame lion down a ravine into a raging river and filmed him as he tumbled over a waterfall". Such examples if accepted as true reveal a shallow glimpse of the boundaries that some filmmakers might be prepared to cross in order to achieve dramatic effect and heighten the intensity of the audience's emotional response.

Whilst truth, objectivity and persuasion are frequently and often erroneously cited as the central core of the documentary, it is clear that overemphasis of these elements can limit the collective understanding of the form. Indeed, Renov suggests

that the style, devices and content of fiction are just as relevant and inspirational to non-fiction narratives, warning that “a view of documentary which assumes too great a sobriety for non-fiction discourse will fail to comprehend the sources of non-fiction’s deep-seated appeal.” (Renov 2003, p.3)

2.2 Interactive Documentary

Interaction is defined in The Oxford Dictionary of English (2005, p.901) as “a two-way flow of information”. Indeed, Meadows (2003, p.44-45) goes further, theorising that interaction is a repeating process consisting of four specific stages namely – Observation, Exploration, Modification and Reciprocal Change. Clearly, the traditional view of documentary, particularly if we subscribe to the notion that it is objective portrayal of fact, is not easy to reconcile with that of interaction: how can factual information be portrayed objectively if that portrayal can be altered in response to viewer input? However, as we have discussed, few, if any, documentaries do attempt an objective portrayal of truth, instead taking a partisan viewpoint and presenting this to the viewers, often resorting to extremely complex social and emotional manipulation. Certainly this fulfils all of Meadow’s criteria in one direction, and so notionally, the concept of interactive documentary merely extends these back in the other direction, allowing the documentary, its core thesis or the associated detail to be altered in response to viewer feedback in whatever form that may take.

2.2.1 Current Definitions

The interactive documentary has come a long way since Mitchell Whitelaw's derisive, but no less accurate postulation that the form, up until then was merely a "catchy tag and an open question..." (Whitelaw 2002) Over the last ten years we have seen a steady rise of interactive media forms claiming to be non-fiction, factual or consisting of material which has documentary value, but this does raise the question of what truly constitutes an interactive documentary? A broader definition of interactive documentary is very straightforward – we may define it as any documentary that uses interactivity as a core part of its delivery mechanism. The synthesis of a deeper, more specific definition presents more of a challenge due to the range of interactive non-fiction content that has come into existence in recent years. Castells (2011) complicates matters of definition further by highlighting claims that the definition of documentary lacks clarity and is therefore still very much a work in progress. Whilst it is argued that a definition of interactive documentary must first take into account a considered definition of documentary, Castells goes on to propose that interactive documentaries are "interactive online/offline applications, carried out with the intention to represent reality with their own mechanisms, which we will call navigation and interaction modalities, depending on the degree of participation under consideration." Building upon this, Poremba (2011) also asserts that documentary can evade a rigid definition, drawing attention to the ongoing debate around the use of the term documentary being applied to other media forms. Nevertheless, Poremba accomplishes a flexible and largely

encompassing definition which takes into account the crucial role of the audience -
“a documentary is an expressive framing of indexical documents, which plays off the
connection created between the viewer and the world. It is a mode of
representation with its own unique materiality, history, theory, and conventions of
practice.”

Justifiably, by using the terms ‘interactive’ and ‘documentary’ together, a sense of
anticipation and expectation is created whereby the audience forms an assumption
of what such an experience may involve. Almeida and Alvelos (2010) also identify
the impact and potential these terms have, but reluctantly admit that many of the
examples of interactive documentary to date are “often no more than a series of
multimedia pieces closer to PowerPoint than cinema”. Such examples of interactive
documentary are arguably the result of misappropriation of other media, without
thorough consideration of the constructs and strengths of these forms. Bogost and
Poremba (2008) communicate similar fears in their exploration of the ‘documentary
game’, an emergent genre of videogames which they argue has been used as a
“label...applied loosely to any game that makes reference (however tenuously) to
the real world”. As the defining element of the videogame is user interaction, the
term ‘interactive documentary’ is more broadly inclusive and descriptive, therefore
definitions of ‘documentary games’ are worthy of examination. Fullerton (2005)
defines these games as those “that attempt to place the players in specific historical
moments using increasingly realistic behavioural and visual simulations.”
Furthermore, Raessens (2006) interrogates whether computer games are worthy of
classification as documentary, arguing that “documentary computer games are

situated somewhere between both ends of the spectrum: They do not represent the historical reality objectively, but they are more than just subjective impressions of the artists involved.” The points raised by Raessens and Fullerton are representative of the differences between historical documentation and documentary and the indistinct nature of the boundaries between these two factual modes. The documentary game in its current form does not have the same inherent ability to capture live action that exists within forms that utilise ‘recordable media’ and therefore must instead utilise more abstracted modes of visual representation. Nevertheless, it is worth exploring existing interactive documentaries to ascertain the inherent abilities present within these forms that are facilitated by interaction.

2.2.2 Existing Forms and Critical Perspectives

Many of today’s interactive entertainment titles share a number of common features with filmic documentary. Engaging stories and the development of character are now recognised for the role they play in facilitating user immersion. This is evident in *Brothers in Arms: Road to Hill 30* (Gearbox Software 2005a) - a first person shooter computer game based on historical events from the Second World War. Marketed as a historically accurate representation of the military experience, The Veterans of Foreign Wars Association endorsed the product remarking that “video games are the new medium for storytelling and *Brothers in Arms* accurately depicts the contributions made by veterans during World War II” (Gearbox Software 2004). Interactive entertainment titles such as this promote transference of perspective as the player controls the action through the eyes of the character in

the game. Kline, Dyer-Witheford and De Peuter (2003, p.144) recognise the ability for this method of interaction to “intensify the illusion of actual embodiment and with it the adrenalin rush of the kill-or-be-killed situation”. The immersion resulting from first-person interaction is complemented by the notion that documentaries should be a representation of lived experience. Although whilst the player is able to ‘exist’ in a reconstructed temporal and spatial representation of a battle scarred French Village, it is arguably a limited experience in terms of representing an authentic and complex emotional journey. Indeed, it is conceivable that the documentary value of such a game, is that it can communicate systems with authenticity, such as the military tactics of the time, as well as place a player in an approximated environment constructed in response to background historical research.

Both Tracy Fullerton and Joost Raessens appropriate Michael Renov’s functions of documentary to analyse a selection of game titles, which claim to be either documentaries or to be considered as having documentary value. Fullerton (2005) delivers an analytical commentary of the opening stages of *Medal of Honor: Rising Sun* – a 2003 PlayStation 2 first-person shooter title, set in the pacific campaign of World War Two. Fullerton claims that “in this game you are a witness to history”, whereby the player assumes control of a sailor caught up in the attack on Pearl Harbor. This choice of player character makes sense in terms of transference, as the player holds the same level of awareness with regard to what is going on as the virtual character. This shared ignorance, coupled with a sense of urgency lends itself well to a rewarding and immersive gameplay experience, allowing the narrative to

unfold complimentary to the players awareness and expectations, without countering the carefully constructed fictional narrative of the virtual protagonist. Indeed, Fullerton recognises the use of an unlikely, ordinary protagonist juxtaposed with a large-scale event from history, as a method for containing the player and to minimise their attempts to alter or subvert the broadly accepted history – “the generality of the character’s experience allows the player to easily and safely imagine themselves in this role, to take actions without questioning their historical value or accuracy. We are ‘in the moment’, but we do not define the moment.” Raessens (2006) eschews traditional retail videogames and instead deconstructs four self-proclaimed ‘documentary games’, identifying the presence of Renov’s four functions within them. Raessens selection of the 2004 narrative computer game *JFK: Reloaded* as being representative of the mode of documentary practice concerned with analysis and interrogation is acceptable, but is perhaps not wholly reflective of the moral and historical complexities that existed around the creation of this interactive experience.

Marketed as a ‘docugame’, *JFK: Reloaded* challenged the player to assume the role of Lee Harvey Oswald and re-enact the assassination of President Kennedy. Developers, Traffic, implied that the overall objective of the title was to prove or disprove the lone gunman theory, by recreating the famous three shots allegedly fired by Oswald. Kirk Ewing, the managing director of Traffic described the game as “a reconstruction of the event using video game technology” (BBC 2004) and points out that issues connected to the Kennedy assassination have been analysed in literature and film, and that an interactive representation is therefore a logical

extension. However, *JFK: Reloaded* courted controversy by offering a monetary reward of \$100,000 to the first user to achieve the most accurate outcome relative to the evidence of actual events. The media responded by questioning the morality of such a production and in the United States of America there were numerous calls for the game to cease from being marketed and distributed. In a letter to the production team, U.S. Senator Frank Lautenberg argues that the game is “distasteful, abhorrent and irresponsible” and adds that if the developer’s intention is to promote further analysis of the actual events then they should utilise the Internet to inform the public of the various academic writings that are available (Lautenberg, 2004). Conversely, Ewing highlights the motion picture *JFK* and states that the director Oliver Stone is far more worthy of criticism by using film “to create conspiracy and distort history to suit his own beliefs”. (Gamesradar 2004).

The media backlash to *JFK: Reloaded* appears to have focussed on the ability to ‘kill the president’ as opposed to the other more investigative, exploratory methods of interaction. Along with the first person perspective role of the gunman, *JFK: Reloaded* allows the user to analyse their performance from numerous angles with the inclusion of a video replay function and user-controllable cameras. The ability to view events from anywhere in the three-dimensional environment provides an experience unattainable through other media forms. The potential for digital technology to be used in this way has been recognised in factual television programming where three-dimensional representations replace events for which no filmic record exist. The *Discovery Channel* production *Virtual History: The Secret Plot to Kill Hitler* (2004) utilised computer generated images composited over the live-

action performances of professional actors. Discussing this production, Moltenbrey (2005) suggests that the objective in using simulated digital footage “is to blur the line between the past and the present so that the re-enactment is indistinguishable from authentic archival footage”. While this has the potential to create engaging and authentic-looking footage that draws the viewer into the production, it also has the potential to be misused, creating fake ‘archive footage’ whose purpose is to mislead.

Contemporary developments in the interactive entertainment industries are beginning to show that television documentaries and videogames are not mutually exclusive forms. In 2011, Microsoft announced collaborations with Sesame Street and National Geographic, to bring branded “playful learning experiences” onto the Xbox platform Utilising Kinect – a motion sensing, full body user interface device – audiences are promised to be introduced to television programming that features “true interactivity...a two-way conversation” (Microsoft 2011). In his Develop Conference session, Relentless Studio’s David Amor (Amor 2012) presented footage from a focus testing session that showed the reactions of three children as they experienced ‘*Kinect Nat Geo TV*’ for the first time. Although there were bold statements made about interactive television being the next big thing, it was clear in the examples shown by Amor that the children were far more active and engaged with the traditional gaming elements that existed within the prototype, than the passive, linear video segments. Amor indicated that part of the challenge for his studio was that the documentary footage was locked down and there was minimal opportunity to edit or alter the tone and performance of the presenter to enable

smoother transition to the interactive elements. This provides an insight into the teams decision to breakdown the product into the three segments defined by the type of experience available to the user at any given time – traditional video footage, interactive video that addresses and responds to the user and playful, augmented reality gaming. Whilst there is the provision to undertake a wholly passive experience and not interact with the product at all, it could be argued to be a valid expectation that interactive documentaries allow interaction at any moment, and not only at pre-determined segments within a production. Nevertheless, this interaction poses a dilemma for the design and development of fully interactive documentaries, raising the question of whether the user can manipulate the structure of content and ultimately alter the message and aim of the production.

2.2.3 The Challenge of Interaction

Whitelaw (2002) portends that “new media forms pose a fundamental challenge to the principle of narrative coherence, which is at the core of traditional documentary” highlighting that structural manipulation by a user may lead to misapprehension and ambiguity with regard to authorial intention. Abba (2008) explores a methodology for interactive film, whereby the characteristics of film and interactive entertainment are merged to create a hybrid form. However, a form as such creates tension whereby “the competing desires of author and audience are difficult to resolve”. Traditional story-telling involves an established, author defined structure of beginning, middle and end that enables the reader or viewer to be aware of their position in the narrative. However in an interactive form the author

loses their full control over the 'reader' and the paths that they may choose to take through the story. As Abba identifies, "a viewer of classical film form expects to be able to reach the final reel and have the story satisfactorily concluded. A participant in emergent interactive fiction is apparently afforded no such closure. On what basis then, do they decide that the story is complete?"

Interactive television in its current form essentially comprises of navigable textual information, basic playable games, voting opportunities and added value content such as alternate audio or video streams. It can be argued that playable games as delivered through digital television services do not constitute truly interactive television – the television here is merely the delivery mechanism and the interactive content is independent from and incidental to what would normally be classified as the televisual medium. The DVD release of the horror motion picture *Final Destination 3* (2006) provided the viewer with two methods for experiencing the story. Marketed to the public with tempting phrases such as 'Take Control' and 'Choose Their Fate' the DVD allows the viewer to watch the film from start to finish as originally intended, or to alter the structure of the narrative by selecting from multiple-choice options. In an edition of the BBC Radio production *Front Row* (2006) critics Mark Lawson and Kim Newman contend that the opportunities for controlling the narrative are essentially alternate scenes that have been creatively implemented into the feature. Newman identifies the enormous amount of potential in such an interactive production but warns of the possibility of it becoming a gimmick that lacks longevity as a media form. In a similar vein early attempts at producing an interactive movie resulted in a comparable conclusion. Laser-disc based arcade

games such as *Dragons Lair* (AMS 1983) and *Space Ace* (AMS 1984) consisted of feature film-quality animation created by ex-Disney employees. The role of the user was to interact at key points in the story by moving the joystick in a certain direction; these decisions would either result in the progression of the story or the end of the game. Due to the primitive nature of this interaction, a negative stereotype of interactive moving image has evolved. Part of the problem with interactive television and film is that audience expectations are high. The very notion of interactive television or indeed interactive film raises the bar, creating in the viewer the sense that they will be presented with televisual or filmic quality images over which they will have full and complete freedom of control – a notion that none of the above currently offer. Therefore when a product fails to deliver this, it is little wonder that audience disillusionment attaches stigma to the terms themselves.

Traditional documentary is a passive, one-way communication medium and can be defined as a monologue between the production and the audience. McMillan (2002) defines and illustrates three “traditions of interactivity” – “User to User” interaction is concerned with the theories of human communication and social interaction. “User to Documents” relates to the deconstruction and interpretation of media communication such as websites and hypertext. The third and final tradition – “User to System” revolves around the interaction between the technology and the user itself.

McMillan presents us with three diagrams to convey these traditions (see Figure 2.1).

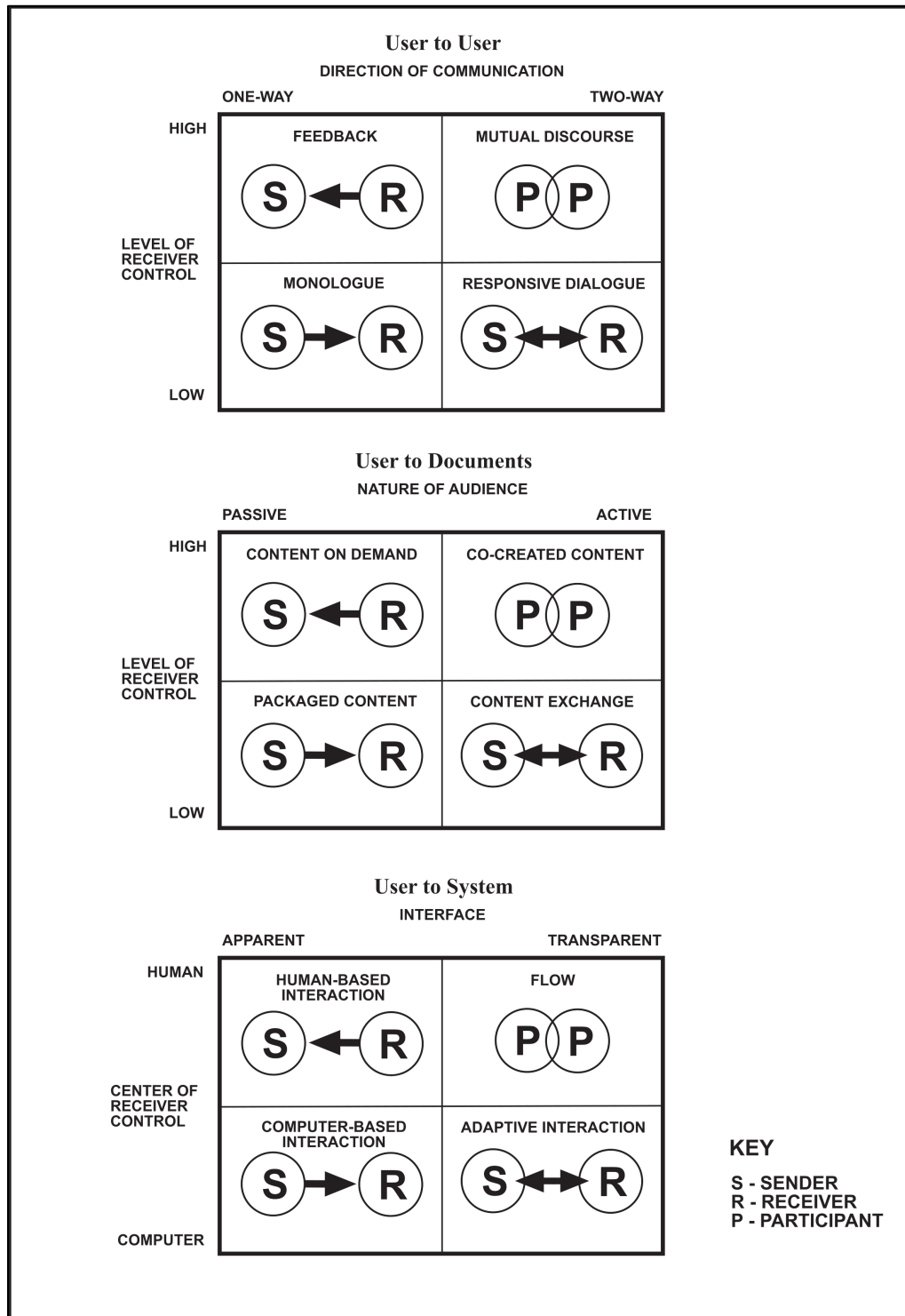


Figure 2.1 Exploring Models of Interactivity from Multiple Research Traditions (McMillan 2002)

Each tradition has been broken down into four distinct modes of interactivity. However, it should be noted that all three of these diagrams are in essence, presenting variations on the same underlying phenomena. The defining characteristics of these modes of interactivity are broadly formed by perspectives from multiple research traditions and do not concentrate on specific criteria such as story, authorship or other contextual elements that are important to interactive narratives.

2.3 Interactive Narrative

Meadows (2003, p.2-3) defines an interactive narrative as “a form that allows someone other than the author to affect, choose, or change the plot.” In simple terms this is an accurate description; however this definition does not fully take into account the variety of forms that claim to present an interactive narrative experience. A range of interactive media has emerged over the last decade that challenges the assertion of interactive narrative being viewed purely as a partnership between author and user with regard to influencing the plot. Salen and Zimmerman (2004, p.381) identify videogames as a key contributor to the advancement of interactive narrative as a form - “Everything we know so far about the experiential components of games – that they are complex sensual and psychological systems, that they create meaning through choice-making and metacommunication, that they sculpt and manipulate desire – are tools for crafting experiences. These experiences emerge from the design of events, actions, and characters.” The definitive role of the author is now blurred, as the user/player,

writer, or architect of an interactive system can now be viewed as the 'author' of an interactive narrative. This is perhaps most evident in an emergent narrative structure which is constructed in real-time in response to a user's interaction and presence in a virtual eco-system. The more traditional view of narrative as a linear, authored experience is evident in embedded systems which utilise fixed narrative elements such as short movies, exposition and pre-defined scenes. (Salen and Zimmerman 2004, p.481)

2.3.1 Traditional Perspectives on Story

Story and narrative has been used as a tool to communicate ideas, feelings and desires since pre-history, and through time specific story templates have been developed to represent and relate to a range of situations and human emotions. During the 20th century film and television evolved through constant creative and scientific innovation to become culturally and critically accepted as both an art form and as the chief apparatus for mass-communication. Throughout this formative period, the fundamental characteristics of story have remained constant and can be identified within media forms. Aristotle's Poetics - one of the earliest theoretical works to explore and define a three-act dramatic structure, characterises plot as "that which has a beginning, a middle, and an end." (Aristotle 1997).

Bernard (2007, p.69-70) presents a brief overview of the three-act structure, arguing that each act aims to raise the level of tension on the journey towards a short yet satisfying resolution. Act One usually contains most of the exposition, setting up what is at stake, and attempts to engage the viewer's interest. Act Two is the body of the story, with a variety of additions, complications and events taking place as the

tension continues to rise. Bernard argues that Act Three contains the greatest levels of tension thus providing the viewer an intense experience as the story is resolved. It is also discussed that the three-act form for dramatic structure should not be perceived as a rigid template for stories. For example, a more complex production may feature multiple storylines which do not appear to fit easily within a three-act structural form. However, Bernard suggests that these stories can be weighted in terms of importance within the overall narrative and that each story strand can still be arranged into three acts, with each strand consisting of the structural components of the classical dramatic arc.

Freytag (1863) proposes a five-act dramatic structure whereby plot is broken down into an arc consisting of exposition, rising action, climax, falling action and catastrophe. This is a more detailed expansion of the three-act structure defined by Aristotle, however both forms have been accepted and utilised by contemporary theorists such as Robert McKee who builds upon what he views as deceptively simple structures towards proposing a set of practical principles for qualitative, “archetypal stories”. Indeed, McKee reinforces the importance of the author, citing the inspiration and instinct of the writer as a core factor in the structure of stories, with plot defined as “the writer’s choice of events and their design in time.” (McKee 1999. p.3-10)

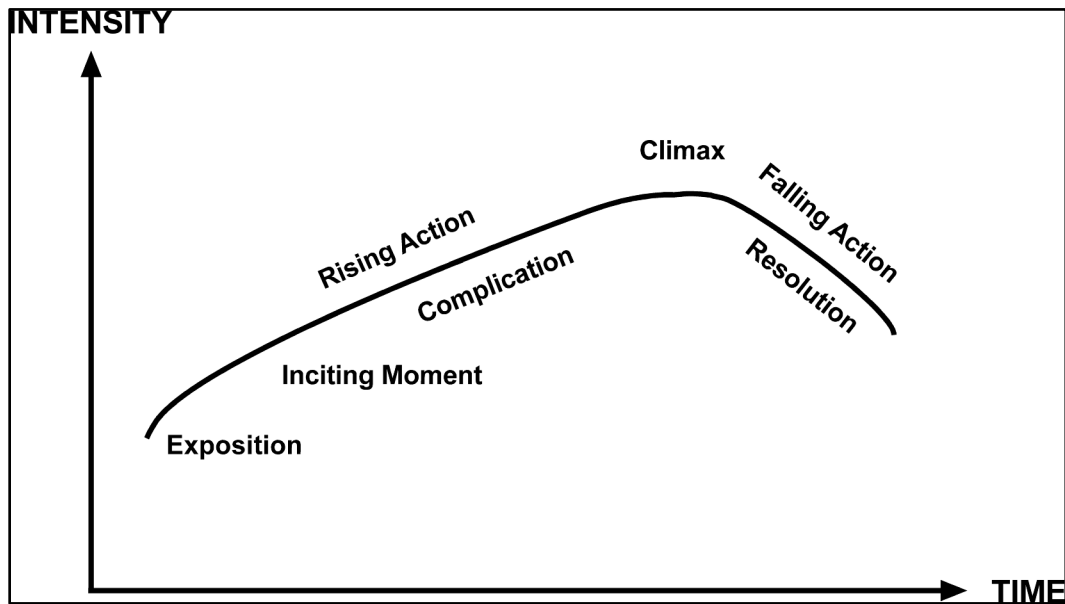


Figure 2.2 The Dramatic Curve (Rabiger 1998)

Rabiger (1998, p.136-9) presents the traditional dramatic arc (Figure 2.2) and discusses its application to the majority of narrative works, further exploring its significance in documentary film, suggesting that documentaries should not be forced to strictly adhere with such a dramatic structure. Whilst the Hollywood screenplay has evolved into a standard format, with expectations for particular events on specific pages, Rabiger is thankful that documentary follows a gratifying dramatic structure but still manages to be “too wayward a form to attract this kind of control fever.” By their very nature documentaries are less pre-meditated in terms of plot. Whilst feature films tend to move into production after numerous screenplay iterations, the plot of a documentary is crafted in response to the intentions of the director and the emergent events recorded as part of the process of observation or content acquisition. Nevertheless, Rabiger argues that conflict and character are at the centre of dramatic intensity and therefore the traditional model

of exposition, inciting incident, complication, climax and resolution is a natural and logical framework for documentary storytelling.

Chatman (1978, p.26) presents us with a diagrammatic breakdown (Figure 2.3) of the constructs of a narrative text, highlighting two key strands – the story (message, content etc.) and the discourse (method of presenting the content, the way in which it is expressed).

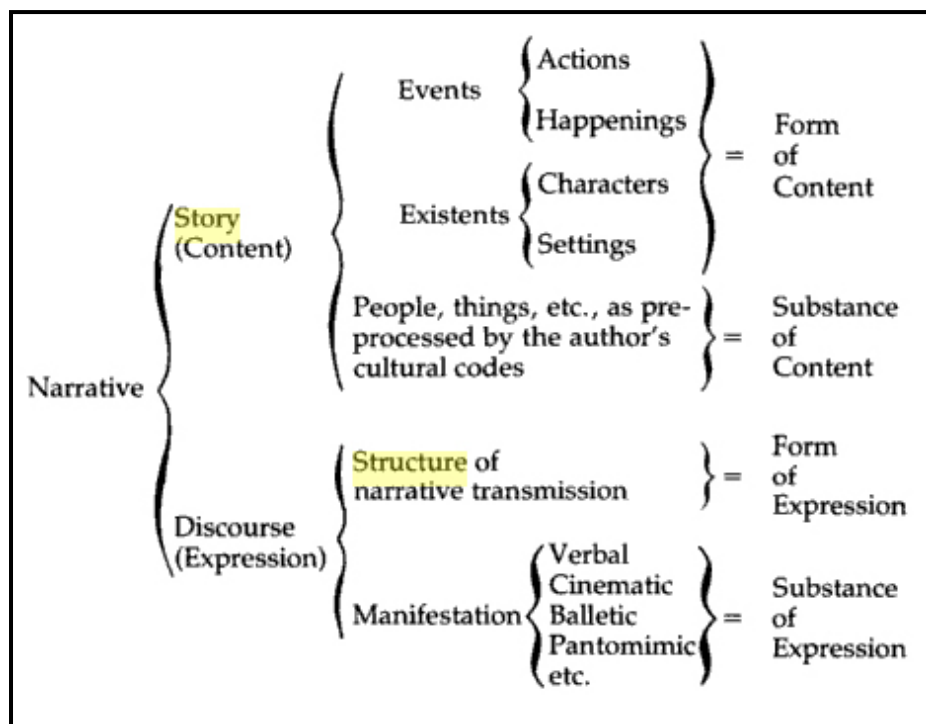


Figure 2.3 Constructs of a Narrative Text (Chatman 1978)

Chatman utilises a simplistic, but no less accurate description of story and discourse in a narrative depiction, whereby story is the “what”, and discourse is the “how”. With the addition of ‘when’ to this basic account of a narrative, the concept of temporal structure materialises, with clear implications for both passive and interactive narratives. Non-linearity in terms of temporal representation is not exclusive to interactive narratives and is relatively common in traditional broadcast

media and feature films. The documentary form has evolved a range of temporal identities to facilitate with both clarity of communication and to manipulate dramatic tension and significance of events. Rabiger (1998, p250-51) identifies several structural types that help to form the contract with the audience, allowing the viewer to comprehend the content and the scope and progression of the documentary.

Chronological Time Structuring: Events and scenes are played out as they would have occurred in order. Allows the viewer to easily understand the progression and temporal location of events.

Nonchronological Structuring: Utilises the ability to leap forward and backwards in time, presenting the content out of temporal order. Allows the film-maker to support their argument by presenting specific scenes at a specific time.

Subjective POV Structuring: Reflects how the film was constructed and the thought process and judgment of the director.

Inventory Structuring: With a focus on anthropology, this structural form provides the audience with a broad list of perspectives on a particular topic or item.

Metaphoric Journey Structuring: Utilising metaphors and symbols the audience are presented with allegorical narratives and parallel accounts that can contain both literal and underlying meanings.

By describing documentary as a journey, it raises the issue of viewer comprehension and the need for narrative sign-posting to ensure the audience knows where they are and can make informed assessments as to where they may be going in terms of

the content of the piece. In the context of the Interactive Documentary, allowing a user to manipulate and change story content would likely make such a production extremely complex to develop. Perhaps limiting the user to only interact with the discourse could be a satisfactory solution. This raises the question; can a user interact with the discourse without altering the story?

2.3.2 Interactive Structures

Interaction has been previously discussed and defined as a series of communications between senders, receivers or participants depending on the context of the system. The craft of storytelling and the broader field of narrative have been identified as relying on drama and emotional intensity to achieve their goals. The challenge therefore is to identify and define suitable frameworks, structures or processes concerned with the management and delivery of narrative elements in interactive worlds.

Klastrup and Tosca (2004) propose a framework for the analysis of transmedial worlds which revolves around what they define as the “ur-actualization” of the world, the initial seed in which the world is first defined and all other developments will be measured against. The core elements of this framework are *Mythos*, *Topos* and *Ethos*. *Mythos* is defined as the central knowledge at the core of the world, encompassing the historical background, key characters and the inciting incidents that establish drama and conflict. *Topos* represents the specific details surrounding setting, time and space which allows the world to be visualized and be assessed in terms of genre characteristics. Finally, *Ethos* is defined as “the explicit and implicit ethics of the world and (moral) codex of behavior, which characters in the world are

supposed to follow” therefore facilitating decisions regarding believability of performance and contextual actions within the world. Interactive properties that exist within a transmedial world therefore face a particular challenge with regard to *Ethos* as the player may be granted enough freedom to subvert or ignore the fundamental principles of the story world through their in-game activities. Klastrup and Tosca also highlight that decisions of the development team can also impact on the *Ethos* of the transmedial world. In a brief analysis of the videogame *The Lord of the Rings: The Fellowship of the Ring* they draw attention to developer implemented quests that shatter immersion by requiring the player to take on the role of the heroic character Aragorn and successfully collect melons, clothes and logs. Clearly this would not be an issue if the player had not read Tolkien’s original texts or viewed any of the cinematic retellings, but these players are likely in the minority.

The structure of an interactive narrative is largely defined by the story world in which it resides, though the design of this world; the form it takes, can be representational or abstract in comparison to reality. Adams and Rollings (2007, p.97-124) define the five dimensions of an interactive world as *physical, temporal, environmental, emotional* and *ethical*. These five categories share clear similarities with the framework defined by Klastrup and Tosca, with the consideration of setting, time, space and the morality defined in the world. However, Adams and Rollings proposed dimensions indicate a broader awareness of the aesthetics and impact of an interactive world; detailing how visual design, game mechanics, narrative context and the level of freedom can contribute to the user experience. Interactive media is constructed and defined by a complex set of characteristics

drawn from literary, technological and artistic forms but can be presented in more broad terms, or viewed as a simple process. McGonigal (2011, p.20-21) argues that “When you strip away the genre differences and the technological complexities, all games share four defining traits: a goal, rules, a feedback system, and voluntary participation.” Whilst this definition concerns games, it is broadly applicable to and descriptive of any interactive system. McGonigal’s work focusses on the transformative and emotive power of games and claims that certain approaches to the design of interactive systems, such as using goals, limitations and obstructions, provides a purpose to the activity, encourage users to think in different ways, and can enhance the overall sense of reward.

Returning to the structure of interactive forms, Mayra (2008, p.18) identifies that games have two main structural forms; defining them as “core and shell, or gameplay and representation”. The *core* is described by the affordances presented to the player, and the rules and mechanics that place them in context. Alternatively, the *shell* provides meaning and significance, enhancing user interaction through depth of communication, symbolism and expression. Mayra’s diagram (see Figure 2.4) portrays these two layers placing interaction and gameplay at the centre of a game, with meaning and representation outside of the core gameplay, yet through the player’s negotiation with both layers a personal user experience and interpretation of meaning is formed.

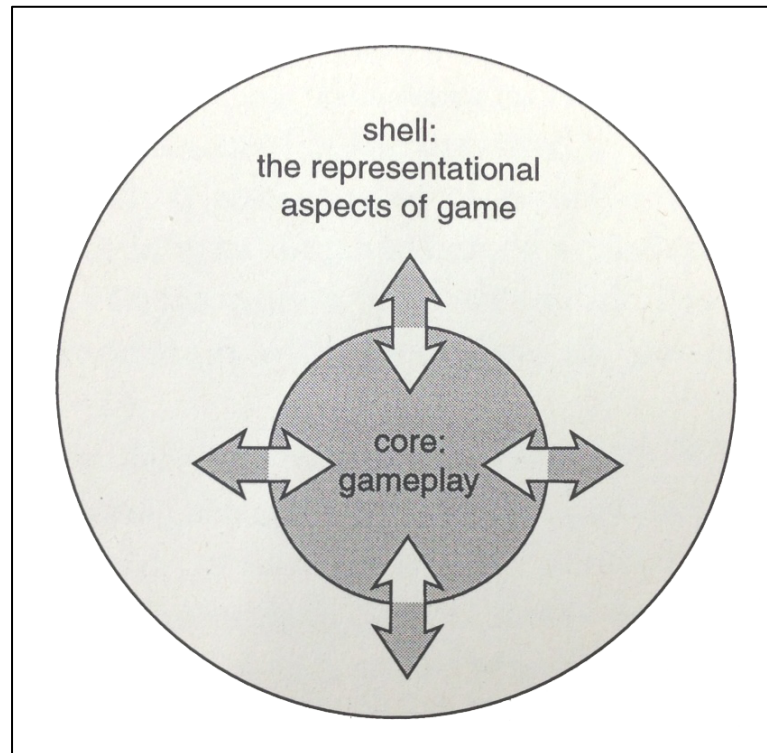


Figure 2.4 Dialectic of Core and Shell in the basic structure of games. (Mayra 2008)

Research conducted by Hunicke et al (2004) also positions gameplay or game mechanics at the centre of an interactive user experience. The MDA Framework (*Mechanics, Dynamics, Aesthetics*) defines the designer as creator and the player as consumer and presents a formal system for the creation and consumption of games. Through establishing games as artifacts, or “systems that build behaviour via interaction” three fundamental components have emerged to define the framework. *Mechanics* are described as “the various actions, behaviours and control mechanisms afforded to the player within a game context. Together with the game’s content...the mechanics support overall gameplay dynamics.” *Dynamics* are things that create the aesthetic experiences and are formed in response to the context and timing of the player’s interactions. *Aesthetics*, as defined in the MDA framework is the intended range of feelings and responses as a player interacts with the system.

For example, the mechanics of a football game include passing, shooting and tackling, but result in dynamics such as goals, fouls, injuries, comebacks etc. The combination of these mechanics and dynamics lead to player emotions or experiences that can be described by the frameworks aesthetic models, which range from challenge (or game as obstacle course) to narrative (where the game exists as drama). These two aesthetic models are synonymous with the two main arguments of what games are as a form and have relevance to the ongoing debate which proposes that narrative and gameplay can't simultaneously co-exist.

2.3.3 Gameplay and Narrative

In *Rules of Play*, Salen and Zimmerman present a hybrid definition of 'a game' which is constructed from what they perceive to be the most relevant parts of eight other definitions previously proposed by a range of historians, sociologists, designers and philosophers. Their definition suggests that "a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." (2004, p.80) Whilst this definition was intended to be narrow, it is arguable that despite being broadly accurate, there are emergent forms and activities within the realm of videogames that may challenge such a notion. Ultimately, videogames empower the user to interact, alter and control the experience, thus presenting vast challenges and opportunities for constructing meaningful and rewarding experiences. The uncertainty that this interaction presents us with, also provides a rich source of material for critics, scholars and industry representatives to passionately debate.

Jesper Juul, the renowned 'Ludologist' declares that we should forego attempts to shoehorn games into modes of analysis and critique used by other cultural forms, and instead the study of games should be driven by the elements that make them a unique medium. In *Games Telling Stories?* Juul (2001) presents a balanced overview of the on-going debate regarding games and story-telling, and successfully manages to argue in places the case for games both being a narrative and non-narrative medium. Juul identifies the conflict between player interaction and intended meaning – that games require to be structured to ensure how and when messages are received by the player. The concept of player agency is inextricably linked to this conflict - whereby the player is encouraged to act freely in a world that responds intelligently with meaningful and justifiable outcomes to their interactions. Clint Hocking, former Creative Director at LucasArts views agency as a primary and defining aspect of the videogame – “there is no other medium of human expression that literally validates the expression of the audience. Agency, therefore, is not just a feature of games, it is the very foundation of what games are and how they mean. It is not simply that your expression and its validation matters, it's that your expression and its validation are all that matters.” (Hocking 2010) So, this raises the question of where and how can developer intended story-telling and player controlled story-telling co-exist?

In a recent publication, Kelly (2011) argues that games are not a story-telling medium, there has never been a good game story, and due to the “fundamental constraints borne of the psychology of play” a shining example of game story-telling will never emerge. Kelly initiates his argument with an excellent dissection and

critique of LA Noire – a third-person action-adventure, where you play as a detective in 1940's Los Angeles. This title is a prime example of a developer authored story being overly marketed as an innovation in interactive storytelling. What Kelly fails to communicate is that the games he does cite as having a great “storysense” would not exist if the developers were not trying to innovate and tackle the challenge and perceived limitation of interactive storytelling. To reject the possibility of games ever becoming a story-telling medium, is anathema to the spirit of development, whereby an innovative approach to solving a problem can spawn an entire genre. The false notion that gameplay and narrative are irreconcilable, only further impedes the development and acceptance of innovative interactive entertainment. Nevertheless, it is clear that the process of designing an experience that can co-exist with the urges, desires and whimsical behaviour of autonomous users is a massive artistic and technical challenge. This issue is further compounded through consideration of the lack of common vocabulary that exists to define and deconstruct fundamental components of the form. In *Narrative Discourse* Genette (1980) states the ambiguity of the term ‘narrative’ and how its misappropriation or limited use can lead to difficulties in the study of narrative. Across the games industry this issue often occurs whereby ‘narrative’ is used as a descriptive alternative for ‘story’. Genette presents a definition of narrative that comprises of three main components - *Discourse*, *Story* and *Narration*. *Discourse* refers to the artefact or text itself, *story* represents what is being told – the summary of events and action, and *narration* relates to the processes, devices and structure of communication. Utilising this definition it is possible to therefore eschew the misunderstanding regarding story and behold narrative as a multi-faceted form of

communication, hence narrative plays a crucial role, whereby every element of interaction, presentation, sound and performance - no matter how insignificant, is conveying something to the audience. Working with this definition presents the question of who is responsible for the continuity and specifics of communication during the development of a videogame. Ideally, this should be a straightforward answer, but the inherent dynamic nature of games development has resulted in there being no definitive role that can be clearly identified across the industry. Only recently, the role of Narrative Designer has become more prevalent in both job listings and game credits. Perhaps this could be the missing link that supports the consolidation of the disciplines of writing and game design.

Writer Rhianna Pratchett has frequently communicated her frustration with the current state of game writing and the last-minute approach to its inclusion in the development cycle, whereby the implementation of the narrative has been secondary to the construction of gameplay. As previously discussed, some ludologists may wish to see this production hierarchy preserved, however Pratchett suggests a more collective, and arguably common-sense approach focussing on “finding the common ground and thinking about story early enough so that it can properly fit together with the gameplay and not just lie on top of it like a kind of narrative custard”. (Parker 2009)

2.3.4 Notable Examples

Rather than take sides on the story and gameplay conflict, a small number of development studios have taken a more considered, philosophical approach to the

writing, design and development of their interactive experiences. Jenova Chen, co-founder and creative director of *thatgamecompany*, raises the issue of the narrow emotional spectrum of games. Chen argues that entertainment exists to satisfy our desire to experience feelings - this works well with cinema, wherein one might make an informed decision to choose a particular genre or a specific film to alter one's mood and state of mind. However, within the realm of videogames it is harder to make such a comprehensible decision as they have rarely been classified or expressed in terms of the feelings that they evoke. Chen identifies that this issue can be illustrated clearly by examining our collective vocabulary for describing the type of experience - "The words people [use to] describe films are emotive; they describe films as 'passionate' or 'magical.' But when people talk about games they're technical, as if they were describing a car. 'The graphics are good. This car has four seats'". (Kumar 2009) Through this intellectual process, *thatgamecompany* have achieved critical and commercial success through three player-centric titles which have each tackled different fundamental issues in game design. *fIOW*, *Flower* and *Journey* have all been crafted in conceptual response to an intrinsic problem or conflict.

The videogame *fIOW* (*thatgamecompany* 2007) concerned the issue of difficulty and player progression, and was informed by the principles, explored by Mihaly Csikszentmihalyi, which argued that our most favourable experience through a task is one that balances level of difficulty against our developing skills over time, ensuring the optimal levels of motivation and reward. (Csikszentmihalyi 1990) *fIOW* therefore intends to provide a calm and engaging experience that avoids failure and

punishment, yet still manages to reward skill and presence in the game world. The pastoral, dream-like world presented in the follow-up title *Flower* (thatgamecompany 2009) shares similar traits in accessibility and player engagement, but attempts to infer more of a narrative, presenting a theme that explores the conflict between rural and urban environments. Throughout development the team were faced with the challenge of providing the player with a tranquil, yet progressive experience that found a balance between the freeform play and expression of the user and the need of the game to somehow convey structure, goals and direction. Through a process of prototyping, user-testing and feedback, accepted ludic devices such as scores and timers were rejected and replaced with visual and aural feedback that provides the player with positive feedback which functions subtly to encourage further action and exploration. In contrast to the idyllic, lush landscapes of *Flower*, *thatgamecompany's* most recent title casts players as a mysterious character in a seemingly barren desert. *Journey* (thatgamecompany 2012) places its attention on addressing some of the issues raised by online play and co-operation between strangers. To achieve this there is no online lobby (the virtual waiting room where players gather prior to the beginning of a period of play), no voice-chat (players are able to communicate using a limited amount of on-screen emotes and actions), and no communication of goals or objectives (this encourages players to undertake the journey and co-operatively discover its secrets). This brave approach to development, whereby standard and lauded constructs of videogame practice are dropped due to their irrelevance and negative impact on the communication aim of the developer and the overall experience of the user, presents a potential methodology for the development of interactive documentary.

In an ever-changing world of commercial opportunities and limitations, a number of smaller studios are leading the way through innovation. *Mojang* are the studio behind the on-going commercial success of *MineCraft* (Mojang 2009) – a construction based game that tasks players to roam a massive procedural world made from blocks and survive by ‘crafting’ items and materials from a range of natural resources. Whilst the actual gameplay, art style and mechanics can be argued to be derivative of existing titles, *Mojang’s* founder Markus Persson can only be praised for his open approach to developing an innovative and sustainable business model. Today, the vast majority of games are developed in secrecy, with the public only receiving specific pieces of information about the title as part of a carefully planned marketing schedule. Where *Minecraft* differed, is that it welcomed players into the development process by allowing them early access to playable prototypes. This open approach enabled Persson to quickly gain a large following of loyal fans which were then given the opportunity to pay a small fee to participate in the Beta version of *Minecraft*. Rather than lock down the specifics of game structure, pacing and mechanics, *Minecraft* is in a process of constant iteration as the developers implement and test features alongside a paying community of over three-million users. (Persson 2009) Additionally, it is not just the business model that is worthy of praise, the actual game itself manages to present an emergent world full of storytelling potential, that bridges any perceived divide between narrative and gameplay. The player finds themselves in a unique landscape and receives no direction or guidance as to the objectives or rules of the game. Through exploration and experimentation the player soon realises that they have the ability to mine the landscape, make materials and craft basic tools. As the in-game sun

slowly sets on the horizon, *Minecraft* populates the once peaceful landscape with enemy characters that can kill the player. This conflict greatly enhances and drives the player's narrative experience in a number of ways. It provides meaning to the player's interactions, as it suddenly becomes a story of survival as they attempt to forage and barricade themselves in safely for the night. On a temporal level it provides structure to the experience whereby the player is motivated to gather and explore during the day and plan their future activities and objectives at night. The ability of enemy characters to destroy what you have made also adds to making a more meaningful experience as this leads to motivated play, thoughtful decision making and a sense of ownership and pride in finished constructions. In essence these fundamental components are all that is required to facilitate engaging, emergent storytelling presenting players with satisfying and believable consequences to their interactions.

This innovative and alternative way of approaching development can also be found in Scotland. Glasgow's *Tern Digital* are putting the finishing touches to *The 39 Steps*, the first title in their Digital Adaptations format, which promise to allow the user to experience classic stories in a completely new way. Executive Producer, Simon Meek has been eager to stress that this new form is not a videogame as such, and that it partly exists to challenge the limitations of e-books which merely deliver an exact representation of the printed word, therefore failing to capitalise on the audio-visual and interactive nature of the platform they exist upon. Rather than follow the traditional model of adapting a book to a game, whereby the player would usually take on the role of a character within the game world, Digital Adaptations instead

utilise gaming platforms and technology to allow players to navigate the story and the world in which it takes place. Evidently, there are obvious issues when gifting the user the ability to explore and interact within the rigidity and familiarity of a classic story. However, the team at Tern Digital have instead treated this conflict as a design problem, and developed an innovative solution which finds a balance between user autonomy and authorial intentions, through the considered use of specific forms of interaction. Tern Digital cleverly avoid the use of the term 'gameplay' and have instead defined these components as "story mechanics". For example, "Control" presents the user with the ability to momentarily view the world through the eyes of a character, deepening the sense of presence the user feels within the world of the story. Interestingly, the team have stated that future Digital Adaptations may utilise custom-built 'story mechanics' that demonstrate a symbiotic relationship to the specific genre of each original text. (GamesTM 2011)

Through agreements with The Scotsman, The Times and The British Film Institute, Tern are able to utilise real-world, historical artefacts such as newspaper clippings, archive footage and photographs to deepen the sense of time and place presented within the experience. Arguably this could be seen as providing a new level of documentary value to the adaptation itself as it presents a historically accurate insight to the period and setting of the original body of literature. Conversely there has been some debate as to whether Digital Adaptations may have a negative impact on the intellectual process of reading literature. Meek is quick to reassure that Tern are "not looking at digital adaptation as a way to replace the book, but certainly offer another way to consume the stories that are contained within

books...It would be great if they inspired people to read the original text, or explore other texts by these authors...the real shame with the notion of people not reading books is that the stories held within them may become lost - this approach opens up the story to a wider audience and potentially new audience.” (Crecente 2011) *Minecraft* and *Digital Adaptations* are two positive and creative approaches to bridging the structural, cultural and diverse challenges that exist within the boundaries of interactive entertainment and the divergent needs of the consumers of digital content.

2.4 Audience, Users and Factual Content

In 2005, the BBC published in a white paper titled *Gamers in The UK: Digital Play, Digital Lifestyles* which discusses the role interactive entertainment plays in the lives of UK residents aged 6-65. The paper’s author, Rhianna Pratchett, concluded that younger audiences – who view gaming as a core part of their daily lives – will grow up to demand more from interactive experiences and drive other traditional entertainment forms to evolve to meet their needs. (Pratchett 2005) In support of this, Lister et al (2009, p.214) argue that traditional approaches to producing media are diminishing, whereby there is now an “increasing requirement for producers to think about how their texts are in a co-creative relationship with users which occur in the ‘community’ created around a particular programme, film or game.” Similarly, media convergence theorist Henry Jenkins (2002) understands the importance of audience analysis in terms of the development of new media forms. Indeed, Jenkins highlights a new culture of participation, stating that research should not focus on

the technology that provides the platform for interaction but instead should “document the interactions that occur amongst media consumers, between media consumers and media texts, and between media consumers and media producers”.

2.4.1 The Interactive Audience

A crucial factor of user-driven content is the potential for user contributions to demonstrate vast differences in quality, however Agichtein (2008) suggests a more balanced opinion, highlighting the advantages these systems hold over traditional documentation in that “their rich structures offer more available data than in other domains...social media exhibit a wide variety of user-to-document relation types, and user-to-user interactions.” Therefore, whilst not being a fully-realised expansive interactive documentary, online debates and bulletin boards could be argued to be an appropriate technology for further analysis. When implemented and managed appropriately, these web-based systems can exhibit documentary value, whereby they can entertain, educate, persuade and enlighten. Therefore formally presented online debates, in particular those linked to a factual broadcast, can be viewed as artefacts, in which evidence is presented, and what follows is the user’s interpretation of the artefact albeit in the form of limited user-generated content. The user’s contribution or manipulation of an interactive system (online debate, videogame, interactive film etc.) can be described by Norman’s (1988, p.47) *Seven Stages of Action*, as detailed in Figure 2.5. This theory is more commonly associated with the design and usability of objects but is relevant to both human-computer and social interaction.

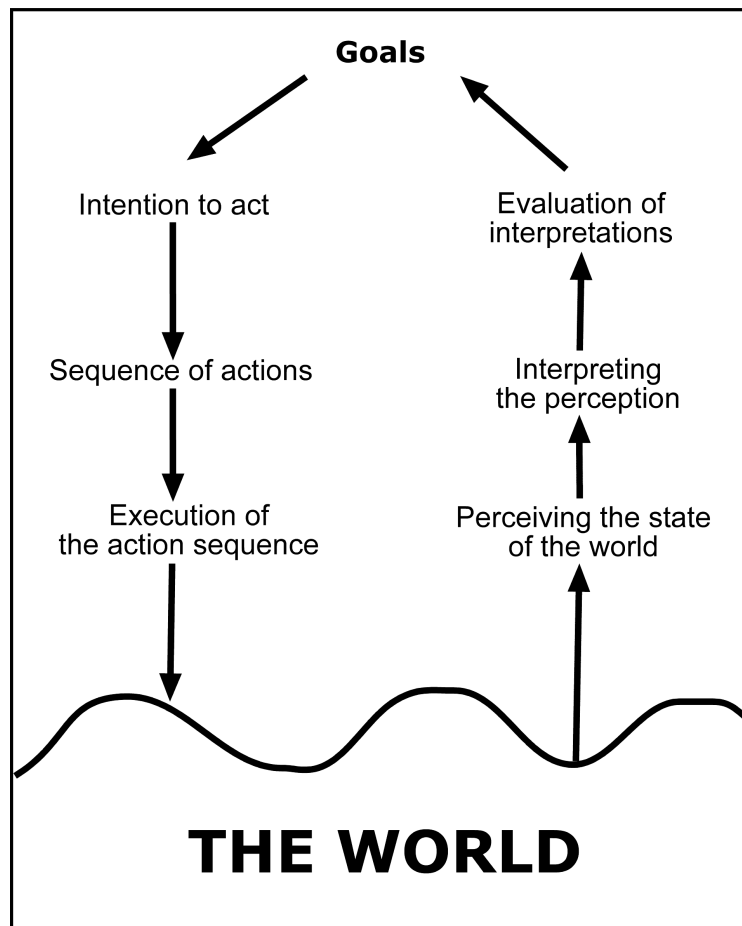


Figure 2.5 The Seven Stages of Action (Norman 1988)

Norman proposes that action is a cyclical process of perception, interpretation, evaluation, goal forming, intentions, actions and execution. This process can be applied to a player's physical and mental activity whilst playing a videogame as they assess the situation presented them, analyse the best course of action and then proceed to undertake said action. In addition, a user on an interactive debate may reflect the seven stages of action in their assessment of the accuracy of the content and the process they then undertake to manipulate the community towards their own worldview. Videogames and interactive debates both appear to fit this model in terms of the user's processes but whilst the game is most likely concerned with the challenge of puzzle solving or the player's need for skill and dexterity, the interactive

debate is pre-occupied with factual accuracy and collaborative narrative. Do games explore the notion of truth, challenge popular opinion or attempt to inform players with knowledge?

2.4.2 Factual Approaches to Interactive Entertainment

The current developmental stage of the videogame sector has been described by industry pioneers such as David Braben as being equivalent to the period in cinema when “talkies” were established. (Mitchell 2007) It is apparent videogames are at a decisive moment, having emerged from a period of concerted effort defining and developing the actual technology, the formation of gameplay mechanics, specific themes and genres, and the crucial task of attracting and sustaining a commercial audience. Throughout this period of evolution, games have continued to be defined and re-defined both by their creators and scholars associated with the form.

Traditionally, videogames have been categorised by specific genres and sub-genres whose definitions are founded upon the form that the user interaction takes and the type of experience that is on offer. This has enabled the consumers of videogames to make informed decisions based upon their understanding of these genres – for example a side-scrolling shoot-em up presents a vastly different experience to a third-person action/adventure. However, more recently a whole new range of videogame forms and movements have started to emerge. Persuasive games, serious games, and documentary digital games are but a few of these new forms. In many cases a product of academic analysis and debate, these new genres are aiming

to provide a variety of new experiences, and lift the videogame towards true cultural significance and social acceptance.

Many of the first forays into videogame production can be viewed as being attempts at creating non-fictional simulations of real-world activities. *Spacewar!* (Russell et al 1962) is commonly accepted as the very first videogame and was conceived as part of experiments in computer software technology at the Massachusetts Institute of Technology. Groundbreaking in its day, *Spacewar!* presented the user with a heavily abstracted representation of two spacecraft and a simulation of gravity and thrust. Similarly, *Pong* (Atari 1972) can be viewed as a simplified depiction of table tennis, allowing the user to deflect the 'ball' based upon the position of the 'paddle' and the speed and trajectory of the opponents shot. The arcade game *Battlezone* (Atari 1980) gained particular interest from the United States military and a special version was commissioned, and used as a weapons training simulation for the crew of Bradley vehicles. (Rode and Toschlog 2009) This software was known as the *Bradley Trainer* and featured content that was based upon existing military hardware and scenarios. The simulation genre has evolved from these early arcade titles and escalating technological ability, and consumer demand and expectation has driven game developers towards creating increasingly realistic, virtual experiences. Contemporary simulations now place the user in visual representations and scenarios that are far more complex than earlier systems were able to portray. This ability to accurately present a situation and location has been recognised by several international Departments of Defence as having value in the awareness training of military forces. The Czech developed *Virtual Battle Space* software has been used to

enhance the real-life training of British forces prior to deployment in Iraq and Afghanistan, with the system able to be manipulated in real-time to challenge the user's decision making process with an 'infinite' range of scenarios. (Hughes 2008)

The focus of this simulation is not to reward killing, or desensitise the user, as is often reported in the press – but instead to test and reinforce standard operating procedures in a safe simulation of high-pressure situations. These types of experiences have factual content embedded within them, from environmental features and terrain generated from high-resolution satellite imagery, to the inclusion of accurately modelled equipment and vehicles. Nevertheless, it is clear that the focus of such simulations are not as easily reconciled with existing factual forms, such as documentary film, which aim to simultaneously inform, educate and entertain.

Videogame technology has empowered developers, artists and activists in the production of a whole new range of powerful and thought-provoking interactive experiences. *Darfur is Dying* (Ruiz et al 2006) can be viewed as piece of political activism disguised within a multitude of traditional gameplay forms. Inspired by the current civil violence in the Darfur region of Sudan, *Darfur is Dying* aims to increase public awareness of the atrocities and the various challenges that the refugees of this conflict encounter on a daily basis. In an interview with the BBC, Susana Ruiz, the designer of the web-based game, justifies her use of the interactive form as a method for targeting a specific demographic of society, stating that they “were always trying to make something that would be accessible to the audience that wouldn't go to see a documentary about Darfur, or wouldn't read a newspaper

article". (Boyd 2006) In the same article, Ruiz goes on to defend her work from allegations that it presents a basic viewpoint of a highly complex situation, highlighting that "the game is an oversimplification of the crisis. But it is an entryway into the crisis". *Darfur is Dying* is a subjective illustration of the crisis in the Sudan, but even so it possesses the ability to inform and intrigue young people, and draw them into the debate.

In a similar vein, the PC and console game *Brothers in Arms: Road to Hill 30* (Gearbox Software 2005a) engaged a broader audience with its ability to communicate an accurate representation of the experience of infantry combat in the Second World War. This was taken further with *The History Channel* implementing footage from the game into a two-hour documentary titled *Brothers in Arms*, which tells the story of an American Infantry regiment and the role that they played over the first few days of the D-Day invasion. (Gearbox Software 2005b) Interestingly, this is exactly the same story content of the interactive game; however it could be argued that the documentary is perhaps a repackaging of the key communication aims of the game, for an audience that does not seek an interactive, gaming experience. This suggests that certain audiences may have a favoured method for experiencing factual content and perhaps through choosing certain technologies or procedures for experience, potential consumers can become alienated.

Videogame technology has also been used in the past to shape a new form of factual television programme. *Time Commanders* (2003) placed a team of contestants in command of a virtual army within a digital reconstruction of a famous historical battle. It should be noted that this 'digital reconstruction' was essentially

an adapted version of the commercial computer game *Rome: Total War* (The Creative Assembly 2004), repackaged for a television audience. In each episode the contestants were presented with a short narrative covering the historical context of the battle and military historians and advisors feature throughout, either to give tips on strategy to the contestants, or to deliver whispered commentary to the audience. It could be argued that *Time Commanders* is the entertainment equivalent of watching someone play a computer game. Structurally a narrative will unfold, however as a viewer you do not have the satisfaction of participating and experiencing the feedback of your own interactions and decisions. Nevertheless as the series unfolds, and your own knowledge of military tactics increases, enjoyment occurs through the anticipation of the outcome of a poor tactical decision, or from the spectacle of watching the in-fighting of the contestants.

Whilst entertaining, these intrusions into television do not really enhance games as an interactive medium. Instead existing game content is being used as a tool, to attract a specific viewer demographic and as a replacement to the expense of producing carefully researched and filmed content. Indeed, in this domain the game has become secondary to the televisual format, with the user or player being relegated to the audience. American game designer, Lorne Lanning discusses the broader, untapped potential of the gaming form, and argues that the industry needs to promote and support a wider spectrum of products, particularly those that are devised with a focus “on real benefits to society”. (GamesTM 2008) So, how would the games industry at large move towards a model of diversity of experience, and are some themes or topics off-limits to the interactive form? More established

narrative forms such as film, television and literature, have defined structures, methodologies and modes for communicating with audiences that provide authors with flexibility and confidence to push accepted boundaries. Experimentation with structure and exploration of challenging themes needs to take place in an inclusive and accepting cultural environment. Nevertheless, this does not free all designers and developers from social responsibility, as all media must still navigate the boundaries of public taste and decency.

2.4.3 Criticism and Controversy

The greatest challenge in utilising or presenting factual material within videogames is arguably creating an experience that is accepted by the public in terms of visual representation and its level of factual accuracy with regard to historical or contemporary events. Clearly, a videogame set in a fictional universe where giant teddy-bears have mystical powers, is going to have less ability to resonate with, and therefore potentially offend, an audience than a game that encourages the player to act as a soldier in a current global conflict. Supporting this, Theodore (2010) presents two issues that arise when game developers utilise factual material, “first, you are inevitably going to get involved with real-world attitudes and controversies. Second, you’re never going to be able to satisfy all the disparate expectations raised when people see familiar settings or characters in digital form.” Furthermore, Theodore contends that the use of factual material without a communication aim or purpose complicates the process of attracting consumers to the production, and that players need evidence that story, game mechanics and visual style have been

appropriately considered. The implementation of a three-dimensional reconstruction of Manchester Cathedral within the *Sony PlayStation3* game *Resistance: Fall of Man* (Insomniac Games 2007), made the press for these very reasons. This science-fiction game depicts an alternative version of Britain in 1951, whereby a team of resistance fighters must battle alien invaders. The church argued that the developers were in breach of copyright and did not gain permission to utilise a representation of the interior of the cathedral. Whilst, Sony claimed that all permissions had been sought, a church spokesperson appealed that "for a global manufacturer to re-create one of our great cathedrals with photo-realistic quality and then encourage people to have guns battles in the building is beyond belief and highly irresponsible." (BBC 2007) Arguably, it was not crucial to the success of the production that a replica of Manchester Cathedral was used – indeed, any fictitious church or cathedral model would suffice in supporting the themes of that specific moment in the plot of the game. However, in a broader, games industry-wide context, to achieve authenticity within a game environment, artists regularly use real-world architecture and features as either inspiration or as a visual template to iterate upon. In the instance of the Manchester Cathedral case, it is evidently a conflict between the expectations of the church and the context and presentation of the in-game interaction. However, there has been an instance of a factual computer game being withdrawn from further development, due to media perception of its content.

In 2009, *Atomic Games'* third-person shooter, *Six Days in Fallujah* (Atomic Games 2009) was announced to the public and almost instantaneously was challenged as

being inappropriate and deserving of being banned outright. The game was declared to intend for 'players' to be able to follow a squad of U.S. Marines over the course of the six-days of the conflict, providing a reconstructed record of history and ultimately exposing players to the emotional journey of the actual marines that were there. (Brophy-Warren 2009) Clearly, basing a videogame around one of the bloodiest events of the most recent war in Iraq is a bold and risky move for any development studio, and would therefore require careful support and management by the publisher. With regards to *Six Days in Fallujah*, publisher *Konami* contributed to the controversy by marketing the game as a 'survival horror' experience – a genre which is more commonly associated with zombies and the supernatural, than a contemporary military conflict. Work in progress footage suggested that *Atomic Games* were aiming towards what could be described as an interactive documentary experience. The team had gathered the testimony of over seventy individuals involved in the events and had implemented gameplay mechanics based upon military rules of engagement. However, *Konami* later pulled their support for the game, leaving the development studio alone to respond to critics and to seek new partners to fund the project. More recently, a spokesperson for *Atomic Games* has hinted that the studio is not finished with the game, stating that "it is very important to us for reasons far beyond just making a product that we finish Six Days...but, it will require time and persistence."(Laughlin 2012) Arguably, a monoculture of games has therefore been allowed to thrive whereby the majority of titles that use war as a setting for gameplay, continue to demonstrate an action-movie mentality, with any authenticity or factual accuracy being reserved for inanimate objects such as weapons or vehicles. Games should always be classified in terms of

appropriateness of content, but they should be allowed to be developed fully, and not allow hearsay or opinion shut development down before they can be reviewed and assessed in their contextual entirety. In many instances, due to the developer/publisher relationship, and the competitive nature of the industry, the vast majority of game development takes place in secrecy, with employees and visitors being legally bound by Non-Disclosure Agreements. Whilst this is understandable should a developer have some proprietary technology, or perhaps if they have been tasked with moving a much-respected franchise in a new direction, but in the emergent genre of the documentary game, transparency and communication of intentions are paramount.

An initial process for games to utilise is to recognise the inherent strengths and weaknesses of interactive entertainment, and define a qualitative, rational framework that tests whether specific content undermines or supports the key communication aims of a production. When dealing with factual content this is of great importance, particularly as this involves the merging of two forms, games and non-fiction, and the history and structures that accompany them. Tameem Antoniades, the co-founder of UK games studio *Ninja Theory*, asserts “If you understand fully the rules of a medium, you can apply them in a new way...but in order to do that successfully, you’ve got to have an absolute understanding and respect for both. You’ve got to pick your battles: pick the areas you want to break, and pick the areas you absolutely must not break.” (Antoniades 2009) This is a notion that contributed towards motivating Art Spiegelman to create *Maus* (Spiegelman 2003) a graphic novel exploring the horrors of the Holocaust and its

cross-generational legacy. Whilst this is a simplistic abridgment of the content of the book, *Maus* is challenging to truly define as it weaves between being the memoirs of the author's family, a visual artefact that uses the principles of comics to convey narrative, and a reflective document that provides the reader with a commentary giving an insight into the author's intentions and personal struggle. Spiegelman manages to transcend temporal boundaries, telling his father's story, his own story, as well as directly addressing the reader, therefore acknowledging the multiple processes that shape the formation of memory and the representation and understanding of a reality.

Analogous to certain videogames, the work of American film director Oliver Stone is also no stranger to controversy, due to many of his films exploring issues and themes that generate emotive critical and political discourse. In terms of his process, Stone views himself as a "dramatist", using an informed process which combines aspects of both factual and fictional practice, to present a historical truth which can be defended in so far that "no one can get behind the closed doors of history and hear the actual dialogue of its participants." (Stone 2000) The approach taken by both Stone and Spiegelman in recognising the role bias plays in their dramatisation of events, and the formation of the historical accounts they build their narratives upon, shows a level of critical awareness that game developers must strive towards. Arguably, not all videogame genres will require this intellectual process as a critical part of their development. Instead, any form of interactive entertainment that utilises historical record or factual elements, must ensure that it has a clear voice and a carefully considered communication aim that is not

undermined by any of the additional elements placed within the experience. Trust and credibility in the practices and intentions of the development team therefore become of utmost importance, facilitating the move into challenging thematic, observational and historical modes.

2.5 Conclusions

Documentary has a long and awkward relationship with truth and objectivity. Although documentary is often perceived as being the objective portrayal of real life subjects, the very nature of authorship and creation raises questions regarding documentary's ability to be viewed as a truly objective form. Indeed, there are documentary modes that demonstrate the desire to capture and present an objective record of events, such as observational documentary, but this form can be argued to still express a degree of subjectivity by the author. It is perhaps the intentions of documentary (as a narrative form that distinguishes itself from others by representing reality) that have remained relatively constant throughout its historical development.

The documentary itself can be viewed as a hybrid form that has evolved as a result of creative experimentation by a range of practitioners and therefore draws upon a multitude of forms such as photography, journalism, cinematography and storytelling. Interactive documentaries are consequently argued to be a logical step on the on-going development of the documentary as a form. Whilst interaction presents a perceived challenge in terms of providing a user with narrative agency, this easily reconciles with the notion of documentary as a subjective portrayal of

factual material. Developments and trends in the design of videogames have demonstrated that a market exists for innovative approaches to story and gameplay, and notable examples have emerged such as *JFK: Reloaded*, *Rome: Total War* and the *Digital Adaptations* series, that all express some form of documentary value or intention by their respective creators. For a new form to grow and achieve cultural acceptance, it is important that the perception of the form is not tainted by poor authorial decisions with regard to the treatment of subject matter. As discussed, the media can at times be irresponsible of its coverage of emergent interactive forms, thus negatively shaping the perception and awareness of potential audiences. Existing reality-based, or indeed documentary games have been shown to possess a subjective re-interpretation of events which have often been poorly considered and defended in response to external scrutiny. Nevertheless there is a great potential within the interactive form to successfully and sensitively deliver an appropriate factual experience. The fact that the majority of videogame development exists hidden behind Non-Disclosure Agreements impacts on the transparency of a production, with the public and press unable to be presented with a rational, and satisfying overview of the development process. If controversial themes or content is being tackled, the creator has to be able to respond with a justification of their methods, intentions and an awareness of the issues surrounding a production. For the interactive documentary to continue to evolve towards becoming a powerful form of communication, handling historical and contemporary realities, the challenge rests with researchers, artists, designers and developers to challenge established perceptions of the documentary and interactive forms.

The next chapter sets out characterisation frameworks for interactive documentary developed during the course of the research and some of these ideas have already achieved publication and have been cited by various authors. Bogost (2010, p.63), cites with regard to the forms that have contributed towards the emergence of the interactive documentary, and Almeida and Alvelos (2010, [p.123]), Aston and Gaudenzi (2012, p.126) and Sørensen (2013, p.55) have recognized the initial simplicity, but underlying complexity of Galloway's (2007) definition of interactive documentary as any documentary that uses interactivity as a core part of its delivery mechanism, and have all used this as a foundational aspect to their own on-going research and practice around interactive documentary.

Chapter 3. Characterisation Frameworks for Interactive Documentary

3.1 Categorising the Interactive Documentary

Building upon ideas introduced in the previous chapter, Galloway (2007) established and defined four categories for the classification of interactive documentaries. The four categories are passive-adaptive, active-adaptive, immersive and expansive; and draw upon McMillan's (2002) models representing the traditions of interactivity. These four categories therefore have an emphasis on the mode of the user's interaction as opposed to being descriptive of genre or the specifics of documentary content.

3.1.1 The Passive Adaptive Category

Passive Adaptive is characterised by user input that takes place on a sub- or unconscious level, and which may alter aspects of content or presentation of documentary material. This may for example take the form of a smart-system that observes a viewer and makes changes to the on-screen content based on their specific unconscious responses. The passive adaptive system would be heavily reliant on technology that is capable of acquiring and constructing useable data based on the viewer's physical reactions to the narrative. For example, eye-tracking systems could be implemented to monitor the specific position of the viewer's focus - if the viewer looks away from the screen the system would register this and attempt to re-capture the attention of the viewer, perhaps through audio-visual stimuli. The tracking system could also be used to highlight those areas of an image

in which the viewer shows most interest. Therefore a particular character or location can be shown in more detail to satisfy the inquisition, or raise the concerns, anticipation and expectation of the viewer. The creation of content for such an experience would be consuming of both time and resources, as material would necessarily have to be available to support the majority of the viewer's 'decisions'. The alternative solution to this would be content creation on the fly, which would utilise physical world models and character models in order to extrapolate from a current or known documentary state. However, it should be noted that existing levels of technology are limited in their ability to truly achieve such a desired outcome. Nevertheless, complex artificial intelligence and procedural generation of content can already be found in computer games, and future interactive documentary productions could build upon this.

The passive-adaptive form can be defined as a 'responsive monologue' due to the absence of user awareness. Participants of this form should not be thought of as 'users', instead they are recipients, consuming the audio-visual material that is being packaged up and presented to them directly. Heeter (2000) states that "interactivity requires physical actions". However, it could be contested that the passive-adaptive form does not sit happily with this concept. Perhaps the 'input' in this case is best described as a physical response by a passive participant as opposed to a physical action by a user of a general interactive system. The term 'physical action' is suggestive of an increased level of awareness and that conscious decisions have been executed.

The passive-adaptive model may be informed or influenced by the following:

Eye tracking technology, subliminal imagery, bio feedback, gestural input and motion-tracking systems.

As an enhanced, passive experience for the viewer, there would be no conscious interaction with the system. However, the position of the viewer's gaze can control the method in which the documentary unfolds, and physiological responses to onscreen events can be used to initiate a change in the pace, tension, or content of the piece.

3.1.2 The Active Adaptive Category

Active Adaptive is characterised by user input that takes place on a conscious level, and which provides the user with an input device that allows for conscious navigation through a production. The device itself could be a familiar piece of technology such as a remote control or mouse, or an 'invisible' gestural recognition device that allows interaction through vocal commands, hand movements or facial gestures. Either a range of content would be necessary to accommodate a multitude of possible pathways through the material, or new material could be generated in real-time. This model most closely describes the current crop of 'docu-games' – procedural worlds, manipulated in real-time in response to user input through game controllers.

The active-adaptive interactive documentary empowers the user to physically interact with the system, and to both exploit and achieve an informed awareness of

the procedures for exploring, altering and experiencing content. Utilising the models proposed by McMillan, we can further categorise active-adaptive as being a 'responsive dialogue'. Nevertheless, this increased level of interactivity does not suggest that the user has an infinite number of possibilities. Instead, the active-adaptive form may utilise a pre-designed set of interactions, thus providing nominal opportunities for non-anticipated interactivity to emerge. Throughout the entire process the user receives constant, explicit feedback based upon their individual inputs to the system. Such feedback aids understanding and acts as a catalyst for further user interaction. The structure of a 'responsive dialogue' offers a base level of engagement to which more elaborate and interesting content can be built upon.

The active-adaptive model may be informed or influenced by the following:

Computer games, interactive television, DVD interactive menus, current 'docu-games' and media-rich online experiences.

The users can make conscious choices with regard to the affordances implemented by the director. These can include choices ranging from the navigation of content, the style and presentation of the piece, the manipulation of the narrative through actions and choices etc.

3.1.3 The Immersive Category

Immersive is characterised by user input and feedback that is fully participatory. For example, the immersive model would place the user inside the portrayed world so that events can be experienced 'first hand'. The purpose of the immersive system is

to allow the user to be fully absorbed into the narrative world by lowering their awareness of external, real-world stimuli to near zero. To achieve such an outcome the interactive experience could utilise immersive technologies such as augmented reality or virtual environment systems wherein the user actively participates within a constructed or adapted space. In these technologies the user is empowered with the ability to navigate and interact with the environment through actual physical interactions.

The immersive interactive documentary may be thought of as the pinnacle of engagement out of the four proposed models. The active-adaptive and passive-adaptive forms utilise a more traditional and familiar procedure for experiencing content, such as home computers, televisions etc. The immersive model sensorally absorbs the user into a generated audio-visual environment where the potential to interact using any physical action is possible. As a fully participatory “mutual discourse” the system constantly monitors the user and utilises its own artificial intelligence to encourage interaction from the participant. Therefore this experiential interaction holds great potential for emergent interactivity to occur. As opposed to a responsive dialogue a greater depth of interactivity exists, with each individual interaction having varying relationships with the preceding and following interactions.

The immersive model may be informed or influenced by the following:

Virtual reality, augmented reality, constructed virtual spaces, immersive environments.

The user is afforded a sense of presence in the world created by the director and therefore may have the ability to decide the direction in which to travel, the position to be in as events unfold, and to undertake roleplay and manipulate the world and events through virtual presence.

3.1.4 The Expansive Category

Expansive would employ a method of mass-interaction to deliver a community based interactive documentary experience. The expansive category is dependent on active participants for the emergence of 'co-created content'. In such a system the users are authorised to change the content of the documentary and challenge the points of view of other users, therefore due to being a socially driven system there is wide scope for potential interactions and emergent behaviours of both positive and negative impact. These activities are not without precedent as educated debate and petty squabbles are widespread across the Internet where individuals use technologies such as forums, blogs, bulletin boards and massively multi-player online games (MMOG) to voice their opinions on everything and anything. Wikipedia (2001) is a free, online encyclopedia, edited by a massive community of users. Although questionable in credibility and accuracy, Wikipedia is demonstrative of a successful platform for allowing people the potential to share their knowledge and expertise with others. The 'expansive' model shares similarities with Wikipedia by allowing users to collectively contribute and regulate content towards the creation of what could be classified as a 'wiki-documentary'. In such a production

the actual user interaction could vary from re-editing and altering existing footage to uploading and implementing user-generated content.

The expansive model may be informed or influenced by the following:

Performance art, online social networks, web communities, massively multiplayer online role-playing games (MMORPGs), web based video and photo sharing.

The affordances presented to the users may be defined by the community or may require the contribution of content or altering/challenging the content made by others. In a co-creative mode the user is a contributing participant, providing 'factual' data for which the documentary can be constructed.

3.1.5 The Limitations of the Four Categories

The relationship between each and every interaction holds particular significance within the expansive interactive documentary. As a system, the expansive form is driven by its users, with rules, content and potential methods for interaction emerging from the community. The many participants existing within this system are part of a forum of continually updated opinion and response that transcends geographic and temporal boundaries. This can be considered as a 'massively-mutual discourse' which will have evolved from an initial pre-defined, or communally-agreed rule set and structure. Emergence is the key concept underpinning the expansive form, where user generated content and user moderation is positively encouraged. Such levels of user empowerment may raise ethical and moral issues.

The expansive model encourages freedom of speech and facilitates the conveyance of a multitude of points of view.

The passive-adaptive model also raises some pertinent issues. Is the audience aware that their physical responses are being monitored and utilised to alter the content of the production and manipulate their individual experience in a specific manner? Such an issue can be overcome with the inclusion of a 'contract with the audience' (either explicit or implicit), wherein the audience is made aware of the methodology of the passive-adaptive documentary, prior to participation. Modern cinema and television audiences expect to have their emotions and beliefs challenged by moving image content, and this unwritten understanding is now a mainstay of the format. In the case of content on demand, user/audience permission is not such a debatable matter, as a conscious decision has been made to acquire a particular element of a production. However, the use of disclaimer statements and indicative content information perhaps deserves to become a core part of the interactive documentary experience.

Although we have proposed and categorised four forms of interactive documentary, further analysis suggests that there may actually be three fundamental modes of interaction. The immersive and expansive forms provide additional detail on the context of the user experience but ultimately embody elements of the passive-adaptive or active-adaptive modes. The immersive concept is essentially an extension of the control system, instead offering input through full-body, physical interaction. The expansive mode is descriptive of mass-interaction with a system, however, in a singular context this would still utilise the action cycle/interactive

process that is provided by the passive-adaptive and active-adaptive modes. This process can be explained by the diagram presented in Figure 3.1 which communicates the systemic process for three proposed modes of interaction for interactive documentary. Active-adaptive is an unmediated, direct process of communication between a user and a system. Passive-adaptive is a process of non-conscious interaction between a user and a system that utilises an agent to mediate and interpret user input and feedback. Hybrid-adaptive also utilises an agent to mediate the interactions between user and system, but with the proviso that the user is consciously directing their input.

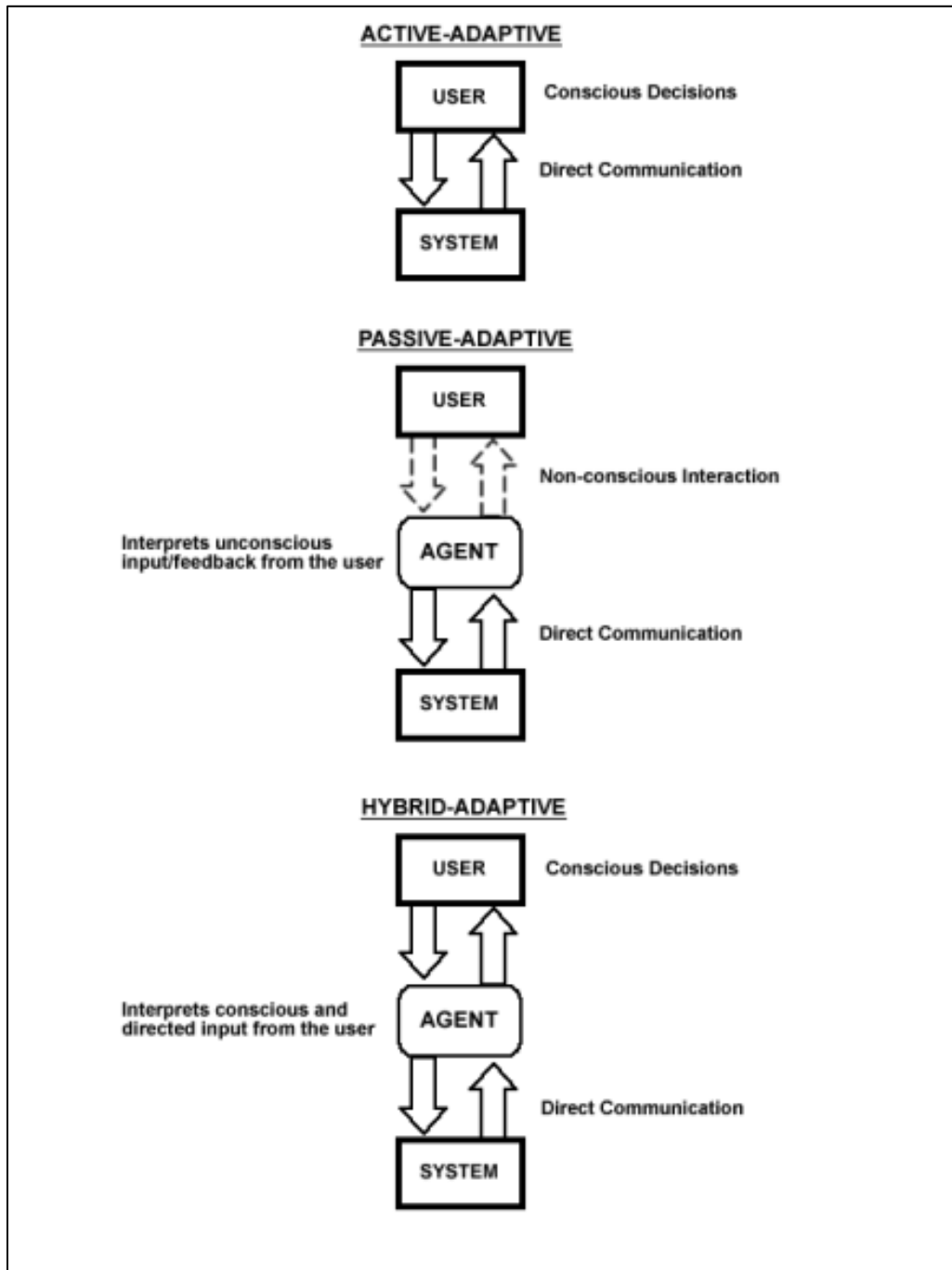


Figure 3.1 Three Models of User to System Interaction

The conceptualisation of the interactive documentary into a simplified, systemic representation fails to communicate the range of complexity, context and intentions that could exist in an actual production. The expansive and immersive models can be represented by these systemic models but should perhaps be re-classified as

specific types of interactive documentary experience. To move towards an experiential classification of interactive documentary it is useful to consider the quality and form of interaction that these experiences would afford. It is proposed that an initial experiential classification of interactive documentary could define these affordances across the following six categories:

Immersive: User is made to feel 'in the world' through the removal of external stimuli to create a sense of presence and accountability.

Creative: User can express themselves within the world through creation and play, shaping the structure, tone and style of the experience.

Expansive: User is part of a shared experience in a community driven, multi-user, social network or environment.

Competitive: User participates in a goal-driven, objective-focussed experience that presents some form of challenge to overcome.

Emotive: User submits to an emotional experience, which may use dramatic, visual or aural techniques to provoke particular feelings.

Investigative: User is encouraged to participate in the acquisition of knowledge through an experience that requires the intellectual navigation through content.

3.1.6 Defining the Affordances of Interactive Documentary

The diagram presented in Figure 3.2 defines four conceptual elements of interactive documentary, and was conceived in response to the previous categorisations of the interactive modes and the extensive review of literature. The diagram builds upon the purposes of documentary defined by Renov (2003) and suggests that interactive documentary is the consolidation of story, debate, social experience and cultural document.

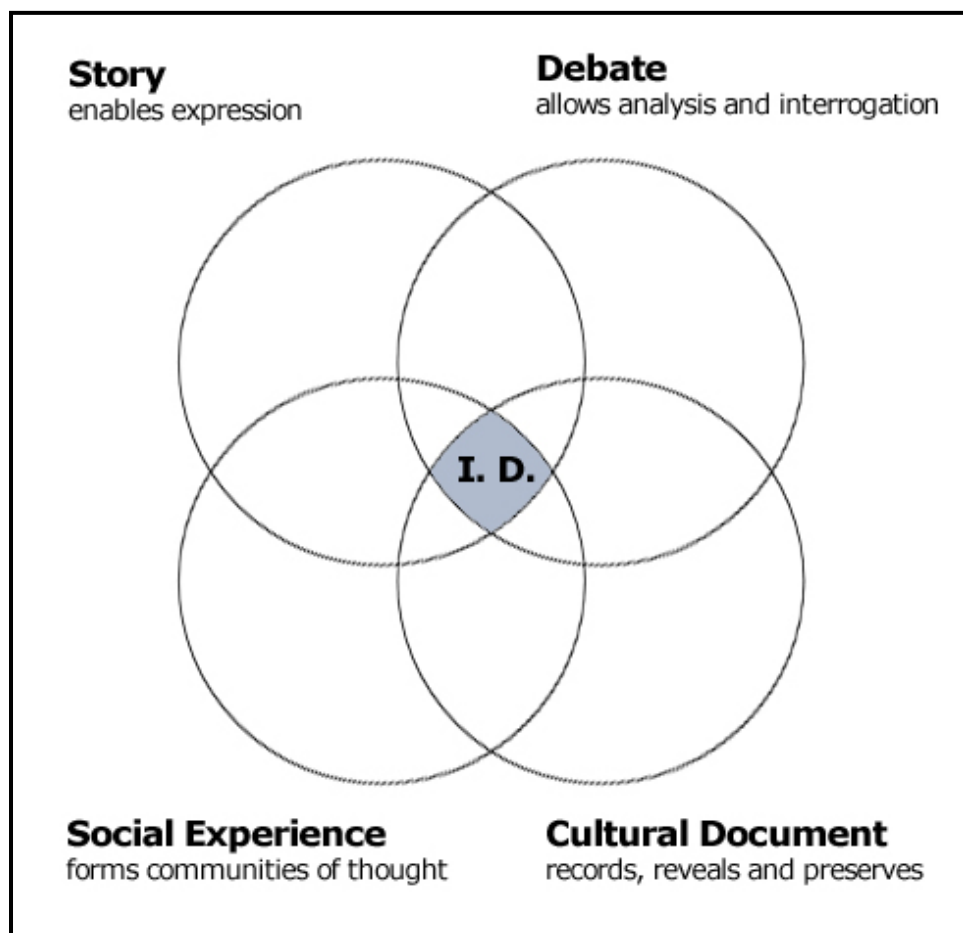


Figure 3.2 Affordances of Interactive Documentary

Documentary is a narrative form; therefore it is logical to extend this to a definition of interactive documentary, solidifying the importance of story and its inherent

properties that enable authorial expression and audience understanding. Documentary is capable of presenting issues; analysing and interrogating multiple perspectives, and encouraging self-reflection, debate and discussion around a particular concept or topic. Documentary is a social experience (directly or indirectly) that addresses its audience, relying on empathy as a manipulative device to challenge viewers into defining their individual point of view and where they place themselves in a broader social context. Documentary is a cultural document that innately captures and communicates its subject matter; provides an insight into the process behind its construction and therefore reveals an insight into the perspective of its creator.

However, Figure 3.2 presents a generalisation of the background research and is therefore limited in its communicative potential when contrasted with a detailed critical framework. The complexity and specifics of the story in terms of how it is constructed and its relationship with interactivity is not communicated. Similarly, the role of the audience is not fully expressed - although the model is suggestive of an intellectual process whereby communities of thought are able to emerge in response to analysis and interrogation of the documentary content. Furthermore, the concept of the interactive documentary as a cultural document is valid, but there is no framework or process for ensuring and evaluating the provenance and accuracy of the material. Whilst it is useful to utilise a visual representation to articulate the underlying constituents of an interactive documentary, there is arguably a need to explore existing critical frameworks to enable analysis of these elements in greater detail. The affordances of interactive documentary can be

divided into two strands; whereby 'Debate' and 'Social Experience' can be grouped in terms of the shared aspect of community, and 'Story' and 'Cultural Document' can be viewed as a grouping defined by authorial control and expression. These strands are not mutually exclusive, but provide the clarity and opportunity to conduct both quantitative and qualitative analysis of existing interactive documentary forms.

3.2 Developing a Framework for the Analysis of Expansive Interactive Documentary

3.2.1 Identifying Criteria Relevant to an Existing Production.

The affordances of 'debate' and 'social experience' can be identified as being a core part of the expansive interactive documentary experience. The expansive form involves mass-interaction within a community of users, who are all empowered to contribute to a 'living' artefact. This ultimately raises a range of interesting questions regarding the design and integrity of such a system. What rules and regulations would exist and how would they be presented and structured? What impact would these have on the spontaneity of user contributions? Can quality, ephemera and misuse be detected and how do they contribute to the documentary value of the system?

Preece (2001) presents a list of categories for assisting in measuring the success of an online community, "...obvious measures such as the number of participants in a community, the number of messages per unit of time, members' satisfaction, and some less obvious measures such as amount of reciprocity, the number of on-topic

messages, trustworthiness and several others...number of errors, productivity, user satisfaction and others.” Arguably, some of these measures are easier to gauge than others. For example, number of participants is a straight-forward process of gathering unique usernames, however categories such as ‘trustworthiness’ run the risk of analyst misinterpretation and bias. To move towards a specific assessment framework we propose the following seven categories as a method for the analysis of content generated by an online community.

1. Number of participants: How many unique user identities have contributed to the debate?
2. Number of comments: What is the frequency and overall amount of contributions a user makes to the debate? Are there specific periods of activity and inactivity?
3. Overall Stance: Is the user for, neutral or against the motion, and does this stance change over time?
4. Standalone Comment or in response to another: A high number of comments by the same person could suggest increased levels of engagement and participation. Do different communication patterns emerge, such as dialogues etc?
5. Subject of Challenge: What is being challenged in the user’s post? Is it another user e.g. personal like/dislike? The factual content of the documentary or web resources? The voice and presentation style of the documentary – the discourse?

6. Word Count: How much are people writing and is there a limit? This can suggest how much effort someone is willing to put in and how motivated the user is?
7. Tone: How does the user present their point of view and is it possible to ascertain a dominant characteristic within the contribution?

There are challenges in gauging the tone of a user's contribution, and for the purposes of this research, any information relating to tone would not be viewed as conclusive. In a similar vein, analysing the grammar of a post presents an issue in that a contributor could be discredited despite there being a valid, underlying reason for the text having a perceived flaw or lack of quality. It is fair to state that allowances must be made for disabilities and varying levels of awareness of internet etiquette.

As a genre, the interactive documentary is still very much in its infancy; although a range of interactive documentaries have emerged over the course of this research, there are limited examples of multi-user experiences as defined by the expansive form. It is also essential to identify an interactive documentary that presents sufficient data in an appropriate, accessible manner to facilitate detailed analysis and evaluation. For this study we identified and selected *Scotland's History* (2008) – an interactive, online debate, established as part of *A History of Scotland* (2008) – BBC Scotland's documentary series that explores Scotland's changing cultural identity. The social interaction that follows in response to the broadcast and the motions posted by the production team, present an insight into the collective mind-

set of online communities and the role they may play in the future development of the interactive documentary form.

For the purpose of this research, we selected 5 debates for analysis and user comments and activity were recorded over a 15 month period. It should be noted that there were several other debates in progress at the same time, with a new debate going live shortly after the broadcast of each episode of *A History of Scotland*. At the time the debates were to remain open for an indeterminate period of time, therefore limitations on the period of data collection was determined in order to include the immediate debate after broadcast but a significant period of time post-broadcast. The 5 debates identified for data gathering and analysis, and a summary of the specifics of the television broadcast that preceded each debate can be viewed in the Table 3.1.

<i>A History of Scotland and Scotland's History</i>			
Series One			
Broadcast	Ep.	Title	Topic of Online Debate
9 Nov 08	1	Last of The Free	Scotland's resistance to English invasion
16 Nov 08	2	The Hammer of The Scots	Wallace's Legacy
24 Nov 08	3	Bishop Makes King	The Importance of the Declaration
1 Dec 08	4	Language is Power	<i>Lords of the Isles (rebranded and altered)</i>
8 Dec 08	5	Project Britain	James VI's Britain

Table 3.1 *A History of Scotland* episodes and each accompanying topic for the online debate.

3.2.2 The Expansive Framework

To enable the efficient and accurate gathering of data, the previously proposed framework that presented seven categories for the analysis of content generated by an online community has been modified into the following pragmatic framework for capturing data and undertaking assessment.

Post Identification Number

Username

Location

Date

These categories are acquired directly from the BBC debate website.

Overall Stance

User comment is evaluated and logged as:

For, Against, Neutral, Unclear, or N/A.

Subject of Challenge

User comment is evaluated and each subject of challenge is ranked (Primary, Secondary, Tertiary) and logged ranging from:

Topic, Programme, Off-Topic, User, Moderator, Website.

Standalone Comment

User comment is evaluated and logged as either:

Yes or No.

Responding to Other

User comment is evaluated and the subject of response is logged as either of the following categories (with the addition of descriptive text to provide context):

Username, Post I.D.(s), Moderation, General Reference.

Continuity of Posters Point of View

User comment is assessed for any obvious change in their point of view based upon their previous contributions and is logged as:

Changed, Constant, N/A.

Word Count

This numeric category is determined by the size of the user contribution and can be calculated by the algorithmic features of the data storage software.

Tone

User comment is evaluated to attempt to determine the primary tone of the users contribution and is logged as:

Praise, Critical, Questioning, Statement, Positive, Negative, Romantic, Apologetic, Supporting, Unclear.

Peripheral Categories

User comments are assessed in terms of the following:

Justified - Does the user support their contribution with evidence?

Creative - Does the contribution demonstrate some form of creativity?

Humour - Does the contribution demonstrate the use of humour?

The application and outcome of this framework is analysed and discussed in detail in Chapter 4. Audience and User Interaction in Scotland's History. This assessment framework is less appropriate for the analysis and characterisation of interactive

documentaries that demonstrate affordances relative to the previously determined groupings of 'Story' and 'Cultural Document', therefore it is logical to establish additional qualitative frameworks for ascertaining the importance and implementation of authorial control and expression.

3.3 Developing Frameworks for the Qualitative Analysis of Interactive Documentary

3.3.1 Overview of Qualitative Study

By way of introduction to the experimental work carried out in this and succeeding chapters, this section of the thesis gives an explanation of the methodological approach taken and the antecedents which informed the approach.

The work presented in this thesis should be contextualised within a continuum. From the author's perspective that continuum ranges from research and practice undertaken during previous studies and also practice-based activities in game design and documentary making. The identification of interactive documentary as an emergent cultural form stems from the author's journey through that continuum. In parallel to the author's study, the status of interactive documentary itself as a form changed significantly as early examples struggled to address the challenges of, and indeed fulfil the potential of, merging interactivity and factual content – a potential afforded by rapid advances in interactive technologies (principally Games Technology) and a growing understanding of how to deploy those technologies in the making of artefacts (principally Games Design). Thus a key driver behind this research was to be able to contribute to the development of a new cultural form,

from the influence of the perspective of computer games. The new area of games research and games studies continues to mature but has not yet settled on a canonical set of methods, or an epistemology that is shared across the “games research” community. A range of methodologies and taxonomies, derived from existing research cultures such as sociology, design theory, film studies and so on are constantly being proposed and refined to reflect the breadth and depth of content that exists across the spectrum of practice in the digital games sector.

Turning more specifically to the methodological approach of this work, the author proposed an initial categorisation of interactive documentary forms in a position paper – the interactive documentary landscape was deconstructed into two essential dimensions: firstly the methods of user interaction and, secondly, the degree in which the audience can consciously alter the content of the documentary. These categories presented inherent characteristics and challenges through which multiple research methods were identified as being the most natural and appropriate way to conduct further analysis.

This responsive mode of research is qualitative in its intentions and fits with the notion of the ‘bricoleur’, whereby the researcher embraces the emergent and subjective aspects of the process to achieve a “bricolage, a complex, dense, reflexive, collage-like creation that represents the researcher’s images, understandings and interpretations of the world” (Denzin and Lincoln 1994). This exploratory method allows for research that is aware of and responsive to the context in which it takes place and is not constrained by notions of empiricism. It can be argued that this approach is appropriate for the early phase of an emerging

discipline since it uncovers useful conceptual frameworks on which later methodologies, empirical or otherwise, might be based in a more mature phase of discipline development. More simply, given the emergent nature of this field of inquiry it is logical to take a highly exploratory approach and not to define a rigid methodology and set of analytical tools taken directly from other disciplines too early during the inception phase of the research.

In order to reveal and define the underlying and emergent patterns within interactive documentary, an inductive approach to analysis was established to inform the collection, comparison and grouping of existing interactive documentary productions based upon existing typologies and frameworks. This method of analysis sought to generate new theories, constructs and contexts of interactive documentary with the speculative nature of the research aligning with the concept defined by Crouch and Pearce (2012) that inductive analysis “is typically an exploratory, creative and iterative process in that the data will be examined in different ways and from different perspectives”. Qualitative textual readings were conducted for sixteen documentary exemplars, with the information generated by this process being further represented as diagrams to enable visual comparison of the essence, or shape of each of the productions. These graphic representations of qualitative data are not quantitative diagrams and do not add any precision to the analysis or, in themselves, mitigate against the subjectivity inherent in the data capture. They exist for the purposes of triangulation – giving another visual view of the underlying qualitative data. This process enables a broader snapshot of the constructs of the productions in order to more clearly understand their complexity

across multiple perspectives and to reduce the potential for bias that each method may present. (Gray and Malins 2004)

Furthermore, the approach to inquiry for the qualitative analysis of interactive documentary presented within this thesis has been informed by Cresswell (2009) and combines aspects of the inductive logic of research as represented in Figure 3.3, with in-depth case study analysis.

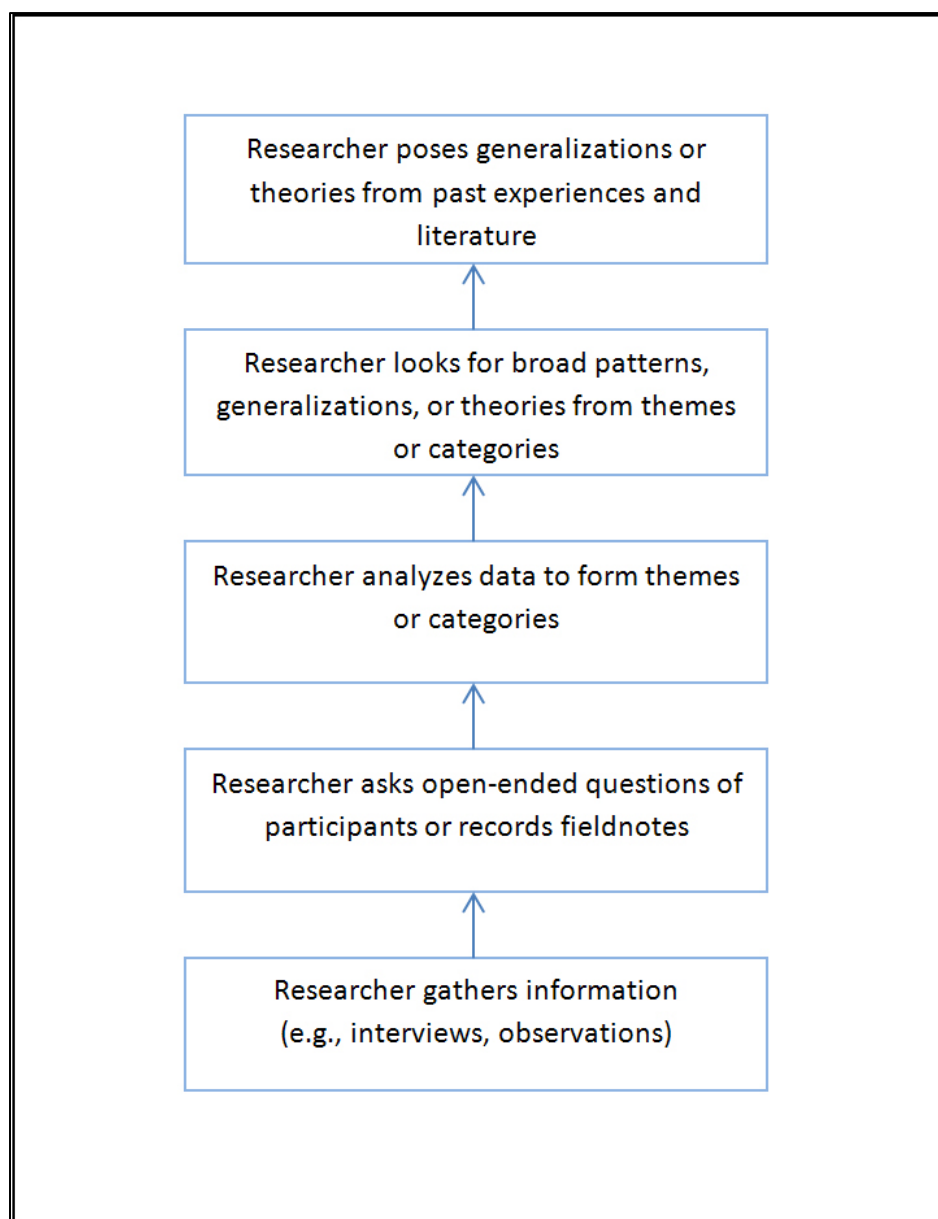


Figure 3.3 The Inductive Logic of research in a Qualitative Study (Cresswell 2009)

This process of inquiry aims to extract data and broad themes from a range of interactive documentary forms towards the development of an informed “generalized model or theory”. (Cresswell 2009, p.13) The case studies will be conducted through the lens of four evaluative frameworks, developed from existing critical models that have been identified and discussed as part of the initial research in the review of literature. The four frameworks are drawn from the work of Renov (2003, p.21), Nichols (2001, p.138), Klastrup and Tosca (2004) and Hunicke et al (2004).

3.3.2 Framework A: Renov’s Four Documentary Modes

In this section, Renov’s framework will be applied to analyse sixteen case studies. Some of these case studies are ordinarily understandable as “documentary”. Some others are not. The aspiration is to discover whether Renov’s framework uncovers attributes in interactive pieces that are not immediately obvious.

The four documentary modes are:

To RECORD, REVEAL, or PRESERVE

To PERSUADE or PROMOTE

To ANALYZE or INTERROGATE

To EXPRESS

Each mode will be assessed in terms of a six-point scale to identify its level of presence and will be recorded thusly,

- 0 – No Evidence
- 1 – Little Evidence
- 2 – Minor Evidence
- 3 – Moderate Evidence
- 4 – Significant Evidence
- 5 – Major, Sustained Evidence.

3.3.3 Framework B: Nichols Six Modes of Documentary Representation

The interactive documentary will be studied towards ascertain a general understanding of the style and tone of its presentation. The six modes are:

- POETIC
- EXPOSITORY
- OBSERVATIONAL
- PARTICIPATORY
- REFLEXIVE
- PERFORMATIVE

Each mode will be assessed towards the identification of the dominant forms of representation and will be classified as: Primary, Secondary, Tertiary or Nil.

3.3.4 Framework C: Klastrop and Tosca's Core Elements of a Transmedial World

The interactive documentary will be analysed in terms of the specifics of its narrative. The three core elements are:

- MYTHOS – What is the central knowledge, inciting moment or broader historical background?

TOPOS – What are the specific details of the world that help define it's genre – setting, time, space etc.

ETHOS – How is good and bad conveyed? The ethical and moral codex for the world. What exists to tell you how to behave?

Each of these elements will be broadly assessed and communicated with descriptive textual statements.

3.3.5 Framework D: Hunicke et al's MDA: A Formal Approach to Game Design

The interactive documentary will be analysed in a three stage process to identify and measure its constructs as an interactive system and the relationship between its designer and its user. The three stages to this analytical process are:

MECHANICS - The researcher will identify the actions, behaviours and control inputs afforded to the user and state them with descriptive text.

DYNAMICS - The researcher will identify the dynamic components and the emergent, systemic responses to user input and state them with descriptive text.

AESTHETICS - The researcher will identify the intended and/or emergent emotional responses as determined by the eight aesthetic categories defined in the MDA framework.

SENSATION (Game as sense-pleasure)

FANTASY (Game as make-believe)

NARRATIVE (Game as drama)
CHALLENGE (Game as obstacle course)
FELLOWSHIP (Game as social framework)
DISCOVERY (Game as uncharted territory)
EXPRESSION (Game as self-discovery)
SUBMISSION (Game as pastime)

Each aesthetic category will be assessed in terms of a six-point scale to identify its level of presence and will be recorded thusly,

0 – No Evidence
1 – Little Evidence
2 – Minor Evidence
3 – Moderate Evidence
4 – Significant Evidence
5 – Major, Sustained Evidence.

3.3.6 Identification of Pertinent Case Studies

The four evaluative frameworks will be applied to a broad sample consisting of sixteen interactive documentary forms, which have been grouped into six categories based upon the underlying technology that shapes each production.

Bear 71 (Allison and Mendes 2012), *Clouds Over Cuba* (Joiner and Tricklebank 2012), and *The Whale Hunt* (Harris 2007) are interactive documentaries that share a common quality in that they are all web-based and utilise video footage or still photography as their primary mode of communication and representation.

Whalehunters (2011), *Stowaway* (2011), and *MetaMaus* (Spiegelman 2011) are three pieces of interactive media that are adaptations or enhancements of existing factual literature, that share the characteristic of having documentary content as a central aspect of the production.

Rome: Total War (The Creative Assembly 2004), *Brothers in Arms: The Road to Hill 30* (Gearbox Software 2005a), and *Kuma\War* (Kuma Games 2004) are three commercial videogames that present a playable experience of historical events and are presented by the developers as having a high-degree of factual accuracy and realism.

The Making of Modern Dundee (2011), *Timeline World War 2* (2012), and *Realtime WWII* (Collinson 2011) are three interactive forms that are designed with a focus on a particular platform or technology and are shaped by the affordances and unique qualities that each specific technology provides.

JFK: Reloaded (Traffic Games 2004), *Darfur is Dying* (Ruiz et al 2006), and *The Cat and the Coup* (Brinson and ValaNejad 2011) are interactive documentaries that are recognisable as being adaptations of existing interactive forms and rely on the users familiarity with these forms to present an alternative type of documentary experience.

Scotland's History (2008), is an online community driven experience which uses a separate television documentary broadcast as a seed for debate and discussion. The detailed analysis of this interactive form as executed in *Scotland's History* is presented in Chapter 4.

These sixteen productions are analysed and discussed through the lens of the four frameworks in Chapter 5 – Case Studies.

Chapter 4. Audience and User Interaction in Scotland's History

4.1 Introduction

This chapter presents an analysis of an online debate, established as part of *A History of Scotland* - a multi-part documentary series produced by BBC Scotland, intending to explore Scotland's changing cultural identity. This section exists as an exploration of the role and impact of the user in the expansive form, and as a preliminary activity to inform the perception of the researcher with regard to the nuances of evaluating interactive documentary.

4.2 A History of Scotland

First broadcast in November 2008, *A History of Scotland* is a five-part documentary series produced by BBC Scotland, intending to explore Scotland's changing identity. Fronted by Neil Oliver, an archaeologist turned television presenter, the series features dramatic reconstructions, powerful music and stunning aerial photography. In the press release for the series, BBC Scotland Joint Head of Programmes Maggie Cunningham states that the series intends to "reach and engage as wide as possible a range of people across the country with up-to-date analysis of Scotland's history". This is supported by presenter Neil Oliver who argues that the programme aims to shatter the myths in our understanding of Scotland's past and utilise current academic evidence to portray a more accurate historical account (HM 2008). During production and in the run up to broadcast, the series caused a stir amongst academics and the wider community. Bignel (2008) reported that whilst some

viewed the programme as a “genuine – and visually stunning – perspective on the nation’s past”, others were greatly concerned that the presenter was an archaeologist and not a historian, and that the series is guilty “of pandering to English perspectives”. This debate played out in the national press with several academics voicing their displeasure with the approach of the production. Historian Professor Tom Devine refused to be on the advisory board and felt that the choice of presenter was inappropriate. In a further incident Allan Macinnes resigned from the advisory team, citing issues with the quality of the production, being expected to work for free and that the focus of the documentary was very “Anglo-centric” (Cornwell, 2008). Arguably, any documentary production has a voice of its own – a specific bias in how it presents information to support the intended communication message. In a review of the series, Finlay (2008) points out the challenges in working with historians – “Ask ten historians to give an account of what happened in the past and you will get ten different versions of events. They will agree on the broad themes and chronology, but when it comes down to detail and interpretation, and on the particular significance and weight attached to events, they will each put forward their own particular reading of history”. Perhaps, the conflict is irreconcilable, stemming from the fact that the production team has the task of entertaining and engaging a very wide audience, with the historical advisors keen to dive deeply into a detailed analysis of the past. The differences in opinion between the historical advisors and the production team may have helped stir up interest and audience anticipation, but this does not bode well for any rational, online debate. If the programme makers and the history experts could not agree (or at least share a

mature dialogue), then how will this shape the online debate, when it is thrown open to the anonymous mass-audience of the Internet?

4.3 Scotland's History

After the conclusion of each episode of *A History of Scotland*, the presenter encourages viewers to “Join The Debate” by accessing the BBC website and navigating to the *Scotland's History* website. The website is divided into six main categories – Television, Radio, Online, Debate, Walking Through History, and Events. The Television and Radio categories provide the user with scheduling information and additional facts regarding the range of programmes that are available. Online takes the user to a range of historical information and multimedia content spread out across the BBC's separate History websites. The Events and Walking Through History sections encourage users to attend various events and undertake historical-themed walks with the support of an audio guide produced in conjunction with the Open University. Clearly there is an extensive amount of content within *Scotland's History*, however, the online debate section was chosen for further analysis as it had the potential to present a living catalogue of user interactions, which would emerge from an initial question or ‘seed’. The debate itself is presented in textual and short video form, challenging users to argue for or against a pre-defined motion. However, what has emerged could be argued to be a form of social landscape - a group view, that utilises public opinion within a living, cultural document that is shaped from personal opinions, histories, beliefs and arguments. Although user interaction in this example only takes the form of text-based commentary, we are

still presented with a summary of the user's thoughts and feelings through their individual contributions.

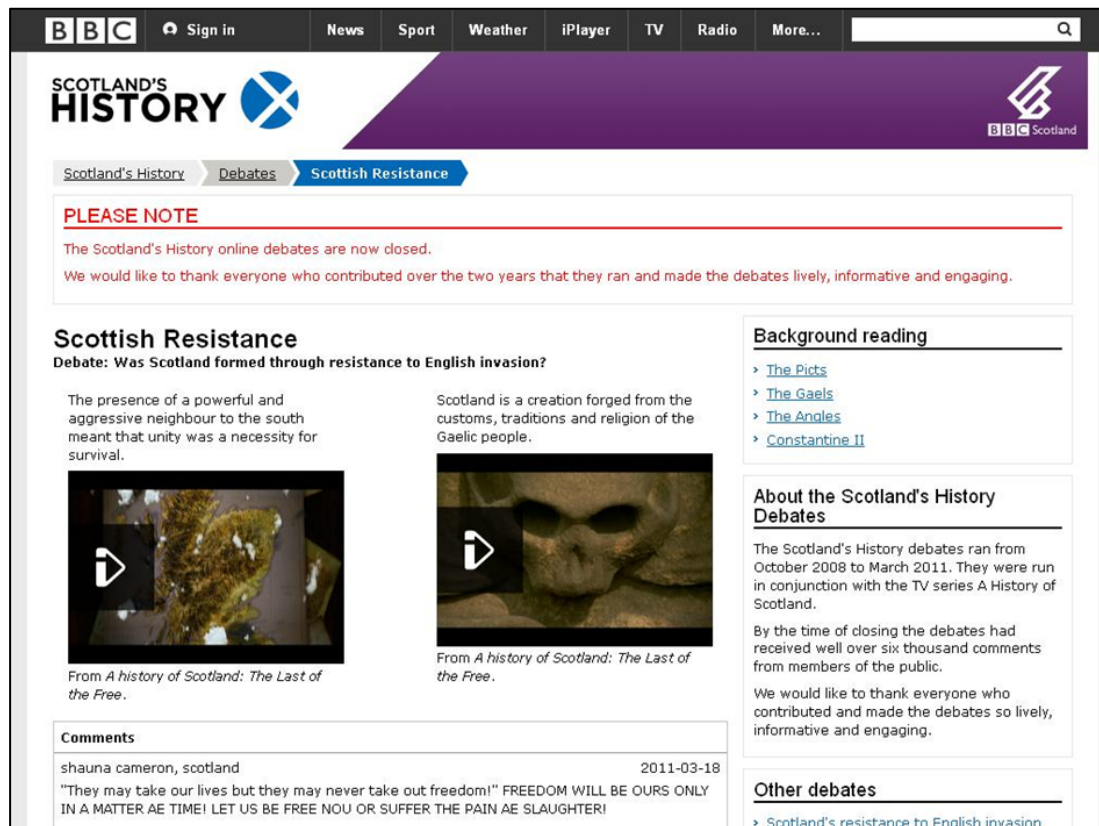


Figure 4.1 The debate screen and user interface of the Scotland's History website.

As you can see in Figure 4.1, in terms of user interface, the debate section is clearly structured with the motion and two video clips representing the viewpoints of for and against displayed at the top of the screen. Below this follows a list of comments from the community, sorted by date and showing the user's identity and location. De Souza and Preece (2004) discuss the importance of clear "Designer-to-user communication" whereby the designer has the power to visually communicate the capabilities of the system to the user. In these terms, the debate section is very clear in its presentation with regard to the subject for debate and the method in which to interact with the system. However, what is lacking is a sense of the evolution or

indeed the current state of the debate – such as a visual snapshot of the collective public opinion. Through reading every single contribution, it is possible to get an idea of the leading point of view, but only through a large investment of time on the site. Perhaps some form of summary of the most contentious comments or a swing-o-meter could provide a form of feedback to users that their contributions hold a less transient value.

Contact was established with the team behind the interactive resources, in an attempt to gain access to unedited user contributions, and gain further insight into the motivations for the production itself. Unfortunately, the producers were unable to grant access to this data as such, but instead provided a discussion regarding the moderation procedure and examples of the form of contributions that would not make it to online publication. Paul Adams, the online producer for *Scotland's History* assured that although all comments must first be approved by a moderator, the debate itself was allowed to evolve naturally. Only on the rarest occasion would a post would be edited or removed, most likely due to it being derogatory or a clear attempt to undermine the system. This is evident in the full transcript of user posts as there are numerous spelling errors and questionable contributions. It is clear that the production team have tried to allow as much variety as possible and at no stage have they tried to chair the debate by requesting people to get back on track. Adams (2008) further explains how the users themselves are incorporated into the moderation process "...where we have allowed controversial views to appear on the site the public will flag up comments they feel are inappropriate. This level of self-moderation on behalf of the users is ideal for us - it shows there is a sense of

ownership of the debate pages and also a strong sense of what is and isn't appropriate for a public forum". Although fair in reasoning, is it possible to ascertain the contribution such methods provide towards the development of a functional and burgeoning community?

4.4 Analysing the Debate

Over the period considered for analysis there were 1167 individual contributions, even taking into consideration the 6000+ users that the BBC recorded for the length of the extended debate until March 2011 the viewer to online engagement ratio is very low at <0.05%. (BBC 2008)

The initial broadcast and following debate elicited the largest response with 384 individual contributions with 181 posts containing content that praised or criticised the presentation and material of the television series. In addition, the actual number of posts that clearly address the debate is a surprisingly low 37. This is composed of 17 posts for the motion, 8 against and 12 posts that present a more neutral stance. As a consequence of this, well over 300 posts are classified as unclear – a result of the user's post either failing to respond to the motion of the debate or demonstrating a specific, overarching standpoint. Perhaps, the high number of comments about the programme can be explained by the fact that this was a BBC website linked to a BBC production, therefore users would naturally use the readily available comment box to voice their opinions. Users often challenged more than one subject in their post, with the majority of posts (213) concerned with the actual content of the programme. 118 posts mentioned the debate, 126 mentioned other

users, 7 made reference to the website itself, 2 posts addressed the BBC moderator and lastly, 25 posts were classed as being wholly off-topic.

In terms of the number of participants there were 230 'unique' usernames, with a further 30 contributions posted by 'Anonymous' users. Interestingly it appears that most users post around once, presenting their point of view and then ceasing to contribute any further. However, a small number of users did make regular contributions, with the most frequent poster commenting on twenty occasions . This user's posts tended to be polite, influential, well-reasoned and at times, very entertaining to read. Furthermore, where there are peaks in the amount of posts per day, this user tends to have contributed to the discussion at some point. In relation to this, and user engagement in general, Owyang and Toll (2007) state the importance of "igniters", a form of user who can, and often "by virtue of a single post, ignite a long chain of dialogue and conversation across multiple blogs". By definition, these igniters fuel the debate through their contributions – be they supportive, contentious, thoughtful or ignorant. The impact of such a user is evident throughout the online discussion and frequently leads to the debate descending into humorous, albeit contentious discussion, that presents a comedic, flowing narrative in which several users demonstrate their creativity and wit. In terms of the actual debate, such amusing exchanges may be viewed by some as an off-topic, and unnecessary distraction. However, structurally, periods of light-hearted banter provides a break in the tension, whereby a moment of humour and sociability is shared between active contributors, lurking readers and the BBC moderators. This fits with Preece's (2000) definition of the three key contributing factors to sociability

within online communities - *Purpose, People and Policies*. With regards to the online debate, *Purpose* relates to the “shared focus” that drives the audience to the site. *People* is defined by the individual users and their “different roles in the community, such as leaders, protagonists, comedians, moderators, etc.” Lastly, *Policies* refers to the “informal and formal” methods in which the community is governed and developed. Therefore an exchange such as the example above is unlikely to have occurred and/or been allowed to remain on view in a community with a more strict moderation procedure. There are other instances involving igniters that can be viewed as providing a more positive and valuable outcome. Several users commented on the location of a battle being mis-represented in the television programme. This resulted in the BBC moderator having to defend the content of the programme by publishing a message from the programme’s producer –

“A couple of comments have been posted about the location of the battle of Nechtansmere as depicted in programme one. In locating the battle site we were advised by our historical consultant, Alex Woolf, University of St. Andrews. More information about Alex's reasoning for the battle location can be found in The Scottish Historical Review, Volume LXXXV, 2: No.220: October 2006”

There are clear benefits to this form of interaction as content can be challenged by the audience and a move towards greater accuracy in factual content can be achieved. In addition to this, the act of witnessing content being challenged also enlightens an otherwise unaware and accepting audience. However there are a significant number of issues with an open anonymous forum that limit the format as

an interactive form. In general the patterns identified for the initial debate are echoed throughout the other Series 1 online debates. The major standout is the low number of posts that clearly address the debate. Overall the vast majority of posts across all debates (95%) can be classified as unclear. The nature of freeform contribution allowed people to contribute whatever they wanted regardless of the debate and demonstrates the significant difficulty the BBC had in eliciting measurable responses without deliberately driving users to voice an opinion. Ultimately this lack of clear opinion led the BBC to modify the format of the posts and force users into declaring a point of view. The website adopted a 5-point scale of *Strongly For*, *For*, *Neutral*, *Against* and *Strongly Against*, and is further supported with a change to the website design to present a more dramatic visualisation of the activity across the debate (See Figure 4.2).



Figure 4.2 The BBC's revised interface for the Scotland's History Debate.

With regard to the level of user activity in response to each television broadcast, Table 4.1 demonstrates that the number of individual contributions declined with each episode and only rising significantly with the final broadcast. When considering the number of unique user identities that contributed to the debate the number isn't even half of the overall contributions (540 unique users, with an additional 169 identified as Anonymous).

<i>A History of Scotland and Scotland's History</i>			
Series One			
Broadcast	Ep.	Topic of Online Debate	Responses to 31 Dec 09
9 Nov 08	1	Scotland's resistance to English invasion	384
16 Nov 08	2	Wallace's Legacy	331
24 Nov 08	3	The Importance of the Declaration	114
1 Dec 08	4	Lords of the Isles	97
8 Dec 08	5	James VI's Britain	241

Table 4.1 Online Debate activity in relation to each television broadcast.

Only five users returned to comment and contribute to every debate (excluding those identified as Anonymous), and while this rises to 30 for 3 or more debates it further demonstrates the difficulty in maintain engagement and discussion. Those 30 users are arguably the most engaged contributing 29% of all the contributions. The number of unique users contributing to a single debate rises to 39% (453 users) of which the majority (402) contribute only a single comment to a single debate. The frequency and overall amount of contributions a user makes to the debate is

measurable but only a small percentage can be truly analysed in order to see if their opinion or argument changes or sways. Given that the specific periods of activity are largely after the initial broadcast, it is significant to note that the debates themselves did not necessarily help in keeping the programme alive online in the periods where it wasn't on air.

Aspects of the data is so variable and inadequate that it is a challenge to draw meaningful conclusions and therefore not productive to inquire into the following categories. Whilst word count was initially perceived to suggest the level of motivation of a specific user, instead it struggles to communicate engagement and is perhaps more indicative of the user's ability to cut and paste from existing texts or ramble. As we have discussed, the majority of contributions were one-off comments by a non-returning user, therefore it would be difficult to ascertain complex patterns of emergent communication. Finally, the tone of a user's post is a relatively subjective measurement, and although there were interesting moments of humour, sarcasm and creativity, there is insufficient data to ascertain dominant characteristics or meaningful patterns.

4.5 Conclusions

Research and analysis has shown that online communities can easily contribute enlightening, interesting, and engaging content to an interactive resource. Conversely, the very nature of online discussions provides a massive challenge for the designer, whereby they have very limited control over the range of content and the varying personalities that choose to interact. For the expansive interactive

documentary to be a success it is vitally important to take into account the successes, failures and limitations of websites such as Scotland's History.

The user's first experience of the interactive system should be positive, therefore content should be visually engaging and easy to navigate. Indeed, the exploration of content should not be a barrier to users, quality material should always be easily discovered and specific elements should be able to be browsed via a range of appropriate criterion. The designer should provide an intriguing and clearly stated seed – this is a contributing factor in attracting users to the site, therefore if implemented poorly, the quality of contributions will likely be affected. From a management perspective, moderation of user contributions should be very light and transparent to encourage further user interaction. This could be further enhanced by positive moderation, in which quality and continued loyalty are recognised and rewarded. Similarly, feedback is an important part of all interactive systems; hence the user must be able to view the impact of their contributions via a clear, dynamic, textual and visual device. In terms of developing communities, it is valuable to facilitate like-minded users being able to join together into social sub-groups with similar world views. This further aids to instil a sense of purpose and belonging amongst the users – the life-blood of the system. Finally, a fully-realised, expansive interactive documentary should reach some form of climax and not be left to run indefinitely. Prior to a conclusion there could perhaps be a number of milestones or goals to mark the progress and provide the users with an ongoing sense of achievement. Without such elements, contributions will more than likely decrease in frequency as user's become increasingly aware of the futility of their efforts.

For Series Two of *A History of Scotland* the BBC updated the resources for *Scotland's History* with additional content that appears to address several of the previously mentioned issues. Visually the site was given a complete overhaul, with the debate section in particular benefitting from major changes in both the aesthetic presentation and the methods in which the user are encouraged to interact. Users were provided with the choice to select their overall stance (Strongly For etc.), and this assists in minimising potential misinterpretation of a user's post. The interactive bar charts could be argued to border on a form of playful interaction, with the mouse pointer triggering subtle animation effects and when selected a random user contribution is pulled from the graphic and presented in a pop-up text box. This results in the web resource being more mineable, whereby a user can now choose to find comments that are against or in support of their own point of view.

Through their iterative development of these resources, it is clear that the BBC understands the importance and indeed the many benefits that arise through empowering an audience. Jenkins (2002) declares that the modern audience is not only "active, critically aware, and discriminating", but if involved appropriately can "archive, annotate, appropriate, and recirculate media products". It could be argued that along with the educational and cultural value of such a multi-platform production, perhaps the most positive outcome for the BBC has been to engage with their viewers and maintain their long-held relationship with an audience that possesses constant and rapidly evolving needs, desires and behaviours.

Chapter 5. Case Studies

This chapter presents the sixteen case studies structured into six categories defined by either the approach or media form that has influenced the creative team responsible for each production. These six categories are - Designing a Community Driven Experience, Adapting Existing Interactive Forms, Platform and Technology Focussed Approaches, Videogames, Adapting Existing Literature, and Web-based Interactive Documentaries.

5.1 Designing a Community Driven Experience

5.1.1 Scotland's History

Scotland's History (2008) seeks user perspectives on issues of Scottish identity, welcoming support or criticism with regard to the commonly accepted history of Scotland, alongside the factual content presented within the television documentary series. Although this production has been analysed and discussed in the preceding chapter, for the purposes of consistency and clarity, *Scotland's History* is further examined using the previously established frameworks for case study analysis.



Figure 5.1 Scotland's History - Main Menu



Figure 5.2 Scotland's History – Debate Screen



Figure 5.3 Scotland's History – Updated Debate Screen

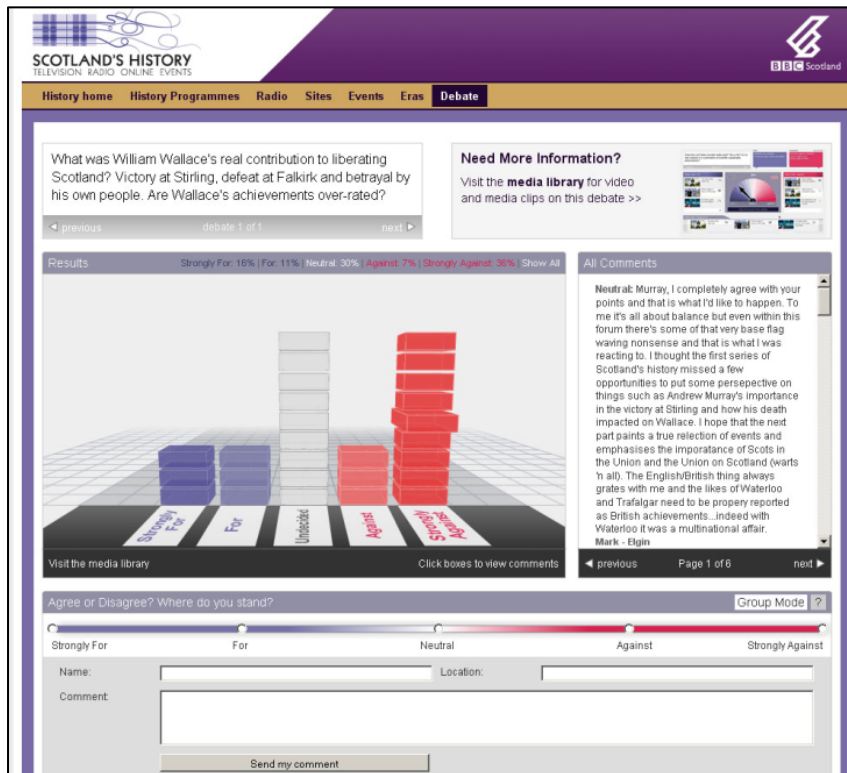


Figure 5.4 Scotland's History – Updated Debate Analysis Screen

Renov's Four Documentary Modes

Taken in isolation away from the accompanying television series, Scotland's History is limited in terms of the presence of Renov's four documentary modes. Much of the documentary content is placed within the actual television series and therefore cannot be wholly assessed within the website. Whilst the website does include some bespoke video interviews or excerpts from the programme to frame the question for the debate, they still exist out of the context of the overall narrative. However, as a debate that utilises online message board technology, there is significant evidence of the mode 'to analyse and interrogate'. In terms of 'record, reveal and preserve', the online debate reveals contemporary opinions on the history. The debates are relatively unmediated or academically substantiated; this therefore calls into question much of the content contributed by users. This presents a relatively weak, historical record, but consequently presents an interesting record of public perception and political views at the time of the debate. The debate itself aims to be relatively objective by asking the community to participate and therefore form a general consensus of opinion. The outcome of each debate is expressed graphically, but there are no closing arguments or promotion or persuasion beyond the narrative of the accompanying television show. Evidence of the expressive mode can be found in aspects of the website in the form of videos and imagery which communicate characteristics of Scotland poetically. Furthermore, as the audience is encouraged to contribute, most posts serve individual political world views but on occasion there are expressive posts that rely on metaphor, poetry etc. to communicate in an alternative and expressive manner.

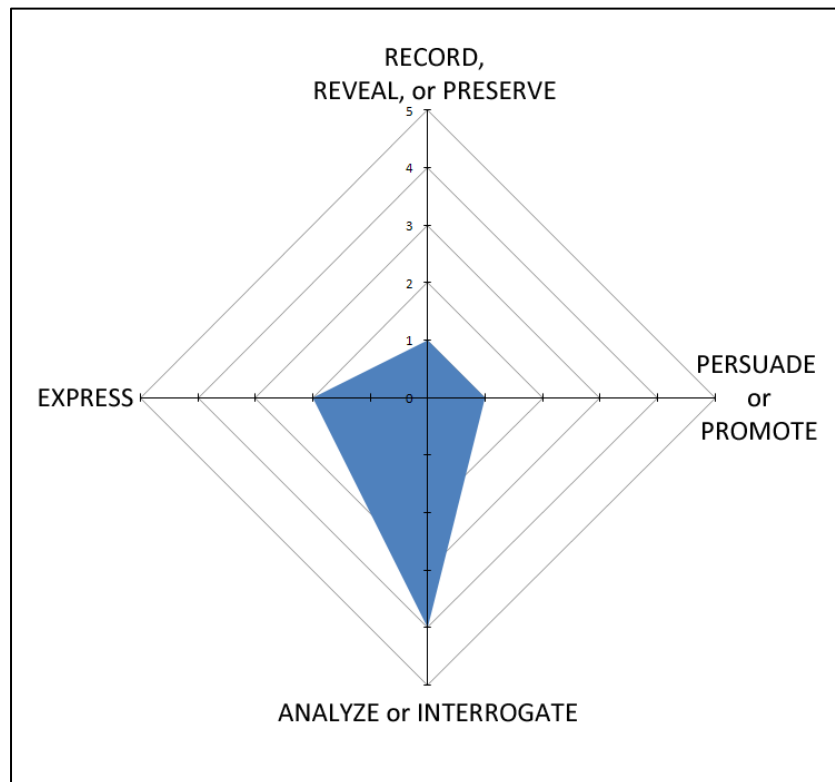


Figure 5.5 Scotland’s History – visualisation of the results of the Renov Framework

Nichols’ Six Modes of Documentary Representation

Scotland’s History utilises three of the six modes of documentary representation. Further analysis of the television documentary itself would present a very different outcome; however, the website has been determined as a standalone piece of media for the purposes of this case study. The primary mode has been identified as ‘Participatory’ in that a community of users across a spectrum of knowledge interact and challenge each other in a sprawling dialogue. This dialogue places an excessive faith in the community with regard to the accuracy and relevance of contributions. The website exists to partly question the format and content of the television

documentary. Therefore the secondary mode of representation is 'Reflexive' as the online discussion encourages awareness of historical bias and how records are formed - by having multiple viewpoints in plain sight it encourages reflection and opinion. However, the debate is prone to losing sight of the actual issues surrounding the chosen topic. With the website based around a period in actual history, the 'Expository' mode is a tertiary element due to the resulting discussions, opinions and overly-eager instruction by some of the participants.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The central theme and content at the core of *Scotland's History* and the accompanying documentary series, *A History of Scotland*, is the formation of Scotland as a nation and an identity.

TOPOS: *Scotland's History* does not easily reconcile with the traditional concept of story and cannot be easily defined in terms of setting, time or space. The combination of television broadcast and online materials is characteristic of a simple transmedia experience. The format of message boards and online discussions struggle to fit with the notion of a story world or an overall narrative; however there is much to be learned by a broader, expansive form of documentary such as this. The on-going dialogue between users is heavily defined by the initial television broadcast, which set certain parameters in terms of tone and the impact of its factual claims.

ETHOS: The website presents the user with the standard disclaimer and a simple statement with regard to the rules and regulations for interacting on the message

board. To a certain extent *Scotland's History* is relatively self-policing and features very occasional moderation by BBC staff, filtering out offensive comments or contributions that breach the code of conduct. A range of user behaviour exists, from antagonism to intellectually informed contributions, humour and occasional creativity.

Hunicke et al MDA Framework

MECHANICS: Reading, watching, writing comments.

DYNAMICS: Arguments, knowledge transfer, supportiveness, challenges, discussion.

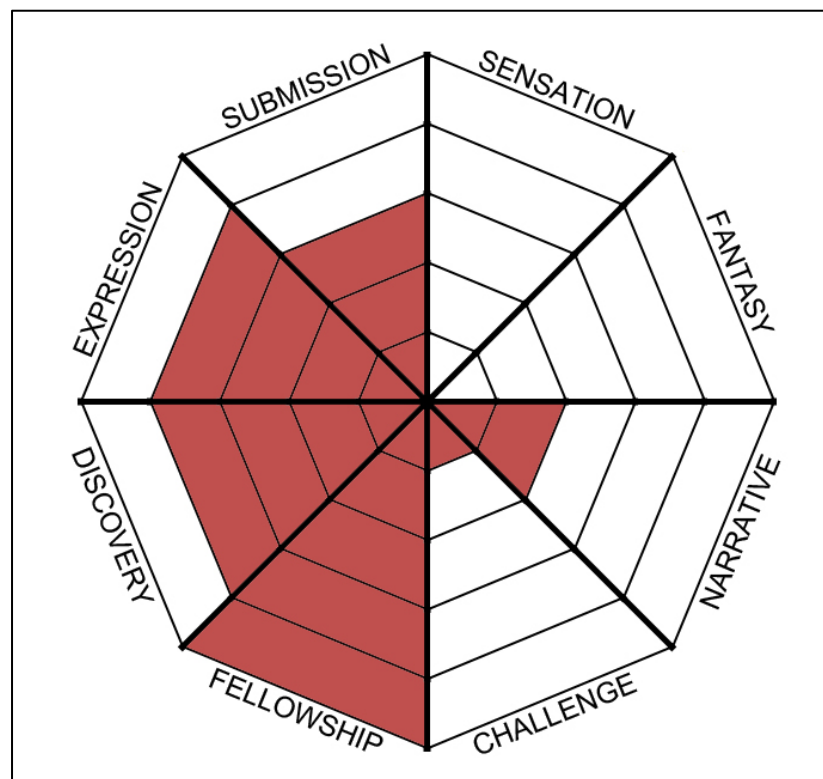


Figure 5.6 Scotland's History – visualisation of the results of the Hunicke et al Framework

AESTHETICS: *Scotland's History* presents an emergent social framework in response to the content of the television documentary and the framing of each specific debate. Cliques and political groups emerge rapidly across a growing dialogue between a range of users, therefore presenting strong evidence of *fellowship*. The open nature of the debate allows the sharing of information, exploration of multiple conversations and the *discovery* of knowledge, the provenance of which varies between uninformed hearsay, and cross-referenced presentations of research. With regard to *expression*, the debate calls for individual views within a group context, facilitating self-awareness and the development of one's own beliefs and ideals. The debates are promoted as week-long events, with a new motion being posed after each broadcast of the documentary. With no obvious conclusion or moderator input to close each discussion, the site has become more of a self-policing community similar to a forum. This indicates a moderate level of *submission* as returning users post frequency suggests that it is very much a pastime. This is countered by the non-returning users that choose to post their opinion without further defence or clarification. A limited *narrative* exists across the piece but it is relatively hard to follow due to continuity issues, the lack of coherence through multiple authors and the method through which contributions are sorted and presented. Beyond the basic computer skills and interaction required to post, there is a relatively low level of *challenge* and the user cannot fail as such. However, should the user post something that gets the discussion going, this can then be a complex situation to navigate, requiring both social skills and knowledge. The aesthetics, *sensation* and *fantasy* fail to emerge as the message board format does not facilitate sensual pleasure or encourage the user to role play or transfer into an alternative

conscience to explore the narrative. Subjectivity features heavily in online discussions and a minority of user contributions can be classified as pure fantasy, however this is more an emergent property rather than an author defined variable or intention.

5.2 Adapting Existing Interactive Forms

5.2.1 JFK: Reloaded

JFK: Reloaded (Traffic Games 2004) is a documentary computer game, which placed the player in the role of Lee Harvey Oswald in a digital re-enactment of the assassination of President Kennedy. Developed in Scotland by Traffic Games, the game explores the notion of the lone gunman theory and places the player in a constrained simulation of the historical event. The player views the period of the President's motorcade from a first person perspective and has the ability to freely aim and fire a rifle throughout this short sequence. The environment and characters respond to the player's actions, with relatively realistic behaviour and in some instances this can closely resemble the archive footage of the actual incident. The game then measures the player's performance with regard to how similar the outcome was to existing historical evidence. This system for scoring interactivity is visually presented in the form of an investigative analysis whereby players can watch stylised video replays and manipulate a rendered scene which shows the path and damage of each shot fired. The game borrows heavily from archive material, drawing upon and replicating aspects of the famous Zapruder footage, along with actual radio dialogue. The game was released for PC on November 22nd 2004 and

could be purchased via the game's own bespoke website. This website challenged players to compete for a monetary prize for achieving the highest score and featured some simple social features such as a community forum, leaderboards, along with a collection of research documentation.



Figure 5.7 JFK:Reloaded – The main menu screen.



Figure 5.8 JFK: Reloaded – Gameplay screenshot demonstrating the player's point of view.



Figure 5.9 JFK: Reloaded – Screenshot of the video replay functions and interface.

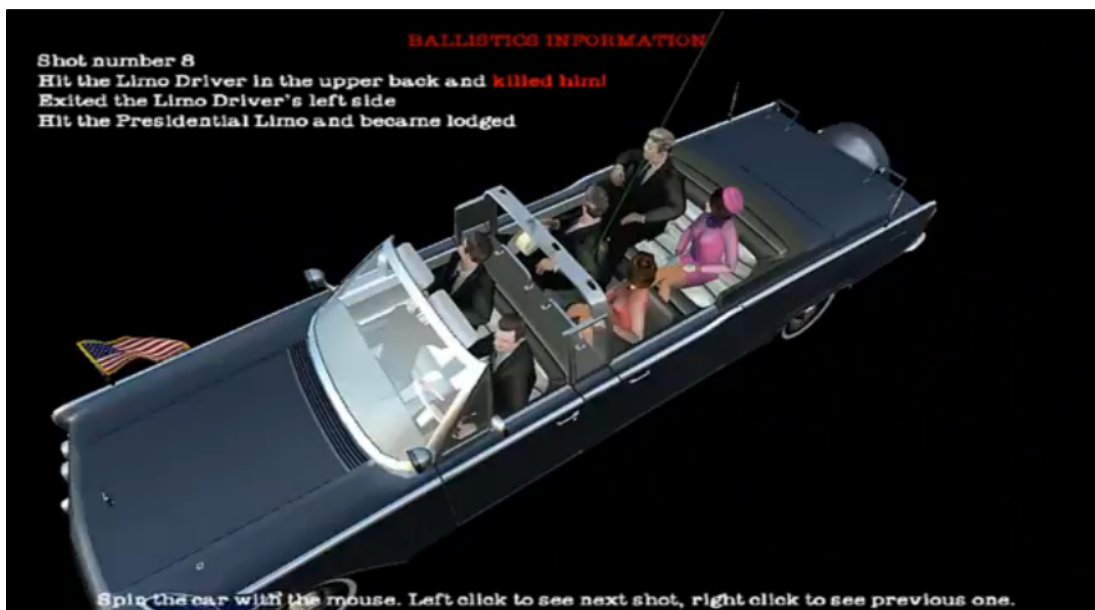


Figure 5.10 JFK: Reloaded – Screenshot communicating the post-gameplay period of scoring and analysis.

Renov's Four Documentary Modes

JFK: Reloaded claims to be a documentary game and there is clear evidence of Renov's documentary modes throughout. The development team has presented players with a digital reconstruction of a scenario that through user interaction reveals emergent outcomes and behaviours. The use of realistic 3D graphics and the attention to detail in the visual reconstruction and simulation of the actual event, can be interpreted as record, or preservation. There is little evidence of persuasion and promotion and beyond minor aspects of the title's website; the developers remain relatively objective with regard to presenting a particular point of view. The results and replay phases of the game present some moderate evidence of interrogation and analysis, however players are relatively constrained from being able to undertake a deeper exploration of the simulation. With regard to expression, the piece is relatively restrained in terms of its use of visual and aural feedback when compared to existing first-person game experiences. A minor level of expression is communicated through the presentation of Oswald's visual point of view, sound effects of breathing and the bobbing of the rifle scope. This provides a competent visual representation of events but struggles to present or address the more complex expression of deeper themes, emotions, and questions.

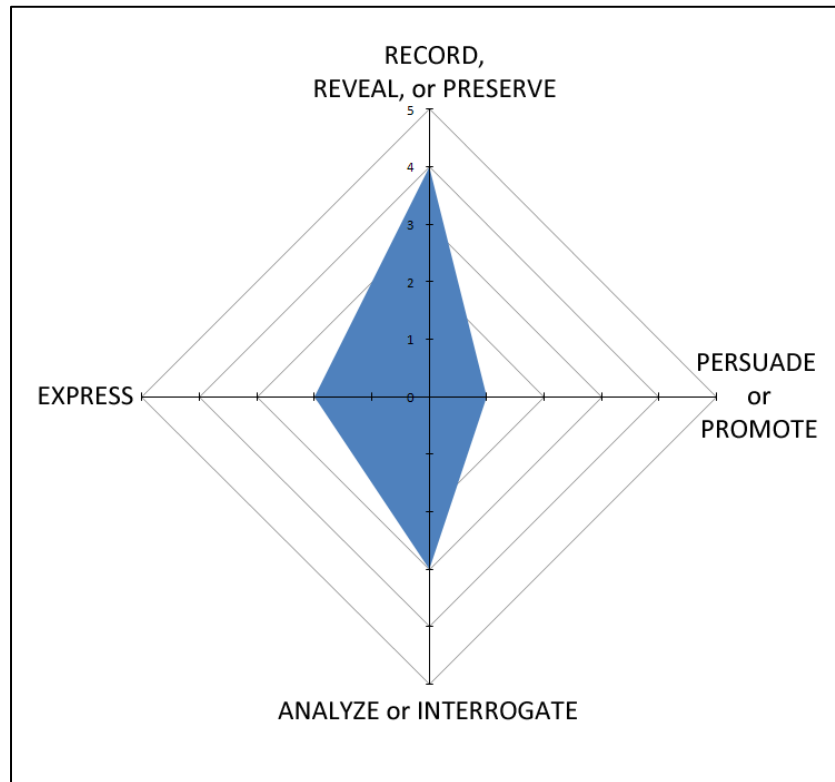


Figure 5.11 JFK: Reloaded – visualisation of the results of the Renov Framework

Nichols' Six Modes of Documentary Representation

The primary mode of representation for *JFK: Reloaded* is 'Expository' due to the direct address of the player, the recounting of history and providing the player an authoritative overview of events. Through limited interaction, the player is able to alter aspects of each playthrough, but these are structured within a set of pre-defined parameters and computer controlled 'actor' behaviours. This links to 'Participatory' as the secondary mode of representation as the player replaces the filmmaker with regard to "participatory engagement with unfolding events". The player's interactions are a crude method of questioning and analysis of the historical event, albeit with gunshots, but there is space for reflection and analysis within the piece. The focus on simulation and accurate reconstruction of events, suggests that

evidence of the 'Poetic' mode is negligible. The remaining three modes of representation have been assessed as tertiary aspects of the overall production. The 'Observational' mode occurs in response to the real-time duration of events – a simulation of moment to moment action in a player controlled reconstruction. The object of focal attention is always defined by the player, providing a sense of being on the scene, like an observational filmmaker. The 'Reflexive' mode features as a result of the method for addressing potential players, claiming the 'docugame' to be a bold new format which questions both historical evidence and the limitations of the traditional documentary form. Although there is a constrained use of expression and subjectivity in the visual presentation, *JFK: Reloaded* does subjectively portray Oswald's viewpoint, and players can undertake 'Performative' actions.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The 1963 assassination of President Kennedy.

TOPOS: The game takes place within a reconstruction of Dealey Plaza in Dallas, Texas. During active gameplay, the player is positioned in the book depository overlooking the motorcade. The core interaction provided to the player is to aim and shoot - this defines the game experience as a constrained first person shooter. A single playthrough of the game exists in real-time and can last up to a few minutes. Visually, *JFK: Reloaded* borrows heavily from existing archive such as the Zapruder footage along with other film and documentary media which may have explored conspiracy theories.

ETHOS: *JFK: Reloaded* awards players for accurately recreating the alleged three shots as recorded in the Warren Commission. This is reinforced through a scoring system and a since withdrawn, monetary prize. The player character cannot die, but you can be visually located by the non-player characters who will run towards your location should you fire wildly and beyond the three shots. The fact the game allows you to fire more shots than the historical evidence details is an interesting ethical point. Whilst the game provides the ability to fire many shots, the piece still constrains the player to a single location, presenting two possible viewpoints, the view from the window and the view through the riflescope. Whilst some of the non-player characters react in terror to gunshots, the game does not comment or provide consequences should the player decide to try and shoot every character within the game. The main historical personalities in the motorcade react in similar way to the actual event, however due to it being an interactive, physics based simulation; there is huge potential for situations and behaviour (both interesting and farcical) to emerge. The post assassination screen assesses player performance in terms of bullet trajectory and destination providing an alternative mode of enquiry whereby players can contemplate and explore their interactions or plan alternative strategies.

Hunicke et al MDA Framework

MECHANICS: Looking, aiming, firing and manipulating the camera angle on the analysis and video replay screen.

DYNAMICS: Kills, vehicle and environmental damage, rifle reloading time and viewpoint sway, temporal constraints - experience lasts as long as it takes the motorcade to pass through, scoring system and post gameplay analysis.

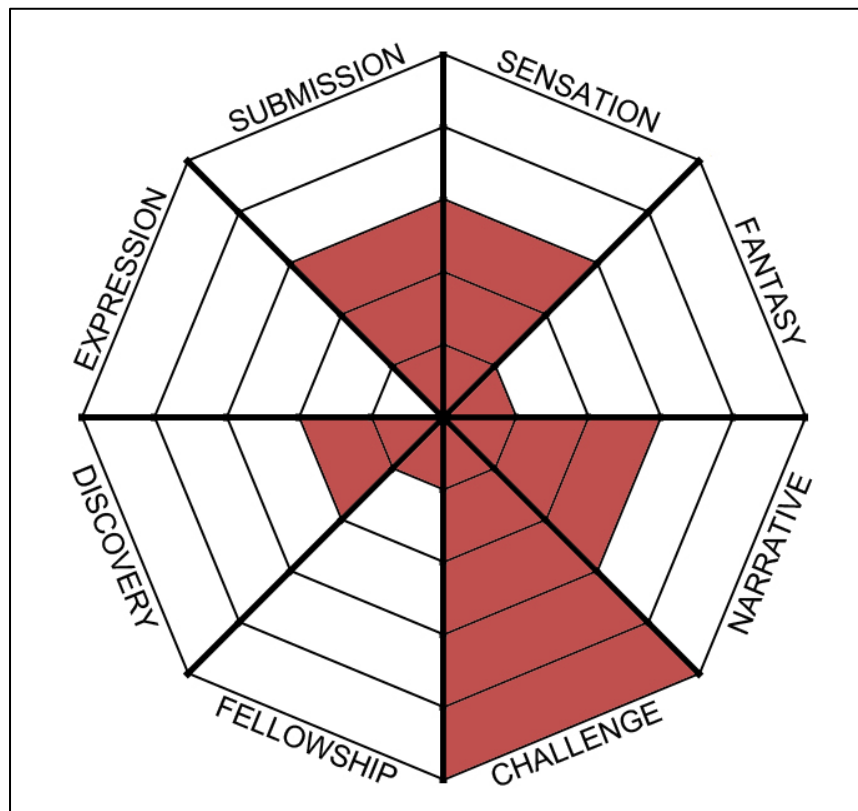


Figure 5.12 JFK: Reloaded – visualisation of the results of the Hunicke et al Framework

AESTHETICS: *JFK: Reloaded* directly encourages players to attempt to achieve the highest possible score defined by set criteria. Whilst marketed as a documentary game, the overarching aesthetic is *challenge* as the game places more prominence on leaderboards and scoring than other modes such as player expression or investigation. The game is promoted with a monetary prize, which leads to

repetitive consumption of the experience, becoming a form of *submission* as players return to attempt to improve their score and implement alternative strategies. *JFK: Reloaded* presents a basic *narrative* framework informed by historical events to call the player to action and to conclude the experience. The player is afforded the ability to interact with a system which features pre-defined behaviours and variables, leading to outcomes which vary between chaos and a close, representation of the actual assassination. A moderate level of *sensation* exists through the player embodying the role of Oswald and having the power of 'life and death' within the simulation world. A sensory experience exists through the bobbing of the rifle scope and the sounds of breathing as the player anticipates their next shot. The piece does facilitate minor aspects of *discovery*, whilst there is not a large archive of material the piece does provide some investigative interaction and contemplation, albeit with limited analysis. *JFK: Reloaded* places the player in role of Oswald and whilst this is indicative of *fantasy*, the world is not make-believe and exists as a relatively accurate digital simulation of events. The accompanying website for the piece contains some very limited aspects of fellowship in the form of community forums and leaderboards. Finally, the piece does not present any evidence of the aesthetic of expression; the piece is more concerned with the historical evidence and Oswald's alleged role, as opposed to being concerned with player self-discovery.

5.2.2 Darfur is Dying

Darfur is Dying (Ruiz et al 2006) is a web-based “game for change” that aims to communicate the daily challenges faced by millions of refugees fleeing genocide in the Sudanese region of Darfur. Players are tasked to undertake a range of activities to keep the camp secure, safe and healthy, against a backdrop of impending attack by militias. The game presents players with two main modes of gameplay. The first part of the game involves the player choosing a refugee and then attempting to navigate a hostile landscape in search of water, avoiding capture by the militia. The second mode more closely resembles a strategy game whereby the player must thoughtfully distribute water across the camp to maintain the growth of crops, enable shelters to be built and that health and sanitation levels remain high. The game presents the player with a point of view which expresses a futile situation in desperate need of global support and aid. The game was directed by Susana Ruiz who led a team of student developers at the University of Southern California in response to a competition sponsored by MTVu and the Reebok Human Rights Foundation. *Darfur is Dying* was designed to be a viral experience, whereby elements of the content directly address players with regard to spreading the game across their own social networks. The piece contains a range of information and documentary media, including a ‘Take Action’ section which gives the player tools to become politically active, such as the option to directly email politicians regarding the crisis in Darfur. This virality led to over 700,000 unique users within the first month of the game’s release playing through the core narrative of the game.

(Thompson 2006) *Darfur is Dying* is a persuasive, awareness raising experience which aims to educate and trigger political activism.

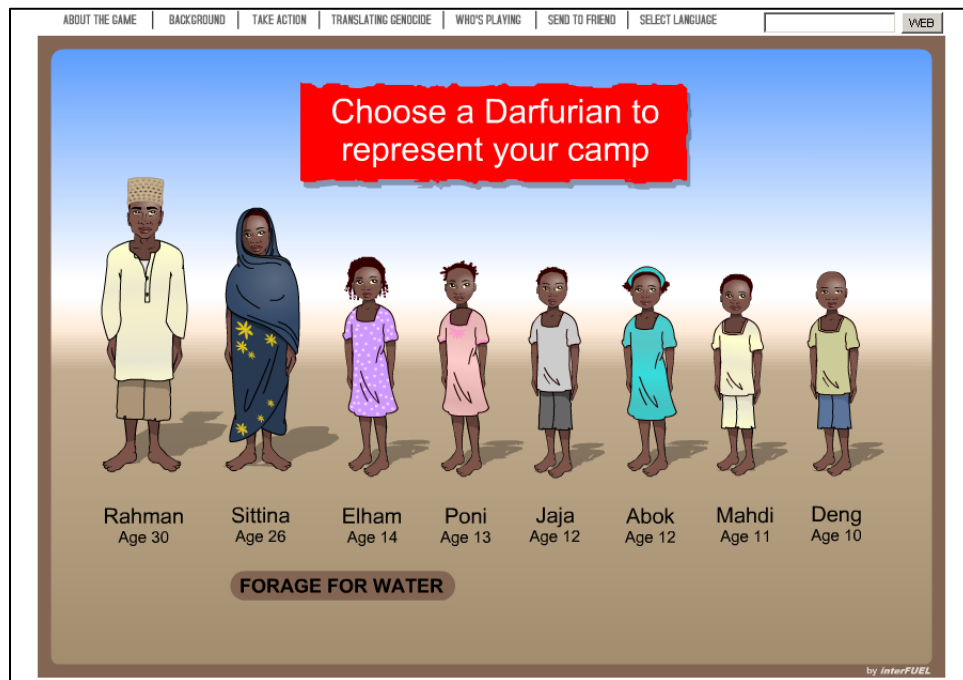


Figure 5.13 Darfur is Dying – character selection screen.

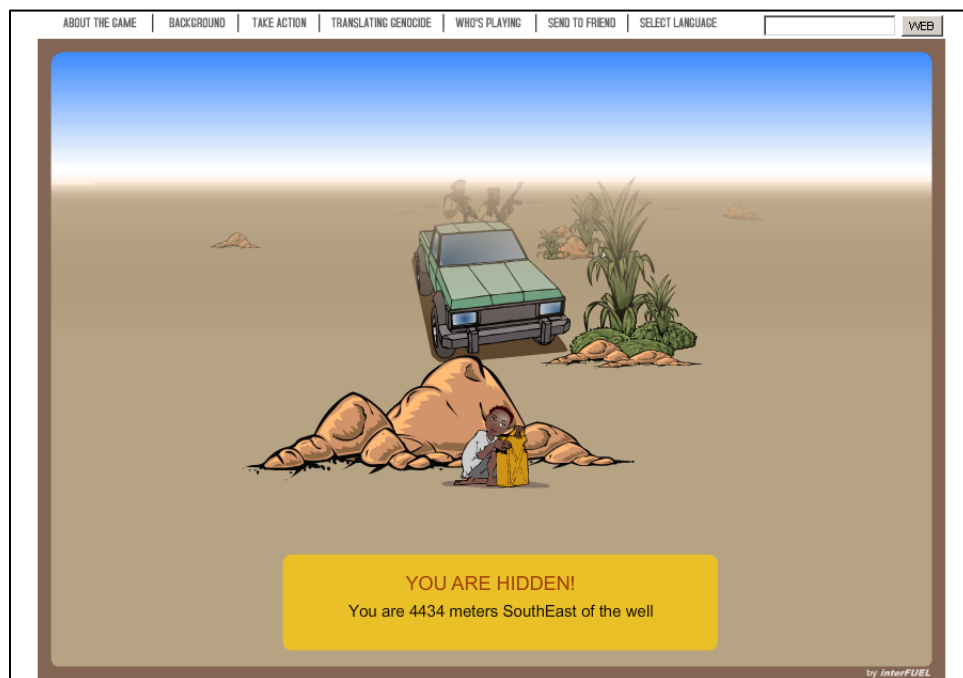


Figure 5.14 Darfur is Dying – gameplay screenshot of the water collection mini-game.



Figure 5.15 Darfur is Dying – gameplay screenshot of the refugee camp whereby the player must make strategic decisions.



Figure 5.16 Darfur is Dying – screenshot demonstrating the viral aspects of the game in terms of its social media strategy.

Renov's Four Documentary Modes

Darfur is Dying presents major, sustained evidence of the two documentary modes of to record, reveal or preserve and to persuade or promote. The piece utilises videogame technology as a mode of delivery to raise awareness and reveal the desperate nature of the situation in Darfur to a younger, game playing audience. The game and accompanying website are intentionally persuasive and present content in a structure and style to achieve impact with the player. The decision to utilise a simplified 2D visual style reduces the impact that more detailed and accurate visual representation could achieve, however the style is partly dictated by the choice of technology (Flash) and the authorial intention to make the content appropriate for a youthful target audience. There is moderate evidence of analysis and interrogation, this exists explicitly across the website, however within the core game there are two main analytical features. The ability to experience the same scenario across differing player characters provides a depth of commentary on the situation, which emerges through multiple playthroughs. The section of gameplay set within the refugee camp features exploration and discovery mechanics which communicate and analyse the complex and fragile infrastructure of a camp dependant on the acquisition and distribution of supplies and water. Lastly, a moderate level of expression is present through the application of simplistic visual and aural design to portray emotive and mature subject matter. This directorial decision maintains that the content is presented in as simple and digestible manner as possible for its chosen target audience.

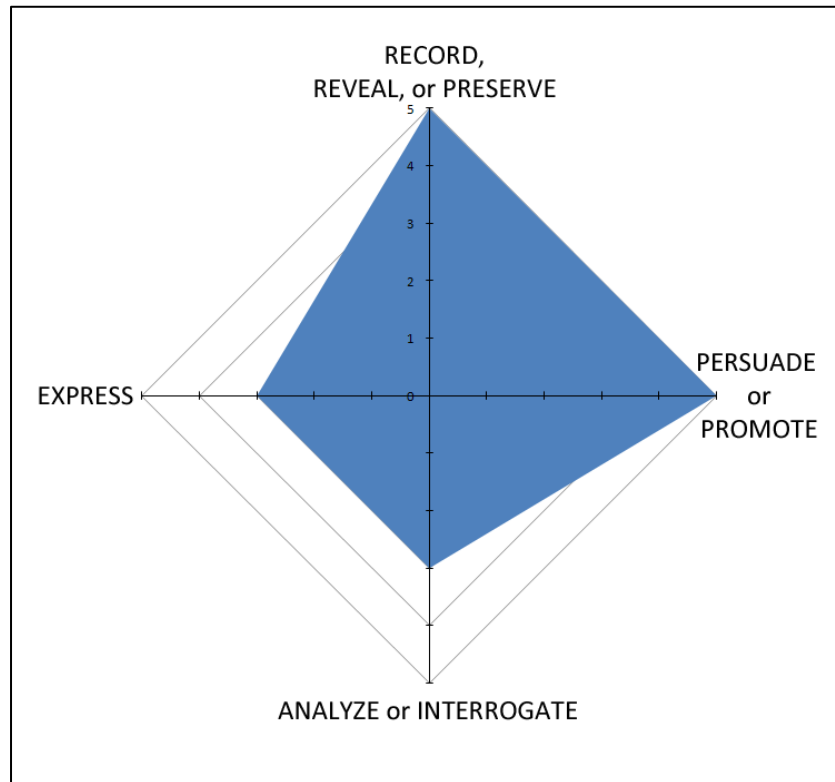


Figure 5.17 Darfur is Dying – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

Darfur is Dying is a game that makes a direct call to action, aiming to inform and raise awareness in its audience, therefore the 'Expository' mode is the primary mode of representation. The secondary mode is 'Participatory' through the active process of the players decision making and developers implementation of a simplified microcosm of actual real world events. Player decisions influence the outcome and presentation of specific events within the game and are made apparent to the player over the course of the experience. The tertiary representation modes within *Darfur is Dying* are 'Poetic', 'Reflexive' and 'Performative'. The visual style is a poetic, abstract take on reality, made with the intention of creating a mood and tone that attracts an intended audience

demographic. The subjective and expressive visuals are analogous to the performative mode as they are juxtaposed to the gritty reality and expansive nature of conflict and human suffering. Reflexivity exists through the author's awareness and questioning of the ability of traditional documentary media to directly engage a younger audience. Due to the presence of commentary, reconstruction and historical representation throughout *Darfur is Dying*, the 'Observational' mode does not feature.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The Crisis in Darfur.

TOPOS: The game takes place in Darfur and presents two main locations, a simplified presentation of an area of Sudanese desert and a top down view of a refugee encampment. The player is constrained within the camp except for the portion of the game where they are challenged to locate and collect water without being captured by the militia. The mechanics of collection and distribution of water present the daily struggle of the refugees as well as defining the genre and strategic nature of the gameplay.

ETHOS: The website presents range of articles and materials that explore the situation in Darfur with more depth and accuracy. The actual game communicates a more simplified view on the world, whereby the refugees are relatively powerless victims, and the militia are a marauding, evil force. Players are not provided with the ability or freedom to undertake offensive or defensive strategies as such, instead the piece limits the options to the main pre-occupations of a refugee - find water,

maintain crops and try to remain healthy and safe. The player participates in an unwinnable situation, resulting in a natural feeling of helplessness. The core intention of motivating the audience to act draws upon this futility and is further supported by the unbalanced nature of the game mechanics.

Hunicke et al MDA Framework

MECHANICS: Moving, hiding, gathering, exploration, choosing, reading.

DYNAMICS: Discovery, reflection, contemplation, tension, fear, futility, empathy.

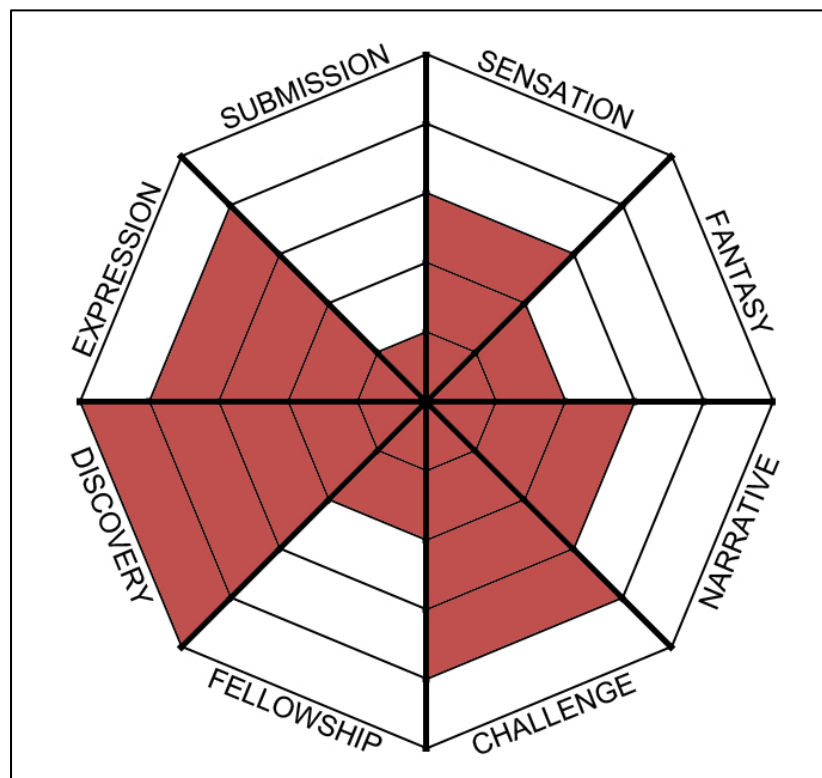


Figure 5.18 Darfur is Dying – visualisation of the results of the Hunicke et al Framework

AESTHETICS: *Darfur is Dying* aims to draw public attention to a humanitarian crisis, using interactivity to reveal facts and issues in response to user exploration, the piece demonstrates a strong element of *discovery*. The game does not explicitly communicate a win or lose state, but the player participates in an unbalanced system which mirrors the *challenge* and futility faced by the refugees in the actual crisis. As a persuasive game, the piece features *expression*, focussing on self-discovery by addressing the player and forcing them to consider their existence and form a personal response to the situation in Darfur. Whilst the visual representation is simplified, there is an aspect of *sensation* during the opening stage of the experience where a sense of fear and anxiety is instilled as players are forced to attempt to hide in a relatively barren landscape whilst searching for water. *Darfur is Dying* utilises some story-telling techniques to communicate with the user, but it does not present as detailed a *narrative* as some other forms of interactive documentary. The game places the player in a simplification of a complex political scenario, and whilst there is an aspect of *fantasy* and role-play by the player, the piece is concerned with the real world and makes reference to historical and factual events throughout. Produced with the intention of becoming a viral game, *Darfur is Dying* encourages the player to share the game, using a basic degree of *fellowship* as a catalyst to increase the reach and communication of the games message. Whilst the game can be replayed multiple times, there is a low-level of *submission* as the game can be fully explored in a short period of the user's time.

5.2.3 The Cat and the Coup

The Cat and the Coup (Brinson and ValaNejad 2011) is a self-proclaimed documentary videogame that allows the player to explore the story of the late-Iranian Prime Minister, Dr Mohammed Mossadegh, from the perspective of his cat. The game begins with the death of Mossadegh and the player then instigates a backwards journey through the main political events of his life. The player, as Mossadegh's cat, must interact with objects and manipulate the environment to lure Mossadegh to the next location, moving the story back in time. The story draws upon aspects of accepted history and uses symbolism, visual metaphors and politically charged illustrations to present a consistent, but arguably biased point of view. The piece concludes with a non-interactive three-minute sequence which, in a return to chronological order, restates the historical events of the coup and the futility of Mossadegh's situation. The game lasts around ten to twenty minutes depending on the player's ability to solve the intuitive, interactive puzzles and is a relatively linear experience, demonstrating a strong awareness of dramatic pacing and structure. Developed over a three year period by a team at the Game Innovation Lab at the University of Southern California, *The Cat and the Coup* is a noir-like tragedy, which draws upon Persian Art and Post-Modernism to construct a symbolic, yet believable, interactive story world. The allegorical approach used throughout the piece even extends to the implementation of many of the game mechanics. The developers make the player complicit in Mossadegh's downfall by the player controlled cat being symbolic as the "cat's indirect manipulation of Mossadegh represents the covert actions of the CIA...The cat's weight tilts the

rooms, keeping Mossadegh constantly off-balance” (The Tuqay 2013). Such attention to the meaning and implementation of both story and game mechanics is a potential area for further analysis.

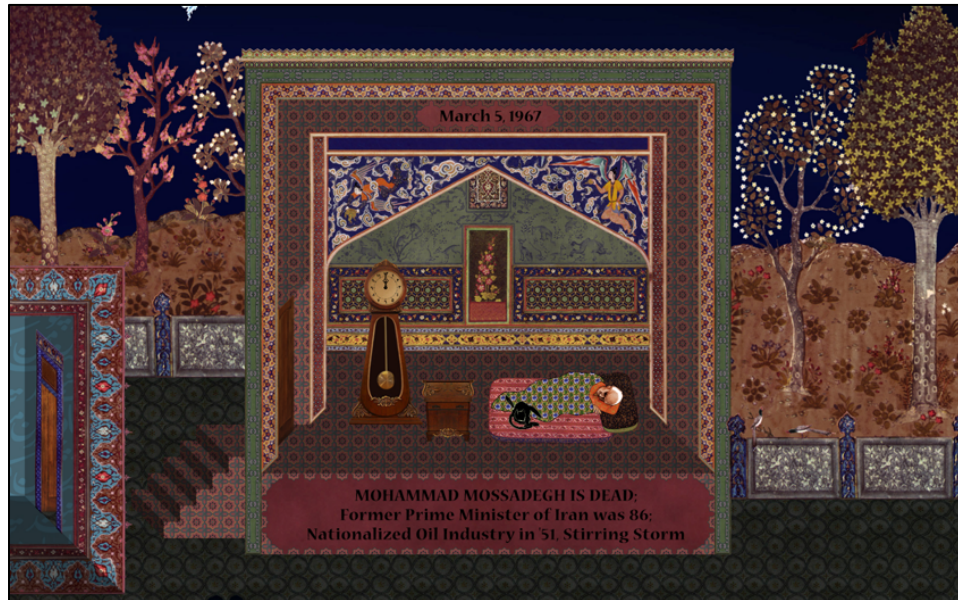


Figure 5.19 The Cat and the Coup – gameplay screenshot of the beginning of the game.



Figure 5.20 The Cat and the Coup – gameplay screenshot demonstrating how the player manipulates the environment by controlling the cat.

Renov's Four Documentary Modes

The Cat and the Coup demonstrates a relatively balanced implementation of the four documentary modes. The creative process and authorial intentions of the development team result in a documentary game that is skewed towards the expressive mode. The historical content is presented with some clarity, but a range of poetic imagery, metaphors and artworks and artefacts from the cultures involved are used to communicate with the audience. The piece aims to present factual aspects of the historical event and therefore acts partly as record. The temporal structure consists of two key forms – a player controlled, backwards journey through the history, followed by a non-interactive, sequence presenting the key events with clarity and in chronological order. This technique, which involves the player in the discovery of the historical narrative presents significance evidence of the mode of 'to record, reveal or preserve'. *The Cat and the Coup* is a persuasive piece of media that addresses the player to consider the nature of historical record, democracy and the ethics of government policy. The piece directly promotes Mossadegh as a powerless victim, defined by the actions of the British and American organisations, which are conversely portrayed by a range of anti-western iconography. There is a moderate degree of evidence of analysis and interrogation – the use of symbolism requires deconstruction by the player and further encourages independent research and exploration of the subject. Overall the piece avoids an overly complex analysis of the history, rejecting alternative methods such as multiple perspectives, or alternative histories.

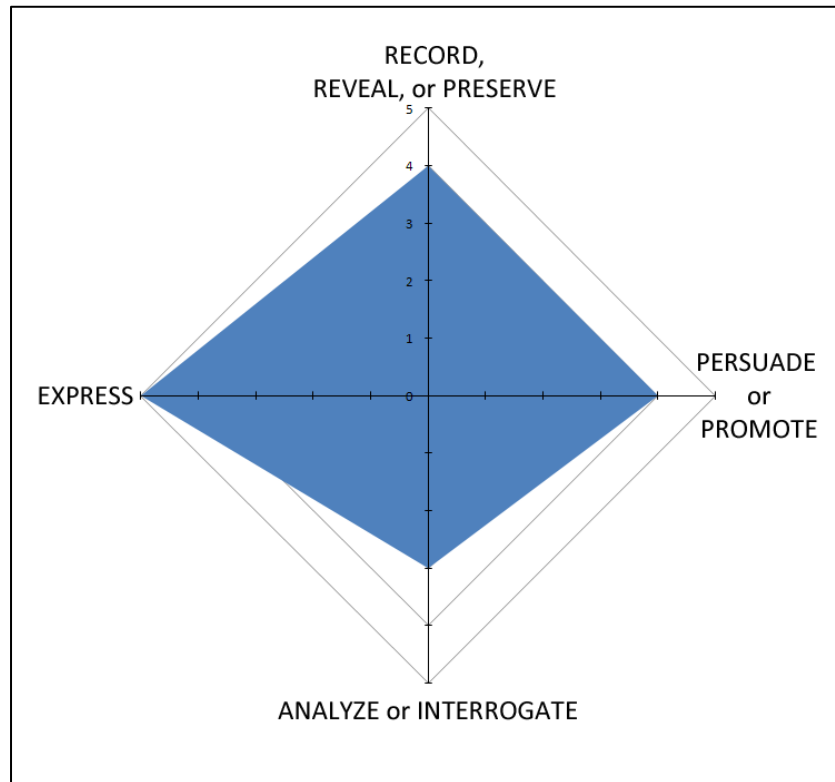


Figure 5.21 The Cat and the Coup – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The Cat and the Coup presents strong evidence of the 'Poetic' and 'Expository' modes of documentary representation. 'Poetic' has been assessed as the primary mode due to the player being assigned the role of Mossadegh's cat – a metaphor for the involvement of the CIA - along with the overall visual style, structure and aesthetics which, whilst ambiguous in places, ultimately express a strong level of mood and tone. As the secondary mode, 'Expository' is recognisable in the developer's use of textual narration; directly addressing and informing the player with excerpts from period archive and documentation. 'Participatory' and 'Performative' are on the periphery as tertiary modes as whilst the game is dependent on player interaction for the progression of narrative, the piece

maintains its integrity with regard to avoiding excessive or superfluous aspects of style or of the archived history.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The inciting incident is the 1953 Iranian coup d'état, with the piece exploring the rise and fall of Dr. Mohammed Mossadegh. *The Cat and the Coup* presents aspects from Western and Middle Eastern politics, art and history in a visual representation of a complex historical period.

TOPOS: The location of *The Cat and the Coup* varies from representations of literal physical locations, such as Mossadegh's bedroom during his house arrest, to more ambiguous, abstract environments that are constructed to portray events, emotions or themes. The game focusses on the period between Mossadegh's rise to power in 1951 to his death in 1967, and makes some reference to previous moments of history to provide a broader context to events. The main plot points are broken down into sections of gameplay which take the form of simple, 'Escape the Room' type puzzles, leading to a fixed, authored conclusion.

ETHOS: The piece communicates through hints and graphics to aid you in the solving of puzzles and progression through the narrative. The developers present the main historical characters using visual stereotypes or metaphors to support their subjective point of view. These layers of narrative complexity and ambiguity allow for multiple readings and meaning making in response to iconography and symbolism. Good and evil is communicated through this method, whereby characters with masks can be understood as deceitful, and the ghost-like

protagonist is portrayed as neutral, which subtly challenges the player assumptions and understanding. Players are unable to subvert the experience or commit acts which go against the narrative, but the method of interaction, which is analogous to that of a puppeteer does in a way make you complicit in the experience and the eventual downfall of the protagonist.

Hunicke et al MDA Framework

MECHANICS: Moving, jumping, interacting, reading.

DYNAMICS: Interrogation, contemplation, achievement, confusion.

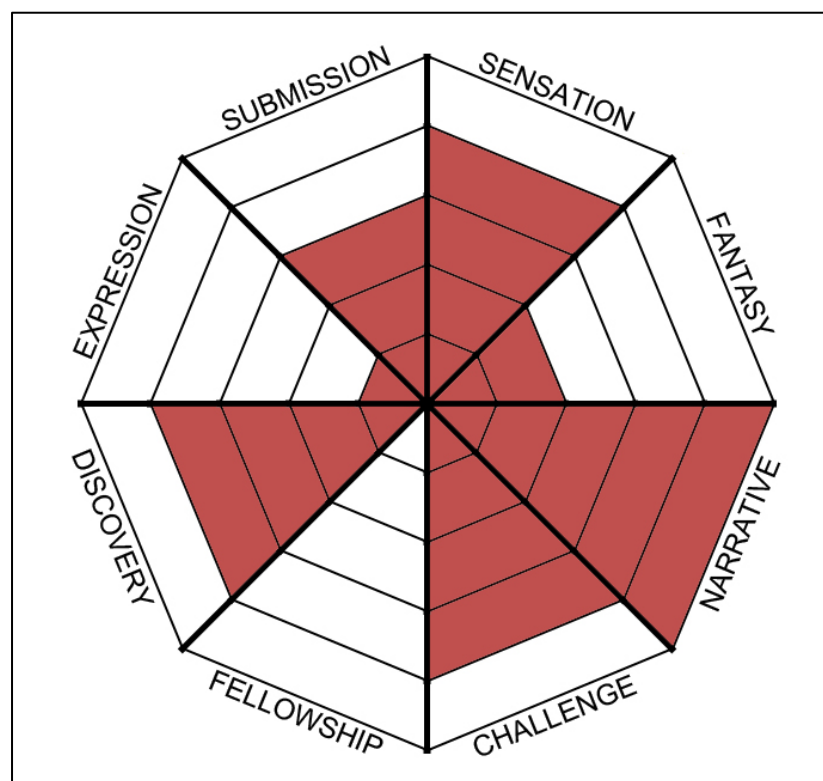


Figure 5.22 The Cat and the Coup – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *The Cat and the Coup* tells a structured *narrative* through expositional text boxes that detail specific key moments of the historical timeline. This technique clarifies the plot of the piece, but it is player interaction with the game mechanics and the resulting dynamics that defines the story. Furthermore the heavy use of metaphor and symbolism expresses alternative aspects of the story, engaging the player in a poetic, thought-provoking story world. Clear evidence of *sensation* exists as the player is presented with an emotive and visually interesting experience through animation, game design, sound and visual assets. As documentary videogame, *The Cat and the Coup* implements aspects of traditional puzzle mechanics to advance and delay the game narrative, providing moments of player contemplation. These puzzles present would likely present a moderate level of *challenge* to players unfamiliar to videogames, however progression is assisted with clues and visual guidance. *Discovery* plays an important part of the experience as the player's interaction unearths a period in history which is most likely unfamiliar to many. The use of symbolism and the complexity of many of the illustrations require players to further explore and research aspects of the history. There is a moderate aspect of *submission* as the puzzle mechanics and detailed visuals encourage some repeat play but the piece does not have the emergent capabilities of a game with a systems or economy-based focus. There is a minor aspect of *fantasy* in that the game requires you to role-play as a cat, however the piece is not concerned with make believe and directly addresses actual historical personalities and communicates their historical timeline. *Expression* plays a minor part through the player's self-reflection on politics and government activities. There are aspects of the piece existing as a social framework or facilitating *fellowship*.

5.3 Platform and Technology Focused Approaches

5.3.1 Making of Modern Dundee

The Making of Modern Dundee (2011) is an interactive digital application designed to exist within a museum setting, allowing users to play mini-games, watch videos and call up detailed information about the history of the Scottish city, Dundee. The application was developed by the University of Abertay in partnership with The McManus: Dundee's Art Gallery and Museum as part of a research project which involved student teams working on three interactive prototypes in response to aspects of Dundee's rich history. The application was designed for the Microsoft Surface – a large, table-sized, communal touch screen computer system – presenting visitors with an accessible and interactive experience. In terms of story, *The Making of Modern Dundee* presents a timeline of Dundee, which is navigable by key historical events and themes, and transcends the city's industrial history, encompassing whaling, textiles, journalism and videogame development. There is no embellishment or emotive manipulation of the content; instead the application presents a descriptive visual archive for users to explore at their leisure. Beyond this form of content, there are simple mini-games included on the application that range from a redesigned version of *Pong* (a simple bat and ball game), to a game which allows you to playfully interact with some of the characters from the commercial videogame *Lemmings*. This playful interaction also exists within the interaction modes inherent to the Surface hardware, whereby users can touch, drag and enlarge visual assets. A key driver behind this project was to ensure that visitors were presented with up-to-date information, on a system that is easily updated by

museum staff. Through the implementation of a content management system along with social media tools such as Twitter, *The Making of Modern Dundee* provides the museum with the ability to engage its audience through contemporary technology.

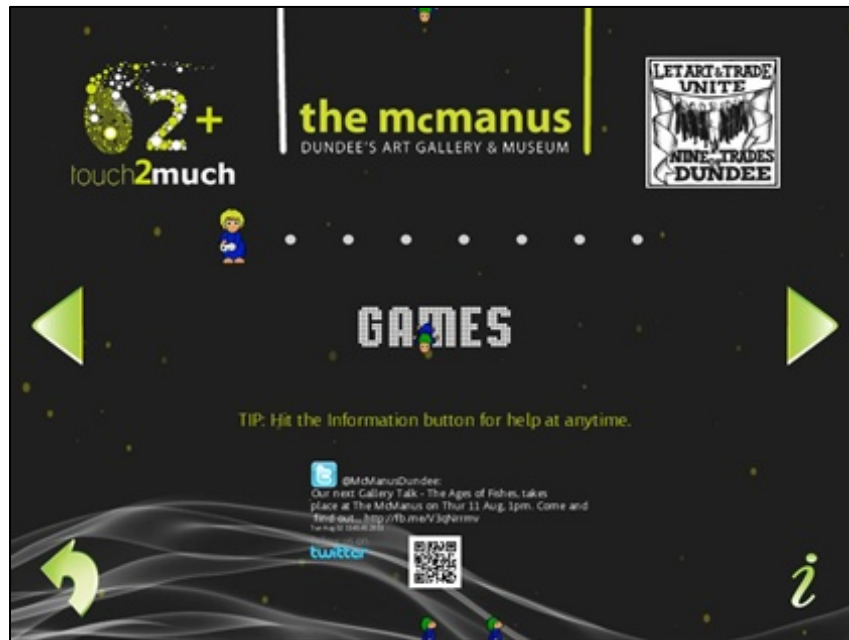


Figure 5.23 Making of Modern Dundee – main menu and interface.



Figure 5.24 Making of Modern Dundee – photograph demonstrating the gestural touch interface and playful interaction with content.

Renov's Four Documentary Modes

The Making of Modern Dundee is strongly linked to historical and cultural heritage and therefore presents major, sustained evidence of the documentary modes concerned with record and preservation. The original brief that emerged from early discussions with the client, requested the investigation of digital technologies to enhance the visitor experience of the museum's existing physical exhibit. The application therefore exists as a virtual museum, facilitating an exploratory mode of navigation that reveals content in response to the users interaction with the system. As a museum piece situated in Dundee and telling the story of Dundee, there is an obvious bias towards moderate promotion of the city and its history. The core narrative featured within the application could be more persuasive, but instead chooses to present content for a broad range of visitors and is restrained in terms of demonstrating an obvious agenda or bias for a particular period in history. There is little evidence of the documentary modes of analysis and interrogation as a core aspect of the piece. The use of the Surface hardware does present a method of navigation that facilitates user exploration, encouraging the formation of historical understanding and a point of view based upon the swatches of material that have been accessed. The design and implementation of a coherent and consistent visual style, supported with additional gaming content suggests minor evidence of expression.

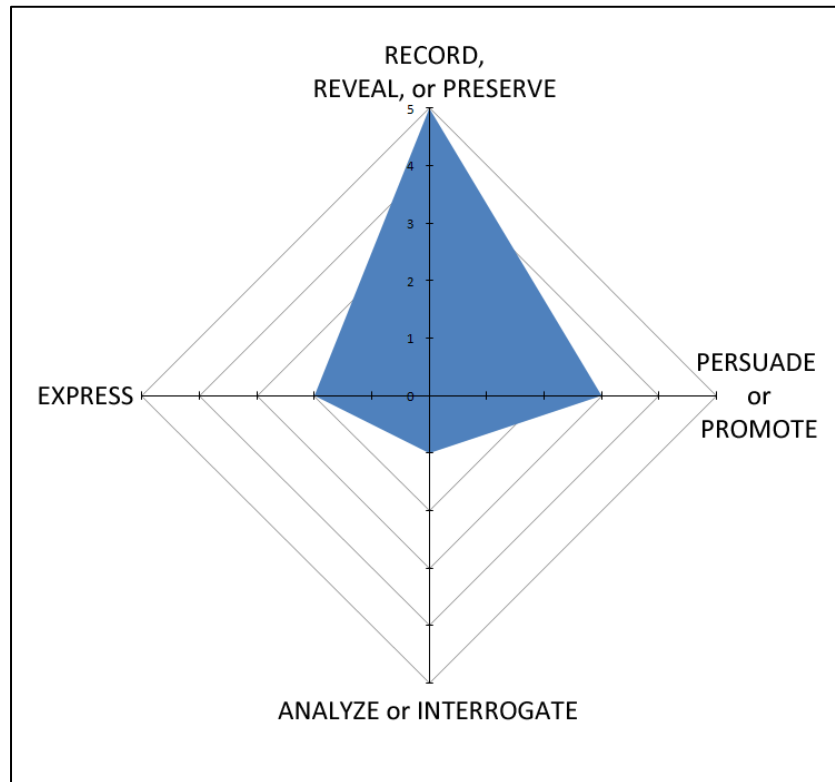


Figure 5.25 Making of Modern Dundee – visualisation of the results of the Renov Framework.

Nichols’ Six Modes of Documentary Representation

The Making of Modern Dundee’s primary mode of representation is ‘Participatory’. The user is essentially browsing an archive and retrieving content that interests them visually or thematically, with the overall user experience being heavily defined by the design of the system, the choice of historical records and the editorial input by the curatorial team. The application directly addresses a specific aspect of history, presenting content in a relatively didactic fashion, resulting in the secondary mode of representation being ‘Expository’. ‘Observational’ and ‘Performative’ have been assessed as tertiary modes of representation. Whilst there is a clear attempt at establishing a coherent temporal relationship between most of the chosen content and artefacts, some of the assets have been included without commentary or

specific context. The use of simple videogames and the implementation of an interface that encourages playful interaction intends to attract an audience to the application but this could be viewed by some as an excessive use of style that intrudes on the discourse of the documentary content.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The broader historical background of *The Making of Modern Dundee* is City of Dundee, the evolution of its industries, and the people that shaped them. Thematically the piece is concerned with Dundee's constant re-invention as an outward looking, technology focussed city.

TOPOS: In terms of location, the application is focused on Dundee, with a more global context being communicated with regard to the industrial and cultural output from the city. The genre is partly defined by the choice of hardware platform and the location for its presentation. As a museum-based touch screen exhibit, the piece presents users with a browsable map-like interface, with artefacts and content presented using metaphors such as paper on a desktop. Users can select, move, rotate, and enhance the visual assets within the archive. *The Making of Modern Dundee* presents a factual story world for users to freely explore. Unlike a documentary game, this is a resource with no focus on immersion or presence within this world as there is no sense of time passing or communication of setting.

ETHOS: Nowadays most visitors to the museum will be familiar with touch-screen interfaces and will draw upon this existing knowledge to interact with the application. Users are encouraged to playfully interact with the information and

assets, with the museum context naturally facilitating a respect for the content. In terms of knowing how to behave, there is no possibility to really behave incorrectly in such a resource. The user cannot manipulate the content in the way that someone can add to a wiki or shared resource as the content is locked. There is the potential for multiple, simultaneous users to negatively alter each other's experience by failing to co-operate or respect each users 'turn' at the controls. *The Making of Modern Dundee* is a resource that borders between interactive documentary and interactive documentation.

Hunicke et al MDA Framework

MECHANICS: Viewing, selecting, moving, zooming, reading.

DYNAMICS: Education, contemplation, discovery, nostalgia, playfulness.

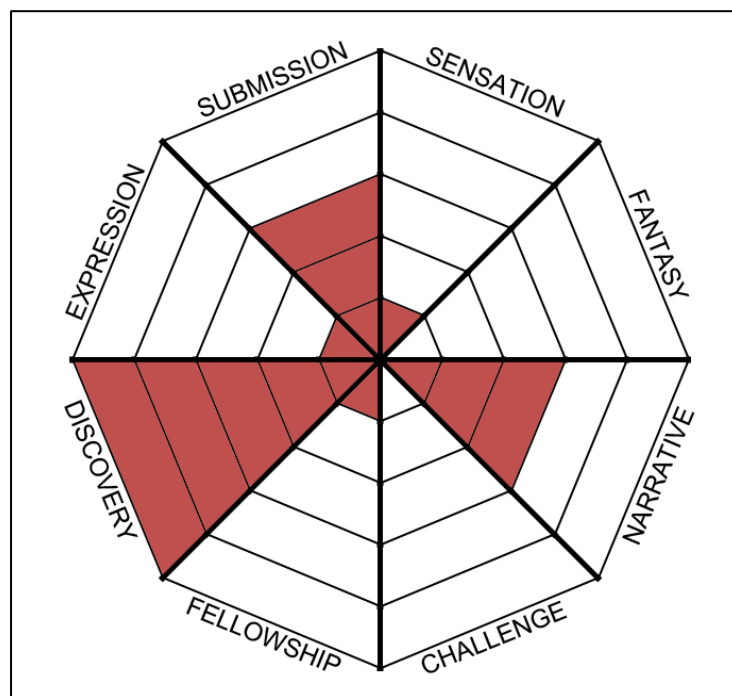


Figure 5.26 Making of Modern Dundee – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: As a digital archive situated in a museum context, *The Making of Modern Dundee* exists to educate, inform and entertain a broad range of users. *Discovery* is therefore a key aesthetic - the piece encourages user exploration through the interface to discover all the content within the archive. The application aims to communicate the major aspects of the industrial and cultural development of Dundee with a focus on the technologies that drove the process. This forms a broad *narrative* that is partly determined by the available historical artefacts rejecting focussed, flowing character-driven narratives that contain clear arcs as a result of authored dramatic re-telling. There is a moderate level of *submission* - as a gallery exhibit it naturally encourages the user to spend some time exploring through the content, perhaps even over multiple visits. The use of the Microsoft Surface technology encourages tactile, gestural interaction with the system and this presents minor evidence of *sensation*. There are limited opportunities for user expression within the application, however there is a minor evidence of *expression* in terms of self-discovery as users with ties to the city will have a more personal response to the content. The application also subtly encourages the user to contemplate their role in society and the nature of change. Limited evidence of *fellowship* exists as the application can accommodate several users using multi-touch to interact at once, however this could become awkward in practice and may limit personal cognition and understanding of the content. There is no evidence of *fantasy* as the piece deals with history and artefacts, with the presentation mode concentrating on clarity and rejecting fantastical interpretations or revisionist points of view. Beyond the skills required to navigate the system, there is no *challenge* as such, or potential for failure.

5.3.2 Timeline World War 2

Timeline World War 2 (2012) is an award-winning iPad application that presents users with an audio-visual archive of the Second World War, navigable via an interactive timeline. The piece presents over 1500 events from the period through photography, newsreels, documents and narration, drawing heavily on the British Pathé archive. The application tells the unfolding story of the war through dynamic maps that change over time to show the locations of conflict, the allegiances and the changing geographical boundaries of the war. Content can be explored through this map interface; it can be directly accessed through searching the database or from freely browsing along the historical timeline interface. Television historian Dan Snow was involved in the conception and development of *Timeline World War 2*, and is outspoken with regard to the story-telling potential that rich, digital applications possess when it comes to engaging audiences in historical content. Featuring throughout the piece, Snow's authoritative commentary provides context on events, which have been chosen and ranked in significance based on his research. (Dredge 2012) This research provides an authorial voice which ensures that the application is not a dry, encyclopaedic representation of the history. The production company Ballista Media, of which Dan Snow is a co-owner, have a strong track record of producing documentary content for television, and have diversified into literature and new media to further enhance the experience of their intended audience.



Figure 5.27 Timeline World War 2 – screenshot of main menu and contents.



Figure 5.28 Timeline World War 2 – screenshot of dynamic map mode of navigation.



Figure 5.29 Timeline World War 2 – screenshot of timeline mode of navigation.

Renov's Four Documentary Modes

Timeline World War 2 demonstrates major, sustained evidence of the modes to record, reveal and preserve. The application aims to present a timeline resource of navigable information concerning historical record and events from across the Second World War. The archive content mostly appears unedited, providing contemporary, tablet-using audiences with a digital preservation of existing documents that they would struggle to readily access alone. These materials are frequently of great historical significance and range from high-resolution copies of photographs, letters or filmed footage. There is minor evidence of persuasion and promotion, with a degree of bias existing through the content being editorially

selected and framed by the author, Dan Snow. The narrated commentary also presents Snow's informed point of view, which tends to be biased towards an Allied perspective, but this can be switched off in place of a more self-directed experience.

The application presents very little evidence of obvious analysis or interrogation but the author's grouping and choice of material, coupled with the timeline and map modes of user interaction constitutes a limited, questioning approach to the experience. Expression has minor evidence - The respectful implementation of archive material and the visual style and formatting of the resource supports the intentions of the application as a serious piece of documentary media. This restrained and sensitive approach, with a focus on accurate communication of history, does result in a minor degree of expression throughout the piece.

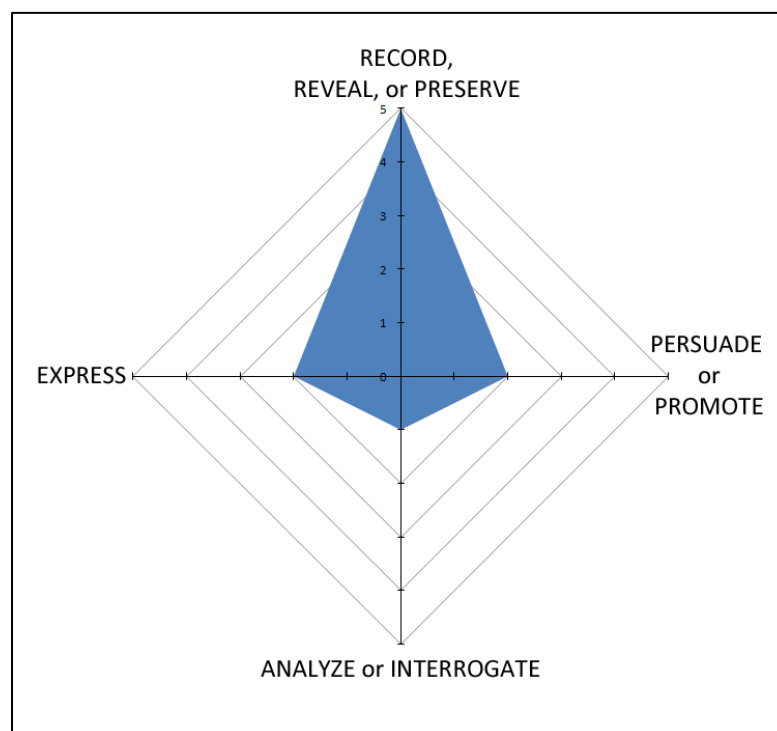


Figure 5.30 Timeline World War 2 – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation for *Timeline World War 2* is 'Expository' as the application is an archived, timeline structured resource of content that was produced in direct response to issues and events from the historical world. The piece demonstrates a more restrained authorial tone than traditional expository documentary, with the user able to choose to navigate freely without narrated and textual commentary. 'Participatory' has been identified as the secondary mode of representation, based upon the use of archive and interviews, with the users understanding emerging from their own personal exploration and consideration of the content. 'Observational' and 'Performative' have been assessed as tertiary aspects of the production. A selection of the content within the application has been presented without commentary, clear description or justification (such as a photograph from a particular event) and this can facilitate misinterpretations of the history. Furthermore, the creative decision to utilise a timeline and map navigational mode, may occasionally complicate the user experience by overwhelming the user with multiple modes for journeying through the content. This stylistic decision to better express the content does not achieve the clarity or simplicity that the developers may have intended and perhaps may have been served better via a separate mode, focussed on playful interaction.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The application presents a broad history of the Second World War, with a thematic focus on how the world evolved politically and altered geographically during the conflict.

TOPOS: As a media-rich digital archive with a focus on a particular period of history, the application does not present a story world or additional dramatic, fictional elements. A range of textual and visual assets defines this piece as a stylised archive for historical content, presenting a relatively abridged and authored overview of World War Two. Selected fragments of historical importance are connected and presented via their relationship in time and geography rather than to portray an emotive story. The experience is designed to be user-driven, with interaction constantly required to move the narrative forward or to return to previously accessed content. Despite the production companies roots in traditional documentary and historical literature the piece does not feature an option or system that would allow the user to receive a more linear, television experience.

ETHOS: *Timeline World War 2* does not present the user with any opportunities to manipulate the content or subvert the presented version of history. Consisting of locked-down historical events, the resource does not feature any ability to determine an alternative history through user influence or traditional gameplay. The application utilises audio-visual media appropriately but remains relatively static in its communication, analogous to that of an encyclopaedia. *Timeline World War 2* does not feature any radical or challenging points of view; instead the application uses accepted versions of history as a foundation. Users are briefly told how to use

the application and how to browse through content, but the piece does not challenge the user to achieve specific goals, question their beliefs or facilitate deeper exploration and analysis.

Hunicke et al MDA Framework

MECHANICS: Reading, selecting, watching, navigation and searching.

DYNAMICS: Awareness raising, education, contemplation and intrigue.

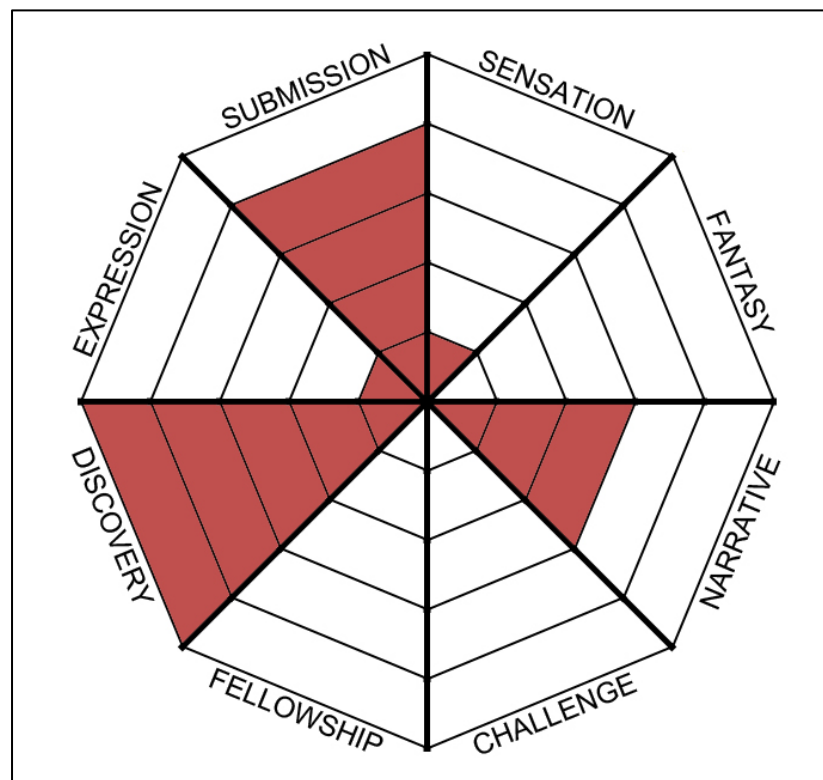


Figure 5.31 Timeline World War 2 – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: As an interactive, digital media archive, *Timeline World War 2* is a resource that encourages the user to browse through content that is interwoven by

historical, political and cultural factors. This active process is strongly representative of the aesthetic of *discovery*, with the specific content within the resource being unfamiliar to the audience. The chosen platform of iPad and the design decisions behind the application presents users with an 'interactive book' and the affordance for a significant degree of *submission* with regard to consumption. There is moderate evidence of *narrative* in that the resource presents a range of events across the timeline of the Second World War and, although linked by temporal and geographical specifics, they not really communicate a flowing narrative that aims to manipulate the emotions of the user. The visual style and overall presentation of the application, coupled with the gestural touch-interaction of the iPad platform, provides a minor level of *sensation*. However, the piece is more concerned with documenting the history with the support of new technologies and rejects more radical interpretations that may aim to elicit a strong emotive response or counter argument. This limits the level of *expression*, as the piece is a visually rich, but relatively dry re-telling of the history that therefore rejects any notion of *fantasy*. As a single-user application, there are no developer-implemented opportunities for *fellowship* in the form of social connectivity or multiple users. Finally, beyond the knowledge required to operate the iPad and the navigation modes the application presents to the user, there is no *challenge* or ability to fail.

5.3.3 Real Time WWII on Twitter

Real Time WWII (Collinson 2011) is a six-year long project which aims to utilise social media to provide 'real time' updates from the Second World War. The project was

launched on *Twitter* on the 31st August 2011 temporally mirroring Germany's invasion of Poland in 1939. The account is managed and updated by Oxford graduate, Alwyn Collinson in his spare time, with the ultimate intention of bringing moments of history to a busy and mobile audience. Collinson draws upon witness testimony, documentary evidence and archive to provide updates that appear to be posted directly from the period in question. (BBC 2011) Through careful use of the limited 140 characters that *Twitter* allows, the messages, or 'tweets' often read as being journalistic updates from the scene, providing the reader with a sense of presence in the events. This is further enhanced by the ability to attach images or video links to each tweet, delivering a visual clarity and grounding to support the written word. At the time of writing, the *Real Time WWII* Twitter account has over 278,000 followers, who are all able to interact through replied comments, retweets (re-posting the updates to their own followers) and by adding specific updates to the 'favourites' section of their account. To participate users must create a username - this can be accessed on a PC or mobile device, and follow the @RealTimeWWII account. With regard to the story and narrative, *Real Time WWII* has a dramatic arc and ending which has been pre-determined by the actual history. However, from many of the tweets to date, Collinson appears to be as keen to present untold, personal stories of the War along with the major, key events. Tweets vary from humorous to horrifying without being inappropriate or misguided, and accurately reflect the emotional spectrum of the period.



Figure 5.32 RealtimeWWII – screenshot of the main twitter feed.

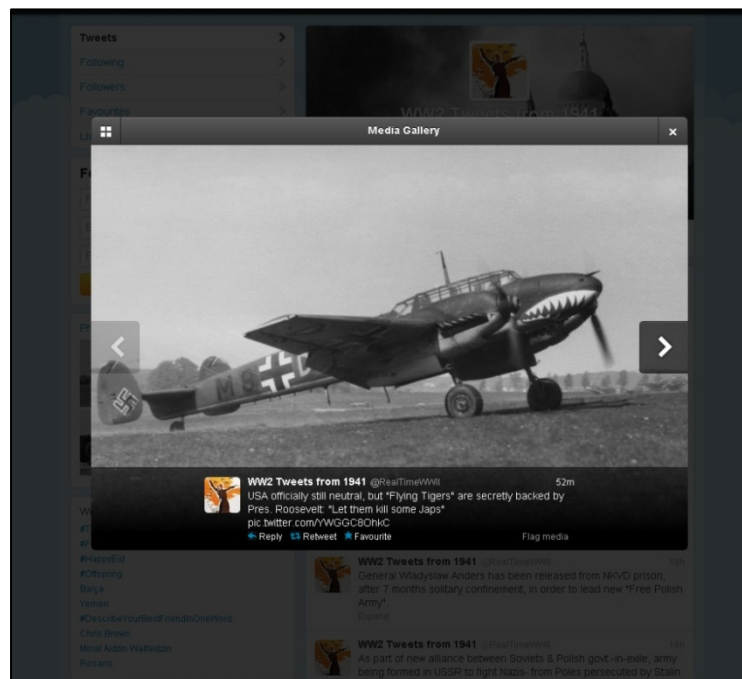


Figure 5.33 RealtimeWWII – screenshot of an example tweet that uses archive media in support of its message.

Renov's Four Documentary Modes

Real Time WWII aims to provide an authored, expressive record of events, preserving moments of history, as they are re-told to a contemporary, social media savvy audience. This demonstrates major, sustained evidence of the mode of to record, reveal and preserve. The creator's intention of constructing a living, chronological record of events that reveals the subtle human stories behind the commonly accepted history of WWII supports this. In terms of persuasion and promotion, Collinson appears to attempt to remain relatively objective, but through the tendency to focus on the allies there is a bias towards the accepted history and more readily available information based in UK archives. This presents minor evidence of persuasion and promotion, which will likely diminish as the updates begin to address the growing scale of the conflict and the multitude of perspectives this will entail. The content does not appear to aim to analyse or interrogate, but there is little evidence that the amalgamated updates could present a gateway for individual research and meaning making. Furthermore, the wording, tone and choice of phrase used to communicate an event by the account holder suggest that an author-driven analytical process exists. In most cases the choice of events and the wording of the tweets are often carefully selected for significance or to achieve maximum emotional impact within the audience. As a form, the 'tweet' is not immediately apparent as being the most poetic or expressive mode of communication but the real-time nature of the account expresses a reality that other resources may struggle to achieve.

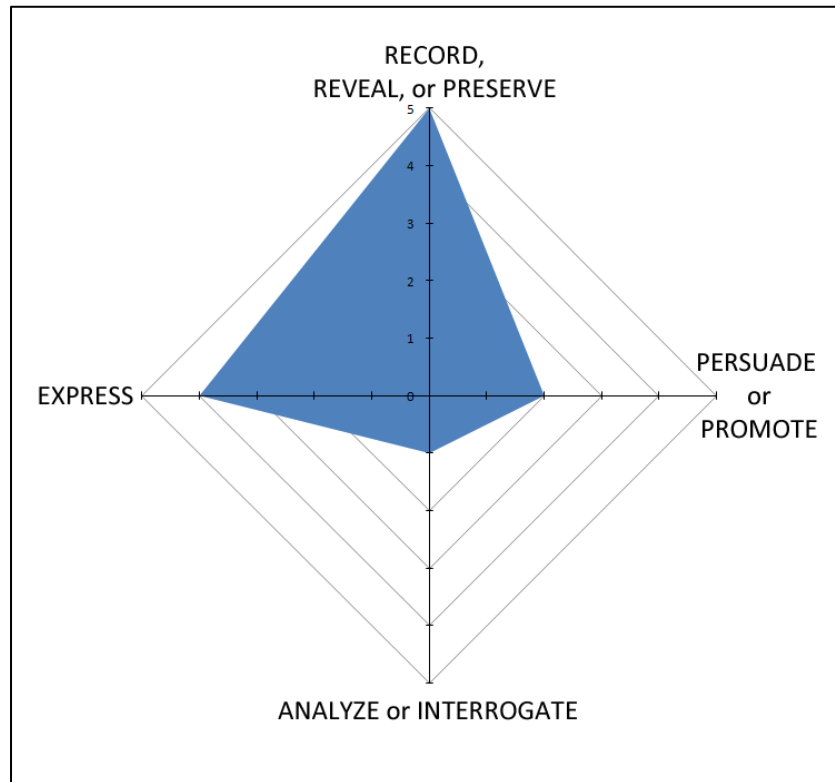


Figure 5.34 RealtimeWWII – visualisation of the results of the Renov Framework.

Nichols’ Six Modes of Documentary Representation

The primary mode of representation for *Real Time WWII* is ‘Observational’. Whilst the updates do feature an aspect of commentary and on occasion an authorial voice, the overall purpose of the piece is to observe things as they would’ve occurred at the time, populating the user’s twitter feed with an alternative timeline featuring of news and stories from WWII. As the application directly addresses issues from history, the secondary mode of representation has been assessed as ‘Expository’, with the overall brevity of the tweet format negating excessive instruction. At times there is tertiary evidence of the ‘Poetic’ mode of representation, either through the inclusion of poetic, expressive content from the

time (such as photography, quotations or poignant excerpts from archive documents) or from the subtle phrasing and choice of interconnected updates by the author. The creator's research and publication process, presents further tertiary evidence of the 'Participatory' mode whereby archive material, interviews and witness testimony feed into the content presented to the followers. The 'Reflexive' mode plays a minor role as a result of questioning the traditional documentary form. This social-media driven method of communicating history works can have a great impact on an audience by intervening on their daily activities, presenting them with information or significant stories from the past.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: At its core, *Real Time WWII* is concerned with the historical events that occurred throughout the duration of the Second World War.

TOPOS: As a Twitter-based project, the piece is defined as social media. However, where most social media accounts focus on current events, *Real Time WWII* consists of two main temporal elements, namely an unfolding reconstruction of historical events, and a contemporary timeline of responses and discussions by the community. The creator has communicated that where appropriate, each tweet aims to be posted on the day and time of the corresponding historical event. Therefore this project will run for the same duration of the conflict itself - mirroring the lulls, periods of activity, towards a relatively known and unsurprising conclusion. To navigate backwards through previous updates, users can only use the tools that exist within Twitter to read back through the timeline. This is a comparatively poor

user experience in terms of using the resource to research further, however this is perhaps countered by impending events of great significance such as D-Day, or Stalingrad building a sense of anticipation amongst the community, with regard to how they will be covered.

ETHOS: The tone of the tweets does not celebrate or glorify conflict, therefore indicating the creator's moral stance to the followers. Twitter is a social platform that exists to encourage dialogue and conversation; however, humorous or offensive replies by other users are not appreciated. As Twitter is moderately self-policing (users can choose to block and report offensive content or accounts) distasteful content is reasonably quick to disappear, with common sense and social media etiquette dictating how to behave. To keep the actual *Real Time WWII* account on topic and functioning as intended, the creator has established an additional twitter account to respond to comments, critique and audience feedback from across the community.

Hunicke et al MDA Framework

MECHANICS: Reading, watching, sharing and commenting.

DYNAMICS: Virality, awareness raising, contemplation and intrigue.

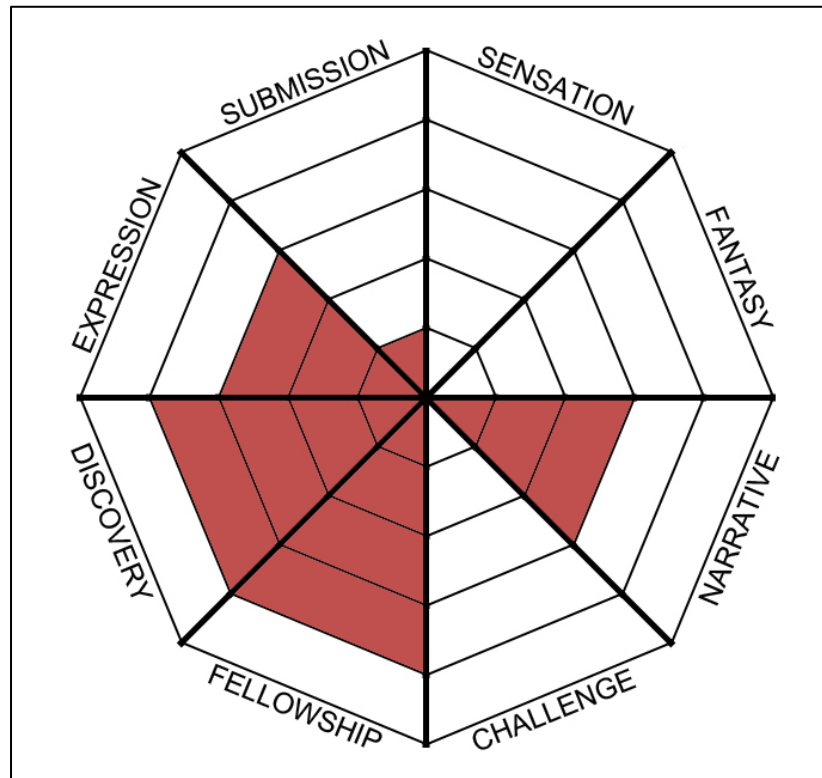


Figure 5.35 RealtimeWWII – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *Real Time WWII* exists on social media therefore it scores highly in *fellowship*, however as a medium, Twitter naturally encourages more shallow forms of interaction such as ‘re-tweeting’ and does not directly engage the community of followers with a call to action to enter into a dialogue or critical discussion. The connected nature of the format does encourage personal *discovery* and knowledge transfer albeit with the minor risk of oversaturation, whereby the Real Time WWI tweets can be obfuscated amongst a range of feeds from other accounts. There is a moderate attempt to communicate a broader *narrative* via fragments of historical stories and events, which will become more complex as the war ‘unfolds’ providing opportunities for cross referencing and interconnected, factual storytelling.

Expression exists moderately through poetic tweets or those that encourage self-reflection or an empathetic response to chosen incidents and personal testimonies. Users are able to browse backwards through the entire list of updates, reading them in the form of a historical timeline, however this requires constant downloading of content. This presents a poorer user experience than a system designed for such a degree of *submission*, whereby content could be easily accessed on demand in response to search terms or thematic categorisation. There are no aspects of *sensation* or *fantasy* throughout the piece, its style is dictated by the standard Twitter interface and does not entertain alternative histories or make-believe. There is also no element of *challenge* as no gameplay elements such as goals, achievements or fail states exist.

5.4 Videogames

5.4.1 Rome: Total War

Rome: Total War (The Creative Assembly 2004) is a real-time strategy computer game that challenges players to grow an empire from the starting point of being the head of a privileged Roman family. Players are tasked with a range of responsibilities from managing the infrastructure and wellbeing of their cities, to leading armies across the map to conquer enemies and capture new territory. The focus for gameplay, which is apparent by the title of the game, is on military strategy and large-scale warfare, with players being able to command a force consisting of thousands of soldiers. Due to meticulous research, developers *The Creative Assembly* are able to present players with a historically accurate simulation of some

of the great battles from history. The design of the system enables players to choose formations, move soldiers and assign specific orders to a range of different unit types, with every decision having an effect on the outcome of the battle. These battles can be viewed from a birds eye-view whereby formations can be seen with clarity, or the camera can be freely controlled to swoop down into the battlefield and follow the journey of a single unit. Players can undertake a traditional campaign mode, whereby they must defeat rival computer-controlled factions and become Emperor, or they can construct their own scenarios using a simple editor. This mode facilities experimentation with the history, allowing players to command different factions, unit types and armies to a scale of their own choosing. This creates alternative histories and emergent outcomes and has been recognised by television producers as a useful story-telling tool, with the *Rome: Total War* engine being used by a range of documentaries and game shows in the form of interactive reconstructions. (Gaudiosi 2004)



Figure 5.36 Rome: Total War – gameplay screenshot highlighting the options available to the player in terms of scenarios and challenge.



Figure 5.37 Rome: Total War – gameplay screenshot of the world map whereby the player establishes an overall strategy.



Figure 5.38 Rome: Total War – gameplay screenshot of the battle screen, formations and available units.

Renov's Four Documentary Modes

Rome: Total War is first and foremost a traditional strategy computer game that aims to challenge and entertain players. There is minor evidence of the modes to record, reveal and preserve through the historical research that underpins the design of the game world, its structure and economy. The inclusion of historical scenarios presents aspects of record, with the emergent gameplay revealing and educating about the tactics and strategy of the period. However there is not much depth in terms of real-world complexities, actual historical figures, or detailed terrain and environments. The game presents no evidence of persuasion or promotion – as a game set in ancient history, there is perhaps too much temporal distance to try to manipulate a contemporary audience. The systems of the game support this as you are rewarded for honourable and heinous acts without moralistic commentary. The game presents minor evidence of analysis and interrogation as players must form strategies in response to careful consideration of the options available to them. However, this describes all strategy games and *Rome: Total War* fails to analyse and question the broader context of the time period, with deeper themes and commentary surrounding conflict, slavery and genocide appearing to be suppressed. The mode of expression has been assessed as moderate, through the visual representation of the world, regions and cities and this is further supported by complimentary sound effects and emotive music.

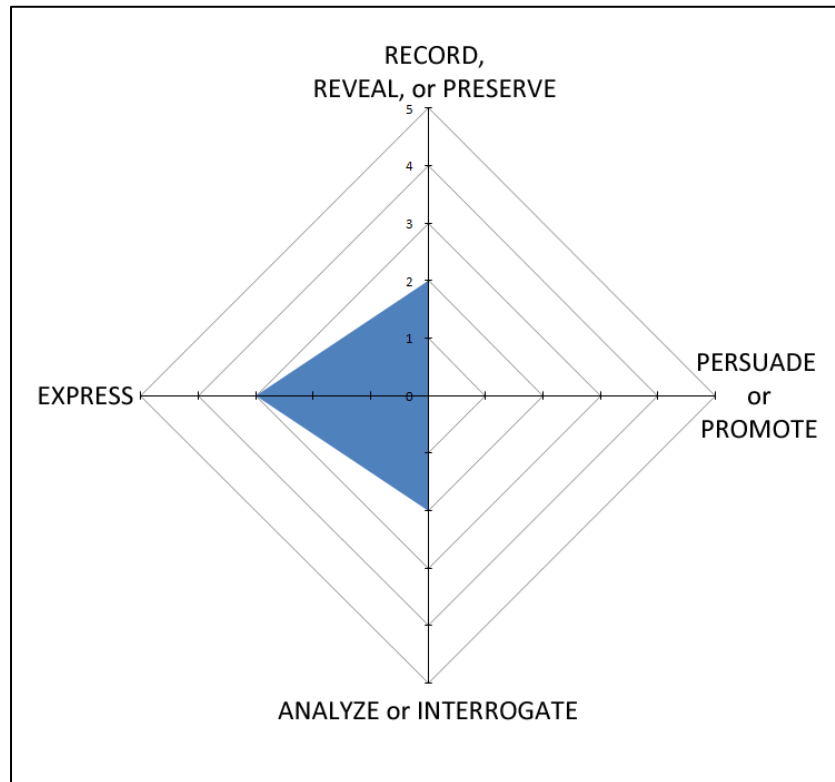


Figure 5.39 Rome: Total War – visualisation of the results of the Renov Framework.

Nichols’ Six Modes of Documentary Representation

The focus on emergence through interaction throughout *Rome: Total War* defines the primary mode of representation as ‘Participatory’. The player is able to analyse and explore a broad reconstruction of a historical event through their interactions - they can see the impact that certain decisions make on morale and well-being but more specifically why certain battles were won or lost and which tactics were vital. This emergent outcome is wholly dependent on active-participation by the player. The secondary mode is ‘Expository’ as the game presents a digestible but nonetheless, authoritative view of a specific period in world history. Additionally, outcomes and description of aspects of the game world are presented to the player

in a dry, encyclopaedic, emotion-free tone. With regard to tertiary modes, the game expresses some aspects of 'Poetic' representation, peripherally in the musical themes and expression of mood. The 'Observational' mode is evident within the specific battle scenarios that are based on historical accounts with the player able to passively view the unfolding battle from a specific position on the battlefield. There is a subtle expression of the 'Performative' mode with regard to the games subjective presentation, whereby the world exists from the player's perspective with lands existing for you to conquer.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The broader historical background of *Rome: Total War* is the rise of the Roman Empire, with the central theme revolving around cultural expansion and military domination.

TOPOS: The entire game takes place in and across the countries and regions that were involved during the expansion of the Roman Empire. In terms of time, the game simulates the seasons and the passing of long periods as units traverse the far reaches of the Empire. Actual battles are to an extent 'real-time' in that they unfold at a steady rate, however the battles tend to be over relatively quickly as certain units or formations defeat their opponent. If the game was truly historically accurate it would not be entertaining to wait for days in a standoff, before making slow progress through hours of battle. The world is conveyed via a territorial map, featuring simple representations that communicate the size of a city and its defences. Upon the game's release in 2004, it featured cutting-edge graphics to

present a relatively immersive experience of battle - however, to today's standards it appears of low visual quality, and relatively sanitised in terms of the actual horrifying nature of ancient combat. As a clear example of the strategy genre, players can make a variety of decisions with regard to governance, growth, exploration and conflict. Players can move units and choose formations and attack modes and the simulation responds to this in real-time.

The systems within the game reward players for conquering territories and gaining riches, provided you do it within acceptable parameters of unit losses etc. The game passes no commentary on players moral choices, even if players decide to exhibit dubious choices and morals, this is accepted and not frowned upon, perhaps fitting within historical understandings of the Roman Empire. Barbarians and other factions are the enemy, and they are expressed as the Roman's may have viewed them during the period. Military tactics of the period are used to inform and assess your performance, with the outcome of battles determined by the correct use of particular units such as archers and cavalry. Territorial maps are used as representations of hostility; there is no dialogue with or detailed representation of the opposition.

Hunicke et al MDA Framework

MECHANICS: Selecting, moving, building, attacking, defending, occupying.

DYNAMICS: Win, loss, expansion, contraction, betrayal, co-operation.

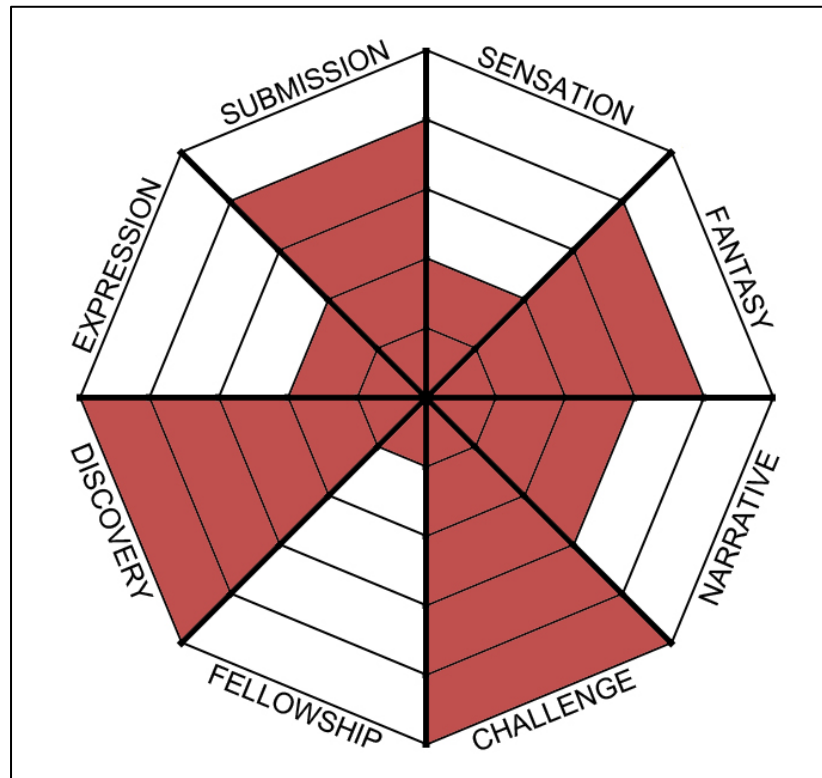


Figure 5.40 Rome: Total War – visualisation of the results of the Hunnicke et al Framework.

AESTHETICS: *Rome: Total War* is designed as a competitive; strategy focussed computer game experience and therefore presents major evidence of *challenge*. Through interaction with the games systems and objectives, players encounter emergent behaviours and outcomes, adding to a strong sense of *discovery*. Whilst the broader history exists, the player is role-playing as a Roman leader, with much of the emergent conflict, relationships and outcomes able to be classed as a *fantasy*. The strategy game genre is known for requiring a significant investment of player time and although there are options to skip or fast-forward through large periods of time, the core experience takes many hours to complete. This presents significant evidence of the game becoming a pastime requiring *submission* from the player. The game expresses a moderate *narrative*; drama emerges from the conflict and the

unfolding of plots and strategies, but there is limited exploration of characters or historical figures. A minor degree of *expression* is identifiable through aspects of role-play – the game allows the player to form an in-game persona presenting an element of self-discovery. Through personal reflection on decisions the player can be defined as an aggressive tyrant or a thoughtful tactician. The 3D visualisation of battles is very immersive and provides a moderate *sensation* of the sights and sounds of ancient warfare. However, much of the game is experienced through the interactive map screens, with battle sequences being the reward for long periods of manoeuvring and preparation. There is insignificant evidence of *fellowship* through the aspects of gameplay that require you to co-operate with non-player characters.

5.4.2 Brothers in Arms: Road to Hill 30

Brothers in Arms: Road to Hill 30 (Gearbox Software 2005a) is a tactical first-person shooter computer game set in World War II. The game is based upon operations and manoeuvres conducted by the 101st Airborne Division, during the D-Day offensive in June 1944. The player undertakes the role of a fictional Sergeant and must lead a squad of paratroopers through a relatively cinematic retelling of the real-life Mission Albany – an allied offensive which aimed to capture and hold key enemy territory prior to the arrival of the main landing forces. The core gameplay of *Brothers in Arms: Road to Hill 30*, is heavily informed by the infantry tactics of the period, with the player tasked with leading two main groups of soldiers – a fire team and an assault team. The player must deploy the fire team to engage and suppress enemy forces, and then utilise the more mobile assault team to flank and eliminate the

enemy. Failure to implement this tactical process usually results in immediate losses and a 'Game Over' screen. Developers Gearbox Software present a meticulously researched story world based upon military accounts, testimonies and historical photographic archive. This attention to detail extends to the design and visualisation of the in-game environments, which placed importance on the inclusion of real-world architecture and countryside, requiring fieldtrips and surveys to be undertaken by the development team. (Aarseth 2007) Despite this focus on historical accuracy, the piece exists as a story-driven computer game and therefore has to contain and constrain players with regard to the scope of the environments and the affordances presented to the player, to maintain an overall coherence and continuity of narrative.



Figure 5.41 Brothers in Arms: Road to Hill 30 – gameplay screenshot presenting the first-person perspective and sense of player immersion.

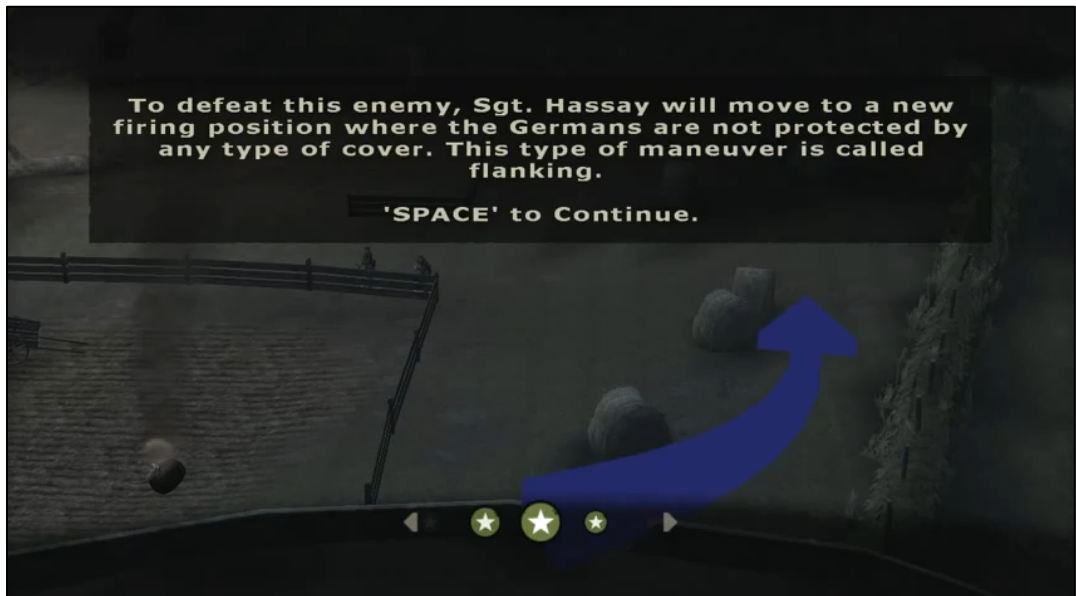


Figure 5.42 Brothers in Arms: Road to Hill 30 – tutorial screenshot that highlights the importance of military tactics with regard to player success.



Figure 5.43 Brothers in Arms: Road to Hill 30 – gameplay screenshot demonstrating the player's relationship with non-player characters.

Renov's Four Documentary Modes

Brothers in Arms: Road to Hill 30 claims to present players with an authentic experience of infantry combat from the Second World War. There is moderate evidence of the mode 'to record, reveal or preserve', as a result of the developers reliance on military advisors, archive material and an accepted timeline of actual historical events. Whilst this timeline forms the core structure of the game, it could be argued that the dramatisation and characterisation throughout the game more closely resembles a fictional, cinematic work, which obscures the history and detail in the world. Persuasion and promotion is identified as possessing a minor role in the piece. This is expressed through thematically through commentary on the horrors of conflict and themes of loss and bravery. Whilst it is possible for the player character to have killed hundreds of enemy characters during a full play through, the game maintains an appropriate tone and does not overly promote or reward the killing of enemies. Analysis and interrogation also has a minor role, as the emotions of the player are manipulated by the first-person presentation and tone of the story. There are moments that facilitate contemplation and encourage empathetic responses based on the scenarios the characters experience. To a certain extent the player is also tasked with analysing the battlefield and making tactical decisions. As a computer game that is clearly influenced by cinematic and televisual works such as *Saving Private Ryan* and *Band of Brothers*, *Brothers in Arms: Road to Hill 30* expresses an immersive narrative through interactive and cinematic techniques to engage it's audience.

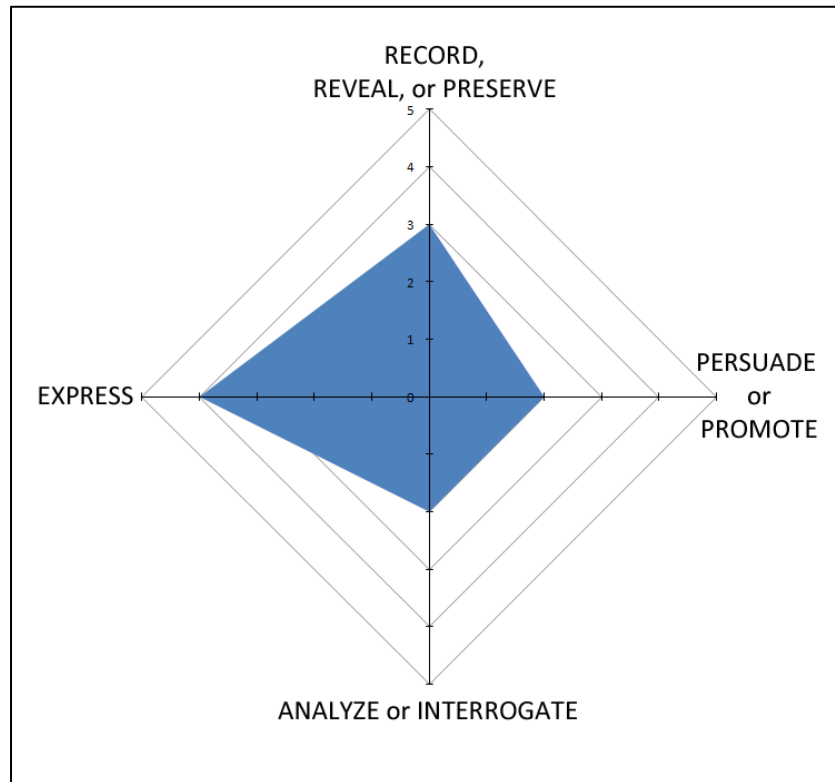


Figure 5.44 Brothers in Arms: Road to Hill 30 – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

'Participatory' is the primary mode of documentary representation throughout *Brothers in Arms: Road to Hill 30*. The player is at the centre of the narrative, yet whilst the broader plot is linear and pre-determined; it is the player's actions and positions in the world that define how, when, and if events are seen. This mode is also informed by the developers' retrieval of history through the creative use of archive materials and personal testimonies. The secondary mode is 'Expository as a result of the game itself directly confronts the player with a period from history. This is reinforced by the game's use of scripted narration to frame the experience, although it concerns a fictional character, in a historical situation. 'Poetic',

'Observational' and 'Performative' have been identified as tertiary elements of the overall experience. Although the game places emphasis on the authenticity and realism of the world and experience of combat, there are still moments of the sublime, with stylistic, visual and aural techniques expressing evocative landscapes and lighting during aspects of the narrative. The game allows the player to observe moments that exist within an actual period of history, presenting an allied perspective on the history, that remains relatively objective with regard to commentary on conflict itself. The performative nature of play has the ability to lead to more subjective readings of the text, due to an emphasis on player expression and experimentation.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The central themes throughout *Brothers in Arms: Road to Hill 30*, are concerned with the notions of comradeship, duty, and heroism. The broader historical background is World War II, with a focus on the Allied invasion of occupied France.

TOPOS: The game is structured around historical accounts of 'Mission Albany' – a night-time mission aiming to secure a number of key locations prior to the D-Day landings on the 6th June 1944. The game unfolds over eight days allowing the player to participate in fictional reconstructions of actual events. In terms of location, the game places the player in similar locations to the airborne troops of the time, such as Carentan etc. These locations are usually hostile but are countered with

beautifully presented French landscapes. The player can navigate the environment, seeking cover and identifying appropriate points for attack.

ETHOS: The game doesn't allow for alternative or subversive playing styles. There is no ability for a pacifist experience as players must undertake suppression and flanking tactics to defeat the enemy and advance the narrative. The player can't negotiate or surrender; they must kill or be killed. Similarly to the experience of the soldiers at the time, players advance through the conflict by defeating the enemy, moving onwards, claiming and holding enemy territory. There are no rules of engagement as such - headlong charges are dangerous, but ambushes and tactical, merciless destruction are encouraged. The enemy is often viewed going about a daily routine, oblivious to the watching player – however this is the only insight into the enemy, ultimately they are a force of evil and players are a force of good. The game does attempt to present the futility and horror of war, but this is undermined by the requirement to kill hundreds of enemy soldiers - this is an obvious mismatch with history and the development of the character within the game world - a common problem when a core mechanic conflicts with the narrative.

Hunicke et al MDA Framework

MECHANICS: Moving, looking, aiming, firing, throwing grenades, hiding/covering, commanding via orders and directions.

DYNAMICS: Kills, damage, reloading, navigation assistance and objectives, player and NPC death and healing.

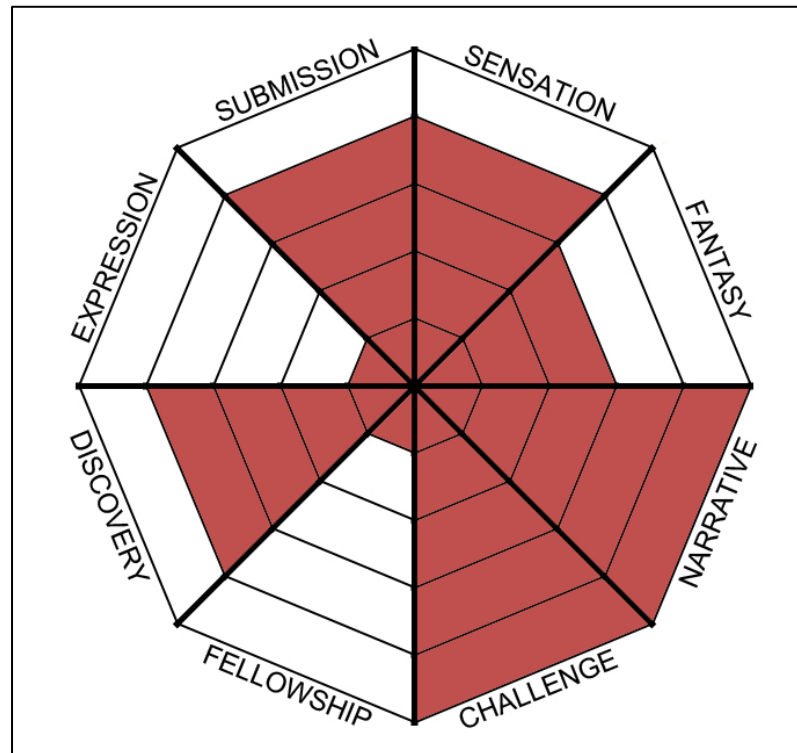


Figure 5.45 Brothers in Arms: Road to Hill 30 – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *Brothers in Arms: Road to Hill 30* is story-driven computer game that requires a moderate degree of player skill to successfully navigate and complete. This is therefore major evidence of the aesthetics of *narrative* and *challenge*. The game uses 3D graphics to present the player with a believable reconstruction of 1940's France. The attention to detail with regard to visual and aural content (ambient sounds, landscapes, lighting, costumes and equipment) indicates a significant degree of *sensation*. The game world is often beautiful and engages the senses during moments of calm or during the noise and violence of conflict. Computer games are often consumed and marketed as a hobby or pastime, and along with the significant investment of time required to experience the entire narrative, this presents strong evidence of *submission*. *Brothers in Arms: Road to Hill*

30 presents the player with an unfamiliar, hostile environment to navigate and explore, providing players with a strong sense of *discovery* and achievement. There is a moderate element of *fantasy* in that players are role-playing as a soldier through a story based on historical events. Whilst the piece is grounded in history, there are conflicting elements such as the ability to kill hundreds of enemies, or unrealistic player health and the ability to take and recover quickly from bullet wounds on lower difficulty modes. The single player nature of the experience precludes any significant aspects of *fellowship*, but there is minor evidence in the thematic content regarding comradeship. Player *expression* is also constrained in that although the game allows you to act in a certain way (risk taker, methodical etc.) progression can only be achieved by reaching the developers aims such as destroying all targets in a chapter as opposed to finding other solutions.

5.4.3 Kuma\War

Kuma\War (Kuma Games 2004) is a free to play tactical shooter computer game that allows players to participate in reconstructed scenarios based on real-world military missions or incidents. *Kuma\War* focuses on the conflict in the Middle East, with the vast majority of the missions being related to events from the Second Iraq War and the on-going operations in Afghanistan. These missions are delivered to players in an episodic structure and are often playable soon after the actual real-world event. The developers Kuma Games utilise historical research, government records, news footage and military advisors to provide a contextual and factual foundation to the gameplay scenarios. Prior to being placed on the virtual

battlefield, players are presented with a video that is a mix of television news report, military briefing and historical documentary. *Kuma\War* is determined to deliver a playable version of current affairs, hiring ex-news reporters to the team and shaping a development infrastructure alleging to have links to the Department of Defense (Timms 2003). The actual gameplay is dependent on the choice of mission, but overall the experience involves either controlling a soldier or squad in a combat scenario, from first and third person camera perspectives. The first mission that launched with the game was titled “Uday and Qusay's Last Stand”, providing players to participate in the military operation that led to the death of Uday and Qusay Hussein. The game questions the history and tactics behind this mission and tasks the player with exploring the use of force and/or alternative strategies to attempt to capture the two brothers. *Kuma\War* has grown beyond this first foray into playable news; players can now choose from over 120 missions, and the game has recently been updated and rebranded as *Kuma\War 2*. The use of contemporary game design elements such as multiplayer, along with a new graphics engine, presents players with an interactive experience which is aesthetically similar to that of popular console based first-person shooter games such as Call of Duty.

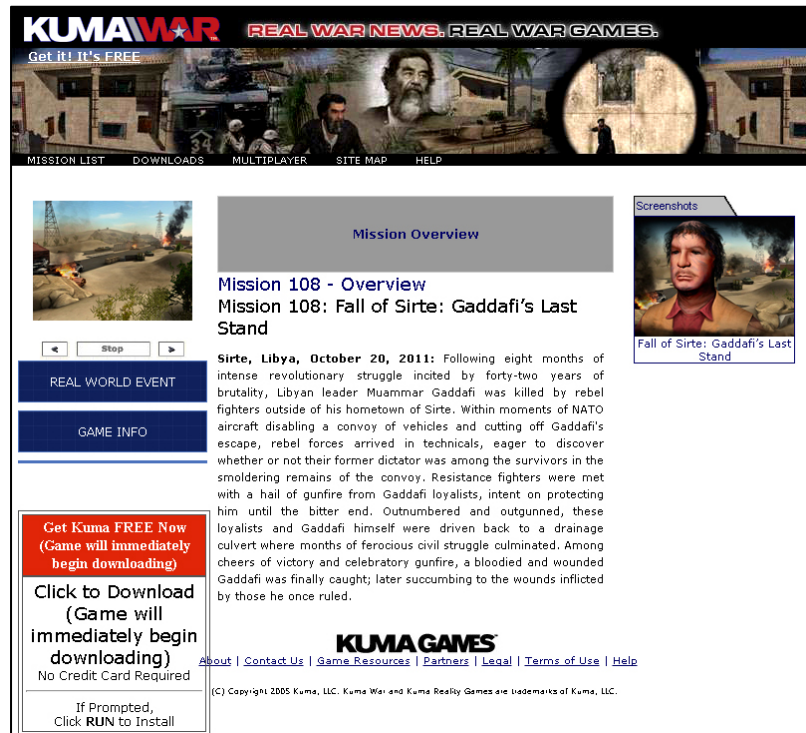


Figure 5.46 Kuma\War – Screenshot of the Kuma\War website which acts as a central hub for the player to access content.



Figure 5.47 Kuma\War – gameplay screenshot of a typical game scenario.

Renov's Four Documentary Modes

Kuma\War intends to allow players to participate in combat-focussed gameplay based on actual news events. The actual implementation and execution of this intention sacrifices accuracy and attention to detail by following a production model that focuses on launching new missions as quickly as possible. This presents a minor aspect of record and preservation, but the overall experience appears to be more akin to an action game rather than a thoughtful, strategical investigation. This is supported with the games moderate degree of persuasion and promotion that presents a clear bias with the idolization of military servicemen, and demonization or dehumanisation of the enemy. *Kuma\War* is not an intellectually sophisticated piece, and could arguably be partly described as a piece of positivist propaganda. The video briefings present an element of analysis and interrogation, but overall the game struggles to convey any evidence of in-depth analysis of the history or thoughtful interrogation of conflict. It is the player's decision to shoot or not to shoot, but the developer struggles to present the player with a range of meaningful choices. There is a minor level of expression partly due to the poor quality of the visual representation, but also with regard to the avoidance of exploration of meaningful themes or questions.

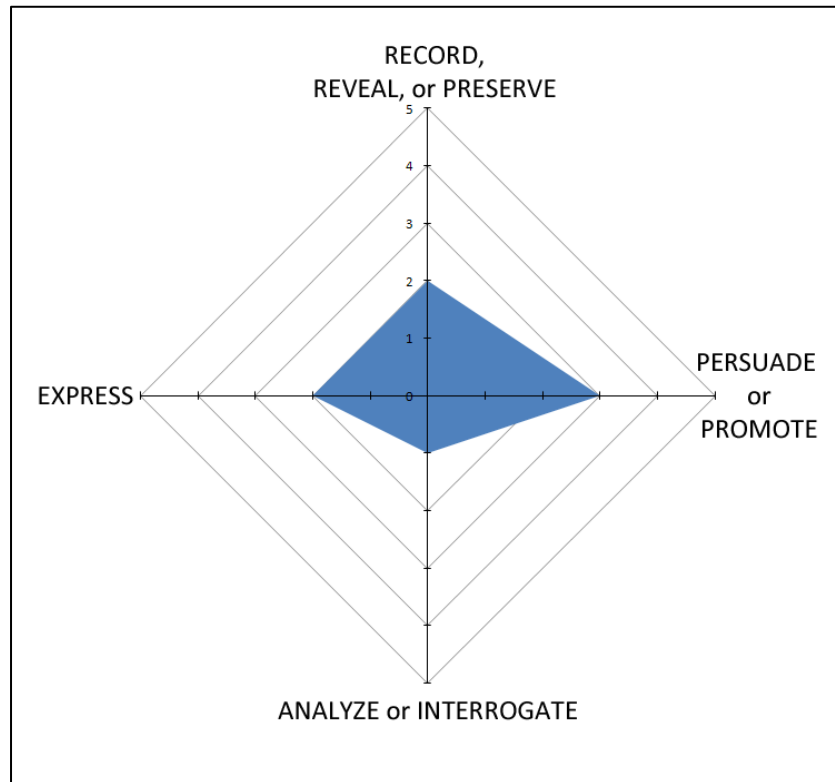


Figure 5.48 Kuma\War – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation in *Kuma\War* is 'Expository'. Each episode presents an authoritative mission briefing which sets the scene and the historical context for the player's actions within the world. There is also strong evidence for the 'Performative' mode due to stylistic choices in presentation, whereby the game addresses the player in a game show-like tone in the pre-briefing, with fast paced commentary and excessive subjective discourse. There is tertiary evidence of the 'Observational' mode as the player is provided with the opportunity to exist in what is a relatively simplistic representation of events. Whilst there are numerous scenarios it should be noted that the temporal framework is not as reflective of historical events as something like the constrained timeframe of the simulation

featured in *JFK: Reloaded*. The naïve presentation of history highlights the tertiary nature of the 'Participatory' mode. Players can interact with the subjects of the documentary in a very simplistic simulation of combat; there is less emphasis on player reflection and analysis of the context and cultural impact of the historical event. The game addresses the player by calling them to action, but does not provide them with the ability to question their role, or explore and comment on the broader impact of the historical event.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: *Kuma\War* covers a range of conflicts from Korea and Vietnam, to more modern military activities in Iraq and Afghanistan. The historical event is framed from a western perspective and calls the player to action. Although content varies dependant on the selection of downloadable mission, the piece presents broad themes concerned with terrorism and insurgency.

TOPOS: The majority of the game consists of episodes derived from actual historical missions from Allied military campaigns across the Middle East, with a focus on modern tactics and weaponry. The 3D graphics and visual design of the world define the genre as a tactical, military shooter game. The production value and downloadable format leads to a satisfactory visual quality but not to the standard of big-budget console games. Player can move and shoot, undertaking navigation of the game world and participating in adversarial combat against NPC's.

ETHOS: *Kuma\War* presents a relatively black and white world with the player character being good and the opposition being bad. Although there are a range of

missions, each with their own specific objectives and challenges, the player is often rewarded with a numeric score for killing enemies. The player can die, but on most missions this is relatively unpunished and multiple lives exist. As a game concerned with contemporary events and military strategy, it is interesting that rules of engagement and the complex scenarios of conflict are barely touched upon or implemented. Players are prompted on screen with a description and location of objectives and are guided through the scenario towards its completion. The title utilises game mechanics and dynamics often inappropriately, undermining the documentary value of the piece. With the inclusion of 'collecting' quests and irrelevant components of game design, *Kuma\War* is undermined as a repackaged game, loosely informed by news and shallow historical research that rejects in-depth journalistic communication or expression.

Hunicke et al MDA Framework

MECHANICS: Moving, looking, aiming, firing, throwing grenades.

DYNAMICS: Kills, damage, reloading, time limits, navigation assistance and objectives, player death and lives.

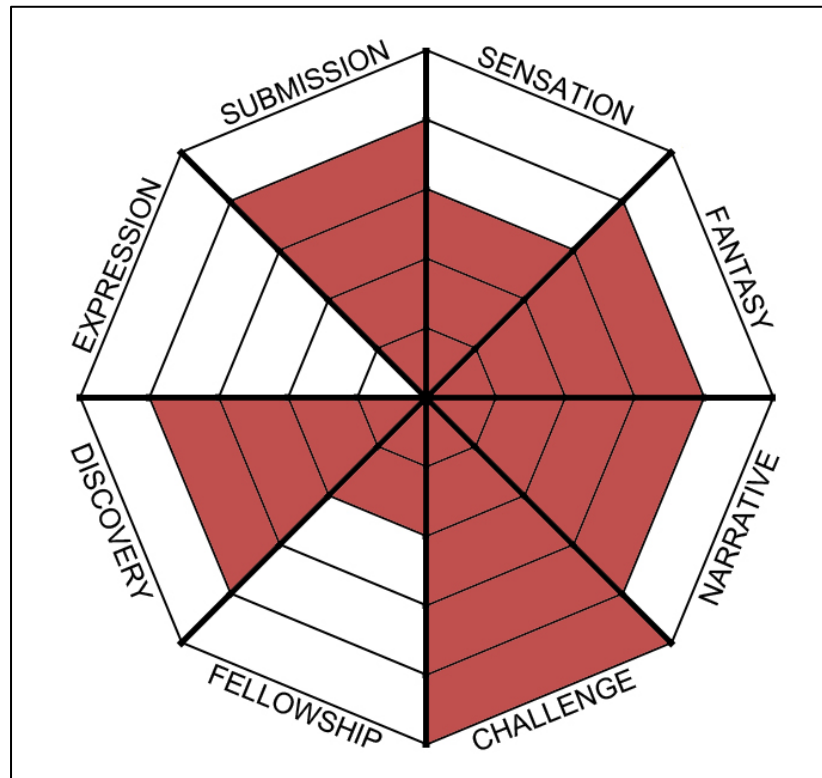


Figure 5.49 Kuma\War – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *Kuma\War* is grounded in the history and conventions of the military shooter genre and presents major evidence of *challenge*. There is limited evidence of dramatic, emotive storytelling, but the game does repackage historical information to inform and present an unfolding *narrative* for players to experience. Missions are based on historical events but feature a level of reconstruction and attention to detail that occasionally borders on *fantasy*. The role-play nature of this genre of computer game also contributes to the significant evidence of this aesthetic. Players are required to navigate and explore an unknown and hostile environment, presenting significant evidence of *discovery*. As a free to play, downloadable computer game with over 120 missions, repeat visits are encouraged

to download new scenarios and challenges. Missions require a moderate investment of time to complete leading to a significant degree of *submission*. Although the game has moderate production values, the piece achieves a moderate degree of *sensation* through the visual presentation and sense of immersion provided by the first-person gameplay. A minor aspect of *fellowship* has been identified due to the simplistic but rare use of multiplayer modes and the web-based community aspects of the game. There is no evidence of *expression* as the game fails to provide a platform for self-discovery or self-expression.

5.5 Adapting Existing Literature

5.5.1 Whalehunters

Whalehunters (2011) is a computer game prototype created by a team of students at the University of Abertay Dundee, in response to a brief proposed and designed in partnership by the McManus Galleries, the Dundee Whaling Archive and Abertay researcher Dayna Galloway. The brief was based on the historical archive compiled by Malcolm Archibald and his publication *Whalehunters: Dundee and the Arctic Whalers* (Archibald 2004). The initial concept was to create a strategy/management game primarily aimed at the 15+ age group that weaves the historical data into a narrative that the player shapes upon each play. The player would role-play as the master of a fictional Dundee Whaling Ship with the overall objective of surviving through a defined period and profiting from the Whaling industry. The game aimed to directly utilise the existing historical data to shape both the scripted events and gameplay mechanisms, allowing users to explore the real-life exploits of whalers,

expanding their knowledge of a largely unknown industry. The finished prototype lacks the polish and scope of a professionally produced piece of interactive entertainment, however, the team managed to deliver a functioning proof of concept that allows the player to run through the stages of preparation, voyage, hunt and return. The player must hire a crew and purchase supplies within set financial constraints, with each decision influencing the potential success of the voyage. On the journey North to the whaling grounds, players are presented with various event cards (based upon historical accounts) that prompt the player to make critical decisions regarding the voyage. Should the player successfully reach the Arctic, they must then participate in skill-based gameplay whereby a whale must be discovered, tracked and eventually captured by managing the movement of the ship and a number of smaller boats.



Figure 5.50 Whalehunters – screenshot of the harbour scene.



Figure 5.51 Whalehunters – gameplay screenshot of the management of the ship’s stores.



Figure 5.52 Whalehunters – gameplay screenshot of the interface for selecting the crew for the voyage.



Figure 5.53 Whalehunters – gameplay screenshot of the whaling minigame.

Renov's Four Documentary Modes

Whalehunters uses a factual novel and a vast historic archive as its inspiration, and was intended to possess significant evidence of the modes 'to record, reveal and preserve'. Issues and challenges that arose during the development process led to the prototype moving away from the initial design, with factual content forming the inspiration for a small number of mechanics and scenarios rather than being clearly embedded throughout the piece. Whilst the clients for the project were aiming for the Whaling archive to be promoted to a wider audience, the finished prototype presents minor evidence of persuasion and promotion. *Whalehunters* manages to loosely communicate the harshness of the conditions and challenges of the voyage, and features a slight emphasis on the positive promotion of whaling as an industry that the city and community depended upon. The player is required to conduct

minor analysis at the planning stages of the voyage - whilst this was initially proposed to be a larger part of the experience, it was toned down for the initial prototype to minimise development complexity. *Whalehunters* expresses a sense of period through visual and aural elements, and through the rejection of realism, the target audience of a teenage audience is supported by a range of stylised, visual assets.

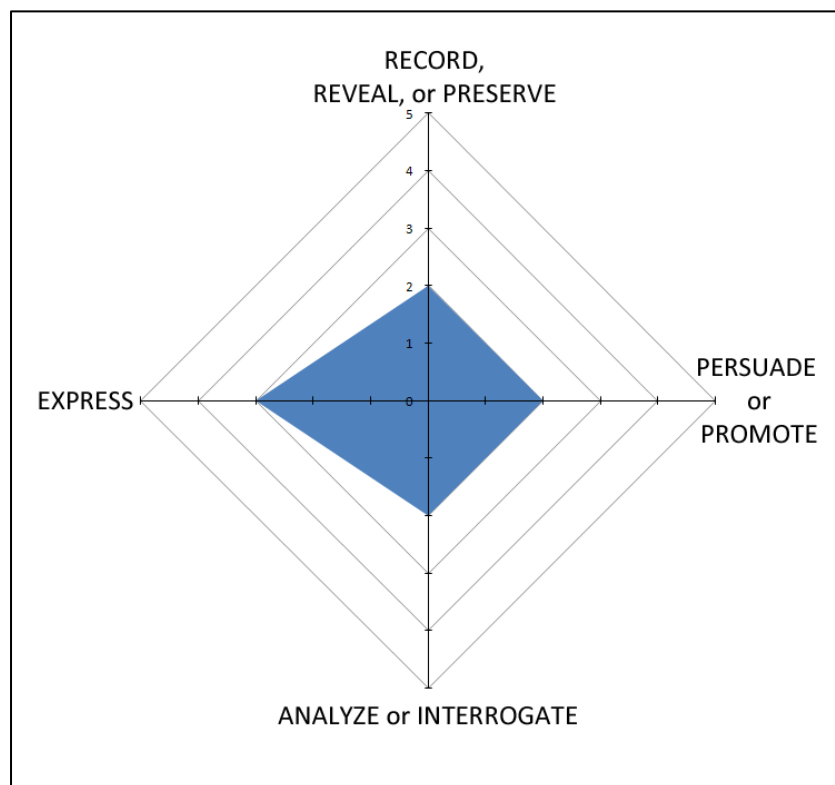


Figure 5.54 Whalehunters – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation for *Whalehunters* is 'Participatory'. As an interactive game with a focus on strategic decision making the player must interact with the games systems to achieve specific goals and objectives. Historical research underpins the experience, but it is presented in a context that is responsive to the

player's choices. The secondary mode has been identified as 'Expository' as the piece was conceived and designed in response to historical events, an existing museum archive and a factual publication. Due to the presence of a significant amount of subjective, visual representation and stylisation in some of the stages of the prototype, 'Performative' is evident as a tertiary mode.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The central knowledge and broader historical background of *Whalehunters* is 19th century Arctic whaling and the Dundee whaling industry.

TOPOS: *Whalehunters* is set during the 19th century and focuses on Scotland and the arctic region. The world portrays a stylised expression of sea-faring culture and industry, with this stylisation extending to the communication of time and space. Weeks in the game world can be experienced by the player in a matter of seconds, as they advance across the planning, voyage and return phases of the experience. The camera perspectives presented in a number of these stages view events from above rather than embodying a character from their perspective - this assists in further defining the game as a strategy experience and in communicating the player's degree of control over the world.

ETHOS: There is a consequence for each of your decisions - the game's systems utilise punishment and reward, therefore educating the player towards the most appropriate strategy. The player is limited to their options though and has limited freedom as to specifics of the journey. On most occasions there is a morally appropriate decision, but as with the real historical period, the player will often be

damned if they do and damned if they don't. The player is constrained to hunting to a scale determined by history – there is no ability to mindlessly slaughter an unfeasible amount of whales, as the player options are limited by crew stamina, weather, luck and cargo space.

Hunicke et al MDA Framework

MECHANICS: Inventory management, random events, decision making, tracking, boat deployment, attacking and avoiding.

DYNAMICS: Discovery, reward and failure in terms of profits/crew loss etc.

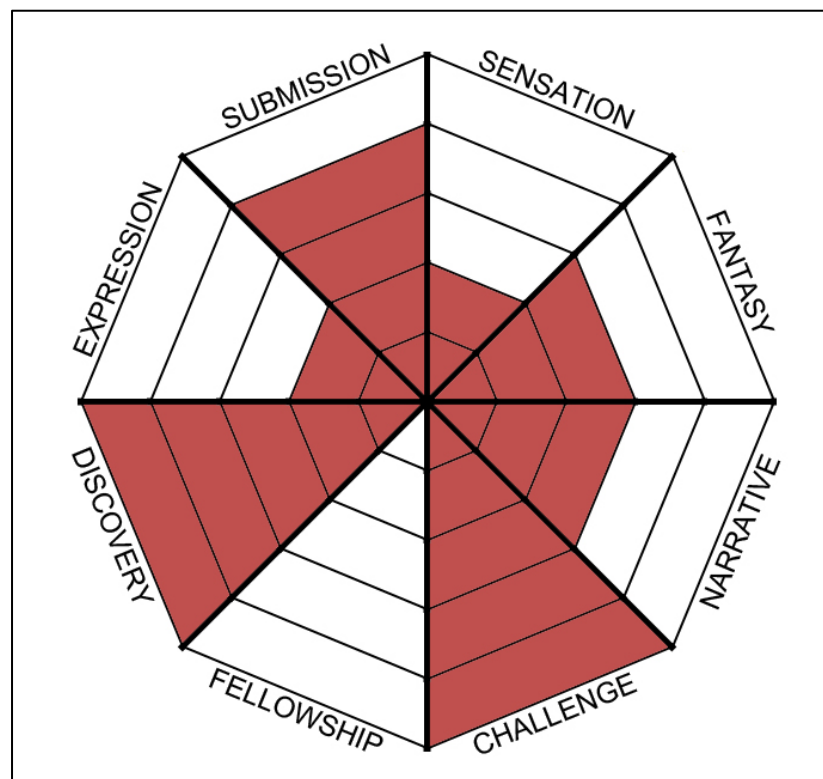


Figure 5.55 Whalehunters – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *Whalehunters* is an interactive game prototype that presents players with a sustained degree of *challenge* through the use of game mechanics and rules as obstacles for the player to negotiate. The prototype intends to allow the player to plan and undertake a voyage with the resulting exploration leading to the *discovery* of new areas, scenarios and resources. A fully-functioning version of the game concept would encourage multiple play-throughs and therefore a significant degree of *submission* as players attempt to become the most financially successful company over a period of seasons. The mechanics and player decisions lead to an overall dramatic *narrative*, however this is not overly expressed and the story is an emergent output of the player's choices within the simple systems of the game experience. There is moderate evidence of *fantasy* as the player is actively role-playing as a Whaling company owner/ship captain, however these interactions are intended to be grounded in and framed by historical evidence. The design and implementation of the visual world, particularly the harbour scenes aim to give a sense of location and activity, suggesting a minor presence of *sensation*. The strategy genre encourages a minor aspect of *expression* by challenging the user to consider how they choose to act in the game world, whether focussing on how they would act in real-life or by role-playing as a specific type of personality - greedy, risk taker, crew-centric etc. The game is a solitary experience and contains no aspects of *fellowship*.

5.5.2 Stowaway

Stowaway (2011) is an interactive application developed by a team of students at the University of Abertay in partnership with the Whaling Archives of Dundee's McManus Galleries. The archive exists to ensure that the Whaling collection, as a Recognised collection, is cared for, protected, and promoted to a wider audience. Enquiries about whaling in Dundee are very common, but currently the public are presented with a complicated path to finding out the information they want to know. The basic premise was to create an interactive application primarily for 5-16 year old children that has a background narrative based on historical data generated by the Dundee Whaling History project. More specifically the application should promote the exploration of real-life exhibits in the McManus Galleries and for users to explore a typical whaling ship in a virtual environment. The final prototype presents a simple 3D visual reconstruction of a whaling ship, that players can navigate and explore using simple controls. Issues that arose during the development phase resulted in the team delivering an interactive piece with limited functionality in terms of the original specification for the design. The concept proposed to place the player in the role of a young stowaway on the Terra Nova (a real-life 19th century whaling ship) and upon discovery by the crew the player would undertake a range of quests such as fetching items etc. This simple game mechanic would lead to the player being educated by stealth as they learn the layout of the ship, terminology and the uses and names of historical objects.



Figure 5.56 Stowaway – gameplay screenshot of the birds-eye camera view.

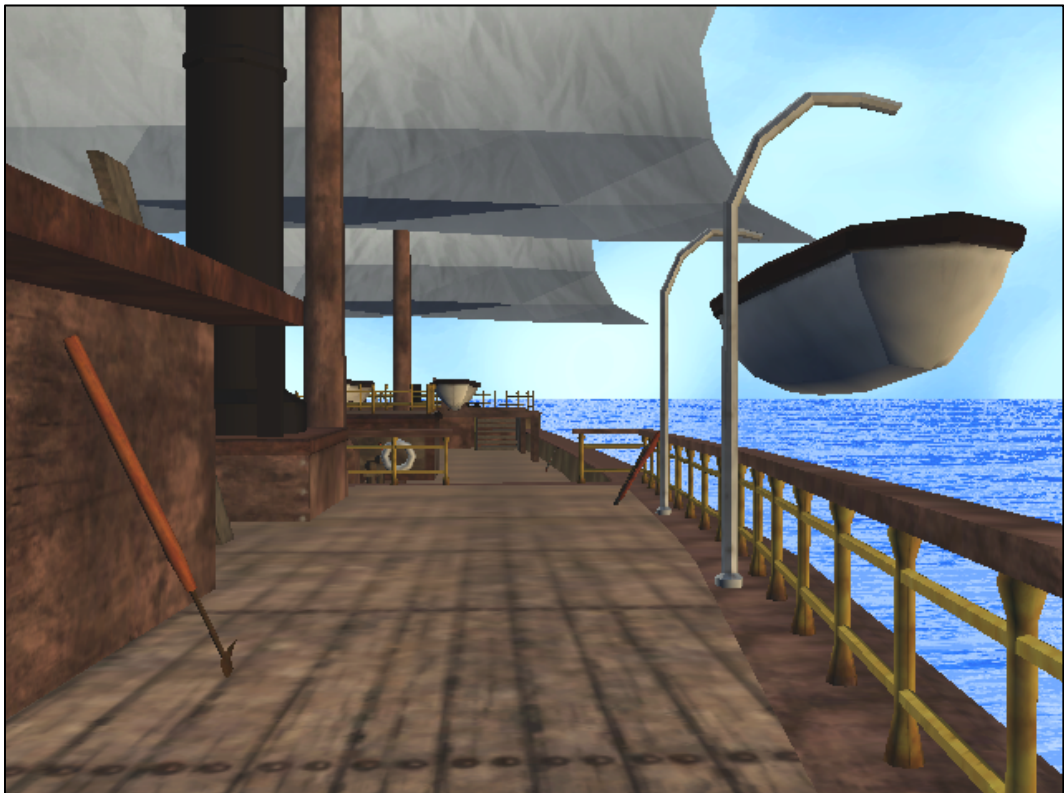


Figure 5.57 Stowaway – gameplay screenshot on board the whaling ship.

Renov's Four Documentary Modes

Stowaway attempts to present a historically and factually accurate representation of life on a whaling ship, with an appropriate visual style for a younger audience. The application presents a competent 3D reconstruction of the Terra Nova, based upon actual reference materials and physical models. Whilst unfinished in terms of additional details and segments of the ship, the piece does present moderate evidence of the mode 'to record, reveal and preserve'. There is little evidence of persuasion and promotion. Although the intention was to present life on a whaling ship, the technical challenges faced by the team resulted in the scope of the project being heavily reduced. The player can only explore the deck of the ship, which does not feature other characters or objects of interest. Beyond choosing where to explore, there is limited opportunity for analysis and interrogation. The inclusion of traditional music and the visual characterisation of the player character presents a minor level of expression within the prototype.

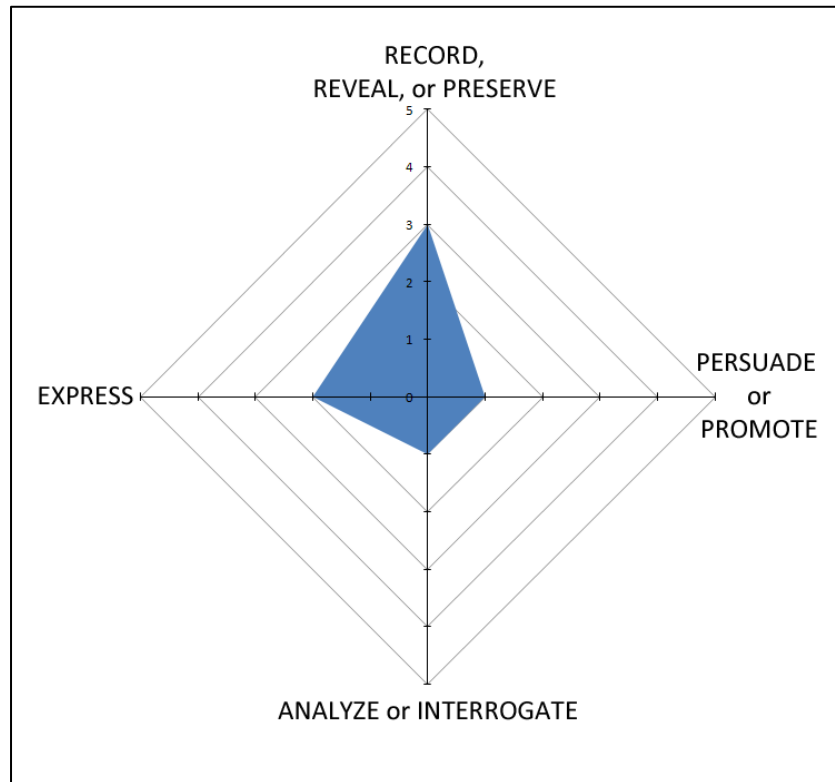


Figure 5.58 Stowaway – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

Stowaway's primary mode of representation is 'Participatory' as the player directly interacts within a reconstructed environment based upon archive as part of a design process. Aspects of the historical data were also gathered through a participatory process which relied on the interpretation of the historical archive. The piece aims to place a younger audience in a reconstruction of life on a whaling ship, framed from the perspective of a stowaway. This premise is grounded in historical fact, whereby many ships leaving Dundee were reported to have dealt with stowaways. This direct address of history defines the secondary mode of representation as 'Expository'. The development team's artistic interpretation of the archive material is perhaps overly stylised and the subjective nature of embodying a character

changes the emphasis of the piece, presenting tertiary evidence of the 'Performative' mode.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The application specifically presents a point of view of life on a Dundee Whaling ship, from the perspective of a young stowaway. The broader historical background is concerned with Scotland's Arctic whaling fleet and the Dundee whaling industry.

TOPOS: *Stowaway* is intended to take place in Scotland and the whaling grounds of the Arctic region. Players undertake the role of a stowaway, a stranger in a strange world, and are constrained to exploring the ship and undertaking simple missions and tasks for non-player characters. The environment is unpopulated due to development issues but it was intended to have non-player characters undertaking simple routines throughout the ship.

ETHOS: The player cannot undertake any action or interactions that are ethically or morally wrong - the player has limited freedom beyond exploring the ship, fetching items and accessing simple dialogues with the NPC's. As an unfinished prototype this piece struggles to communicate the original vision for the piece.

Hunicke et al MDA Framework

MECHANICS: Moving, looking, selecting, searching, fetching.

DYNAMICS: Achievement, discovery, knowledge, confusion.

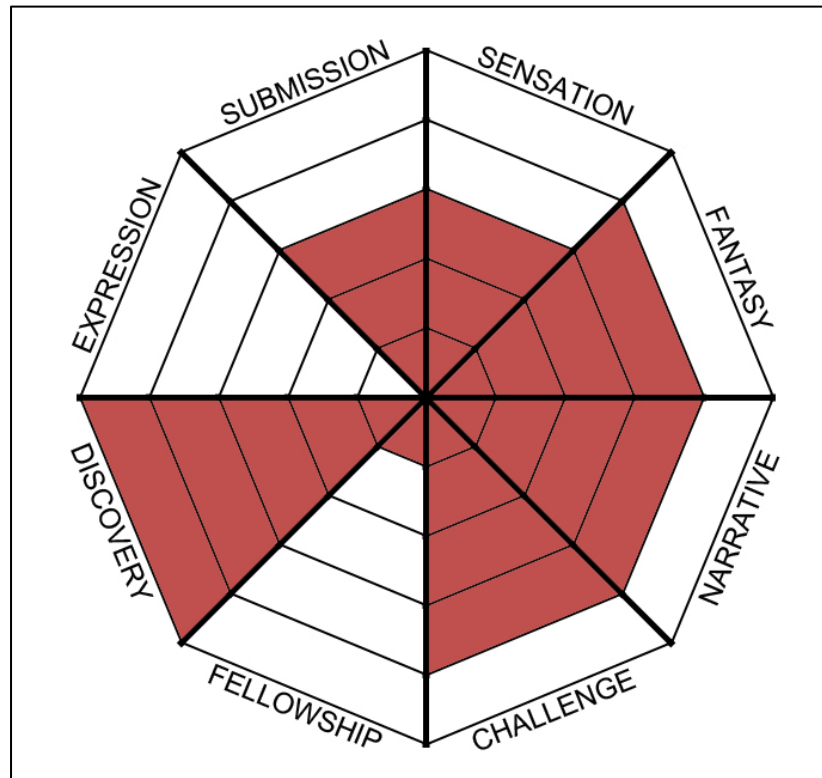


Figure 5.59 Stowaway – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: At its core, *Stowaway* intends to encourage players to participate in exploration and *discovery*, as they undertake simple quests throughout the ship. For the majority of younger audiences, 19th century whaling will be a relatively unknown period of history so therefore presents major evidence of game as uncharted territory. *Stowaway* is an educational, interactive application with relatively simple tasks and quests, but these still exist as an obstacle course for the player and would provide a significant degree of *challenge*. The original design materials suggest the piece intended to have an authored story to shape and support the user’s journey and give context to their interactions on the ship. The dramatic placing of the player in an unfamiliar situation and environment lends itself to a dramatic *narrative*. The

degree of characterisation, role-play and the loose use of historical materials are indicative of a significant level of *fantasy*. The piece places the player as an avatar on a whaling ship, giving a sense of presence, time and place. The use of traditional music, sound effects and environment art adds towards a moderate degree of *sensation*. *Stowaway* is an exploratory, educational game, demonstrating moderate replay value and *submission*. The game is a solitary experience, however the intention to present the player with non-player crew-members presents a tenuous level of *fellowship*. There is no evidence of *expression* as the limited mechanics and gameplay do not facilitate self-discovery of the expression of identity by the player.

5.5.3 MetaMaus

MetaMaus (Spiegelman 2011) is companion book and DVD to Art Spiegelman's *Maus* (Spiegelman 2003) – a Pulitzer Prize winning graphic novel, exploring the horrors of the Holocaust and its cross-generational legacy. Whilst this is a simplistic abridgment of the content of the book, *Maus* weaves between being the memoirs of the author's family, a visual artefact that uses the principles of comics to convey narrative, and a reflective document that provides the reader with a commentary giving an insight into the author's intentions and personal struggle. This complex, personal and powerful narrative raised as many questions as it answered and in 2006 Spiegelman granted academic, Hilary Chute permission to interview him and explore his archive of documents, diaries and art towards the co-creation of *MetaMaus* (Spiegelman 2011, p.6) *MetaMaus* exists as an exhaustive archive of material documenting the history, development and reception of *Maus*, and

features content ranging from home movies, original audio recordings, draft sketches along with an interactive, fully digitised version of the original graphic novel. The user is able to enhance and deepen their experience of the original text by interacting with a simple navigation mode of hyperlinks, search terms and menus. The additional content exists as documentary; providing commentary and context with regard to Spiegelman's artistic process, his authorial intentions and his personal relationship to the narrative.

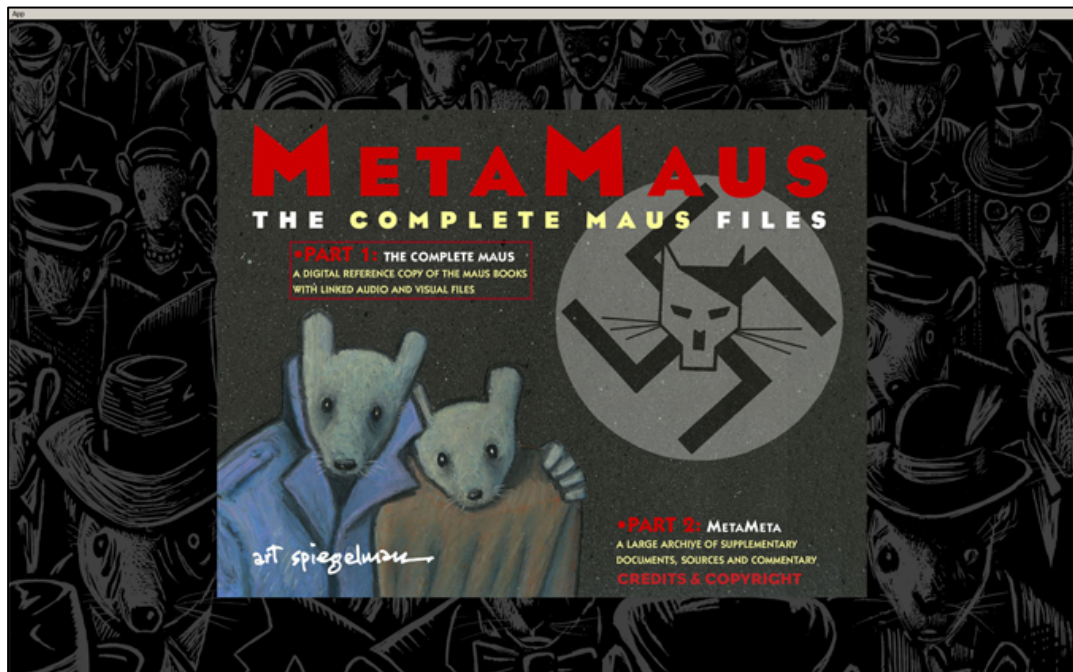


Figure 5.60 MetaMaus – screenshot of the main menu.



Figure 5.61 MetaMaus – screenshot of the range of content gathered within the resource.



Figure 5.62 MetaMaus – screenshot of an example of the personal materials presented within the archive.

Renov's Four Documentary Modes

MetaMaus presents a relatively balanced presence of all four documentary modes. The piece exists as an exhaustive archive that aims to record multiple aspects of the history, creative process and content of the graphic novel itself. This presents significant, sustained evidence of the mode 'to record, reveal and preserve'. Whilst, *Maus* is a very persuasive and emotionally impactful artefact, *MetaMaus* is more restrained (in the same way a director's commentary is usually less dramatic than a film itself) and features a moderate degree of persuasion and promotion. Through recorded conversations and interviews, Spiegelman is essentially interrogated, and presents a more up to date analysis of his work. The format of the book and navigation modes of the DVD encourages the reader to explore and critically analyse the surrounding content of the book. A significant level of analysis and interrogation further exists with the provision of additional resources and academic papers to digest. *MetaMaus* is not a dry, encyclopaedic piece of literature, but instead has been written and presented as a visually rich, expressive archive. *Maus*, is regarded as a highly expressive and emotive work of art and it is clear how its mode and tone of storytelling has influenced the design and presentation of *MetaMaus*.

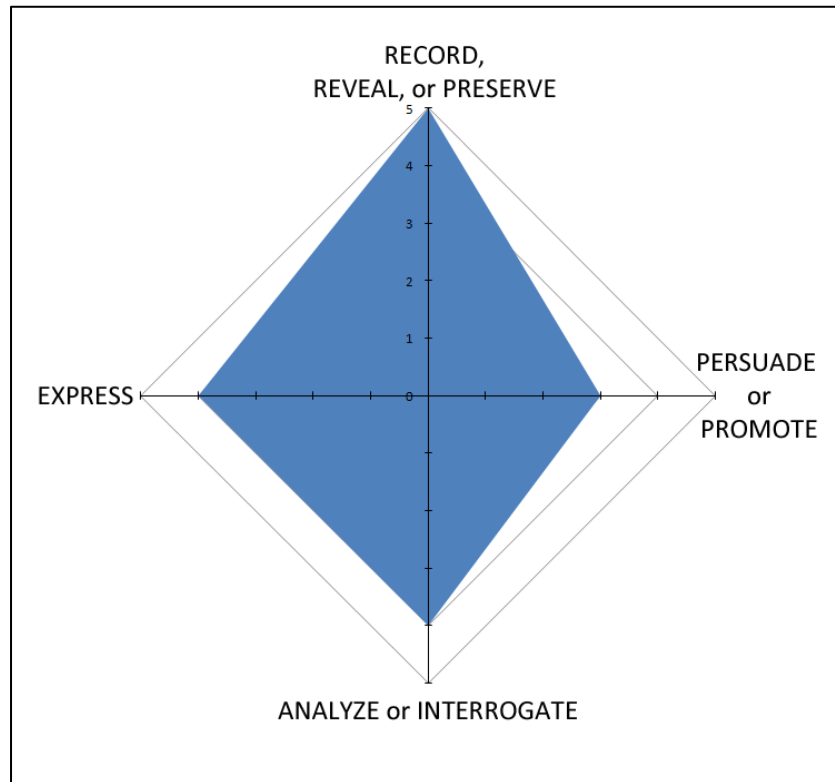


Figure 5.63 MetaMaus – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation that underpins *MetaMaus* is 'Participatory'. Users are required to navigate a creative archive of content, interacting with the range of material to retrieve information and form their opinions on the piece. The book and the DVD both allow the participant to interrogate the text by directly searching for specific subject matter or materials. 'Expository' has been classified as the secondary mode as *MetaMaus* directly addresses a major moment in world history along with the inception, development, publication and reception of an award-winning graphic novel. 'Observational' and 'Reflexive' are tertiary modes due to the inclusion of unedited materials such as interviews, photographs and letters; and that the piece is a retrospective on the preceding graphic novel. *Maus* itself was

a relatively introspective analytical statement by the author and this hybrid publication encourages further contemplation and questioning of the content.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The central knowledge of *MetaMaus* is the publication of the graphic novel *Maus*. The broader historical background can therefore be argued to encompass aspects of the Second World War, namely the invasion of Poland and the legacy of the Holocaust.

TOPOS: *MetaMaus* is in book and DVD-ROM format and therefore present the user with a deep archive of material concerning *Maus*. The format partly defines *MetaMaus* - but the structure and voice throughout the resource provides a tone of communication more akin to a documentary. There is a sense of multiple story worlds, for example, the factual moments of history that occurred during the war, to the feeling of being in Spiegelman's mind as he confesses his fears and expresses his intentions as an artist and story teller.

ETHOS: *MetaMaus* is a navigable resource and the user cannot alter the content or drastically manipulate the intended meaning of the author, however there is of course opportunity for user misinterpretation. The format of the piece does not facilitate user behaviour as such, as this is not a world or interactive story. Instead, its status as a resource encourages contemplation and deeper analysis by the user of the overall *Maus* narrative.

Hunicke et al MDA Framework

MECHANICS: Viewing, selecting, listening, reading, searching.

DYNAMICS: Education, entertainment, contemplation, interrogation.

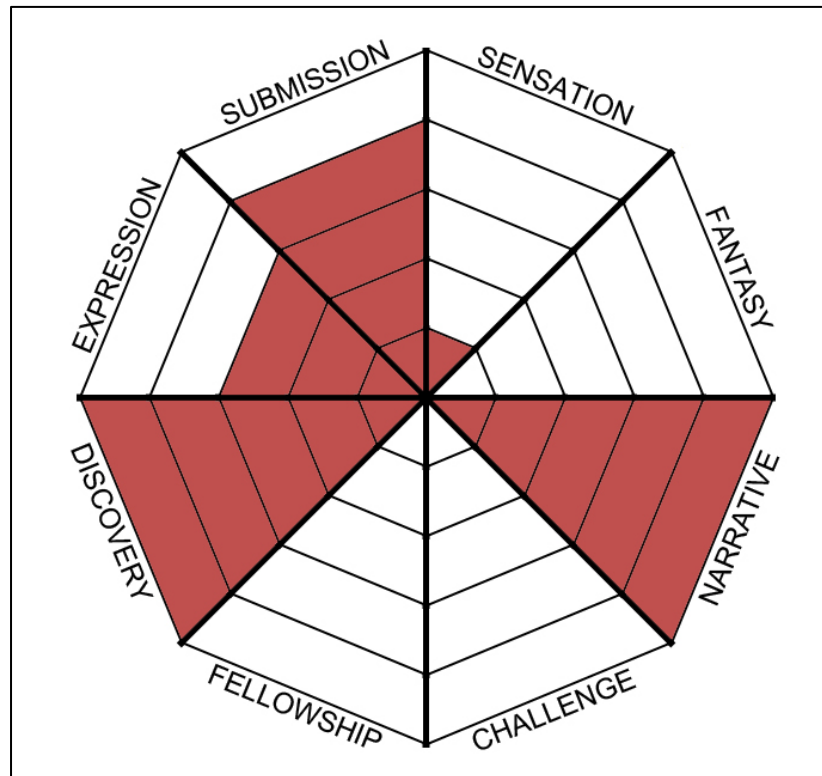


Figure 5.64 MetaMaus – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *MetaMaus* communicates a structured and multi-faceted *narrative* of Art Spiegelman’s personal and family history. The publication covers multiple interconnected narratives, drawing upon the persecution of Spiegelman’s Jewish parents during World War II and the impact these events continue to have in the present day. *MetaMaus* is a rich and detailed resource that presents additional clarity and context to the development and publication of *Maus*. Through reading and intuitive navigation, users participate in the *discovery* of the author’s personal secrets,

aspirations and beliefs that frequent the vast archive. The use of the book and DVD format features an inherent mode of consumption and suggests an indication of the investment of time required by the user, therefore presenting a significant degree of *submission* and pastime. There is a clear and moderate degree of *expression* as the user driven exploration and contemplation of the piece has the ability to have a powerful impact on the user - either due to the themes and issues it explores or the journey of the author and communication of their practice. Aspects of *MetaMaus* engage the user in a sensory way (such as the audio interviews) but much of the content is presented in an archive format. This leads to a minor element of *sensation* as the piece does not attempt to immerse the user through systemic responses to interaction. There is no evidence of fantasy due to the obvious focus on the actual events and personal testimonies. Whilst the graphic novels use of animal characterisation, suggests an element of *fantasy*, this is instead an appropriate story-telling device to assist in delivering a comprehensive and believable story of such enormous human scale. There are no game mechanics, *challenge* or dependencies on user skill, beyond the basic intellectual demands for consuming literature and hyperlinked content. *MetaMaus* is written and designed for personal consumption and presents no evidence with regard to the aesthetic of *fellowship*.

5.6 Web-based Interactive Documentaries

5.6.1 Bear 71

Bear 71 (2012) is a web-based interactive documentary which tells the story of a bear that has been captured, tagged and released in Banff National Park, Canada. Directed by Jeremy Mendes and Leanne Allison, this 20-minute piece utilises a range of interactive and cinematic techniques to portray the bear's emotive journey, through an involving and immersive digital experience that draws the user into the ecosystem of the park. *Bear 71* is similar to a traditional documentary due to its production model which placed emphasis on the need for a vast amount of actuality footage. Over a two year period a range of CCTV footage and filmed content was gathered, edited and repackaged into a navigable, interactive experience which presents the user with an abstract, map-like interface to explore. In terms of story, *Bear 71* presents a dramatized, first-person narration of the tragic journey of the eponymous bear as a central core to an arguably broader narrative. Through playful navigation and exploration the user encounters content which highlights the hidden life of the animals in the park, the broader story of the region itself, along with larger human themes which deal with the conflict between man and nature, the social ethics of CCTV and the concept of freedom.

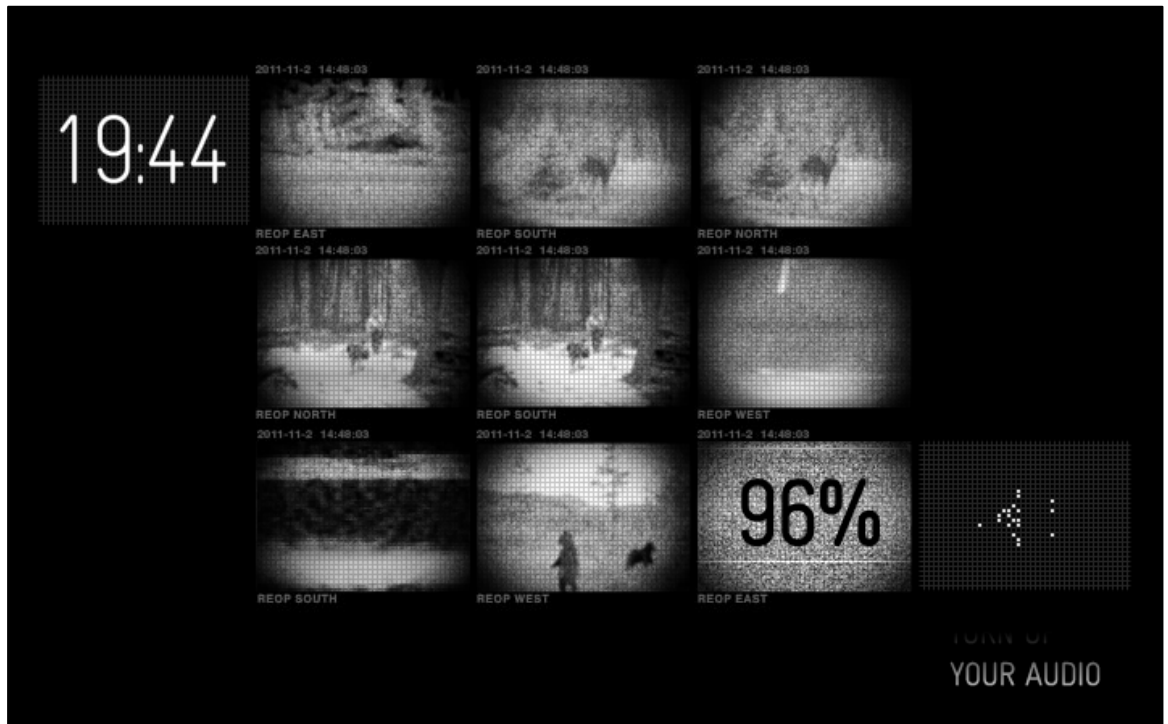


Figure 5.65 Bear 71 – screenshot of the loading screen, setting the tone for the user’s experience.

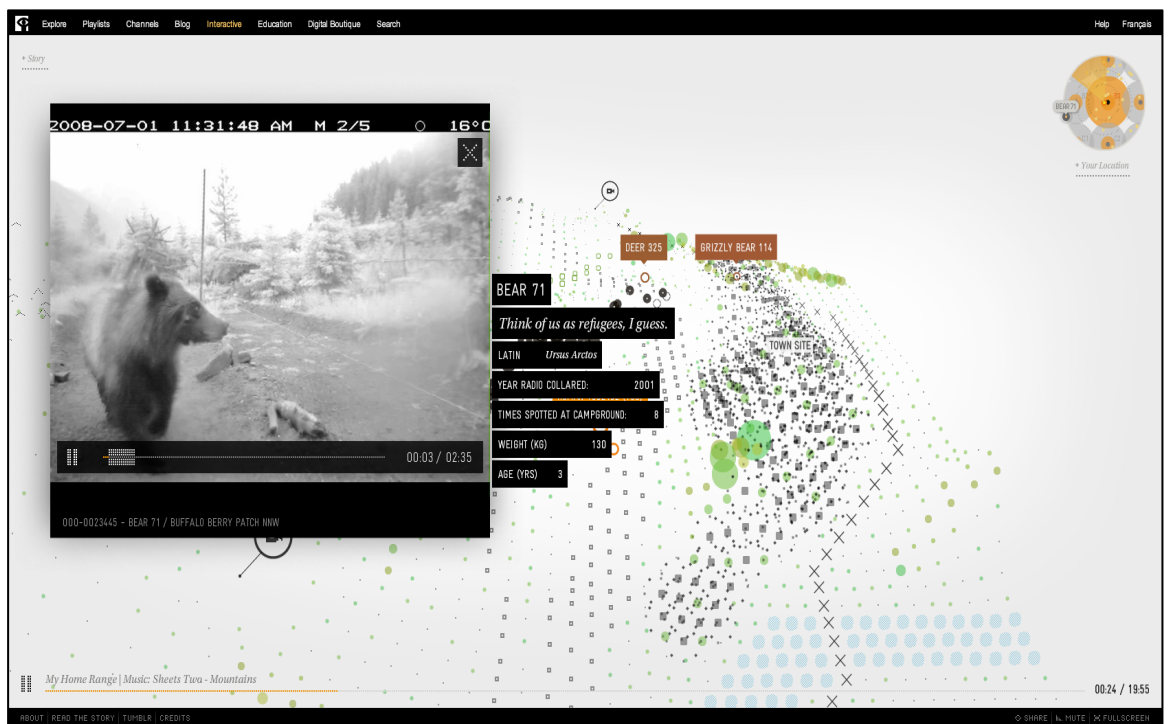


Figure 5.66 Bear 71 – screenshot highlighting an example piece of CCTV footage.

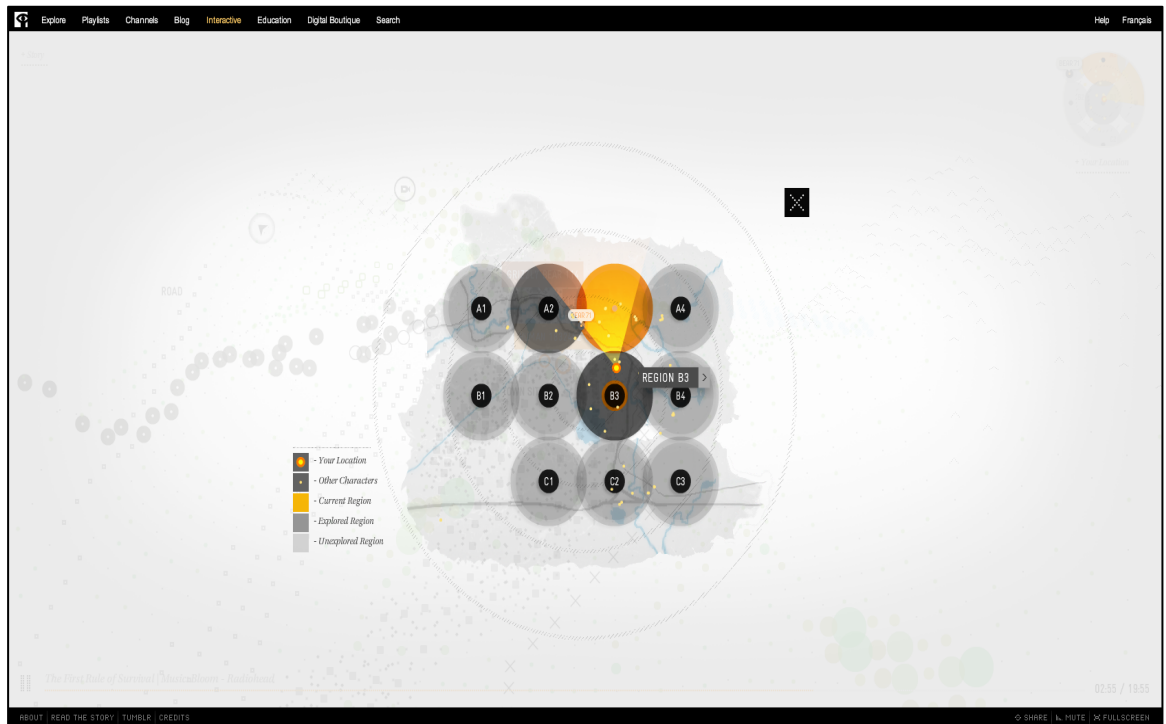


Figure 5.67 Bear 71 – screenshot of the visual interface and abstract map presentation.

Renov's Four Documentary Modes

Bear 71 presents major, sustained evidence of all four modes. The pre-production process for *Bear 71* originally envisaged a linear, filmic documentary. However after being pitched, potential was recognised with regard to a more involving and socially connected, digital experience (Martel 2012). The directorial team's intentions and decisions are therefore influential in the outcome of the analysis due to their inherent relationship with traditional documentary practice.

As illustrated in Figure 5.68, the analysis resulted in a maximum and balanced score across all four categories. *Bear 71* acts as a record which preserves a period in time presented across multiple perspectives. The beauty and tragedy of nature is promoted through the use of video and still photography to present moments

across a spectrum of significance. The persuasive narration questions the user, both in terms of events and subject matter, but also in regard to interaction with the systemic elements of the piece. Additionally, the inclusion of webcam support places the user 'within' the world and narrative, encouraging the user to analyse and interrogate what it feels like to be tagged, and lose privacy through constant monitoring by strangers. There is a significant and sustained level of expression throughout *Bear 71*. The stylistic, artistic and symbolic choices behind the visual representation of the world are analogous to a complex digital visualisation, drawing upon best practice in user-interface design whilst simultaneously ensuring that the director's communication aims and intended aesthetics are not undermined. Aural aspects such as the narrated voice over by 'the bear' detailing thoughts and issues from the bear's perspective, and the use of sound effects and licensed music, are carefully chosen to support the emotive thematic content.

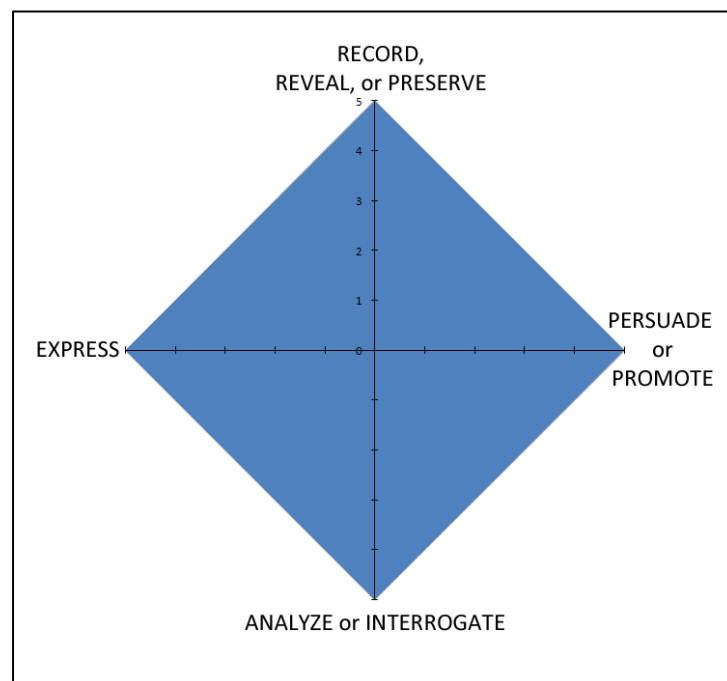


Figure 5.68 Bear 71 – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation for *Bear 71* is arguably 'Poetic'. This is due to the artistic focus on mood, tone and affect - and is reinforced with the decision to create a narrated voice over by the bear and the overall stylistic presentation and visual treatment of the interface. The 'Expository' mode of representation does play a significant part in *Bear 71* as the piece does directly confront the historical world with regard to the actual life of a bear and the circumstances surrounding its existence and eventual demise. However, 'Expository' has been classified as a secondary mode due to the rejection of an excessively authoritative tone, and the user having the freedom to make their own meaning from elements of content. 'Participatory' and 'Performative' modes have been assessed to be tertiary aspects of the overall experience. Although the user is in control to a certain extent as to how and when the content is accessed and presented - the user is essentially interacting on a very basic level, with content that is not overly subjective or excessive stylistically.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: The central theme of *Bear 71* is the relationship between man and nature, with the inciting incident being the capture and tagging of a young bear and its subsequent life tracked by digital systems.

TOPOS: In terms of location, the entire experience is set within Banff National Park, Canada. The world is represented by minimalistic animated graphics which communicate topographic data, wildlife, vehicles and points of interest. The player

uses this map as an interface to track other users and to discover a range of pre-recorded footage and information presented in a live CCTV style format. Although the entire experience lasts twenty minutes and communicates a real-time environment, the piece is bookended with a beginning that uses exposition footage from when the bear was first captured, and an ending which is paced and edited to ensure a dramatic and emotive conclusion. These two crucial story points are non-interactive and are not dependent on the user triggering them with the context of progressive gameplay.

ETHOS: *Bear 71* does not allow the user to subvert or alter the message of the piece as the narration and overall arc is locked down. Whilst there is scope for some user freedom in terms of navigation of the open map, the user is not empowered to alter outcome of the story. The user's webcam is the only element of *Bear 71* that encourages an element of self-expression, with the user able to alter their representation in the world. This feature could be subverted by mischievous users to undermine the experience of others, but it does not alter the overall aim and theme of the piece. The tracking mode of interaction lends itself well to the story, the world and the message of the author, setting the tone for the experience and communicating the core mechanics within the context of the narrative. The decision to constrain the piece to a specific duration conditions the user to expect an authored experience with a conclusion, as opposed to an open system with no clear objective or closure.

Hunicke et al MDA Framework

MECHANICS: Selecting, navigation across the map, webcam feed, watching, listening, reading.

DYNAMICS: Discovery, reflection, limited social interaction, contemplation.

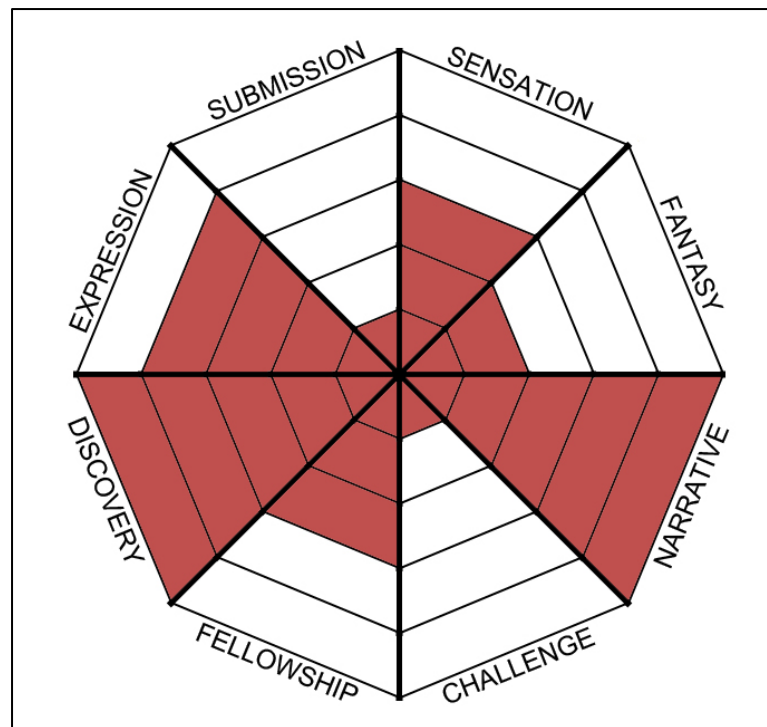


Figure 5.69 Bear 71 – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: As a narrative-driven experiment in interactive documentary storytelling, *Bear 71* features a well-crafted story arc with a powerful, emotive conclusion. Containing this within an environment that encourages exploration and playful interaction is therefore strongly representative of the aesthetics of *discovery* and *narrative*. *Bear 71* features abstract graphics to convey the complex landscape and ecosystem, supported with aural components that are implemented to achieve a moderate level of *sensation*. As an experience that facilitates self-discovery, by

challenging users to contemplate aspects of existence, there is clear evidence of *expression*. This is supported by the choice to present a multi-user experience with web-cam use allowing users to see simultaneous visitors to the piece – resulting in a basic social framework and *fellowship*. *Bear 71* projects an illusion of presence – a *fantasy* in which users do not actually inhabit the physical environment, although the methods implemented to place users in the story world are highly expressive, the piece remains strongly grounded in a factual, real-world scenario. As a piece of media with a fixed duration and outcome, there is a clear level of commitment presented up-front to the user. This results in a low level of *submission*, with repeat visits and consumption of content being an unnecessary part of the experience. A minimal level of *challenge* exists as beyond mastering the basic interaction, there is no way for the user to fail or accidentally end the experience through lack of skill or ability.

5.6.2 Clouds Over Cuba

Clouds Over Cuba (Joiner and Tricklebank 2012) is an interactive documentary film conceived by The Martin Agency and developed by the production company Tool. Commissioned by The JFK Presidential Library to commemorate the 50th anniversary of the Cuban Missile Crisis, the piece intends to present the decision-making process and timeline throughout the crisis, supported by a vast library of archive material and declassified historical documentation. Primarily the production exists as a web-based documentary, but an interesting production and design process exploring the use of second screens and cross platform interaction have ensured that the piece is

also accessible using mobile devices without compromises in terms of visuals or structure. (Tool 2012) *Clouds Over Cuba* presents the user with a narrated documentary that exists across a ‘live’ timeline. As the video content plays, additional materials become unlocked and are accessible via an exploratory interface which simulates an archive or dossier. At any point the user is able to interrupt the documentary and access this content to explore specific events in more depth or to view additional perspectives, context and detail. The historical accuracy of the piece is further underpinned by the use of bespoke commentaries and testimonies from a range of respected historians, author’s and, in an impartial shift in perspective, the son of Nikita Khrushchev. (Pathak 2012) The piece culminates in a ‘What If?’ short film which portrays an alternative 2012 whereby a global nuclear war took place. The use of actors and a similar approach to filming, editing and presentation as the rest of the piece ensures that this fake content, whilst deceptive, remains believable and poignant.

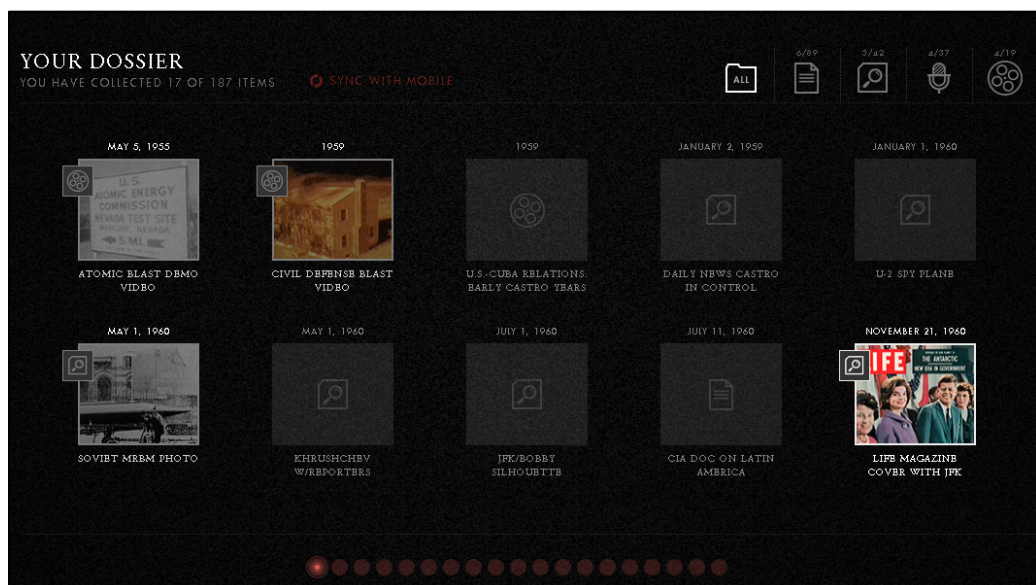


Figure 5.70 Clouds Over Cuba – screenshot of the ‘Dossier’ – a basic implementation of collectable content.



Figure 5.71 Clouds Over Cuba – screenshot of the chapter structuring to the video content.



Figure 5.72 Clouds Over Cuba – screenshot of the fictional documentary presenting an alternative history.

Renov's Four Documentary Modes

Clouds Over Cuba is built around a vast archive of material from the period and is supported with interviews and narration that provide contextual framing to the content. As a result of this, the piece therefore demonstrates sustained evidence of existing to record and preserve. Furthermore the construction and presentation decisions indicate that the piece also aims to reveal to the user through the measured disclosure of content in response to user navigation and enquiry.

Figure 5.73 shows that the mode of 'to Analyze or Interrogate' also presents major, sustained evidence, as the user is very much encouraged to analyse the content within the piece. This is reinforced by the method for interacting with the data, as the player is made to feel like they are exploring top secret material in the search for the truth. *Clouds Over Cuba* appears to be attempting to be an objective overview of the crisis, so is not an obvious propaganda piece. However, as the documentary was commissioned by the JFK Presidential Library and Museum an inherent bias therefore exists. The implementation of multiple perspectives and commentary on events therefore facilitates a degree of balance to the proceedings, resulting in moderate evidence of persuasion and promotion. With regard to expression, the piece presents the material in a restrained and conservative tone which is appropriate to the period. The limited colour palette, the use of icons which relate to the period and the ability to review an unlocked 'dossier' of content' demonstrates an authorial intention to express a particular mood. The piece also has an alternative history section, presented in the style of the rest of the content which presents an emotive perspective on what may have happened. The use of

fictional constructed from staged interviews with actors, location filming and computer-generated graphics present an expressive conclusion that questions and brings greater significance to the factual content earlier in the piece.

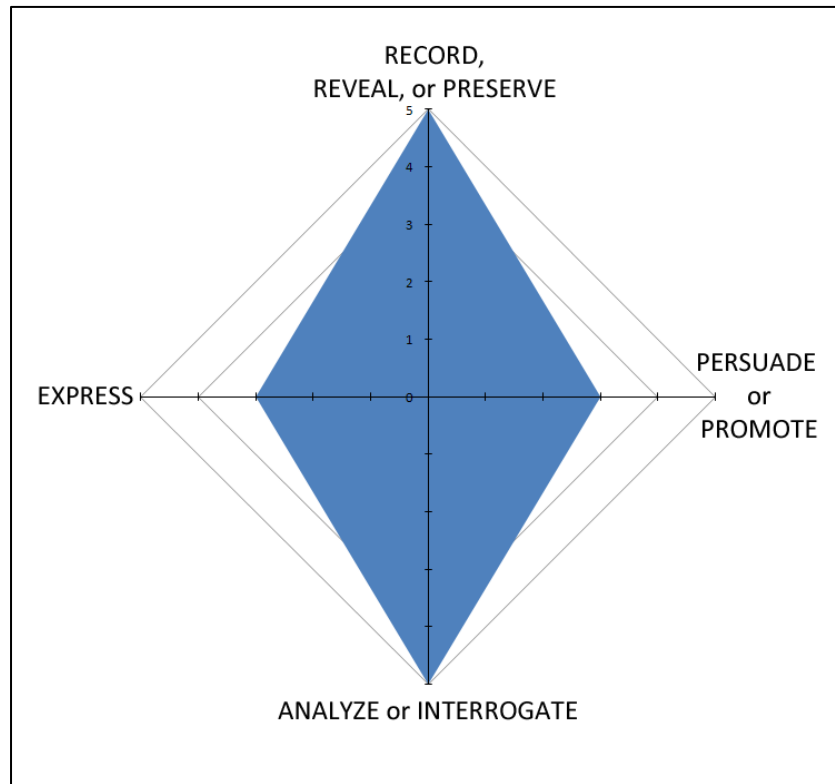


Figure 5.73 Clouds Over Cuba – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation is evidently 'Participatory' as the user can interact, access and view archive content, documents and interviews with specialists and witnesses to be able to shape their own meaning from this vast range of material. As a documentary that directly focuses upon and addresses a particular moment in history and presents some of the content with an authoritative stance, the secondary mode of representation is 'Expository'. The 'Reflexive' and

'Performative' modes have been assessed as tertiary aspects of the overall discourse. *Clouds Over Cuba* demonstrates a questioning attitude to accounts of history and the documentary form and this is manifested within the design and implementation of the 'dossier' of evidence. The user is also drawn into proceedings as a virtual performer, due to mobile device alerts and calendar alerts which aim to communicate the timeframe and pacing of historical events in real-time. These elements are not vital to the consumption and navigation of the documentary's core thesis as they exist as additional content accessible from the main narrative.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: *Clouds Over Cuba* is based on the broad, accepted history of The Cuban Missile Crisis and the historical events that preceded it. Thematically, the piece comments on the imperfection of memory and how the best intentions and decisions can be undermined by uncontrollable elements such as chance.

TOPOS: Structurally, the entire piece revolves around a central timeline which serves the dual purpose of defining the scope and duration of piece, along with presenting the user with an easily understood interface for navigation. The implementation of talking head interviews and archive material, along with authoritative narration are expressive of commonly held views regarding the constructs of traditional documentary. The piece further supports this by allowing content to be consumed and viewed in a traditional linear film context. The interactive modes afford the user with a browsable narrative which is arguably a more in-depth and detailed chapter interface for a documentary film. Time plays an important role within the

piece as the user is placed within several timeframes which cast alternative perspectives on the accepted history. The user is interacting from the point of view of the current day whilst simultaneously being drawn back in time to consider the unfolding of the actual events through the use of voluntary, but intrusive mobile calendar alerts. In addition the inclusion of an alternative history, exploring the outcome of a nuclear war, provides a meaningful temporal twist to conclude the documentary.

ETHOS: The user is not able to manipulate the message of *Clouds Over Cuba*. Through the use of a 'Dossier', users are introduced to a very basic collection mechanic that encourages consumption of the entire piece. However, users cannot change the events they can only choose when to access, view or re-view content, therefore ensuring there are no opportunities for self-expression or subversion of the message. There is a relatively serious tone throughout which communicates the tense nature of events to the user, with a focus on the complexities of the crisis presented through a range of perspectives and historical information. The documentary consciously explores the human cost of nuclear war through the concluding 'What If?' scenario.

Hunicke et al MDA Framework

MECHANICS: Viewing, Selecting, content collection, calendar syncing.

DYNAMICS: Contemplation, interrogation, collection and repeat viewing due to the content being unlocked once certain aspects have been viewed.

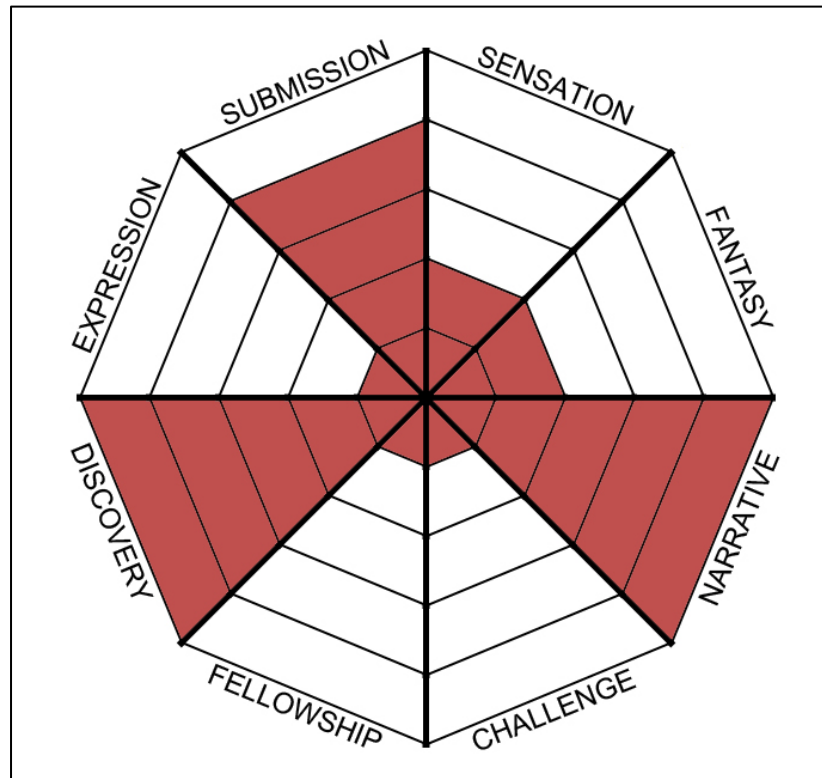


Figure 5.74 Clouds Over Cuba – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *Clouds Over Cuba* is more of an archived resource linked to linear documentary therefore the range of interactions and opportunities to manipulate content are limited. Nevertheless, a level of investigative interaction and exploration of possible points of view still exists. As a self-defined interactive documentary project, the piece presents an engaging narrative with an appropriate mode of interaction which leads to a strong presence of the aesthetics of *narrative* and *discovery*. The volume and placement of content consequently requires a moderate investment of time by the user, encouraging repeat visits and engagement with archive and mobile calendar system. Although there are no overtly game-like mechanics, the exploratory navigation of the digital dossier encourages *submission*.

Although there is a focus on the communication of the complexity of the historical event, the visual presentation, audio and narrative structure is designed and implemented to provoke specific emotional responses. *Sensation* and *fantasy* are not key drivers of the piece, but do exist due to the documentaries inclusion of fictional, staged content, as a counterpoint to the authoritative historical content. *Clouds Over Cuba* has a very low level of *challenge* – there are no tasks or objectives which can result in a failure or abrupt ending. The dossier element is a basic collection mechanic but there is no challenge or skill requirement to unlock all the content. The piece has a logical flowing narrative between chapters and reaches an appropriate conclusion before encouraging the viewer to dive back in and consume the unlocked content at their own pace. The documentary is arguably a personal experience with no multiuser modes or content, however a basic ability to share aspects of the site with others via social media provides evidence of minimal *fellowship*. Whilst the interactive modes do facilitate some self-reflection and analysis of personal points of view, there are limited opportunities for *expression* and communication.

5.6.3 The Whale Hunt

The Whale Hunt (2007) is a web-based experiment in documentary storytelling which explores the whaling traditions of the Inupiat Eskimos in Barrow, Alaska. In his artist's statement, Jonathan Harris explains how he documented the event in over 3000 photographs, taken at specific intervals in relation to the intensity of the action. This source material is presented to the user on a website which has

implemented several frameworks to facilitate faithful re-telling of the narrative. The interface allows the user to implement constraints across the full archive of content in terms of cast, concept, context and cadence. This results in a user-defined pathway through the narrative which may choose to focus on a particular individual's story, present imagery which only includes specific themes, content and locations, or manipulate the pace in which the images are presented. At any point, the user can also interact with several visual interfaces to explore the content. These interfaces are visual representations of the intensity of the author's experience and serve the dual purpose of facilitating playful, intuitive navigation and of drawing the user into the narrative through meaningful interaction. The overall narrative of *The Whale Hunt* encompasses Harris' entire journey, telling the story of his time with the Inupiat highlighting aspects of their culture and daily lives against the backdrop of the preparation for and completion of the eponymous whale hunt. The use of a chronometer to take automatic photographs at regular intervals demonstrates an intention to remain objective. This is further supported with the absence of commentary or narration, however there still exists an element of authorial bias in the subjective framing of some of the photography.

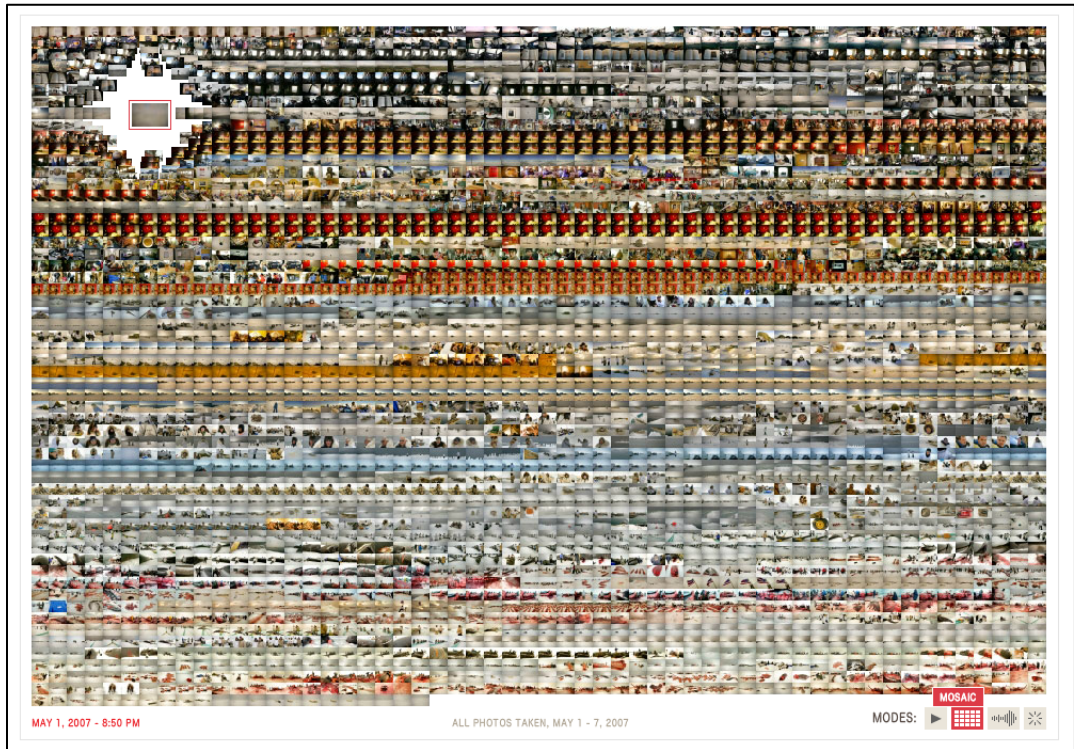


Figure 5.75 The Whale Hunt – screenshot of the mosaic mode of navigation.

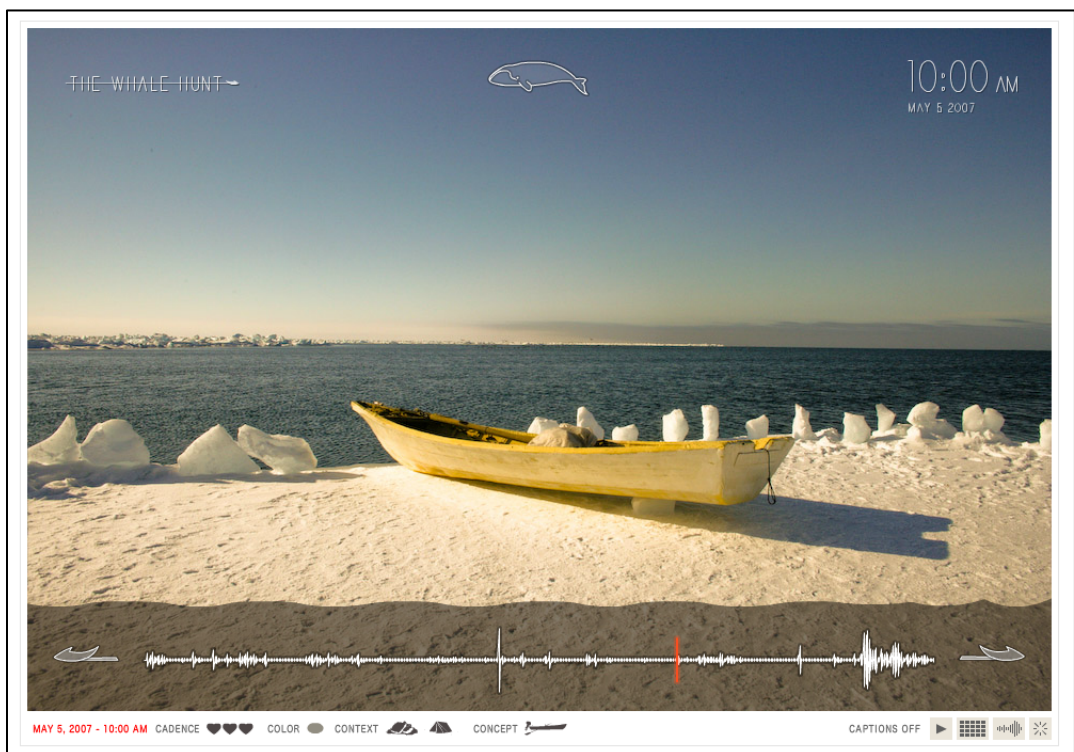


Figure 5.76 The Whale Hunt – screenshot of the main mode of presentation with the heart-beat interface.

Renov's Four Documentary Modes

The Whale Hunt exists as a record that reveals and preserves aspects of a culture that few people have the privilege to witness. The piece draws upon established ethnographic principles to attempt to capture social activities and events through the use of an unbiased natural approach. This is indicated by the author's decision to have some aspects of the photographic process removed from his control. A sustained level of expression also exists as the author utilises a range of visual techniques to communicate his personal physical responses to the events he experienced. Whilst the interfaces initially appear to be purely functional, the thinking behind each of them reveals expressive and artistic intentions. The user is encouraged to analyse and interrogate events through the provision of navigation modes that allow specific content to be presented based on theme, individual, location or action. This encourages contemplation and individual meaning making in response to the content. *The Whale Hunt* is a moderately persuasive piece of interactive media that demonstrates an awareness of a variety of viewpoints with regard to the public perception of whaling. There is ambiguity with regard to the author's feelings as an increased heart-rate during intense periods of the journey could be indicative of fear, excitement or disgust. The communities respect for the whale and the process of their traditions and practices are communicated to the user through the inclusion of correspondence between the author and the Inupiat Eskimos.

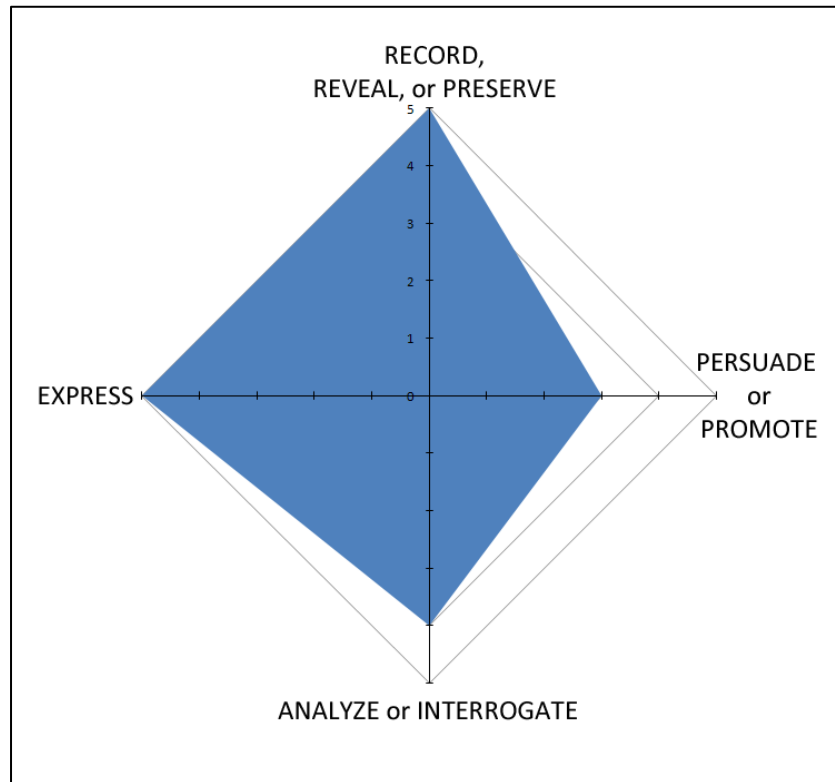


Figure 5.77 The Whale Hunt – visualisation of the results of the Renov Framework.

Nichols' Six Modes of Documentary Representation

The primary mode of representation throughout *The Whale Hunt* is 'Observational' due to the authorial intention to record images of the hunt as it unfolded and without commentary. Whilst this may indicate a focus on unbiased, factually accurate content, the lack of context of many of the images leads to ambiguity in aspects of the overall narrative. Furthermore, the visual modes and interfaces designed and implemented by the author, form an expressive photographic archive which manages to co-exist as an abstract reassembly of the world. This defines the secondary mode of representation as 'Poetic'.

The remaining four modes of representation have been categorised as tertiary aspects of the general experience. The author presents a window into the lives of a

community of people and whilst there is a clear awareness of issues within this world, the author does not address them directly as would be expected with a stronger use of 'Expository' modes. The option to filter and control the appearance of content through user interaction presents tertiary evidence of the 'Participatory' mode. *The Whale Hunt* indicates the 'Reflexive' mode as the user is placed within the author's experience, whereby photographic bias is questioned, and an attempt is made to frame the photographs within the context of time, space, and the author's emotional reactions. Finally, the expressive nature of the user interfaces and their stylistic presentation are linked to the 'Performative' mode of representation.

Klastrup and Tosca's Core Elements of a Transmedial World

MYTHOS: *The Whale Hunt* presents a visual record of the annual traditional hunt by the Inupiat Eskimos in Barrow, Alaska. Thematically, the piece explores the co-existence of man and nature, aspects of tradition and ceremony, along with cultural differences.

TOPOS: The piece presents the personal journey of the author over the nine days of the production. Therefore the locations range from the author's home during pre-production, the flight to Alaska, and the actual time spent with the local Inupiat Eskimo community in their homeland. *The Whale Hunt* portrays an observational approach to documentary that utilises aspects of traditional photo essay/reportage to experiment with storytelling. The piece is partly defined by the ethnographic

approach of the author with specific details being determined by the setting and culture of the subjects.

ETHOS: Due to the observational mode, the user is presented with content that, whilst not free from authorial bias, encourages the user to develop an individual, personal response. Users are unable to alter the photographic content but they are free to shape their own opinion on events and derive their own meaning from the work. Through the moment to moment presentation of a naturally dramatic and visually rich event, the user is presented with an experience – the parameters of which are defined by simple interfaces which alter the structure of content based on theme, location, people etc. The emotional response of the artist is partly conveyed by the heart rate interface, providing a simple ethical and moral calibration for which users can then measure themselves against.

Hunicke et al MDA Framework

MECHANICS: Viewing, Selecting, Browsing, and Navigating.

DYNAMICS: Contemplation, interrogation, awareness raising, emotive responses defined by the user's point of view or personal sensibilities (shock, respect etc.)

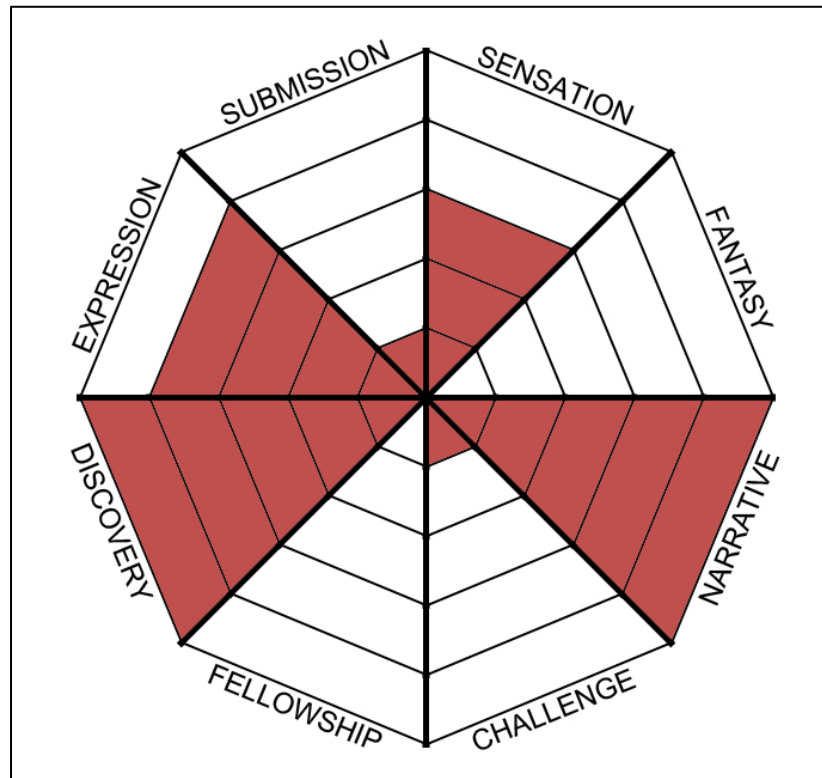


Figure 5.78 The Whale Hunt – visualisation of the results of the Hunicke et al Framework.

AESTHETICS: *The Whale Hunt* is an experiment in human story-telling there *narrative* plays a significant role. The piece exists as a photo-essay of a period in time spent observing a specific culture and has a clear beginning, middle and end along with dramatic peaks and troughs. The images are also arranged in groups to represent alternative perspectives or to allow the user to focus their attention on a particular strand of the author’s experience. This process of inquiry and the general interface for user navigation encourages the aesthetic of *discovery*. Parallels can be drawn with ethnographic documentary, as the mode or representation presents the user with a thought-provoking anthropological study of a potentially explosive subject matter. With regard to *expression*, *The Whale Hunt* encourages user self-reflection in response to the content. Each image provokes a varying degree of emotional

response, encouraging user contemplation within the thinking spaces throughout the archive. Moderate evidence of *sensation* exists through the visual art of photography. Whilst many of the images are free from photo-manipulation or staging, the overall piece has been edited and authored in consideration of how these images are encountered and explored. As a website, users are free to return to explore the content; therefore a limited level of *submission* is apparent in that the user is not required to invest a significant proportion of their time. There are no aspects of *fellowship* or *fantasy*, as the user doesn't have to role-play, alter their perception or communicate with other users to engage with documentary.

Chapter 6 – Further Analysis and Findings of Case Studies

6.1 Introduction

This chapter presents a discussion of the data gathered through consideration, under the various frameworks, of the sixteen separate case studies in chapter 5.

In order to make sense of this portfolio of documentary exemplars, dendrograms have been constructed to provide a visual focus for the discussion. Dendrograms here are used in a semi-formal way to visually indicate possible clusterings within the underlying data. The diagrams give an indication of similarity between different exemplars and hierarchically group them.

In viewing the diagrams, branch points nearer to the left suggest a close relationship between exemplars, and branch points that occur nearer to the right are indicative of being limited in terms of sharing similarities.

In the next sections, dendrograms illustrate the findings according to each of the Renov, Nicols and Hunicke frameworks. The findings through the framework of Klastrop and Tosca are discussed through narrative, since that framework does not provide measures on which dendrograms can be meaningfully created.

This chapter closes with a holistic examination of the case studies and is supported with a final implementation of the cluster analysis that combines the three frameworks to form a fourth dendrogram that provides an overall visual impression of the classification of the chosen interactive productions.

6.2 Framework A: Renov's Four Documentary Modes

The dendrogram for Renov's Four Documentary Modes (Figure 6.1) presents three main groupings when assessed broadly. *The Making of Modern Dundee*, *Timeline World War 2*, *Realtime WWII*, *Brothers in Arms: The Road to Hill 30*, *Whalehunters*, *Rome: Total War*, *Stowaway*, *Kuma\War* and *JFK: Reloaded* form the first grouping; this grouping can be argued to have a focus on user interaction for the purposes of entertainment. The second general grouping consists of *MetaMaus*, *The Whale Hunt*, *The Cat and the Coup*, *Bear 71*, *Clouds Over Cuba* and *Darfur is Dying*; with these examples the documentary form takes precedence, with interaction being a secondary, but necessary aspect of the production. *Scotland's History* appears as an outlier due to its separation from the documentary content which is delivered by the television series and a level of interaction (albeit multi-user) which is relatively limited and basic. However, more significant information can be ascertained by observing the diagram more closely, whereby four groupings are able to be identified.

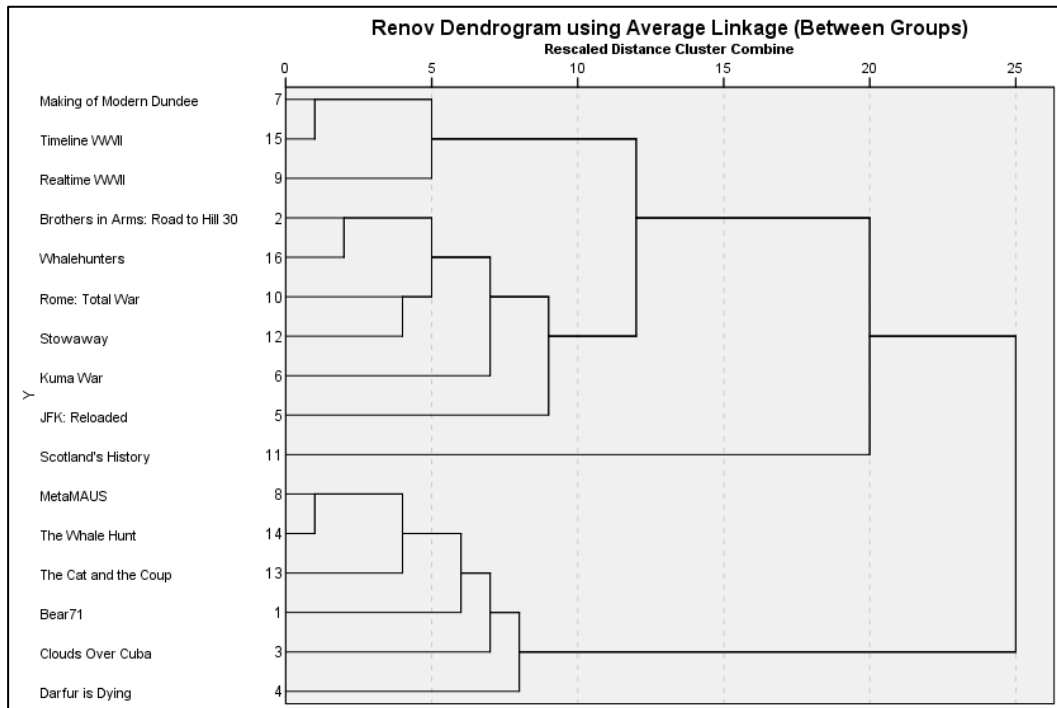


Figure 6.1 Dendrogram of Renov's Four Documentary Modes.

Group A

(The Making of Modern Dundee, Timeline World War 2, Realtime WWII)

The main characteristics shared by the productions in this grouping are that they all present strong evidence of the mode *to record, reveal or preserve* and little evidence of the mode *to analyse or interrogate*. This can be explained further by the fact that all three titles are applications that present an almost encyclopaedic style of delivery, avoiding overly expressive communication or complex interaction.

Group B

(Brothers in Arms: The Road to Hill 30, Whalehunters, Rome: Total War, Stowaway, Kuma\War and JFK: Reloaded)

The titles in this grouping mostly share a similar characteristic of presenting moderate evidence across all four of Renov's modes. There appears to be no clear

dominant mode, however when compared with the titles in Group A, there appears to be a more noticeable presence of the mode *to express*. This can be explained by the fact that all six of these productions are either defined as being videogames, or have the provenance of videogame technology as a core part of their development.

Group C (Scotland's History)

After closer analysis, we again observe *Scotland's History* as an outlier. This production is unique as it demonstrates significant evidence of the mode to analyse or interrogate, but limited evidence of the remaining three modes. The open nature of the website (in terms of allowing communication and content from multiple users) and the distinct lack of a consistent voice or author perhaps undermine the documentary intentions of the production.

Group D (MetaMaus, The Whale Hunt, The Cat and the Coup, Bear 71, Clouds Over Cuba and Darfur is Dying)

This final grouping consists of titles that demonstrate significant evidence across all four documentary modes. Mostly utilising the internet as their mode of delivery, each of the productions in this category communicates challenging factual material appropriately and sensitively. With the exception of *MetaMaus* and *Darfur is Dying*, the remaining titles are self-defined as being interactive documentaries. Authorial intention and persuasive communication is a core aspect of these productions and

there is clear evidence of the creator undertaking a process akin to traditional documentary practice.

6.3 Framework B: Nichols Six Modes of Documentary Representation

The dendrogram generated from the data for Nichols Six Modes of Documentary Representation can be viewed in Figure 6.2 and suggests that there are five main groupings. Surprisingly, the groupings do not appear to be as divisible in terms of genre or platform when compared to the Renov groupings that emerged in Framework A. These groupings appear to demonstrate where productions share similarities in either the level of, or quality of the author's manipulation of the primary material.

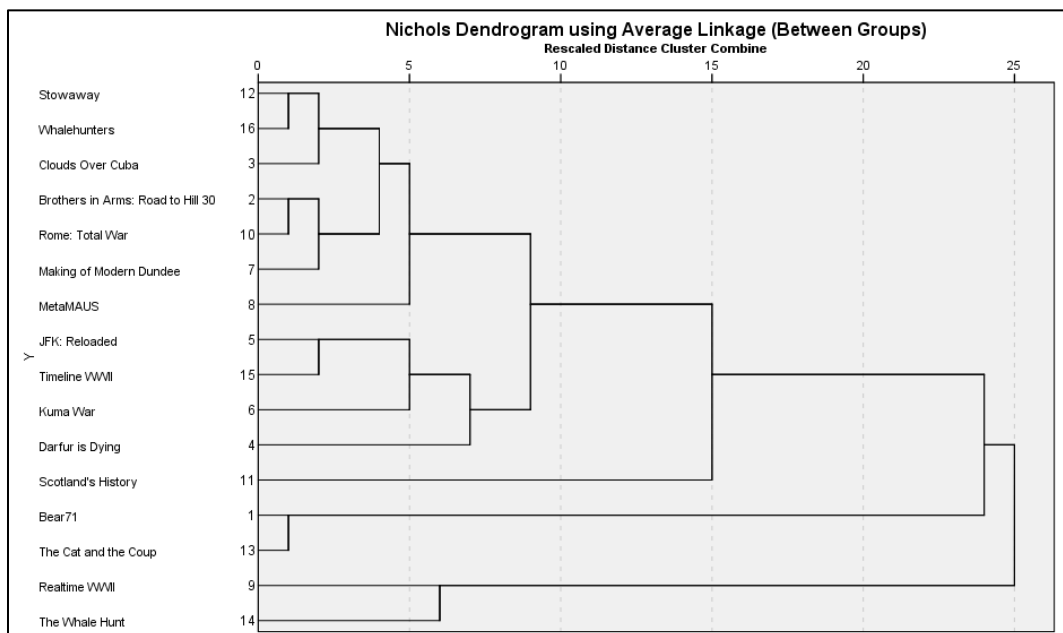


Figure 6.2 Dendrogram of Nichols Six Modes of Documentary Representation.

Group A

(Stowaway, Whalehunters, Clouds Over Cuba, Brothers in Arms: The Road to Hill 30, Rome: Total War, The Making of Modern Dundee and MetaMaus)

The main characteristics shared by the productions in this grouping are that they are all classified as having their primary mode of representation as *participatory* and their secondary mode as *expository*. This grouping demonstrates a significant use of archive which dominates the presentation of content or the mode of interaction.

Group B

(JFK: Reloaded, Timeline World War 2, Kuma\War and Darfur is Dying)

Inversely to group A, the main characteristics shared by the productions in this grouping are that they are all classified as having their primary mode of representation as *expository* and their secondary mode as *participatory*. A key aspect of these productions is that they address specific moments in history, with the presentation of this history in a direct and focussed manner. Although not exclusive to this group, the content of these four productions can be viewed as presenting a challenge to existing perceptions of the history, through a 'questioning' mode of interaction that directly addresses the audience.

Group C

(Scotland's History)

As a lone grouping, *Scotland's History* is unique as it is the only case study to be evaluated as having *participatory* and *reflexive* as its primary and secondary modes of documentary representation. Although the intentions of the developers may have

been to provide a social platform for the emergence of historical truths, what has emerged (due to the open nature of the website and the reliance on user contributions) could be argued to be a naïve, collective discussion of history. The reflexive nature of *Scotland's History* demands that the audience challenges aspects of the television programme; as these two productions are kept relatively separate, the actual issue or subject of discussion soon becomes lost.

Group D

(Bear 71, The Cat and the Coup)

The subjects in this grouping share the similarity of utilising *poetic* and *expository* as their primary and secondary modes of documentary representation. Although dealing with real-world issues, both titles utilise an artistic form of presentation in terms of the visuals, structure of the content and the actual method of interaction. This grouping can be further distinguished from the others by the use of allegory – the focus on a seemingly random bear or the ability to play as a cat, leads to the communication of themes and ideas of great significance.

Group E

(Realtime WWII, The Whale Hunt)

This final grouping is distinguished by productions that feature *observational* as their primary mode of documentary representation. The individuals behind *The Whale Hunt* and *Realtime WWII* have both expressed an intention to portray a historical event in an accessible form, free from bias and over-manipulation. This desire towards journalistic integrity is a defining characteristic that separates this grouping,

whilst other productions may have had similar intentions; it is the final implementation that presents itself for evaluation.

6.4 Framework C: Klastруп and Tosca's Core Elements of a Transmedial World

The data generated through the application of Klastруп and Tosca's framework covers a broad range of specific information regarding each of the sixteen productions. The relationship between mythos, topos and ethos for each separate production has been discussed within each individual case study. It is important to undertake further discussion with regard to some of the patterns or issues that have emerged through this initial analysis, to be able to form an understanding of the relationship with the other three frameworks.

Although perhaps an oversimplification of Klastруп and Tosca's definitions, their categories can be viewed as -

'Ur-Actualization' as Primary Source

'Mythos' as What?,

'Topos' as How, When, and Where?

'Ethos' as Why?

Where productions share a similar primary source or treatment of the factual materials, can we identify interesting emergent patterns or behaviours based on the presentation, implementation or manipulation of the material the documentary is founded upon?

A key aspect of Klastrop and Tosca's research, concerned whether the mythos of a storyworld was undermined by aspects of the topos or ethos. This can be addressed towards the central theme, knowledge or source at the core of a documentary, to ascertain which aspects undermine effective communication with the audience and lead to questions regarding the integrity and intentions of the documentary.

Scotland's History allows the audience to question the original documentary broadcast, yet this subverts the central theme and intentions of the documentary which aimed to present a definitive history of Scotland through high-quality, accurate content approved by experts. The user contributions remain in relative isolation from the documentary broadcast and there is no system to dynamically change its presented version of history, even if it is proven to be erroneous. This is compounded further by the message board's minimalist approach to moderation and the fact that there is not an intention or process for repackaging user contributions into a meaningful discourse that supports the core intention of the production.

JFK: Reloaded also features affordances that undermine the intentionality of the production. The honourable aim of exploring conspiracy theories through the production of an interactive reconstruction of the President Kennedy assassination is immediately subverted through the ability to go on a trigger-happy rampage in an alleged historical simulation. This perhaps unintended focus on repetitive, violent gameplay also forms the core structure of *Brothers in Arms: Road to Hill 30*, which despite being based on a specific campaign during WWII, utilises unrealistic amounts of killing to lengthen the duration, increase the level of challenge and to entertain

the player. This arguably places the players focus on lining up headshots and advancing through the game world, than on noticing the historical aspects of the game that are the result of meticulous research. Continuing with productions focussed on armed combat, *Kuma\War* demonstrates a shallow level of research to rapidly inform the development and release to the public, of gameplay based on contemporary conflicts. Whilst delivering on its intention to allow gamers to play combat scenarios that are based on current news events, to be able to turn this around in a short period of time and with a limited budget, leads to a relatively low-quality and questionable documentary experience.

Not all of the productions demonstrate such awkward implementation of intentions and user affordances. The team behind *Bear 71* have maintained the integrity of the narrative through limiting the degree of agency the user has over aspects of the production. This does not mean that the user is denied any form of pleasurable or meaningful interaction, instead the piece is thoughtfully structured to allow the user to freely discover a variety of events and content as a result of interaction which is embedded in the style, tone and context of the documentary. The main plot points, which follow a form of three-act structure, are locked down by the director thus ensuring authorial control of the overall intentions and emotional impact of the documentary.

The emergent aspects of *Rome: Total War* present a potential challenge to the authored narrative structure found in examples such as *Bear 71*. Although *Rome: Total War* struggles in terms of communicating themes or meaningful, emotional content, its systematic approach to enable emergent scenarios, outcomes and

dramatic moments is worth future consideration. If production was to utilise the approach of assigning values and behaviours to individual elements such as events, locations, objects then the potential exists to develop a documentary system that can present dynamic, yet meaningful narratives, that unfold in real-time. The relationship between the mythos, topos and ethos would also need to be carefully implemented in the structure of such a system.

With regard to the interactive forms that rely heavily on existing documentation, such as *Timeline World War 2*, *MetaMaus* and *Realtime WWII*, the discourse is often partly defined by the form of the archive itself. The tone and presentation of *Timeline World War 2* is very much informed by the style of the period, with newsreels, telegrams and maps featuring prominently as both content and as a visual style. The authorial voice of the newsreel also lends itself in places to the voice of the interactive application, providing the user with a sense of the content's importance, but lacking the emotional significance that a more personal narrative may convey. This is a mode of expression that is perhaps addressed more prominently in *Realtime WWII*, with its occasional excerpts of personal experience, and to great success in *MetaMaus* which is an archive of a range of emotions, trauma and events experienced either directly or indirectly by the author.

6.5 Framework D: Hunicke et al's MDA: A Formal Approach to Game Design

The dendrogram for Hunicke et al's MDA Framework (Figure 6.3) is based upon the data established by the evaluation of the aesthetic modes of each of the sixteen interactive documentaries. As the aesthetic modes defined by this framework are

directly associated with their proceeding mechanics and dynamics, it is expected that the results of this framework will lean towards groupings based upon the method, context and outcome of user interaction. The analysis of the dendrogram presents four main groupings.

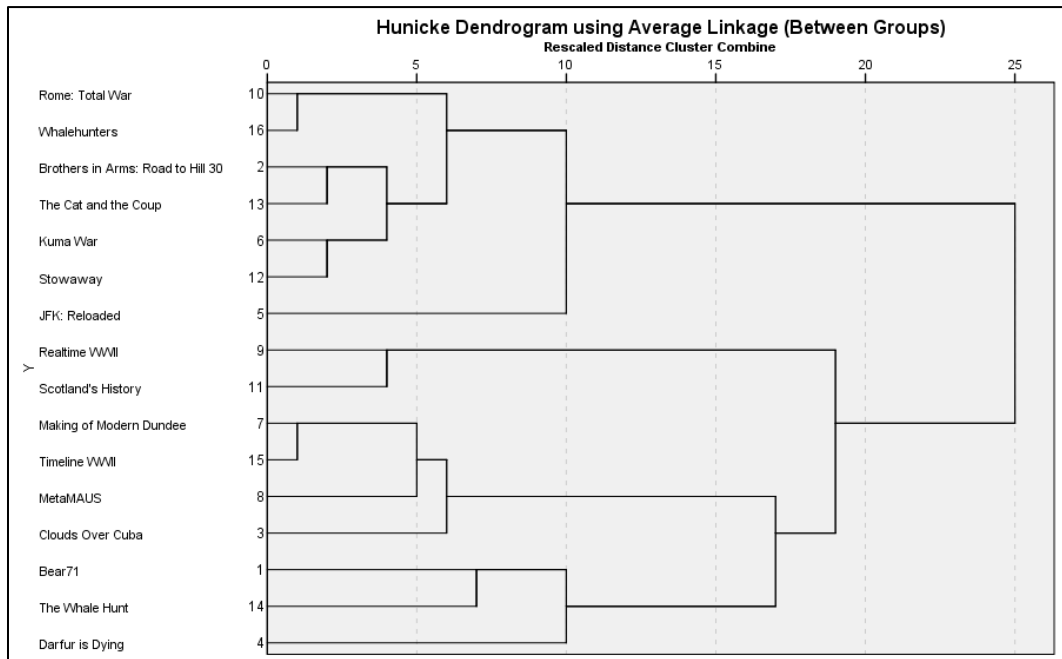


Figure 6.3 Dendrogram of Hunicke et al's MDA: A Formal Approach to Game Design.

Group A

(Rome: Total War, Whalehunters, Brothers in Arms: Road to Hill 30, The Cat and the Coup, Kuma\War, Stowaway, JFK: Reloaded)

This is the largest group, presenting seven productions that demonstrate significant or major evidence of the aesthetic of *challenge*. The titles within this group are all able to be viewed as being videogames, therefore it is easily justified that challenge (a defining construct of the videogame) features so prominently. *Rome: Total War* and *Whalehunters* are both examples of real-time strategy (RTS) games; therefore

their close grouping is due to being almost identical in terms of their mechanics, dynamics and aesthetics. An additional close pairing is *Brothers in Arms: Road to Hill 30* and *The Cat and the Coup*, who share similar levels of *challenge*, *sensation* and *narrative*. This is an interesting result as the two productions are very different in scope and intended audience – the former is a big-budget videogame with the latter being a short, documentary game created by two academics on a relatively shoe-string budget.

Group B

(Realtime WWII, Scotland's History)

The two titles that form this grouping both demonstrate an almost non-existent degree of *challenge* and instead are prominent in the modes of *fellowship* and *discovery*. The defining characteristic across these two productions is the use of community and social media – with content existing as short pieces of text either generated by the community or the owner. The use of historical evidence, presented as text or photography straight from books, archives and records appears to have negated any degree of *sensation* or *fantasy*.

Group C

(The Making of Modern Dundee, Timeline World War 2, MetaMaus, Clouds Over Cuba)

The titles within this grouping can be characterised as consisting of a triumvirate of the aesthetics of *discovery*, *narrative* and *submission*. These three modes essentially describe the user experience whereby users leisurely explore a narrative in a

process similar to reading for research. Historical data or factual information are presented relatively free from manipulation and artistic flourish, and therefore require the user to be active and interested. There are no moments of ceremony or expressive feedback as commonly used in videogames as a reward for player interaction. This may lead to the content being viewed as being dry and this is further influenced by low to non-existent levels of *sensation* and *fantasy*.

Group D

(Bear 71, The Whale Hunt, Darfur is Dying)

This final grouping is characterised by the dominance of four aesthetic modes – *discovery*, *narrative*, *expression* and *sensation*. The core mode that defines this grouping against the others is the significant presence of *expression* or game as self-discovery. All three of the productions address the user's conscious and interaction with the systems and content of each title leads to a pronounced period of self-reflection and contemplation. Emotional impact is a key driver selected by the creators of these interactive works and the content and structure has been shaped to deliver this. With the exception of *Darfur is Dying*, this is further supported by very low levels of user *challenge*, to negate failure and frustration, which would undermine the impact of the final piece. Interestingly, the challenge presented by *Darfur is Dying*, aligns with the core message of the game as it expresses the futility of the refugees situation.

6.6 Combined Analysis of Frameworks

The dendrogram presented in Figure 6.4 communicates a combined analysis of the data from all three frameworks (Renov, Nichols, Hunicke et al). The groupings that have been identified are easily reconciled with the characteristics of broader interactive media forms, but these groupings are suggestive of competing or conflicting elements and this presents an interesting opportunity for further discussion. Each grouping can be classified as featuring productions that share a closely linked approach to the intentions of the creator and their treatment of the primary factual material.

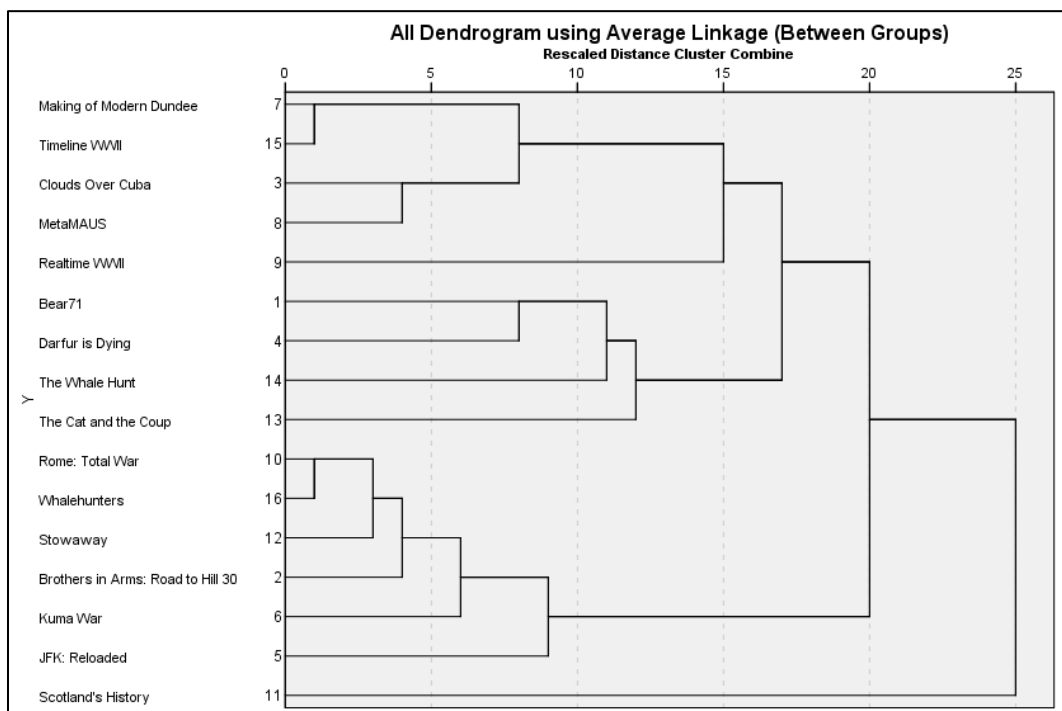


Figure 6.4 Dendrogram of the Combined Data from Renov, Nichols and Hunicke et al.

Group A

(The Making of Modern Dundee, Timeline WII, Clouds Over Cuba, MetaMaus, Realtime WWII)

The five titles in this grouping are all linked by their use of historical material towards an educational user experience. Indeed, this group could be described as being analogous to the traditional form of historical documentary whereby the documentary aims to exist as or present historical record. The authorial intention appears to focus on informing an audience and this is achieved through an encyclopaedic mode of presentation featuring a vast array of textual and audio-visual content. Each production appears to have chosen a particular platform (Tablet Computer, Interactive DVD, Twitter) and has designed an interactive experience with the strengths and limitations of this platform in mind.

Group B

(Bear 71, Darfur is Dying, The Whale Hunt, The Cat and the Coup)

The four titles in this grouping can be characterised as possessing persuasive and expressive intentions that present the user with an emotionally or intellectually challenging experience. This group could be defined as being the equivalent to traditional film or television documentaries that actively explore controversial or challenging issues whereby the documentary primarily exists as social commentary. All four of these titles appear to have been carefully designed and evaluated to ensure that each element supports the core communication aim of the production. Opportunities for the user to contemplate and generate meaning are embedded throughout the mechanics and interactive structures of each title.

Group C

(Rome: Total War, Whalehunters, Stowaway, Brothers in Arms: Road to Hill 30, Kuma\War, JFK:Reloaded)

The six productions in this group are characterised as being entertainment focussed, goal-orientated, interactive simulations that utilise videogame constructs at their core. This group can be viewed, perhaps unfairly, as having parallels with low-brow television documentary whereby the documentary exists as entertainment. Despite the meticulous research undertaken by a production like JFK: Reloaded; the inclusion of a simple game mechanic such as unlimited ammunition, completely undermines the intentionality and tone of the interactive documentary. This can be compared to television productions that utilise constructed scenes of conflict to pull in an audience and consequently undermines the integrity of the director.

Group D

(Scotland's History)

The collective analysis again places *Scotland's History* as an outlier due to its lack of similarity to the other interactive productions. As previously discussed, the debate that took place on the *Scotland's History* website is of limited value due to factors ranging from unstructured presentation of content with no clear goal, a lack of consistent moderation, and the relative separation, both temporally and spatially, of the documentary from the interaction. This does not preclude the development and reception of a successful expansive interactive documentary form in the future, but it is necessary to consider the conception of a practical framework to encourage this emergence.

6.7 Conclusions

When we compare the formation of the groupings across all three frameworks, the Hunicke et al and Renov analysis generate quite similar results with any deviation in grouping being the consequence of a slight structural difference rather than radical dissimilarity. The Nichols framework challenged the preconceptions of the researcher through the unexpected grouping of productions that appear to be comparatively diverse but are united by their inherent use of a particular mode of documentary representation. For example, *Kuma\War* and *Darfur is Dying* appear to be vastly different in their intention, approach and level of sensitivity, yet they share a common component in the expository and participatory modes. Whilst Nichols categorisation does not express the range of possible executions that a production aligned with a particular mode of representation could take, it does provide the starting point for a development process. A production such as *Kuma\War* presents an unclear message to its audience – it claims to be a meticulously researched, interactive experience of modern conflict, yet ultimately becomes a sub-par, shooter videogame that glorifies combat, often distastefully close to the real-world news events that end up becoming part of the game. Conversely, *Darfur is Dying* delivers on the commendable intentions of its creators – as a game for change it is intended to draw a specific audience in through strong visual and game design. However it is due to appropriate and considered embedding of documentary content, that the production achieves significant emotional impact, to drive the player towards some form of social activism. It can be argued that for the goal-orientated videogame form to become as persuasive and intellectually challenging

as it is challenging in terms of mental and physical dexterity, there needs to be a development process that facilitates the emergence of these qualities. As the previous analysis has shown, there is the tendency for a dominant characteristic to emerge and define an interactive documentary as a result of the focus for the development process. Through focusing on providing a player with an experience shaped by objectives placed along an ever-increasing difficulty curve, arguably conditions players towards the notion that this form of interactive documentary exists to be defeated. Challenge can be an effective aspect of a documentary experience, providing it is thoughtfully implemented and embedded with meaning. This can be supported by a title such as *Brothers in Arms: Road to Hill 30*; in which the game design punishes the player until they learn to follow WWII infantry tactics and procedures, leading to a relatively authentic and educational experience.

When a developer chooses to focus on delivering an expressive, poetic experience, the factual material runs the risk of becoming too abstract or obscured by the style and tone of the presentation. Interestingly, titles such as *Bear 71*, *The Cat and the Coup*, or *The Whale Hunt* appear to have relied on standard filmic documentary practice, utilising textual or spoken narration to provide additional context to the audience to minimise unnecessary confusion or undesired ambiguity. The abstract presentation that is used to form the interactive map in *Bear 71* is more than a visualisation of the location that the documentary takes place within. Again, the importance of embedding meaning within content comes to the fore – for example, the map uses shapes and symbols to present a simplification of the National Park’s complex ecosystem, however this also serves the purpose of portraying the bear as

an object to be tracked, making the user complicit in the story world. *Bear 71* demonstrates a directorial understanding of the importance of the relationship between content, context and user control. As a poetic form, it achieves its communication aim through the directors considered use of mechanics, dynamics and aesthetics that underpin the intentions and narrative of the documentary. This high level of authorial manipulation can be viewed as a positive (providing the intentions of the director are valid) and can lead to impactful communication.

Interactive documentaries that concentrate on historical record have been identified as having a tendency to present the material in a format that appears to avoid manipulation or bias. The risk that arises from this is that in the process of trying to ensure objectivity, the resulting structure and volume of content can overwhelm the user. Taking the case study examples into account, several of the productions have been developed in conjunction with a museum or national archive, and this could suggest that the practice of the museum permeates into the interactive documentary itself. The tone of *Timeline World War 2*, *The Making of Modern Dundee* and *Clouds Over Cuba* is defined by the content and presentation of their corresponding historical archive and the platform or technology selected to disseminate this content. Although these forms tend to have little to no evidence of sensation or fantasy, *Clouds Over Cuba* stands out as it builds upon the archive towards presenting a conclusion that proposes an alternative history to the crisis. This simple addition contextualises the virtual archive and enlightens the user of the significance of seemingly minor events.

To establish a methodological framework for the analysis and development of an interactive documentary, it is important to therefore consider the relationship between the purpose of the documentary, the choice and structure of the content, the style and presentation, and the form that the interactive system takes.

Chapter 7. Establishing a Methodological Framework

7.1 Integrating the four frameworks

The methodology employed within this work reflects what has been understood of the existing literature by bringing together four separate evaluative frameworks into one coherent critical methodology.

Modality of documentary: this is based on Renov's work and essentially seeks to evaluate the intentionality of the documentary – intentionality of message and purpose.

Tonality of documentary: this is based on Nichol's work and characterises the tone and style of the approach that the documentary takes to realise its intention.

Embedding of discourse: this is based on the work of Klastrup and Tosca and defines the cultural and historical context, setting up the lexicon and language of the documentary and the ethos or value system by which the documentary's intent is proposed to be judged.

Documentary Interaction: this is based on the work of Hunicke et al, and captures the ways in which the interactive documentary is actually constructed and its power to engage with the audience in relation to the intentionality through mechanics, dynamics and aesthetics (MDA). It concerns itself with creating affordances that allow audience to resonate with the intent of the documentary.

Indeed, the role of the audience, user or player should be an important consideration within the design of the framework. All documentaries (and therefore interactive documentaries) exist within a sphere of awareness. The primary material, or subject, be it a historical incident, a current event, a biography etc. can exist in a variety of contextual forms within an individual person. It can be known in detail/slightly/ or it cannot exist at all (complete ignorance and unawareness). It can resonate with an individual on a spiritual level or rely on empathy and memory to allow someone to relate to the notion of the primary material or subject. It can provoke someone into expressing an opinion or bias, without necessarily knowing the details. This all shapes the initial response and stance an individual would take when presented with an interactive documentary or even a basic textual premise for one. It is proposed that clarity of communication at this moment is key to the development and reception of the form. Systems or processes for ensuring that content is embedded appropriately throughout the interactive documentary and that the user is communicated to effectively with regard to the affordances and procedures for interacting with and experiencing this content are paramount.

7.2 The Modality, Tonality, Discourse and Interaction Framework

The diagram presented below in Figure 7.1 visualizes the proposed framework for interactive documentary in terms of the activities of creation and consumption, and the perspectives of both the director and the audience.

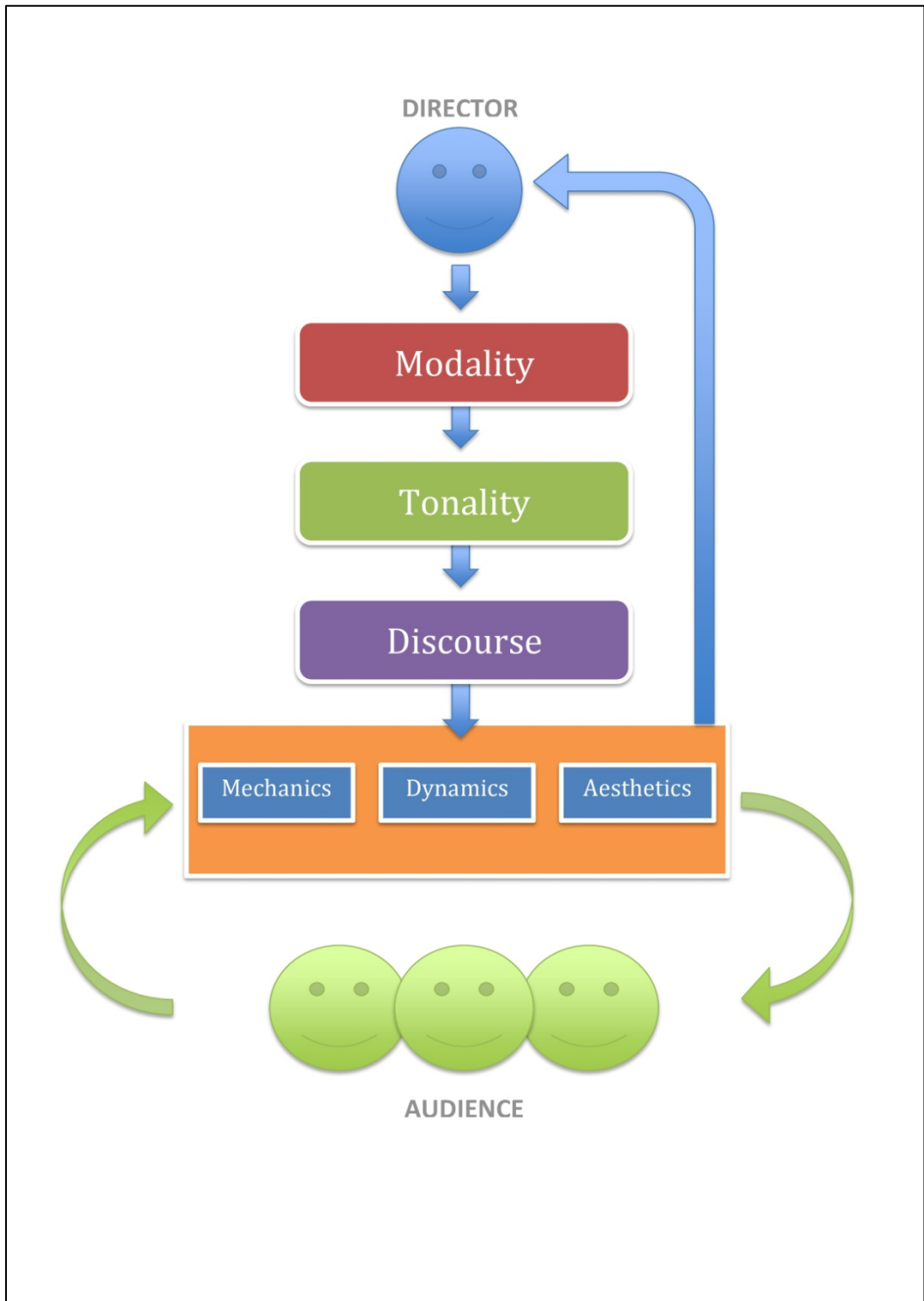


Figure 7.1 Proposed Framework for the Analysis and Development of Interactive Documentary.

The role and responsibilities of the director are presented as an iterative design process of content identification, acquisition, manipulation and embedding within a bespoke interactive system. As the vision holder of the interactive documentary, it is the director's responsibility to form an intention and then express this through the appropriate editing and construction of content. This content, established here as modality, tonality and discourse, must then be thoughtfully embedded in a well-designed interactive system that provides user agency and doesn't undermine any aspect of the directors core thesis or intention.

The audience experiences the interactive documentary as an artifact and through interaction with the system, the embedded discourse, style and tone, and the overall intentions of the director are revealed. The audience may have some pre-existing understanding or awareness of the central knowledge of the interactive documentary, but it is highly unlikely that they will have a deep insight into the production process or methods employed by the director. The audience builds meaning and depth of understanding through the feedback generated in response to interaction with the three constructs of the system – mechanics, dynamics and aesthetics. The mechanics are the affordances presented to the audience to enable them to navigate and interact with the content of the documentary. The dynamics are the emergent events and outcomes in response to the audience interacting with the mechanics of the system and are determined by the timing and context of the interaction. The aesthetics are the intended range of the audience's emotional responses to the content emerging from within the dynamics of the system.

Through the coherent integration of four evaluative frameworks into a critical methodology; it is proposed that the Modality, Tonality, Discourse and Interaction (MTDI) Framework adds to the power to evaluate – both in construction and in deconstruction - the efficacy of interactive documentary. The MTDI Framework provides a vocabulary that describes the relationships and processes that exist within interactive documentaries, and can be applied as an evaluative tool to analyse existing interactive productions. The framework can be appropriated as part of a creative process to facilitate the conception, design and development of an interactive documentary. This would allow directors to design a cohesive interactive delivery method for the communication of content that takes into account the behaviours and motivations afforded to their chosen audience.

Chapter 8. Conclusion and Future Work

The main contribution to knowledge presented by this thesis is a methodological framework for the critique and development of interactive documentary that has been established through a process of analysis and evaluation of a broad spectrum of factual interactive entertainment to identify the fundamental constructs and theory that underpins this hybrid media form. This hybridization, or indeed convergence has raised questions as to the legitimacy of interactive documentary in terms of authorship, accuracy and truth. However, documentary has always been exploitative and manipulative to a degree, and this has also shown to be evident in early photography and moving image; the newsreel, and contemporary 'factual' television. The concept of interactive documentary raises key issues regarding the role and integrity of the documentary filmmaker. However, the director of an interactive documentary can dictate the rules, procedures and mechanisms for interactivity and therefore has the potential to remain in control of the specific levels of possible alteration to both the message, and the method of its delivery. The notion of interactive documentary is one that is a logical extension of documentary as it currently stands. Certainly it should embrace the traditions and historical provenance of documentary filmmaking, but also provide the user with an engaging experience that aims to challenge, inform, reward and entertain. Previous attempts at producing interactive film content have resulted in negative reactions due principally to limited interaction and high audience expectation against limited technical capabilities and aspiration. This, however, should not preclude from

speculation about the forms future productions may take, and indeed, are already taking.

Previously, the documentary filmmaker has had complete editorial control over the message that is conveyed and the footage used to construct and emphasise an argument. If the documentary is interactive, the potential arises for both the core message and the material used to emphasise this message to change. However, this impacts on the role of the filmmaker and suggests the loss of auteur status through the relinquishment of total control over a production. In the case of interactive documentary where content is generated on the fly this is not such a contentious issue as new content would be subject to generative rules and grammar, which will all be defined and prescribed by the filmmaker. In the above instance, the documentary filmmaker has to define the universal rules by which the documentary world and associated characters unfold. Therefore the documentary filmmaker would become even more omnipotent as they control the universal parameters for the content and the procedures for the user's experience. The interactive documentary should not be viewed as a replacement for documentary but as a valid, additional creative form for allowing people to explore and contribute to a collective understanding of the world.

Conflict and problem-solving in response to a challenge or need can excel as a methodology for game concept development. New videogames frequently have to re-establish the procedures for experience as they cope with the latest hardware and new methods of interacting. Yet, it is hard to imagine a film studio having to reinvent the processes involved in watching cinema, alongside the production and

filming of their latest blockbuster. Videogames are an exciting and constantly evolving hybrid art form, therefore to try to contain them in a specific structure or definitive methodology at this stage in their development, only denies the potential of the medium. However, it has been identified that by utilising limitations and constraints as part of the conceptual and developmental process can lead to the emergence of new ways of looking at the interactive form. The conflict that arises from the unhappy marriage of competing design elements can be utilised as a methodology for inspiring creativity, innovation and commercial opportunity. Issues regarding gameplay and narrative will continue to be discussed, but the true future of the form lies with creators and visionaries, responding to this debate with practical experimentation that explore innovative systems of interaction, the formation of new business models and the emergent phenomena that occur within these virtual spaces. Interactive entertainment is potentially the most powerful communication medium of our time. With the existence of a global and continually growing audience in terms of demographics and volume, perhaps the only questions remaining are what messages, themes and stories will future audiences be told, and perhaps more importantly, will these audiences ever be empowered to truly tell their own? To achieve this, the importance of the role of expression must be considered – whether the method in which the author communicates to the audience, or the degree of freedom afforded to the user. To avoid controversy and negative user experiences, the creators of interactive documentary must understand how to communicate their intentions and to present complex issues in a meaningful way. Through over-reliance on inappropriate existing models and systems, developers and creators will continue to push emotional and thematic

complexity through a system that is not really designed or renowned for its ability to be able to handle this. The proposed Modality, Tonality, Discourse and Interaction framework aims to empower creators of interactive documentary to consider how their work is experienced, understood and consumed and will provide a structure where the audience can be presented with content that has been implemented with consideration of context to facilitate the audiences construction of meaning and their understanding of themes and messages. Whilst this thesis has presented an inclusive view on the categorisation and classification of interactive documentary, informed by the fundamental constructs of traditional documentary and interactive media, other classification methods can be viewed as imposing strict boundaries as to the content and structure of an interactive artefact.

The proposed Modality, Tonality, Discourse and Interaction (MTDI) Framework has been designed with two key affordances in mind. Firstly, it can be utilised as an analytical framework for the critical dissection of existing interactive documentaries to assist in understanding the constructs and relationships that are present within a production. Secondly, the MTDI Framework provides a basis for exploitation of a developmental tool to inform the practice of writing, design and creation of interactive documentaries. Currently, the framework lends itself more towards being a method for analytical de-construction of existing media, although there is the potential to develop the framework into a more practitioner-friendly production toolkit in the future. To achieve this it is intended to further explore and define the stages of the framework from the perspective of content creators and directors, placing these stages within the context of the processes of pre-production,

production and post-production. Whilst the framework appears to offer a relatively logical structure for identifying and understanding content, the toolkit would need to be supported with a range of materials to enable its users to understand the deeper context and meaning of each of the sections. To develop a functional and comprehensible toolkit it may be required to refine the MTDI Framework to be more clearly aligned with specific modes or sub-genres of interactive documentary. This process would require further analysis of these areas of interactive documentary with a focus on identifying and gathering qualitative information on the provenance of each form, through interviews with industrial practitioners to accurately ascertain the production process involved. The MTDI Framework would then be able to be presented as a toolkit that guides the user through the stages of their proposed production, challenges them to define and reflect upon their intentions as a director, and educates and informs them through specific exercises and supporting professional documentation and materials. The exposure of the MTDI framework through supportive toolkits will further legitimise the interactive documentary as a culturally accepted and acknowledged staple of interactive entertainment.

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