

AFFECTING MODALITIES: CONFIGURING MEANING IN CYBERSPACE

By
VALERIE C. TRIM

A thesis submitted to
The University of Birmingham
for the degree of
DOCTOR OF PHILOSOPHY

Department of English
College of Arts and Law
The University of Birmingham
February 2012

UNIVERSITY OF
BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

Abstract

The power of the Internet has produced a rich environment for the creation of new art forms. These artefacts, which can employ complex graphics, animation, music, written and spoken text and user-interactivity, are extremely fluid and variable. Encountering them requires a new and specifically multimedia literacy. This thesis examines in detail four online texts: *Faith*, *Hometown*, *The Shower*, and *Blue Han*, in order to investigate the possibility of such a literacy.

Both *Faith* and *Hometown* are subjected to an extended visual, aural, and textual analysis, using theoretical approaches drawn from art history, narratology, literary theory and music. *The Shower* is analysed by reference to film theory, musical semiotics, the concept of openness and user interface design. *Blue Han* is used to test claims that digital artworks can function as paintings.

This analytical work leads to an analysis and rethinking of some common assumptions made about the nature of interactivity, online collaboration and the mimetic possibilities of the digitalisation of texts.

The thesis concludes that analysis of multimedia texts is indeed possible, but that their diversity requires a range of analytical approaches working together to uncover meaning. Such a variable combination of methods of reading, it is suggested, would provide the beginning of a new form of literacy.

Acknowledgements

I would like to thank both my supervisors for their continued support throughout the writing of this thesis: Dr Carmen Rosa Caldas-Coulthard for her energetic encouragement and Tom Davis for his gentle, steady kindness and inspirational thinking.

I would like to thank Robert Kendall not only for giving his permission for the reproduction of the *Faith* screenshots but for his invaluable comments and support.

I thank Ian Harper, *Inanimate Alice's* Producer, who not only granted permission for the reproduction of the images from *Hometown* but also enthusiastically supported my work.

I thank Nicolas Clauss for being prepared to discuss his ideas and methods with me and for allowing access to his work. His colleague, Jean-Jacques Birgé was equally frank and helpful.

My thanks go too to Eileen Mogridge, Liz Hainey, Vicky Stock, Anna Houston and Adrian White. These good friends have helped me in a number of ways: by being prepared to spend time with me discussing at length difficult and complicated ideas, acting as proof readers or helping me to present my work effectively by solving formatting problems.

I am indebted to Paul Alexander, Deputy Head Teacher at Alcester Academy, who helped me to understand better some of the practical and theoretical aspects of computing and generously gave unstinting support to my work, as did his colleague James Merrett.

I especially thank my dear friend Lee Differ with whom I have shared many happy conversations about many diverse topics. It was during one such conversation that he introduced me to the musical and critical writings of Adorno which in turn inspired me to embark on postgraduate research work.

And lastly I thank Chris, my husband of many years, who just put up with it all without complaint. Almost!

Table of Contents

ABSTRACT	2	3.2.1. Capturing the text	51
ACKNOWLEDGEMENTS	3	3.2.2. Approaching the text	53
CHAPTER 1: GENERAL INTRODUCTION	5	3.3. Analysis of <i>The Shower</i>	55
1.1. The Development of the World-Wide Web: A Brief History	6	3.3.1. Situating <i>The Shower</i>	55
1.2. Summary of Thesis Chapters.....	8	3.3.2. The Power of Indeterminacy	56
CHAPTER 2: ANALYSIS OF FAITH AND INANIMATE ALICE	10	3.3.3. <i>The Shower</i> : The Constraint of Looking and the Spectator’s position	62
2.1. Methodology	10	3.3.4. Durnat’s Stanzas and Clauss’s Elements and Motifs: a brief visual analysis	65
2.2. Semiotic analysis of the poem Faith	17	3.3.5. The Disruption of Narrative	78
2.2.1. Background Information to the poem Faith	17	3.3.6. <i>Psycho</i> ’s music: Herrmann’s dialectic	83
2.2.2. Front piece visuals: Modality: Colour and Font	18	3.3.7. <i>The Shower</i> : Birgé’s Music.....	86
2.2.3. Compositional Aspects	18	3.3.8. <i>The Shower</i> : an attempt at openness	89
2.2.4. Compositional Layout	20	3.4. Conclusion: Blurring the Boundaries	91
2.2.5. Analysis of <i>Faith</i>	21	CHAPTER 4: BLUE HAN: THE ILLUSION OF PAINT	93
2.3. Semiotic analysis of the interactive episode <i>Inanimate Alice 4: Hometown</i>	27	4.1. <i>Blue Han</i> : Interactive painting?	93
2.3.1. Background information	27	4.1.1. The Materiality of Electronic texts	93
2.3.2. A Narratological analysis of <i>Hometown</i>	29	4.1.2. Situating <i>Blue Han</i> : a genealogy	94
2.3.3. Alice in danger: <i>The Dare</i>	32	4.1.3. <i>Blue Han</i> : a description	96
2.3.4. <i>My Project</i>	40	4.2. <i>Blue Han</i> : on interactivity and painting.....	98
2.4. Conclusion.....	45	4.2.1. The Conditioning of Reception	100
CHAPTER 3: ANALYSIS OF THE SHOWER BY NICOLAS CLAUSS	47	4.2.2. The Conditioning of Reception: guiding the beholder to see paint	103
3.1. Background Information to: a) <i>Psycho</i> , the Movie and b) <i>The Shower</i>	47	4.2.1. On codes and mobility	105
3.1.1. The Shower Scene	49	4.2.2. <i>Blue Han</i> : interrogative and propositional ‘painting’	109
3.1.2. Nicolas Clauss: <i>The Shower</i>	49	4.3. Conclusion: From Pixels to Paint.	112
3.2. Methodology	51	CHAPTER 5: CYBERNETIC ART, TELEMATICS AND THE CONSTRUCTION OF MEANING	114
		5.1. Ascott’s Behaviourist Vision	114

5.1.1.	Process and Change: Cybernetic Art	116
5.1.2.	Ascott's behaviourist tendency and retention of authorial control	119
5.2.	The Limits of Dispersed Authorship	121
5.2.1.	At the Boundary: Art and Games	124
5.3.	Some closing thoughts: On content, meaning and dialogue	126
CHAPTER 6: CONCLUSION.....		129
6.1.	Introduction	129
6.2.	Affecting Modalities: configuring meaning in cyberspace.....	129
6.2.1.	Affecting Modalities	129
6.2.2.	Cyberspace: virtual realities.....	130
6.3.	Summary of the Analytical Work: methods used and problems encountered	130
6.4.	Authorial control versus user interactivity	133
6.4.1.	Summary: authorial control versus interactivity.	135
6.5.	Painting as a form of aesthetic representation: illusion, projection and codes	135
6.5.1.	Painting: an expanded definition	135
6.5.2.	Paint to pixel: digital representations	136
6.5.3.	Painting versus digital representations: reception	136
6.5.4.	Painting: a question of vocabulary?	137
6.6.	Developing a Multimedia literacy	137
6.6.1.	Affecting Modalities: configuring meaning in cyberspace.....	137
APPENDIX 1: GLOSSARY		139
	Glossary:	139
APPENDIX 2: ENDORSEMENTS		141

List of Illustrations and Tables

Figure 1 Kress and van Leeuwen's semiotic 'toolbox'.....	11	Screenshot 8 Alice's act of graffiti.....	35
Figure 2 Interactive meanings in images: Composition.....	12	Screenshot 9 The stairs are about to collapse.	36
Figure 3 Interactive meanings in visual images.	14	Screenshot 10 Montage to suggest Alice's fall.	36
Figure 4 Representational Structures.	14	Screenshot 11 Ludic interlude. User is offered the appearance of choice.	37
Figure 5 Narrative Structures.....	16	Screenshot 12 Option 1.....	38
Figure 6 The colour range and font used in <i>Faith</i>	18	Screenshot 13 Option 2.....	38
Figure 7 <i>Faith</i> front piece.....	18	Screenshot 14 Option 3.....	38
Figure 8 <i>Gallican Psalter with Canticles, Litany, and Office of the Dead</i>	18	Screenshot 15 Option 4.....	38
Figure 9 Opening Webpage of <i>Faith</i>	20	Screenshot 16 Indicating the absence of participants.....	39
Figure 10 <i>Faith</i> : Stanza 1.....	23	Screenshot 17 Speech bubbles to indicate the position of <i>implied reactors</i>	39
Figure 11 <i>Faith</i> : showing the opening of the first stanza.	23	Screenshot 18 The 'curtains' move across to end this episode.....	40
Figure 13 <i>Faith</i> : Stanza 3.....	24	Screenshot 19 Closing frame of the first episode of <i>Hometown</i>	40
Figure 14 <i>Faith</i> : Stanza 4.....	25	Screenshot 20 Montage showing the satellite sequence on Alice's Igrat.	41
Figure 15 Screenshot showing the enlargement of the word 'leap'.	25	Screenshot 21 Alice begins to share her work with her friends.	42
Figure 16 Final stanza.....	26	Screenshot 22 Alice begins to demonstrate her computer skills.....	42
Figure 17 <i>Faith</i> : Final stanza after 'faith' has crumbled and the chance to replay the poem is presented. .26		Screenshot 23 Showing some of the Igrat's colour range.	42
Table 1 Mouse interaction.....	30	Screenshot 24 The start of Alice's IStory.	43
Table 2 Narrative analysis of <i>Hometown</i>	31	Screenshot 25 The conclusion.....	43
Screenshot 1 <i>Hometown</i> opening frame.....	32	Screenshot 26 The Igrat's touch screen, housed in its attractive casing.....	44
Screenshot 2 Establishing frame.....	32	Figure 18 The poster advertising Hitchcock's 1960 movie, <i>Psycho</i>	47
Screenshot 3 <i>The Dare</i> : the <i>raison d'être</i> for Alice's escapade.	33	Figure 19 Screenshot stills from Hitchcock's infamous shower scene from the movie <i>Psycho</i>	52
Screenshot 4 The stairs as <i>vector</i>	33	Figure 20 <i>Collage with Squares Arranged According to the Laws of Chance</i> (Arp, 1916-1917).	57
Screenshot 5 The forbidding stairs and the pointing hand.....	34	Example 1: A sample script and its embedded subroutine.....	59
Screenshot 6 The dense and forbidding shadows.....	34	Example 2: Extract from Clauss's programming.	59
Screenshot 7 A prescient moment.....	35	Example 3: Generating randomness.....	59
		Example 4: Generating randomness.....	59

Table 3 Visual elements of <i>The Shower</i>	67	Figure 36 Roy Ascott <i>Change Painting</i> (1959).....	114
STANZA 1 Induction: Marion prepares herself for showering.	68	Figure 37 <i>Plastic Transactions</i> (1971).	116
STANZA 2 Marion showering, relaxes.....	69	Figure 38 One image from <i>La Plissure du Texte</i> (1983).	117
STANZA 3 Prelude to the attack: her attacker enters the bathroom.	70	Figure 39 <i>Blue Lacuna</i> : an example of a hyperlinked text.	122
STANZA 4 (A) The struggle.	70	Figure 40 Freeman’s <i>Graph Theory</i> (2010).	123
STANZA 4 (B) The struggle.	72	Figure 41 <i>La Plissure du Texte</i> : Assignment of roles.	125
STANZA 5 (A) Marion dies alone	73		
STANZA 5 (B) Marion dies alone	74		
STANZA 5 (C) Marion dies alone.	75		
STANZA 6 Marion lies dead.....	75		
Other Imagery 1.....	76		
Other Imagery 2.....	77		
Figure 21 The title piece (incorporating a preloading sequence) of <i>The Shower</i>	78		
Figure 22 <i>The Shower’s</i> opening sequence.....	79		
Figure 23 The amplified image of Marion.....	81		
Figure 24 The so-called Hitchcock chord and its variant.	84		
Figure 25 Herrmann’s original score for <i>The Murder</i>	84		
Figure 26 <i>Blue Han</i>	96		
Figure 27 Assorted screenshots from <i>Blue Han</i>	97		
Figure 28 <i>The Eavesdropper</i> (Maes, 1655).....	101		
Figure 29 Francis Bacon : <i>Three Studies of Lucian Freud</i> (1969).....	104		
Figure 30 <i>Blue Han</i> : A moving isolated figure.....	104		
Figure 32 <i>The Red Horseman</i> , by Carlo Carra (1913).....	107		
Figure 33 <i>Dynamism of A Dog on a Leash</i> (1912) Giacomo Balla.	107		
Figure 34 Stills from Fischinger’s <i>Motion Picture No.1</i>	108		
Figure 35 Magritte: <i>La trahison des images</i> (<i>The Treachery of Images</i>) (1928-1929).....	109		

Chapter 1: GENERAL INTRODUCTION

The aim of this thesis is to examine a variety of texts that created specifically for global distribution on the World Wide Web, using a system of interlinked hypertext documents accessed via the Internet. I focus on those texts which have high production values and involve the different modes of text, sound and imagery working together. I have observed the explosive development of new, imaginative strategies that experimental artists devise when working in the digital medium in order to create new types of multimedia artworks, my interest in these texts fuelled by my background experience as a trained artist, teacher of art, design and technology and keen amateur musician. Hence, I have chosen a selection of texts that make strong claims to be art or literature and which are advantaged and enhanced by the medium of their creation and distribution. I hope to demonstrate that these multimedia texts are susceptible to analysis in much the same way as conventional texts despite the mobility that working in the digital environment allows and encourages. The fact that there is often constant change in the body of the text and the opportunity for user interaction does, however, pose unique difficulties for the would-be examiner, not least in trying to capture representative samples, which are stable enough for analysis. In addition, the fusion of the different modalities affects not only the evolution of the text but the responses of the user, who is usually actively involved in the development of the text in some way. However, while significant claims are made that many texts created for Internet distribution are both interactive and collaborative, I suggest that this terminology is generally carelessly applied, implying a flawed understanding and application on the part of artists, writers and users.

Throughout this thesis, I have adopted a number of different approaches in order to deal with the complexities that my selection of works presents. These approaches range from a personal though straightforward, textual analysis using the work of a number of pre-eminent theorists, to the development of some new methods of analysis of my own that I regard as being suitable starting points in attempting to explicate these complicated texts. I consider (at some length) the potential of the digital text as a means of

delivering artistic representations; I conclude by beginning to question the ready assumptions we all have about the possibilities for artistic collaboration, interaction and dialogue via the Internet and the implications that such mediated negotiations have for the development and delivery of meaning between the artist and his/her spectator in the digital world of the computer.

Additionally, the ready interpersonal communication that the Internet facilitates has not only begun to encourage the construction and distribution of much more aesthetically appealing multimedia productions (sometimes as promotional and marketing tools for business, teaching and learning aids or new and innovative outlets for the creative artist) but has also changed the nature of the texts themselves. The ease with which animated imagery, sound effects and music can be combined, modified and manipulated is indicative of a shift of emphasis. In these creations, pictures, graphics and sound are increasingly prevalent and contribute to the overall meaning of the production, signalling a move away from the dominance of the conventionally written text. Therefore, despite the historically perceived notion of the literary text as being the pre-eminent form for the conveyance of information and meaning, there can be little doubt about the growing ascendancy of the visual. As Benjamin H. Harris, professor and librarian at Trinity University, San Antonio notes, 'In the streets, on screens, across our webs, the visual is primary. Icons erase words from desktops, textbooks for all ages have become drenched in images' (2006, p.213). Barthes's assertion then, that the visual has only a subsidiary role to play due to the inherently 'polysemic' nature of images as described in *Rhetoric of the Image* (1977, p.39), could be regarded as the prejudice one would expect from an academic whose structuralist background is essentially logocentric. In the light of the perceptible increase of the use of pictorial imagery in everyday communications, not unreasonably, Kress and van Leeuwen make a case for the necessity of developing 'visual literacy' since they believe 'that visual communication is coming to be less and less the domain of the specialists, and more and more crucial in the domain of public communication' (1996, p.3). I would go further. As the growing capacity of computers facilitates the easy use of multimedia software to enable text, music and imagery to interact, and users to develop increasing levels

of competency, then the acquisition of a literacy in order to make meaning of *all* of these diverse modalities *working together* is indicated.

The facility to construct and distribute online, interactive multimodal texts, with colourful graphics, diagrams, film, video, sounds, music and so on is attractive to any creative person and, for the artist/writer/poet/teacher, the Web offers a large potential field of recipients and 'interactees'. Regardless of how one uses the Web (for business, pleasure, education or aesthetic purposes) the opportunities for producing informative and arresting multimodal textual matter demand a new literacy, and by implication, new ways of deconstructing the meanings they contain. As each mode mediates the effect of the other and the screen constantly changes, flickering through transient instantiations of meaning, then deciphering and unravelling the message is complex. At the present time, suitable analytical techniques for use on these kinds of multimodal texts are in their infancy. Katharine Hayles calls for 'a wide ranging exploration of what electronic literature is' and 'what signifying strategies characterize it' in her recent book (2008, p.4). Kress, van Leeuwen and Jewitt advocate social semiotic analyses as the way forward, and I see no reason why such an approach should be limited only to static imagery. However, such is the richness and variety of multimodal text that to extract maximum meaning from the signifying features embodied in requires the broadest analytical approach possible. Since such 'texts' frequently represent the investment of substantial amounts of time and effort in their production and are available to the millions that have the technology to access them, then it is reasonable to suppose that they are representationally significant, invested with meaning and, therefore, worthy of analysis. It is the purpose of this thesis to examine how meaning is constructed in an online situation where author/user interaction is mediated via the computer screen in multimodal texts exhibiting high aesthetic values. To this end I have identified several works that offer me the opportunity to determine how meaning can be configured in cyberspace and these are:

- http://collection.eliterature.org/1/works/kendall_faith.html: *Faith*
- <http://www.inanimatealice.com/> *Episode 4: Hometown*
- <http://www.flyingpuppet.com/shock/shower.htm>: *The Shower*
- <http://www.flyingpuppet.com/shock/bluehan.htm>: *Blue Han*

In selecting these case studies, I have tried to ensure that they are representative, in a variety of ways, of many of the strengths that modern computing can provide, for example, in terms of their aesthetic appeal or innate dynamism. The multimedia that are an intrinsic aspect of these examples is not invariably the same. All of them are experimental and, I believe, illustrate the potential of the multimodal approach.

1.1. The Development of the World-Wide Web: A Brief History

No one can doubt that the introduction of the computer, as a consequence of the development of the electronic age, has far-reaching implications in practically every aspect of how we conduct our daily lives. That technology, in its broadest capacity, has succeeded in acquitting itself of one of its primary tasks of subduing and controlling the natural world, at least at the local and domestic level, is obvious to any Westerner who flicks a switch to turn on the light or sets the central heating to function automatically in a cold snap. In the office and workplace too, the capacity of the computer, as a means of exercising control over systems of production, for developing business opportunities and enabling the storage and retrieval of vast amounts of information, is unsurpassed. As a developmental tool for the designer, engineer, musician, artist, architect, writer and so on, modern computing has not only speeded up creative activity but encouraged new ways of problem solving and thinking through the use of imaginatively constructed software programmes. It seems incredible that in such a short period, powerful computing capacity, once restricted to the domain of large corporations or military or governmental installations, has been devolved to the level of the general public and the individual in the West and, increasingly, globally. In the UK alone, at least seventy per cent of the population use a home computer and most PC (personal computer) owners access the Internet using broadband (Office For National Statistics, 2008). In its capacity to share and exchange information, the computer is, as Gerd Gigerenzer of the Max Planck Institute in Berlin notes, 'the third information revolution' (2001, p.1) is only comparable to the invention of writing and the development of printing in its ability to effect change. Therefore, it becomes essential that computer users, functioning in any capacity, for work or pleasure, and using the computer as a means of communication, develop fluency in the construction and the interpretation of meaning in this rapidly developing medium.

From its inception, the Internet was conceived as a means of communication for the transfer of information as email or text messaging, and it is these inherent functions, married to powerful computing capacity and increasingly sophisticated software, that facilitates the interactive Web 2.0 in use today. The Internet is essentially a: 'global network connecting millions of computers' (Thurlow, 2004, p.28), the 'revolutionary change in technologies of communication' as Deibert notes in *Parchment, Printing and Hypermedia* (Deibert, 1997, p. 4). It originated as an unexpected by-product of the perceived military need¹ for up-to-the-minute information and innovation required by the US Department of Defense (DoD) during the Cold War of the Fifties and Sixties between the West and the Soviet Union. To enable easy and rapid communication between personnel involved in this vital DoD work taking place on the Massachusetts Institute of Technology campus, Robert Licklider and his team devised an online 'intranet'² community. Here, most of the key features we associate with personal computing, such as the mouse-controlled interface and computer graphics, were developed. These technologies and a limited networking facility³ enabled emailing, bulletin boards and virtual friendships, all aspects of online communication we know today (Deibert, 1997, p. 4).

It is worth noting that the Internet and World Wide Web, two terms frequently used interchangeably, describe two different phenomena. The recent, widespread availability of broadband connection to the Internet via the telephone system, added to the growing power of personal computing, has blurred the distinction between the two terms to such an extent that they tend to be used synonymously. To clarify: the

¹The US DoD set up ARPA (Advanced Research Projects Agency) in 1958 to counteract perceived Soviet Military supremacy following the launch of the Sputnik satellite. Now renamed DARPA ('D' for Defense) its mission, displayed on its website (<http://www.darpa.mil/mission.html>) has always remained constant: 'DARPA's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security. We also create technological surprise for our adversaries' (DARPA, 2009).

² The local 'intranet' system used at MIT can be regarded as a precursor to the global Internet operating today.

³ Although there are numerous accounts of the development of the Internet, the *Internet Society* website (www.Internetsociety.org) provides a comprehensive version, authored by many of the original researchers and protagonists in the field, of the early days of its development (Leiner, et al 2003) starting from Robert Licklider's original concept of an 'Inter galactic network'. See also Licklider's prescient articles *Man-Computer-Symbiosis* (1960) and *The Computer as a Communication Device* (1968).

Internet is a sophisticated network of linked computers while the World Wide Web (WWW or Web) is a means of formatting information and can be defined thus:

(the) web is a system of computer servers connected through the Internet, and which supports the exchange of files (or *webpages*) formatted mostly in a simple programming language known as HTML (HyperText Markup Language). With the help of browsers (e.g. Netscape Navigator and Internet Explorer), these files can be translated from dull programming language ('plain text') into colourful, formatted webpages ('rich text') and links can be followed between documents by directing the browser to 'addresses' (other files) on other computers elsewhere in the web (Thurlow, 2004, p.28).

Tim Berners-Lee, the originator of the WWW, in identifying its full potential at the Web's inception in 1991, had, of course, already foreseen such possibilities for the creation and distribution of colourful webpages, which he clearly announced in an email:

The WWW model gets over the frustrating incompatibilities of data format between suppliers and reader by allowing negotiation of format between a smart browser and a smart server. This should provide a basis for extension into multimedia, and allow those who share application standards to make full use of them across the web (Berners-Lee, 1991).

It is the almost complete convergence of these two differing technologies, the Internet and the World Wide Web that have united Licklider and Berners-Lee's aspirations for a fully functioning global interactive communication service. However, it is the facility of web 'browsers'⁴ to convert plain text documents into colourful and elaborate presentations which has engaged the interest of business and the general public in the Internet as a means of transferring information from one computer to another. The ease with which Web browsers like Internet Explorer can be accessed to achieve this transference, and the ubiquitous presence of a powerful PC in practically every workplace and domestic setting facilitates the interactive usage referred to by Berners-Lee. Web activity now dominates the Internet thus reinforcing the notion that the Web and the Internet are indeed synonymous. When writing about the subject, even some academics tend to subsume one term into the other by referring to the Internet and the WWW as a single, nebulous entity. Christian Fuchs (2008, p.138-139), when describing the characteristics of the Internet/WWW, sometimes fails to distinguish clearly between the two aspects, preferring to offer a taxonomy of Internet/WWW outcomes

⁴ A browser is an application program that provides a way to look at and interact with or 'navigate' through all the information on the World Wide Web. A Web browser is a client program that uses HTTP (Hypertext Transfer Protocol) to make requests of Web servers throughout the Internet on behalf of the browser user. A number of browsers are commonly used: Internet Explorer, Firefox, and Flock and, for Apple machines, Safari.

rather than a description of what each component is. However, he usefully includes these identifying features: interactivity, multimedia, globalised communication, many-to-many communications, cooperative production and hypertextuality. All of these features are the common currency of computer mediated communication which individuals use to make and share messages and meanings with others.

By 2008, the *Internet World Stats* website (<http://www.Internetworldstats.com/stats.htm>) estimated that nearly one and a half billion people had Internet access. The refinement of web technology, now known as Web 2.0⁵, improving computing capability, and expansion of broadband availability resulted in a greater take up by the general population leading to better user competence. This, in turn, promoted creative and imaginative activity and social interaction, where the end user had access to the 'responsive, real-time computers that contained vast libraries covering every subject imaginable' (Waldrop, 2008, p.79) envisioned by Licklider and Berners-Lee and most of the scientists who worked to develop the Internet. As all the necessities to make and transmit messages to one another were readily available, it was only a matter of time before the general public began to exploit the endless possibilities of the Web.

1.2. Summary of Thesis Chapters

Chapter 2 begins with an explication of the methodology I have applied to the analysis of both *Faith* by Robert Kendall and Kate Pullinger's *Inanimate Alice*. It draws heavily on the ideas of Kress and van Leeuwen whose work I have taken the liberty of freely adapting and extending as necessary, trying as far as possible to remain true to their vision of a semiotic approach to visual analysis. *Faith* and *Inanimate Alice* are highly susceptible to the visual analysis that Kress and van Leeuwen have developed. Both are recognisably still literary works to which sonic and visual enhancements are designed to enrich both the text *and* the experience of reading it. However, while I have used their concept of a 'grammar of visual design' (1996) to give form and structure to my analyses, I have not hesitated to use the work of other theorists when appropriate. I have drawn ideas from the fields of fine art, music and literary theory in order to expand the possibilities for constructing and understanding meaning in the given text. I do this because I believe that this

⁵ From this point I shall use the terms Internet, Net, Web, WWW, Web 2.0 interchangeably except when I need to be specific, at which point I will clarify which aspect I intend as necessary.

is much more representative of how as individuals we extract (and construct) the maximum meaning that we can by bringing to bear all of our experience and knowledge (Barthes would describe these attributes as 'competencies') when reading a text.

Following the methodology section, this second chapter continues with the formal analysis itself, firstly of *Faith* and the *Inanimate Alice*. I have deliberately taken different aspects of Kress and van Leeuwen's ideas and applied them selectively for two reasons; firstly to test the success and flexibility of the theories they propose in applying them to a selection of my own and secondly because their work offers a coherent approach to complicated texts. Evolved from systemic functional linguistics, the logic of this approach counteracts the often overwhelming complexity of the multimodal text, offering the would-be analyst a rational and manageable approach to textual analysis of this type. The chapter concludes with some consideration of how aesthetic response is bound up with the manufacture of the text itself, and how the boundary between the two is sometimes difficult to determine, given the deliberately affective nature of the text itself.

Chapter 3 adopts a decidedly different approach to a much more subtle and deliberately self-conscious text. The French, avant-garde, digital artist Nicolas Clauss has produced a text that, at first glance, seems impervious to analysis, though it has provided a rich seam of exploration. The base text from which *The Shower* was derived (the shower scene from Hitchcock's *Psycho*) has been the subject of extensive analysis for decades, and I make only occasional reference to these examinations. I explore the difficulties of capturing mobile text like *The Shower* and use ideas taken from French film theory before attempting to situate this piece not only within Clauss's oeuvre, but within the avant-garde movement as a whole. In the analysis, I focus on the structural processes of Clauss's derivative piece for which I have attempted to devise a workable system of visual analysis. This is partly inspired by Kress and van Leeuwen's work, at least in the manner of beginning to categorise some of the ways that a recursive text like *The Shower* actually functions. Since music has such a pivotal role to play in Hitchcock's shower scene, I examine some of the implications and motivations behind Clauss's adoption of an alternative musical score to accompany his own work. Underpinning these analyses is my concern to examine Clauss's claims that he produces collaborative and

interactive artworks, which can be considered as online paintings. However, as *The Shower* is essentially cinematic in its construction any close examination of this last claim is better scrutinised by a consideration of a piece that more closely mimics the form Clauss declares it to be. Hence Chapter 4 investigates how a digital text might be illusory, even to the extent that it can be considered paint. I refer extensively to the work of Gombrich and Kemp from the world of fine art, marrying their ideas about how the reception of art works is conditioned by a number of factors with ideas about how the home computer can be used to mimic those conditions to induce a similar response.

Throughout this thesis, I became increasingly aware that a number of assumptions are made about the nature of working with computers, and the interactive and participatory opportunities they seem to offer the artist and his/her spectator to produce collaborative work. Whilst the idealism that artists display in this regard is laudable, I believe the reality is significantly different and that such collaboration comes at the cost of cohesive and identifiable artworks. In Chapter 5, I have used Ascott's early, visionary academic writings as a barometer to test these assumptions – as a lens through which one can see clearly what progress has been made in the direction of the development of a democratic art that global Internet access coupled with powerful and creative software seems to herald. This work is essentially meditative, attempting to map at least a small part of this complex and rapidly developing terrain. By the time this thesis is finished, some of the pieces I have examined will have been superseded by many more sophisticated and responsive works. Such is the nature of the technology that promulgates Internet activity; the work of any analyst is always outstripped, always lagging far behind.

Chapter 2: ANALYSIS OF FAITH AND INANIMATE ALICE

2.1. Methodology

In a literature review that informs this work, I identified the role that social semiotics has in the analysis of texts made up of an amalgamation of modes of communication, for example, words, images and sounds. Theorists in this field are only too keen to acknowledge the current limitations of such activity, and to encourage others in the development of innovative ways of examining and investigating 'semiotic resources'. As van Leeuwen notes: 'Social semioticians not only inventorize semiotic resources and investigate how semiotic resources are used in specific contexts, they also contribute to the development of new semiotic resources and new ways of using existing semiotic resources. In other words, semioticians can contribute to semiotic change.' (2005, p. 26). It is in the light of this advocacy that I hope to develop a framework of analysis that is sufficiently robust to enable complex, interactive texts, existing only in the context of cyberspace, to be investigated, and to reveal how meaning is configured.

To analyse such texts it will be necessary to draw the work of a number of theorists together so that the various aspects of multimodal productions can be examined and, by doing so, I hope to be able to advance the work of semiotic analysis in this complex area. For the purposes of this examination, I shall refer extensively to the work of Kress and van Leeuwen, who have proposed a theory of multimodal communication. This expresses the 'move towards a view of multimodality in which common semiotic principles operate in and across different modes, and in which it is, therefore, quite possible for music to encode action, or images to encode emotion.' (2001, p. 2). In order to facilitate this, I will draw on van Leeuwen's partnerships with Kress (1996) and Jewitt (2001), to provide a 'toolkit' for the analysis of visual images. This analysis will also look at compositional layout and colour. Additionally it will be necessary in some instances to refer to the iconological representation and interpretation of meaning as practised by Panofsky (1955). Panofsky's definition of iconology as 'a method of interpretation which arises from synthesis rather than analysis' (1955, pp. 53-58) is useful. It is predicated on the notion of 'three strata' (1955, pp. 53-58) of representational meaning existing within any artwork. These strata are: *natural* subject matter

(essentially representations of objects as they are), *conventional* subject matter (allegorical representations of ideas and concepts through attributions etc.) and lastly, *intrinsic* meaning (incidental qualities unintentionally portrayed which reveal attitudinal, class, religious or other persuasions of the artist). In reading any image today, inevitably the analyst will adopt this 'stratified' approach to a work to determine and then synthesize meaning. Kress and van Leeuwen's work crucially extends this process of the analysis of the visual beyond Panofsky by applying a highly detailed and systematic framework intended to determine the *relations* between the represented *participants* in an image, including the mundane imagery that inhabits the everyday world, rather than an explication of the symbolically loaded, which concerned Panofsky. Additionally, I regard Panofsky's approach to the analysis of the visual, in this respect, to have a close alliance with Barthes's work⁶, since his (Barthes) contribution is valuable in terms of his semiotic analyses of both the visual *and* the literary text in his development of the concepts of 'denotation', 'connotation' and 'polysemy', (1977, 2000).

Although these theorists will inform my investigations for a large part of this thesis, true to van Leeuwen's assertion that:

Social semiotics is not pure theory, not a self-contained field. It only comes into its own when applied to specific instances and specific problems, and it always requires immersing oneself not just in semiotic concepts and methods as such but also in some other field (2005, p. xiii).

then I reserve the right and necessity of calling upon other theorists' ideas and work when expedient. This is particularly important since multimodal constructs are rarely the product of a single signifying system. Of painting, Kress and van Leeuwen note, 'images are polyphonic, weaving choices together from different signifying systems, different representational modes, into one texture' (1996, p. 177). I believe that this description may be successfully applied to multimodal online texts, constructed not only from a variety of media, but also imbued with many socially and historically acquired meanings. In these texts, the truth value (the modality) of imagery (colours, sounds) is determined by the recognisable genres in which such imagery

⁶ There is a remarkable correlation of approach between Barthes and Panofsky, as a comparison of method will show, notably in Barthes's textual analysis of *Wrestling with the Angel* (1994, p.248) and in Panofsky's essay *Introduction to the Study of Renaissance Art* (1970, pp. 51-67). In both cases, each identifies the importance of classificatory processes of various kinds as aids to interpretation. Although the terminology differs, as does the sphere of interest, there is sufficient overlap, I believe, to justify their connection.

operates, as well as their context and means of delivery. This means, therefore, that what is perceived of as being true or real in one context (e.g. colour) in another circumstance has fluctuating significance. As Kress and van Leeuwen observe, 'Whether a representation is judged credible or not is not a matter of absolute truth. What one social group considers credible may not be considered credible by another. This is why we see modality as interactive, rather than ideational, as social, rather than a matter of some independent value' (1996, p. 175).

Recognising these changing modality configurations is instrumental in the deconstruction of meaning in any semiotic resource but crucial in situations where user interaction enables the text itself to be reordered, and the denotative and connotative values changed. It seems inevitable to me that, in as much as texts themselves are the result of a 'pick and mix' process, because of the author's wide experience of living in the world, then the analyst too is subject to the same governance. By this process of 'bricolage', I believe it is possible to begin the analysis of interactive multimedia online productions by applying and adapting the methodologies proposed by these investigators of semiotic resources. It is, however, expedient to use some formal systems to analyse texts because the rigour that these enforce ensures the broadest 'unpicking' of the textual fabric which will go beyond individuated selection and construction of meaning. Such analytical frameworks are enabling structures that bring into play an orderly form of enquiry that makes meaning accessible and which can express, in a rational and quantifiable way, the intuitive responses of the individual or group.

Gunter Kress and Theo van Leeuwen's work, in constructing a semiotic approach to analysing visual imagery has particular appeal, since it resonates with my own experience as a teacher of art and design. A difficulty in teaching art, with a view to generating an imaginative and creative response, is the constant necessity of always having to enable a child to do at least two things. Firstly, to become more culturally and visually aware of those existing signs and representations that seem entirely natural and, secondly, to shed these already preconceived ideas about how or what something should be. Although I have known intuitively and through experience, that certain compositional structures work, or that certain colours or colour combinations are effective and open to new configurations, Kress and van Leeuwen have begun to articulate

and describe the representational possibilities of the visual by providing a 'grammatical' framework which quantifies this process. This framework is useful both for the conscious construction of visual representations to configure new meanings, and for the analyses of existing visuals as social semiotic resources; and Kress and van Leeuwen provide a vocabulary and a *modus operandi* to do so based on Halliday's 'metafunctions', referred to previously in my literature review already mentioned. To clarify: it is worth quoting from Jewitt and Oyama's work (2001), who describe how social semiotic analysis can be applied to the visual by referring to Kress and van Leeuwen's adaptation of Halliday's metafunctions. Jewitt and Oyama say that:

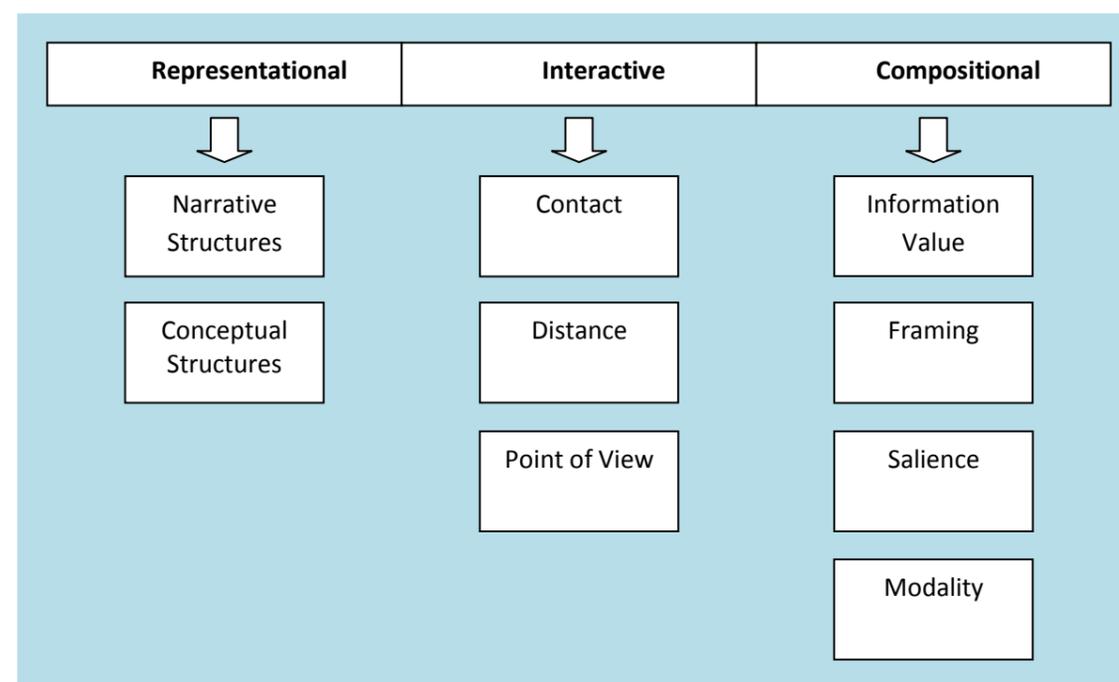


Figure 1 Kress and van Leeuwen's semiotic 'toolbox'.

... (Kress and van Leeuwen) have extended this idea to images, using slightly different terminology: **representational** instead of 'ideational'; **interactive** instead of 'inter-personal'; and **compositional** instead of 'textual' (2001, p. 140).

Kress and van Leeuwen believe that any image must perform these functions, and in doing so, is 'representing' the world. This, in turn, is bound to necessitate 'interaction' with it. Therefore, any image must be recognisable as a variety of text (poster, picture, TV ad, etc.) thus, implying a 'compositional' component. Within these broad categories exist more specific toolkits to enable visual analyses that can be usefully

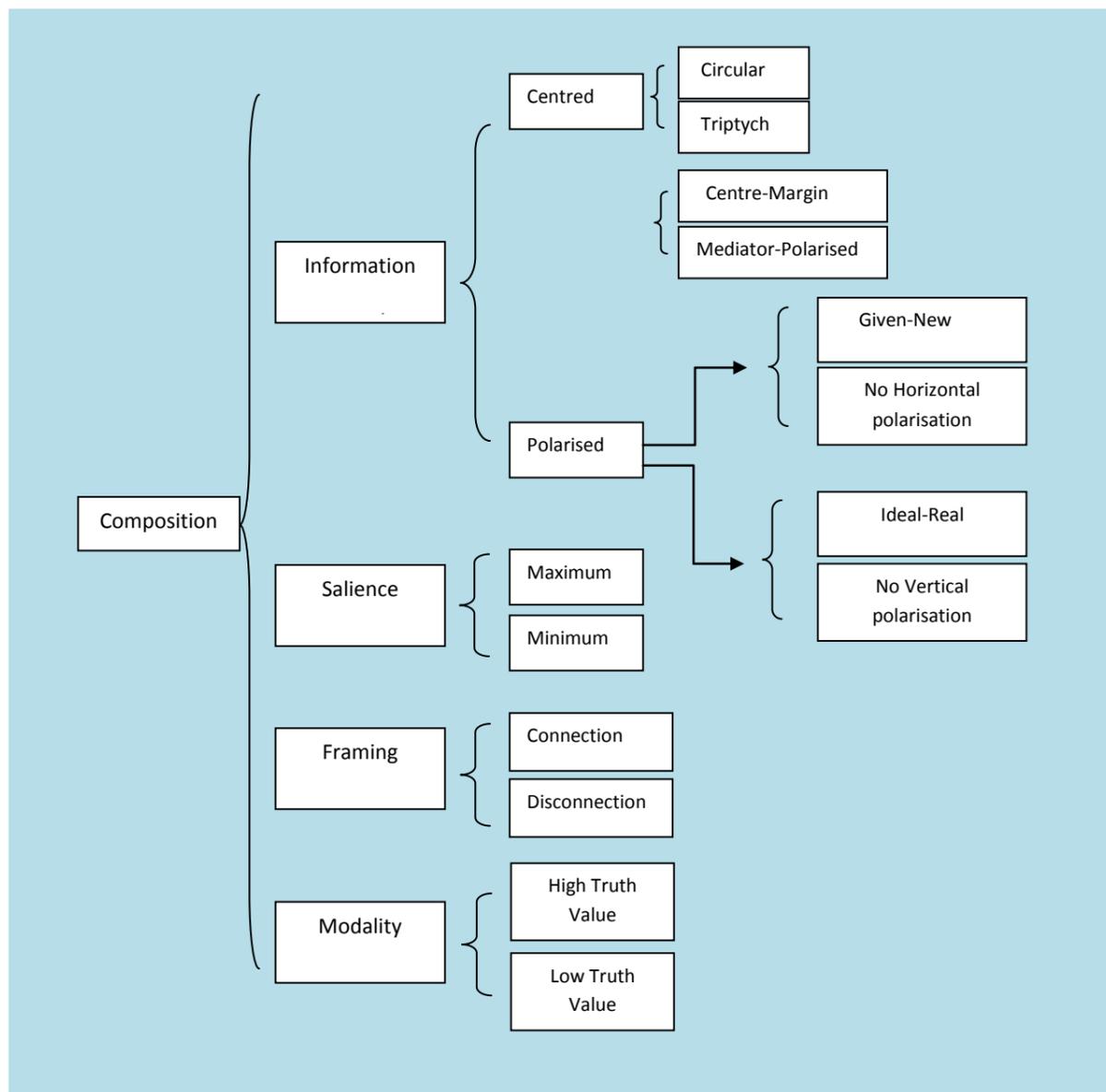


Figure 2 Interactive meanings in images: Composition.

applied to some or all of the pieces I have chosen to examine (and these categories will necessarily vary because of the disparate nature of the items undergoing investigation). For ease, I have expressed them in Figure 1, which summarises the main thrust of my investigation.

The actual tools of analysis for dismantling texts inhabit each of these toolkits, so once the choice is made about which aspect of the text is to be deconstructed (that is, representational, interactive or compositional) the appropriate kit is chosen. For example, to look within the broad area of interaction it will

be necessary to open up the tool kits of contact, distance and point of view to exam the various aspects of interactivity (see Figure 1). However, it is my intention to concentrate on the last of these operations, in the first instance, that is, the compositional aspects of multimodal production. It is the coherence of multimodal works that contain these elements which maximise the potential for configuring meaning. It is the relationships between the various elements within a piece that provide the author/viewer/user/listener with the raw materials, the ‘semiotic resources’ to enable, firstly, meaning to be constructed, and, secondly, meaning to be deconstructed and understood. Notwithstanding this position, inevitably it will be necessary to consider some of the other aspects shown above as, and when, they appear, and I will do so if appropriate.

Figure 2, which I have adapted and expanded from Reading Images (1996, p. 223) is helpful in identifying the specifics of the analytical process of composition. Two observations need to be made regarding this diagrammatic representation of these analytic resources: firstly, these are not complete and, within each toolkit, more and more divisions are available. Secondly, and more importantly for the purposes of my work, these categories are not, I believe, simply to be applied to the visual, which is van Leeuwen’s original intention, nor to the linguistic, from which these functions are borrowed (Halliday, 1985). They can, I believe, be applied to sound and music.

I hope to be able to demonstrate that sound and music play as prominent a part in the production of meaning as all the other communicative modes in the production of multimodal texts, especially those that are generated in cyberspace. The importance of this lies in Kress and van Leeuwen’s proposition that, ‘in the age of digitisation, the different modes have technically become the same at some level of representation, and they can be operated by one multi-skilled person, using one interface, one mode of physical manipulation’ (2001, p. 2). This conclusion is drawn from their observation that past multimodal texts were the result of an editorial process by which the various elements that make up the final text ‘were organised as hierarchies of specialist modes’ (2001, p.2). A collaborative process of this kind will inevitably result in the dominance of one mode over another, not least because of the identifiable hierarchical structure of *people* as operatives within a production system, as well as the inequalities ascribed to the speciality they practise. For example, the dominance of the written word, usually thought of as being the most effective communicative

mode, is ratified by Barthes when he claims that, 'it is far from certain that in the social life of today there are to be found any extensive systems of signs outside human language' (1970, p.9). Barthes, despite championing the importance of the visual and other modes as having semiotic significance, still advantages the written text since 'it is the presence of the linguistic text that counts' (1977, p.38). He suggests that its appearance alongside any image as caption, dialogue, etc. has a primary function to 'qualify' the meaning of the 'polysemous' image in some way. Although he develops the conceptual category of 'anchorage' which, undeniably, performs the function he describes (1977, p.38) in ascribing to an image the notion of a preferred 'denoted' reading. While this does not preclude other 'connotative' readings, merely constraining them, he overlooks the possibility that images can function effectively and meaningfully in their own right. Today's single manufacturer of the digitised multimodal text, a modern day *Gesamtkunstwerk*, is in complete control of his/her output and may choose to foreground whichever modes best suits his/her purpose. Often, however, it is the case that the examples of multi-modal works I have chosen to investigate are, at the temporal level, examples of the Barthesian concept of the 'relay' in which there is a reciprocal relationship between the different elements that make up the composition (1977, p.41). At frame level, or at the point where the user may suspend the action, or repeat it, it may be that 'anchorage' exists, only to be superseded once a choice has been made, or when the action is restarted by the click of the computer mouse.

Apparent simplicity of output does not imply simplicity of meaning. For example, in the next chapter, I will examine in depth the kinetic poem *Faith*, which, on one level, has very little interaction with the reader. This work is truly a *Gesamtkunstwerk*, since every aspect of the poem was devised by the poet, Robert Kendall himself, who exercises his authoritarian control over the production, even to the extent that the reader can only move through the poem in one direction, effectively negating the inherent fluidity that working on line can offer. The multimedia possibilities are extensively exploited although, superficially, this is a poem in which each of the successive stanzas can stand alone to form a conventional text. However, I believe its efficacy would be sadly diminished, if its multimodality compromised. In fact, I would go so far as to say that the poem's intrinsic value and power depends upon its method of construction and its distribution, which could not be expressed in any other way.

I will begin my investigation into *Faith* by briefly situating this poem within both the canon of Kendall's work and the development of electronic literature in general. I will go on to analyse the **compositional** aspects of the piece using Kress and van Leeuwen's approach as illustrated in Figures 1 and 2, opening out each toolbox as required by the piece. My findings here will be complemented by a Barthesian semiotic analysis of the visual and textual elements.

For the second item to be subject to analysis, *Inanimate Alice: Hometown*, I will apply further aspects of Kress and van Leeuwen's theory, this time being more particularly fixed on the construction of meaning in imagery through various types of visual **representation** and their **interactive** function (see Figure 1). Although *Inanimate Alice* is principally an entertainment, its increasingly convergent educational function suggests that the interactive relationship between the writers and producers of the text and its intended audience is becoming especially important. Kress and van Leeuwen attest that: 'visual communication [...] has resources for constituting and maintaining [...] the interaction between the producer and the viewer of the image' (1996, p. 119) by which they mean that images have two kinds of participants: represented participants (depicted as people, places, things) and interactive participants (producers and viewers who communicate via the images themselves). These visual (and I propose, sonic and verbal) 'resources' are formulated with the supposition that, for any text to be successfully received and understood, a 'model reader', who is 'able to deal interpretatively with [...] expressions in the same way as the author deals generatively with them' (Eco, 1979, p. 7) needs to be constructed; this is especially pertinent in the field of education where both the specificity of text and audience must be identified and matched. Kress and van Leeuwen also propose that 'the context of production and the context of reception' (1996, p. 120) is manifested in the image which is shared between maker/author and reader, each of which relies on their own 'competence' (Eco, 1979, p. 7), to encode and decode meaning respectively.

In fact, these descriptions of the prerequisites for the construction and deconstruction of meaning roughly equate to Nattiez's conceptual categories of 'semiological tripartition' (Nattiez, 1990, p. 10-15). He suggests that the meaning of the work created is mediated by the competencies of all parties involved in both

its production and reception. Nattiez was concerned principally with the semiological process inherent in musical forms, which he describes as existing in:

three dimensions', namely the *poetic dimension* (essentially the process of creation), the *esthetic dimension* (the level where the work is received and reconstructed by a viewer/listener/reader etc.) and, lastly, the *trace* (meaning the physical and material existence of the work in some form) (Nattiez, 1990, p. 10-15).

In all cases, the deduction of meaning is hindered or facilitated by the competency of the 'receiver', regardless of the nature of work under scrutiny. Nattiez notes: 'the constellations of possible meanings [...] is not a producer's transmission of some message that can be subsequently decoded by a 'receiver'. Meaning [...] is the *constructive* assignment of a web of interpretants to a particular form' and further that 'it is never guaranteed that the webs of interpretants will be the same for each and every person involved in the process' (Nattiez, 1990, p. 11).

To facilitate socially interactive meaning in visual images (and, similarly, in music) and, therefore, to make sense of them, an understanding of social interaction and social relations in the real world is necessary. Kress and van Leeuwen sum their view up succinctly: 'the articulation of social meanings in images derives from the visual articulation of social meanings in face-to-face interaction, the spatial positions allocated to different kinds of social actors [...]' (1996, p. 121). By paying close attention to the detailing of these communicative resources, which are pitched at a specific audience, *Inanimate Alice's* producers hope to maximise the learning experience of children. In short, *Inanimate Alice* is a vehicle through which social mores, knowledge of the world and so on are explored, with the additional objective of developing computer literacy and writing skills (of the broadest kind). Through both the interactive capacity of the online experience and the flexibility of increasingly sophisticated software, the *Inanimate Alice* episode *Hometown* is one step along the way in realising this long term aim.

The analysis of *Inanimate Alice: Hometown* is facilitated by the use of the methodology, taken from Kress and van Leeuwen (1996, p. 154), shown diagrammatically in Figures 3, 4 and 5. These are representations of specific ways of approaching a visual text, and again I will expand my own personal toolbox as necessary with borrowings from other theorists, in an attempt to deconstruct the methods by which meaning is formulated.

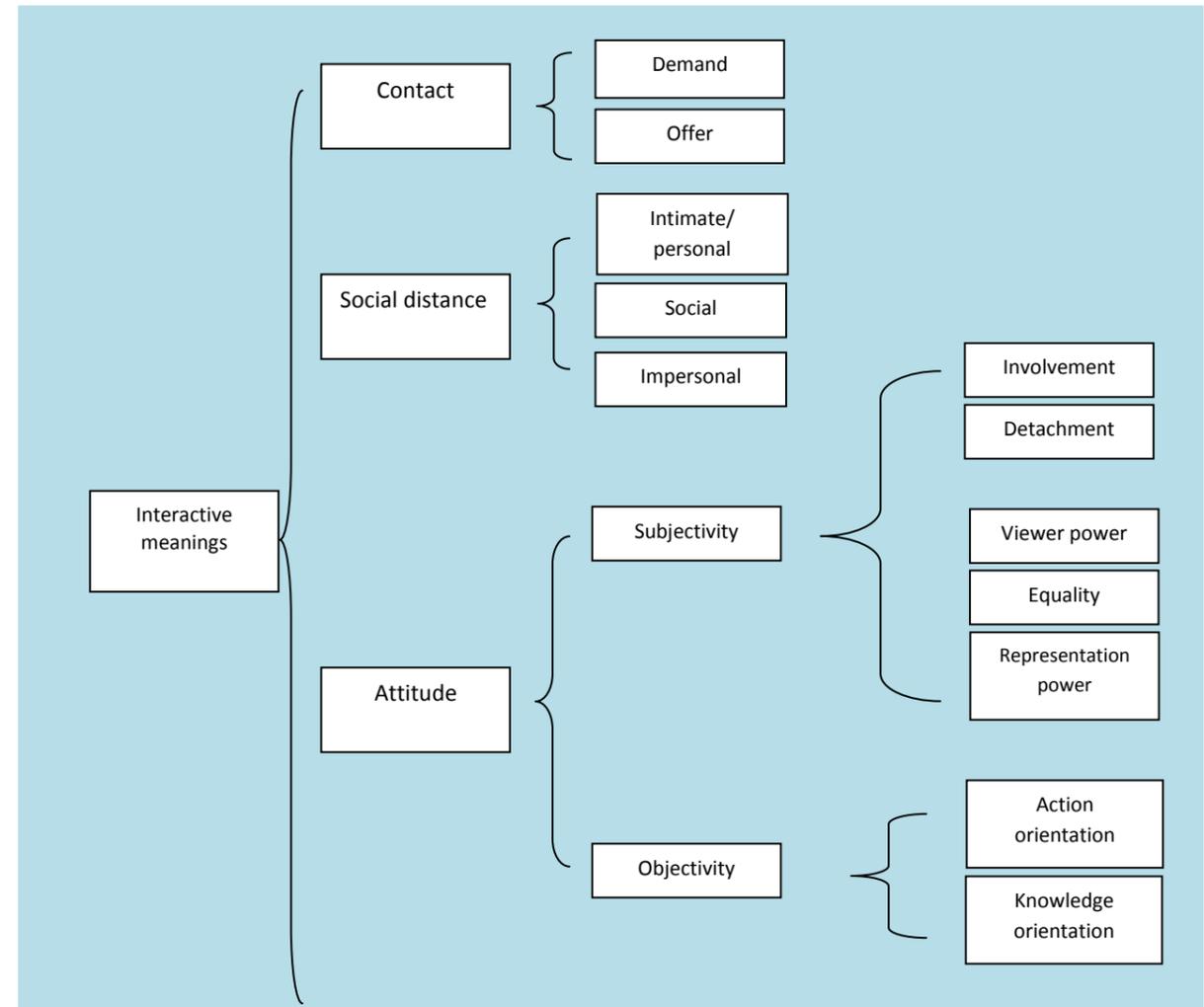


Figure 3 Interactive meanings in visual images.

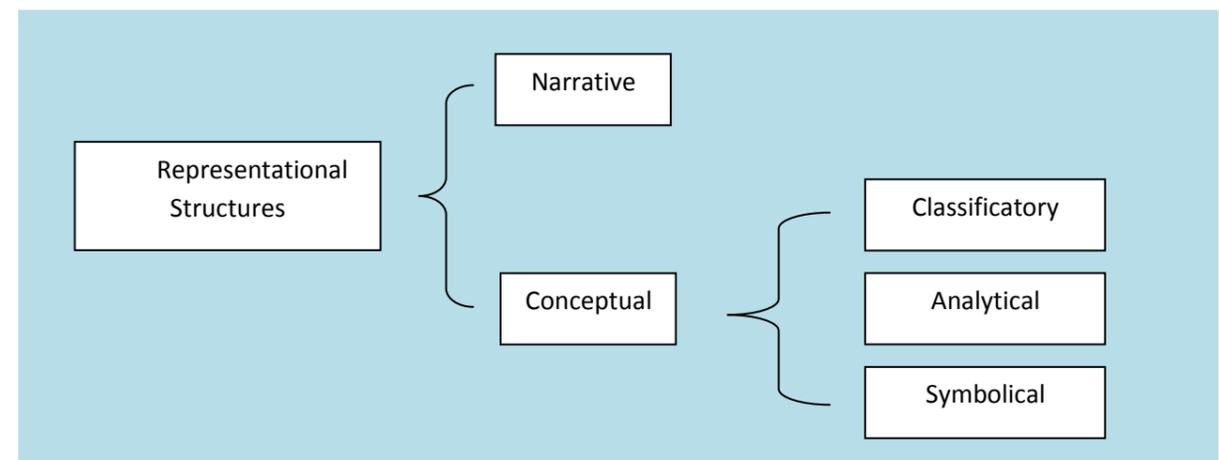


Figure 4 Representational Structures.

Of these, in addition to others already mentioned, I have adopted and adapted some aspects of Genette's narrative theory (1980), used to expose, systematically, the underlying narrative structure of *Hometown*, and to quantify some key aspects of it. However, the relationship of the main character Alice, expressed through the personal pronoun 'I' and narrating in the first person, and the 'me' as interactive user/reader who, at times, acts as Alice, remains problematic. This is an area for further development beyond the scope of this work, although I believe that it may be possible to modify Kress and van Leeuwen's work on designing the position of the viewer in relation to interactive texts (1996, p. 119). For the time being, the modification I have made to Genette's terms regarding the description of 'who speaks?' illustrated in the analysis that succeeds this chapter will, I hope, suffice.

Because *Inanimate Alice*, whilst originally conceived as an entertainment, has a developing educational function, I begin by situating the whole project within its pedagogical framework before beginning a detailed semiotic analysis of two sub-episodes within *Hometown*. The scale of the *Inanimate Alice* project is too large to attempt a full analysis of all of it, but it is my intention to select those aspects of *Hometown* which are representative and typical, and to apply Kress and van Leeuwen's methods to them. If successful in revealing the ways in which meaning is configured, then these analytical processes could be equally applied to the whole project.

Specifically then, I shall attempt semiotic analyses of these aspects of *Hometown*:

- **The Dare:** from the opening of *Hometown* stopping at the point at which Alice begins to recount her history.

My Project: in which Alice demonstrates how to construct multimedia narratives using her hand held 'Igrat'.

Each of these affords the opportunity to apply and test Kress and van Leeuwen's theories as regards the analyses of visual texts, as well as applying aspects of their theories to the sounds and music that accompany what is seen. However, the nature of *Inanimate Alice* requires these theories to be modified or reinterpreted, not least because of the problematic use of the first person narrative (something not so far accounted for in their work), and the non-static, moving imagery as well the (actively) interactive nature of the text. Figure 3

summarises how meaning is constructed in interactive situations, where the relationships between participants (as described earlier) are identified and detailed. Kress and van Leeuwen's overall strategy regarding the underlying representational structures by which meaning in visual imagery is produced as a consequence of the 'unfolding actions and events, processes of change,' (1996, p. 57) and so on is shown in Figure 4. Figure 5 highlights a main and complex aspect of it, namely the narrative mechanisms or 'propositions' evident in pictures. Within the main body of this text, I refer to some, although not all, of the various aspects identified in this sequence of diagrams. A glossary is provided for those terms I have used; these are marked with an asterisk at the first appearance in the text. All of these diagrams are taken from Kress and van Leeuwen (1996). Further information regarding this terminology is given in the glossary.

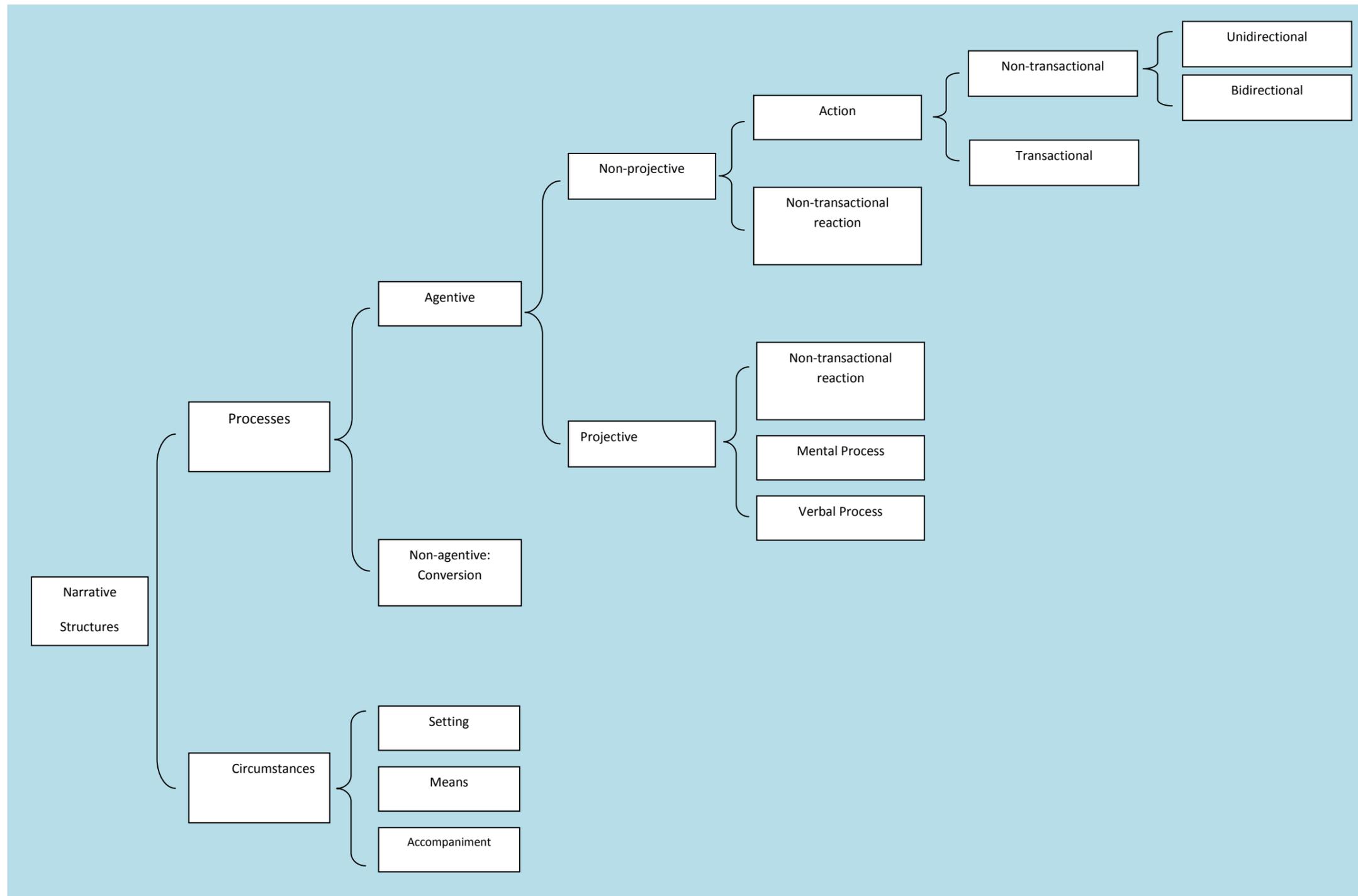


Figure 5 Narrative Structures.

2.2. Semiotic analysis of the poem Faith

2.2.1. Background Information to the poem Faith

A brief history of the development of electronic literature, to which the poem *Faith* belongs, usefully supplied by N. Katherine Hayles (2008), outlines the progress of the electronic medium over about twenty years from what are generally considered to be the first hypertext fictions, written in the late eighties and nineties. These include (Michael Joyce's *afternoon: a story* (1987, 1990), Stuart Moulthrop's *Victory Garden* (1995) and Shelley Jackson's *Patchwork Girl* (1995)) to relatively recent work published online in 2006. From 2008 onwards, she has, with others, presented and curated a collection of sixty electronic works, known as the *Electronic Literature Collection: Volume 1*, (Hayles et al., 2008) specifically as a teaching resource for her undergraduate and postgraduate students at Duke University. Hayles has included a variety of electronic texts for the purposes of trying to categorise them in some way, as well as to track the developments in electronic literature as a consequence of technological advancements and the expansion of the World Wide Web. *Faith* is one of the poems that make up the collection and is of particular interest, since I believe it to be a good example of how a multimedia and multimodal approach can be used to produce interesting, novel and meaningful work. The growing sophistication of the computer is instrumental both as a means of facilitating construction of such work and its distribution through the Web.

Faith, produced in 2002, is the creation of Robert Kendall, who has been actively composing innovative electronic poetry since 1990, making him one of the earliest practitioners of the form. His dedicated website (<http://robertkendall.com/>) supplies a comprehensive description of his activities, both as an author and academician, and hosts many of his literary works, poems and essays. In a series of personal e-mail communications to me, exchanged in the early part of 2009, Kendall reveals the 'motivations for creating *Faith*' as being the desire to produce a 'poetic form that was unique to the digital medium.' He is clearly fascinated by both the verbal and visual organisation of the poem and the possibilities that the electronic environment offers. In a piece originally prepared for Dene Grigar, Associate Professor, Digital Technology

and Culture at Washington State University, and included in his communication to me, Kendall expresses his interest thus:

Over the centuries poets have been drawn irresistibly to various systems of verbal organization involving rhyme, meter, alliteration, assonance, syllable count, word repetition, and other sonic devices. Twentieth-century poets were particularly amenable to visual forms such as the acrostic, the mesostic (an acrostic that runs down the middle of the poem instead of the beginning), the palindrome, the Oulipian snowball (a succession of one-word lines in which each word is one letter longer than the next), and the various manifestations of Concrete Poetry (Kendall, 2004).

From this description, it is possible to see that some of these ideas have influenced the poem's construction. Although *Faith* does not exactly conform to any of these verbal systems, its production as a kinetic poem enables a realisation of possibilities perhaps only dreamed of by poets prior to the advent of the computer. Certainly, the fluid movement of the text and the insertion of new text into the old represents a close association with the Oulipian style of poetic writing and is used to dramatic effect, not least because of the perceptible moment that the kinetic animation software allows. The composition of the verbal text proved a testing process; as Kendall confesses in the piece he prepared for Dene Grigar⁷, 'It was very difficult to write this piece. I started with a version of the almost complete layer (the fourth) and worked backwards, but getting the different overlays to work together the way I wanted required constant tweaking and tinkering' (Kendall, 2004). In his correspondence to me, he describes the process in more detail, 'When I created Faith I started out with a version of the poem in its longest form. I printed out a lot of copies and circled different combinations of words to create drafts of the other layers' (Kendall, 2009).

When one considers how the poem functions as an animation this developmental process is an essential stage in its realisation. Robert Kendall's description of his own poem on the *Electronic Literature Collection* (2006) website is as follows:

Faith is a kinetic poem that reveals itself in five successive states. Each *new* state is overlaid onto the previous one, incorporating the old text into the new. Each new state absorbs the previous one while at the same time engaging in an argument with it. The gradual textual unfolding is choreographed to music (Kendall, 2002).

⁷Dene Grigar has delivered a variety of courses in Electronic Literature and Culture at Washington State University. *Faith* has been included for study at various times.

Adobe Flash software, the graphics programme that facilitates the powerful and interactive graphics and web based contents, is used to produce movement, and the images are supplemented by the addition of musical sounds. Kendall explains in an email to me that, 'The music was all done with MIDI, using sound from a Roland XV-3060 sound module with an add-in patch library. All the sounds are samples from real musical instruments' (Kendall, 2009), and I will refer to this and to the visual and textual elements in much more detail in the analysis that follows. However, the introductory webpage of the poem is an important element that qualifies the rest of the piece, and as such deserves careful consideration in its own right, so I begin my analysis there before moving on to the rest.

2.2.2. Front piece visuals: Modality: Colour and Font

The front piece of *Faith* is entirely static and without sound. Nevertheless, it is a powerful introduction to the poem and its visual elements cannot be ignored as it has an essential function in heralding what is to follow. Subsequently, I will regard each section of the poem in turn, interweaving the analysis of the various modes through which meaning is configured, separating out or conjoining the various elements as necessary. The colour palette adopted in *Faith* is extremely limited (Figure 6) the colour of each phase or stanza just sufficiently different to enable each previous stanza to be identified as it is absorbed into the next. At the end of the piece, the final stanza contains all that has gone before, the colour differences enabling the build of the poem to be seen. This extract from the final stanza demonstrates that the colour sequencing throughout the poem runs from gold to orange, red, burgundy and finally to black on a neutral white background. I will refer to the significance of this choice of palette following this initial analysis.

2.2.3. Compositional Aspects

The opening frame of *Faith* (Figure 7) is significantly different from the subsequent stanzas that make up the poem, having a larger colour palette, different layout and more variable font styles. Although this title page is not actually part of the poem itself, it creates a mood of expectation in the mind of the reader and the poem is played against this expectation; therefore, it has a marked and crucial significance. The mediaeval illuminated manuscript style suggests that the nature of the poem is about religious faith, although the

No, I just can't make the usual sense anymore so
I'll simply stride out of my mind, press my foot firmly

Figure 6 The colour range and font used in *Faith*.



Figure 7 *Faith* front piece.



Figure 8 *Gallican Psalter with Canticles, Litany, and Office of the Dead*.

subsequent text makes no direct biblical references of any sort. However, the use of Old English typeface and the highly decorated initial letter 'F' affords to the text a sense of history, and summons up the concept of a religious life of contemplation since this lettering is associated with the handiwork of monks who dedicated their working lives to the production of one-off handwritten copies of Bibles and other religious works. This sense is compounded by the colourfully illuminated, albeit indeterminate, illustration to the left of the wording which encloses the text. The flowing, interweaving curving lines and the mosaic-like surface decoration with its use of foliage, are gothic in style. They are redolent of illustrations in the border regions of pages of theological and devotional works: Bibles, Psalters and Books of Hours (or elaborate sculptural decoration found in churches and cathedrals of the same period (Figure 8).

The colour choice of the front piece of the poem suggests both *high* and *low modality* simultaneously within the devotional heritage to which it lays claim. For one versed in religious iconography, the colour scheming affiliates the piece to other works within the genre of devotional works and the elaborate lettering and colour range give credible expression of religious faith. If one has a strong faith of one's own already established what is expressed by the colour choice is true, and of *high modality*, but for the non-believer the palette simply contextualises the piece but is distinctly of *low modality*. For example, the use of blue in this front piece is significant as it never appears on subsequent pages. Blue is traditionally seen as meaning purity, virtue and sometimes, nobility. Over the centuries, a range of blues has been used to depict the Virgin Mary's robes and, by association, her attributes. Azure was commonly used in religious paintings, but its fugitive nature made it inappropriate for quality items, and the preferred choice was ultramarine blue, which was highly stable. As John Gage notes, 'the reputation of pigments and dyes depended first of all on their stability, and then on their rarity, and hence their cost' (Gage, 2006, p. 111), so although expensive, ultramarine came to be associated not only with the wealth of the donor of the painting but, because it was colourfast and not subject to fading in the light, with Mary's enduring fidelity and virtue. The highly saturated cerulean blue colouring of the illustration, not quite emulating the slightly darker and extremely costly ultramarine blue used to depict Mary's robes in late 14th and 15th century paintings, is matched by a rendition of the gold used to decorate these expensive works. Both of these colours denote purity, wealth and incorruptibility in

Christian iconography. Cerulean blue⁸, although a nineteenth century invention, by virtue of the general association of blue with Mary as the inviolate Virgin Mother of Christ, still connotes the Marian attributes of faith and purity, thus emphasising the nature of the piece to come. The word 'cerulean' derives from the Latin *caeruleus* which translates as blue or green-blue, and hence, is associated with the term *caelum*, meaning sky or heaven. It is this connection of the Marian attributes to the aspirational concept of an imaginary and unreal/ideal place that exists in a blue sky that is suggestive.

The incorruptible nature of gold, its preciousness and eternal durability also make it a suitable colour to choose to reinforce the power of the colour blue and attests to the unimpeachable and immutable nature of true faith. The use of these two colours together in the opening frame of the poem *Faith* would seem to indicate the truthfulness and fidelity of what is to come. The fact that the word 'faith' uses an approximation of gold colouring, added to the calligraphic expression of its first letter, again promotes the notion of a relationship with existing religious texts and centres the poem within the tradition of devotional works. For the true believer, the expression of the Marian qualities of purity, truth and faith are embodied by the colour palette and, therefore, of *high modality*. For the non-believer, these colours symbolise something that can be, at best, aspirational only and which are experienced vicariously, and hence have *low modality*.

In all general respects then, save one, this front piece suggests that the poem will emulate previous examples of this religious genre. The exception to this uniformity of presentation is the wording that is concerned with the factual information that allows the poem to be experienced with or without music and the copyright details. Although the gold colouring is reiterated, this may be regarded as the maintenance of a cohesive style, a limited colour palette so as not to detract from the overall composition of this opening frame. Interestingly the choice of a modern font to spell out this wording is the first indication, other than the mode of distribution via the computer, that this piece is not conventional and that what has gone before is mere reproduction or pastiche, thus denying or deflecting in some way the validity of the textual and colour

⁸ It should be noted that this is what I see on my screen. The topics of personal visual perception and different screen resolutions are important and relevant but beyond the range of this work. Robert Kendall wondered if the 'color has been distorted through the process of digital reproduction' in one of his e-mails to me and acknowledged that this would add an inadvertent 'element of transformation to the mix' (Kendall, 2009).

presentation. The presumption of a non-existent lineage is exposed by the nonconformity of style of the words themselves that refer to something very modern, which is the option to include electronically produced music or not, at will. In addition, the word 'movements' on the title page connotes not only the musical usage of the word but, at a second reading, describes the fluid nature of the textual presentation. The humorous description of the poem as an 'expanding multi-verse' is a pun. It is based on the idea of an expanding universe proposed by modern astronomy and which refutes and denies some of the basic tenets of Christian belief. This injects a moment of doubt about the nature of the work, hinting at unconventionality which then initiates the tension between logic and faith that runs through the work. At this stage the reader cannot imagine how the poem will deviate from his/her expectations derived from former knowledge of similarly presented conventional texts, although ultimately a poem whose verses multiply and expand simultaneously is revealed.

2.2.4. Compositional Layout

Applying van Leeuwen and Kress's methodology reveals a number of compositional features. The opening page of this work (Figure 9) can be roughly divided into left and right and top and bottom divisions. Within these *polarised** divisions, it is possible to identify a number of features conforming to the categories of the *given** and *new** and *real** and *unreal** described by Kress and van Leeuwen in *Reading Visual Design* (1996). To the left of the vertical line, the *given* area of the front piece sets the scene for what is to come, not simply across the rest of the page but throughout the subsequent stanzas.

The most *salient** feature, the decorative brightly coloured motif of blue and gold, is almost entirely in the left-hand, *given* region of the page, thus indicating or suggesting an affinity with traditional devotional texts. Its positioning affirms its own visual depiction and associations with these texts as being the aspect of the work which is familiar, easily understood, what we already know. The strictly informational text, the naming of the work and its composer, the optional music and a brief description of the piece are found in the same section. Interestingly, the description of the piece crosses the boundary between the *given* and the *new*, thus confirming the message the words contain; that the poem is unconventional, being 'expanding' and a 'multi-verse' construct. This is likely unfamiliar territory to the reader who is uncertain as to what to expect.

The colourful motif too extends into this area, and the use of branching foliage hints at the burgeoning nature of the poem to follow although, at a first reading, this is not obvious.

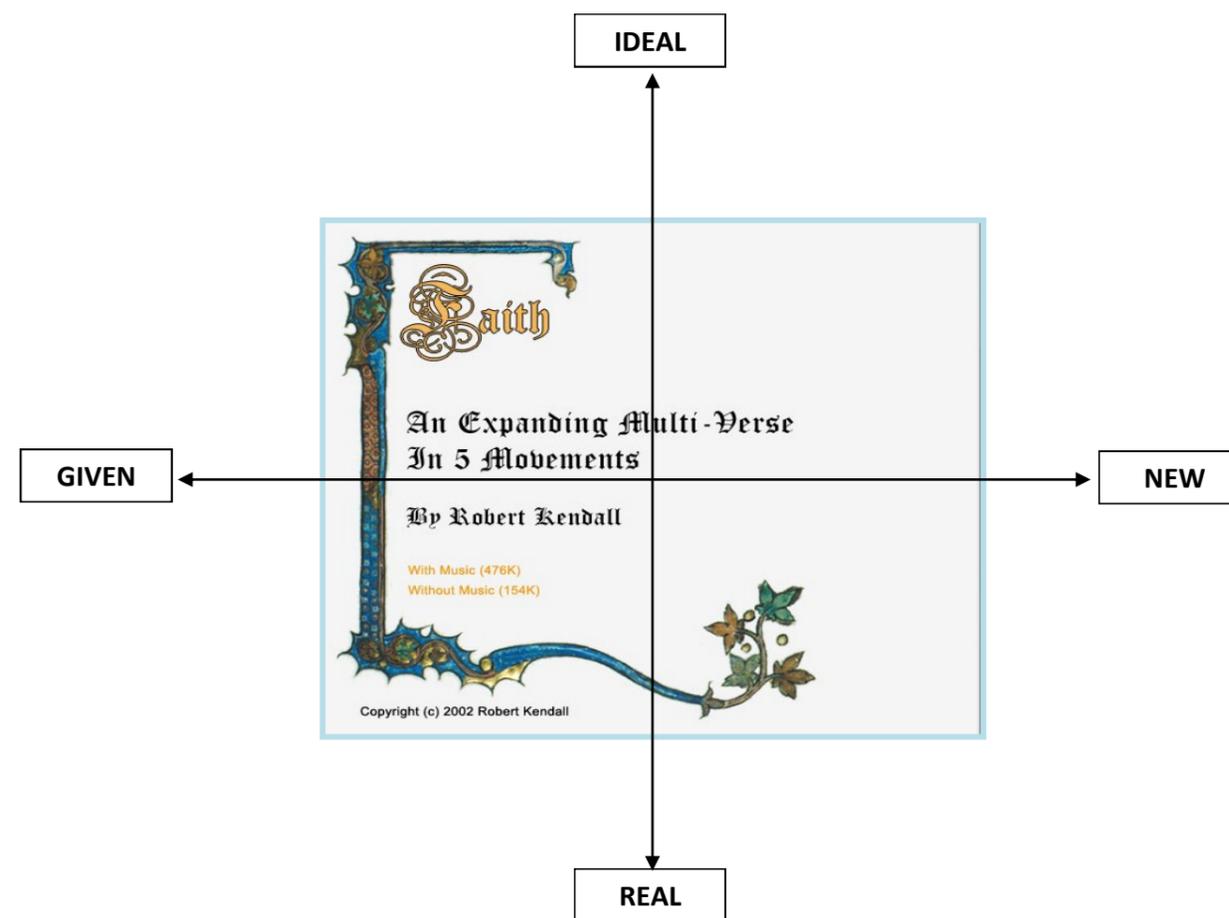


Figure 9 Opening Webpage of *Faith*.

A similar *polarisation* exists in the horizontal plane where the *real* and the *ideal* hold court. The lower left hand quadrant represents a stronghold of truth values for it delivers factual information (the *given* information described previously) whose validity is confirmed by being positioned in the *real* sector of the page. This double validation indicates *high modality* where the truth-value of the information given is less disputable than other aspects of the page. The *given* factual information exists in the lower half while the artistic, imaginary possibilities and uncertainties dominate the upper and right hand sections of the page and reiterates the signification indicated by the choice of font and the descriptive wording of the nature of the

poem to follow. The aspirational blue colouring appropriately transcends the boundaries between the *real* and the *ideal*, and the *given* and the *new*, because it exists as both an actual colour of concrete things (the sea and sky) and a symbolic representation of heaven and faithfulness as already described. Bleeding into the *new* realm on the page, in the form of a growing plant tendril, it leads the reader to a new space, where the poem begins.

2.2.5. Analysis of Faith

For ease, I reproduce the text here, although it should be noted that, in the early stanzas the visual layout on screen varies from this rationalised version. Please note too, that the word 'Faith' is an integral part of the first verse and stays throughout the poem, although it seems that, in succeeding verses, it acts as a banner headline rather than part of each stanza. For this reason, I have bracketed it to indicate its continuous presence:

1 Faith
Logic can't bend this
So.....

2 (Faith)
I edge logic out.
Can't the mind press on

around the bend to
consummate this vision of the deep 'or'?

Maybe. But....

3 (Faith)
I hedge. Oh red
winking neon logic.

No, I just can't make
the sunny side of my mind press

the black button, think
around the bend of theory to be

only this consummate 'o', this visionary
'r' of the deeper world.

Yet then.....

4 (Faith)
I step to the idea edge elegantly and oh so
ultimately, not just any watered-down walking out

but a fine wine of leave taking, a full bodied
forgoing-going-gone upon the logic lip.

No. I just can't make the usual sense anymore so
I'll simply stride out of my mind, press my foot firmly

into the black, all-but-bottomless chasm beyond the brink,
around the bend, off the rocker (yippee), to leave behind

only this consummate poem, this visionary, incorruptible
transcript of the deeper world's One True word:

Leap

5 (Faith)
Just to sum up:

Faith

The title of this poem is deceptive, since even a first reading suggests that the poem is actually about the all too human process of vacillation between the hopes and aspirations attached to 'faith' and the baldness of 'logic'. Although progress through the poem is strictly linear, allowing the reader no opportunity for deviation from its path, the poem is also circular as the end of the poem is also its beginning. This construction reinforces the difficulty of trying to marry together, to 'consummate', the irreconcilable natures of both faith and its antithesis, logic. In fact, the construction of the poem is instrumental in conveying the nature of both logic and faith (and by implication doubt); its logical, linear character impelling the reader on to explore the available options. Its overall circularity expresses the futility and indecision of such a process.

In the version shown above and online, there is, to some extent, the appearance of a conventional poem. This is attested by the apparent use of couplets in its later stages, although these do not conform to the standard definition of 'a pair of successive lines of verse, typically rhyming and of the same length' (Baldick, 2001). However, little there is in the way of a conventional metre, with no direct rhymes and the division into

couplets seeming quite arbitrary, it remains visually appealing. Perhaps then, what we have here is prose presented as poetry, as free verse. Although not obvious in the version above, each stanza is subsumed into the next and identified online by a form of colour coding so that each part is always visible. It is here that the poem's complexity and its affiliation to Oulipian (from *Ouvroir de littérature potentielle* (The Workshop for Potential Literature⁹) writing forms are revealed. *Faith* demonstrates this affiliation by the use of 'constrained' writing techniques practised by Oulipian artists and writers. Peter Consenstein, in his article *Memory and Oulipian Constraints*, notes that 'The Oulipians emphasise the use of formal constraints in their literary production, in reaction to the emphasis placed on "écriture automatique" by the Surrealists' (Consenstein, 1995). Such constraints include the use of mathematical equations and the reworking of existing literary forms. They do this because 'by "working under constraint" they have raised their level of consciousness' (Consenstein, 1995). Robert Kendall's poem is consciously constructed using the constraint of beginning with four 'seed' words (Kendall, 2009) that allow more and more verbal layers to come into being, with each one containing all that has gone before.

The colour coding ensures that every succeeding stanza is visible and recognisable, despite the existing words in each stanza eventually being broken up. These words are then recombined with new letters, which are differently coloured, to form a new layer of text. As Kendall explains, 'Verbs become nouns ("bend" progresses from "can't bend this" to "can't the mind press on around the bend") or adjectives ("consummate" graduates from "to consummate this vision" to "to be only this consummate 'o,' this visionary 'r'"). Sentences divide and recombine' (Kendall, 2009). Thus, the poem may be described as a palimpsest in which previous versions of the text are erased and overwritten. This interesting approach uses its own internal 'logic'. Firstly, it is intended to surprise and delight the reader and, later, the variety of ways in which new verbal constructions are made continue to please and entertain. There develops an expectation of surprise, and interest is maintained by the novel manner in which text is introduced into each frame. Moving letters, floating words, new colours and musical sounds; these all add to the overall effect. The poem

⁹ In fact Wikipedia's webpage on the Oulipian movement is a useful starting point in investigating oulipian methods, as well as providing a rough translation of the group's intentions as being 'the seeking of new structures and patterns which may be used by writers in any way they enjoy' (Oulipo, 2009). Kendall's work certainly falls within these parameters.

becomes more and more complex as it grows and develops, to the point where whatever happens next seems entirely normal, natural and rational. Each stanza seems to contradict the previous one as the writer oscillates between the poles of logic and faith.

The first short stanza 'logic can't bend this' (Figure 10) describes faith as being not only impervious to logic (emphasised by the 'bouncing' of the word 'logic' off the word 'faith') but not able to warp faith in any way. The difference between the two is reinforced by the two differing lettering styles. 'Faith' is calligraphically written in Old English Gothic, and this style acts as an *affordance*^{10*}. This lends the word weighty gravitas despite the modern electronic medium. Although 'faith' stoutly maintains its spot in the *ideal* region of the frame it is centred between the *given* and the *new*, and perhaps its fixity in this position is indicative of both that which historically has gone before (incontrovertible belief) as well as what is to come (nagging doubt and uncertainty). Faith *was* something affirming, ancient and mysterious, concerned with the ineffable and essentially a closed concept, while doubt *is* open ended, uncertain and indeterminate. The typeface of the mobile 'logic' is much more mundane and, unlike its counterpart 'Faith', it is not privileged with a fanciful capital letter. Logic, therefore, seems something every day, commonsensical, normal and secular and thus the two ideas remain at odds. Interestingly the colour scheming is identical; hence the gold colour, connoting both immutability and incorruptibility. Both 'faith' and 'logic' then are presented as 'pure', as incontrovertible truths despite their contradictory binary opposition. As 'logic' literarily drops into the frame (Figure 11), descending from the *ideal* region, only to bounce off the unyielding 'faith', its several appearances are accompanied by the striking of a bell as it rebounds from the surface of 'faith'. 'Logic' then fades into the background, to be quickly replaced by the opening 'seeding' (Kendall 2009) phrase. The bell plays differently pitched notes from a whole tone scale and is synchronised to match the action exactly. The effect of these notes is to create a sense of unease, as the listener's ear, generally attuned to conventional Western tonal harmony, is disturbed by the unfamiliar intervals and progressions between the notes. However, another rationale is imposed in choosing this particular musical system. Since the intervallic

¹⁰ The term *affordance* as used by van Leeuwen is derived from Gibson (1979) and cited in his recent *Introducing Social Semiotics* (2005, p.4).



Figure 10 *Faith*: Stanza 1.

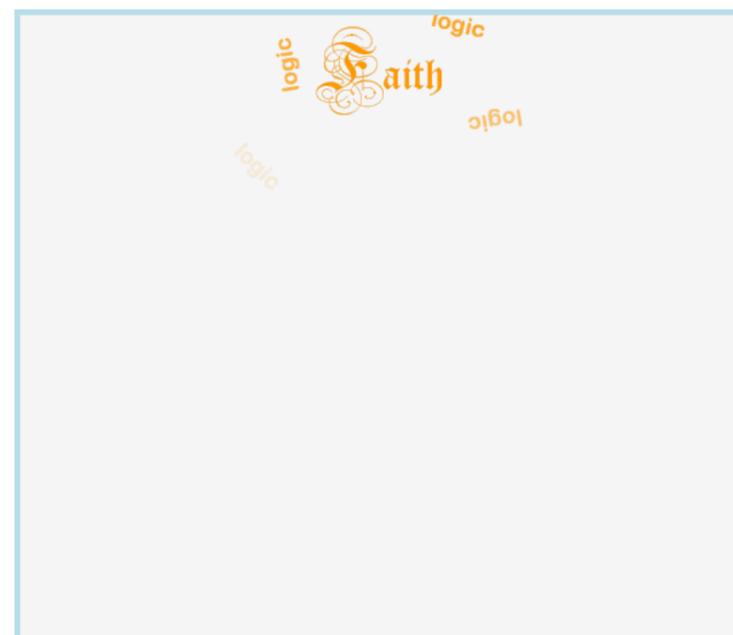


Figure 11 *Faith*: showing the opening of the first stanza.

distance between notes in the whole tone scale is absolutely constant, logical and measured, so the concept of 'logic' is reinforced by its application. Simultaneously the bell sound is ambiguous, the clarity of its ringing timbre connoting purity and incorruptibility thus making it claimable by both sides of the debate. The inevitable ecclesiastical overtones of the bell are neutralised by the fact that the sound is attached to the 'logical' side of the argument.

All modes working together in this unified way have the remarkable effect of creating a compelling anomaly, one where 'faith' and 'logic' are treated fairly, and given equal prominence, sharing the sounds and colours associated with each side's opposition. Curiously, the tension between 'faith' and 'logic' is fully realised through the unification of several modalities with one another, where textual expression is married polygamously to visual motion, colour and music. The individual words 'logic/can't/bend/this' spiral in, diminishing in size as they do so, each suggesting both the shape and movement of a flying arrow, a visual trace being left upon the retina. This has the effect of creating a series of *vectors** which direct the eye to the central area of the frame where they settle. Accompanied by more whole tone bell sounds and centrally positioned, they occupy neutral ground where the *given* and *new* and *real* and *ideal* meet, thus signifying uncertainty and doubt. The scene is set, and the remainder of the poem oscillates between 'faith and logic' as the author grapples with a desire for one and a need for the other. Indeterminacy then, rather than 'faith' is the poem's subject matter.

The following stanzas stand in opposition to one another in order to express how the argument between 'faith' and 'logic' vacillates and develops. In the 'edging out of logic' at the start of stanza 2 (Figure 12) some sort of resolution seems at hand, but the verse ends questioningly, as the writer expresses the hopelessness and impossibility of marrying together the two disparate elements of 'faith' and 'logic'. Despite his efforts to 'press' his mind to 'bend' to accept both 'faith' and 'logic' he recognises the impossibility of such a task. By expressing the irreconcilable differences between these two positions in the word 'or' he gets to the kernel of the problem: the argument cannot be further reduced. The only resolution is to make a choice, which necessitates that one position must be entirely abandoned. He delays both the 'logic' of this and the necessity of arriving at a resolution in the word 'maybe' and in the next stanza he optimistically resumes his cogitations.

In every stanza, a resolution is sought, though none is found, and by the end of the poem, having explored numerous possibilities, he finds himself no further forward, and the cycle begins once more. The indeterminacy that the poem explores benefits from the relationship between the various modes and this becomes increasingly important as the movement, colour and music are closely synchronised to increase impact, and all are essential to convey full meaning.

Such is the informational, sensory and affective nature of sound, graphics and colour that this poem can be regarded as an example of the Barthesian concept of ‘relay’ where ‘text [...] and image stand in a complementary relationship’ (Barthes, 1977, p. 41). I believe this concept of a ‘complementary relationship’ can be extended to include sonic additions and that, in *Faith* the music has a crucial function in ‘advancing the action’ (Barthes, 1977, p. 41). For example, while it is possible to view the poem without music, to do so is to impoverish the experience, much as reading the poem in the static form shown previously diminishes its meaning. In the second stanza, as the new red text flies in, horizontally from left (*given*) and right (*new*), the music performs the function of mimicking the action.

In fact, throughout the poem the affective quality of the music is high and is redolent of Renaissance ‘word-painting’ music where the rising and falling of pitch or the rhythmic character is suggestive, and qualifies and reinforces the verbal text. The *Oxford Music Online* resource (Carter, 2009) explains ‘word-painting’ as ‘the use of musical gesture(s) in a work with an actual or implied text to reflect, often pictorially, the literal or figurative meaning of a word or phrase. A common example is a falling line for *descendit de caelis* (‘He came down from heaven’).’ As word-painting ‘presumes the possibility of a meaningful relationship between word and music’ (Carter, 2009) this is an appropriate way to regard the sonic accompaniment to the poem *Faith*. Throughout *Faith*, key words and phrases are emphasised by the use of particular instruments, used for their sound, ‘colour’ or timbre, to produce specific effects. Robert Kendall instances the appropriate and affective use of two instruments in several stanzas where ‘the harp is [...] used symbolically to represent the realm of heaven (an object of faith), and the ethereal tone of the glass harmonica is often said to be “otherworldly”’ (Kendall, 2009). Both these instruments are used to considerable effect. The harp, heard in stanza 2, sounds rising or falling whole tone scales as each word or phrase slides inwards. The words ‘around

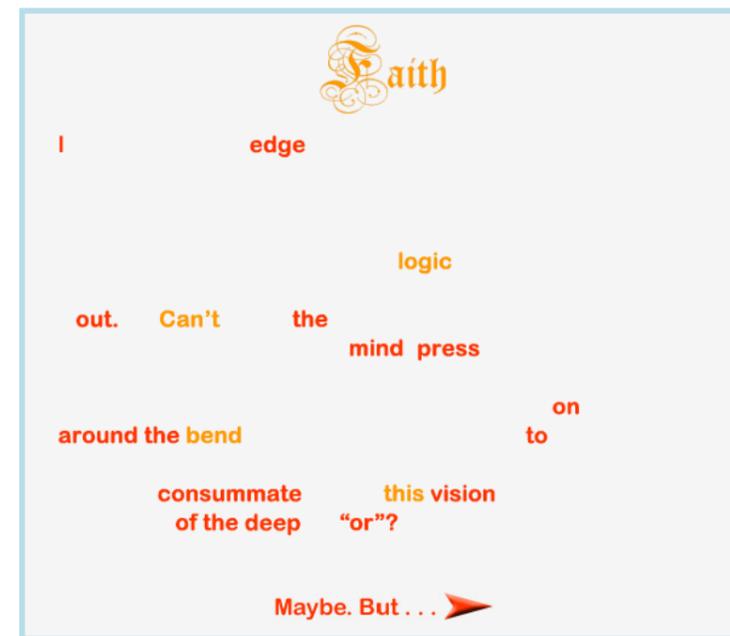


Figure 12 *Faith*: Stanza 2.



Figure 13 *Faith*: Stanza 3.

the bend' are accompanied by a rapid up and down scale to suggest, onomatopoeically, an actual 'bend' by the changing the direction of the scale. Later, the 'or' rises from the depth of the *real* region to a slow, and much more considered, rising scale. The glass harmonica is used to produce a sustained ethereal sound, emulating the ghostly lettering as it slowly fades into view, notably in stanzas 3 and 4. The impact of these musical events, coupled with the use of colour to mark different verses of the poem, maximize the *salience** of selected words and phrases, especially when enhanced by the animated effects. However, because the poem is constantly moving on, the text being revealed diachronically, just in time to be read, *salience* is ephemeral and cannot be considered to be a fixed feature. Unlike the most *salient* image observed in the front piece (which is static and is therefore always *salient*), in the poem itself, *salience* is the property of the newly revealed and is ascribed only in the process of revelation. What is revealed *now* is always the most *salient*, receding in importance as the poem progresses.

It is, I think, in stanzas 3 and 4 (Figures 13 and 14) where the impact of the various modes working together is seen to best advantage. In stanza 3 ('I hedge. Oh red winking neon logic'), the content is the consideration of 'logic' and the references to electronic devices are used metaphorically, vividly describing the writer's intellectual turmoil and indecision. Electrical circuits are innately binary systems, which are either on or off (reflecting some of the qualities of logical thinking), and this concept underlies the verbal text here. The adjectival phrase 'red winking neon' is animated, and the words enact their own meaning, blinking on and off, supported by the glass harmonica which, sonically, reiterates the action, amplifying the effect. Similarly, the word 'button' dips as though pressed; this action is accompanied by a non-musical sound effect which emphasises the movement. Red and black, the historical colour of electrical wiring denoting positive and negative poles (now disused, although still embedded in the minds of older readers), a light that blinks, and a switch that 'toggles' between on and off, much as the argument about 'logic' and 'faith' toggles, are used to explore the either/or possibilities that run through the poem.

Stanza 4 marks the poem's climax. This is obvious, not only by the number of words that have now accrued on the page, but by the density of sound that accompanies the text. As the text is revealed in all its

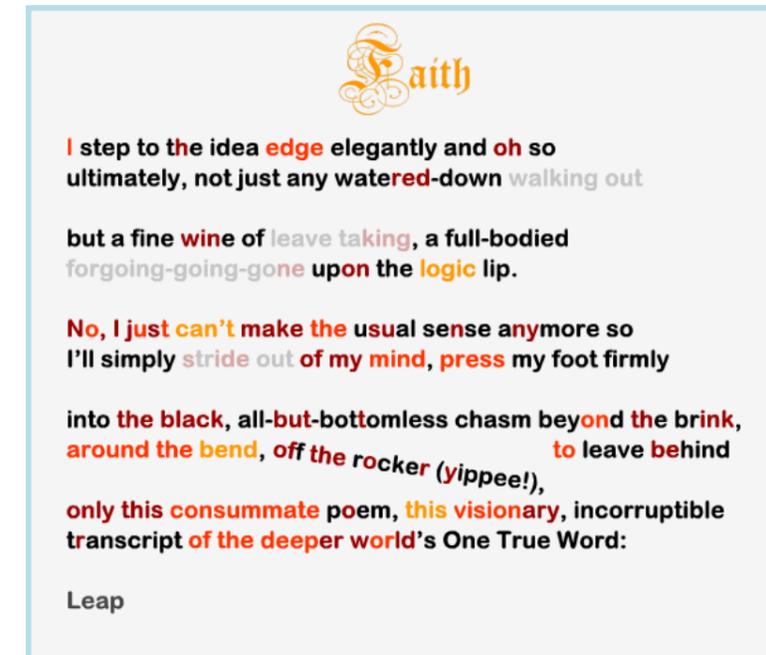


Figure 14 Faith: Stanza 4.

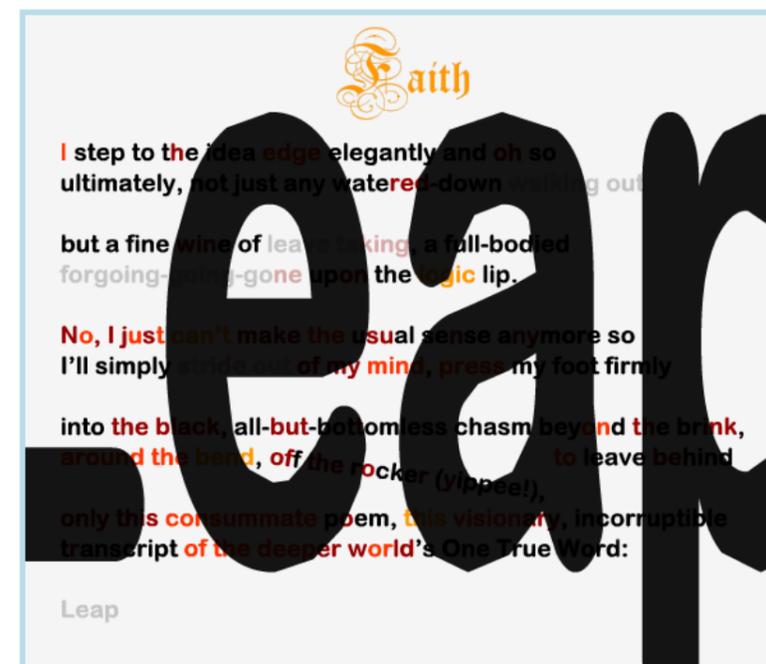


Figure 15 Screenshot showing the enlargement of the word 'leap'.

complexity this is matched by a layering of the sonic accompaniment, strings and harp, suitably choreographed 'word-painting' to match animated words and phrases as before. The poem is now fully present, and visual impact is made by striking colour differentiation. All previous stanzas of the Oulipian-like text are still extant; each succeeding verse absorbed in the next in a Russian doll effect. The verbal text has dropped the electronic allusion, and the opening line 'I step to the idea edge' suggests that a choice, an intellectual choice, signified by the word 'idea' is about to be made. Emphasizing that this choice is made at the 'logic lip' and by alluding to 'fine wine', 'full bodied' and 'not just any watered down walking out' indicates a determined attempt to resolve matters.

'Full bodied' and 'fine wine' suggest that any decision made will be secure and final, a coming to fruition after a long period of maturation. Inevitably this optimism is dispelled in the next lines where doubt resurfaces and there is a sense of surrender in 'I just can't make the usual sense anymore': a verbal throwing up of the hands and a giving way once more to indecision. The lines 'into the black, all-but bottomless chasm beyond the brink, around the bend, off the rocker (yippee)' inject a dark humour, amplified by the visual animation and musical accompaniment, and a tendency towards hysteria or desperation in recognition of human frailty in not being able to arrive at a decision after all. The appearance of the words 'edge', 'lip', 'chasm', 'brink' compound the uncertainty as these suggest there is a reluctance attached to the necessity of having to make a choice at all. One 'totters' on the edge, the brink and so on, but these words also encapsulate possibility that a choice will be made, only to be denied in the last stanza.

Surprisingly, the capitalized 'One True Word' is not 'God', which this biblical phrase might reasonably conjure up, but 'leap', indicating a complete surrender to the inevitability of uncertainty and the keen excitement that this can bring. A leap of faith, a leap of logic, a leap of joy, a leap into the dark, a leap of the imagination. As 'leap' grows from the *real* and *given* part of the frame expanding into the *ideal* and *new*, moving ever closer to the viewer (Figure 15), the expectation is that a resolution may be at hand. However, none arrives. The final stanza crumbles to the sound of tinkling bells, and confusion abounds. 'Faith' survives



Figure 16 Final stanza.

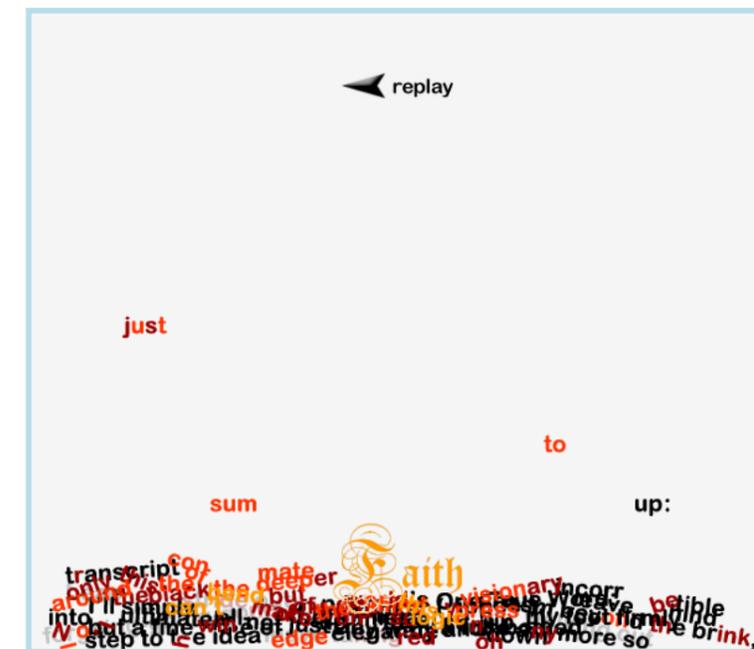


Figure 17 Faith: Final stanza after 'faith' has crumbled and the chance to replay the poem is presented.

a little longer and the silent pause, a caesura, is just long enough to absorb the scene before faith gives way to uncertainty, the only resolution being the sound of an implied perfect cadence on the bell, the single concession to any kind of formal harmony signifying the end of the poem (Figure 16 and Figure 17).

Finally, there are two more points which I believe are worthy of consideration. The constant reiteration of the word 'faith' as a banner headline throughout exists as a reminder perhaps that, while the poem is about indeterminacy, 'faith' remains the quarry, and the poem is an account of its pursuit, although it remains elusive and just out of sight, around the 'bend' as the author might say. Lastly, the lack of the colour blue in the poem, so evident in the front piece and a modality marker indicating purity, virtue and so on may suggest that the poet actually has no intention to achieve resolution, that there is no truth, no logic and no faith, that all there is, is doubt. If this were the case, the front piece is a deceit, indicating one thing but realising another and confirming the theme of indeterminacy and inconstancy that marks the poem.

2.3. Semiotic analysis of the interactive episode *Inanimate Alice 4: Hometown*

2.3.1. Background information

Kate Pullinger and Chris Joseph, novelists and digital writers, have collaborated to produce the series *Inanimate Alice* which was conceived simply as entertainment but has now assumed an unexpected secondary role in education. As Ian Harper, the series producer notes, '*Inanimate Alice* was not designed principally as an educational tool. It was conceived as an entertainment. Only after we had produced a couple of episodes did we get the reaction that the series had strong educational attributes' (Harper, 2009). *Inanimate Alice* is available online at <http://www.inanimatealice.com> where, in the site's extensive *iTeach* section, it is described as a 'pedagogy project'. Its principal aims and objectives are to 'enable students to see storytelling in a new, multi-sensory light' and that: '*Inanimate Alice* is a new media fiction that allows students to develop multiple literacies (literary, cinematic, artistic, etc.) in combination with the highly collaborative and participatory nature of the online environment' (Pullinger and Joseph, 2007) The series

consists of four episodes to date, with another six in the planning stage. Ultimately, the intention is to follow Alice, the eponymous subject of the series, to maturity, and therefore, the series overall can be regarded as a *Bildungsroman* (as its producers claim), since each episode is concerned to 'explore his (her) intellectual, emotional, moral and spiritual capacities' (Herman, 2005, p. 41). Across the four episodes so far, Alice, is shown as developing from an eight to fourteen year old. Although other characters feature in each episode, including her parents, Alice's main companion (and the only one ever visible) is the imaginary 'Brad' (derived from 'Bradfield', the name of the series production company) who matures and develops as she does herself. This is appropriate, since Brad is Alice's creation and one which helps to demonstrate her growing capability as an animator and games designer, stated as her ambition on the website's opening webpage. Each episode takes the form of a simple narrative in which Alice as the central character is usually placed in a position of risk, and one in which Brad is seen to both comfort and rescue her. By episode four, the narrative has expanded, and quite a high degree of user-intervention, interaction and game play is needed to advance the action in order to complete the story.

The series is accompanied by two sets of lesson plans. These are downloadable from the *Inanimate Alice* website following registration. These are intended for use in schools in order to develop the 'multiple literacies' mentioned above. The first set is designed to stimulate the student's critical faculties whilst acquiring digital literacy and an appreciation of multimodality. The second set looks in much more detail at the actual process of creative writing and storytelling, using the online software package 'I-Stories', as well as illuminating, implicitly, parts of the KS2 and KS3 school curriculums, notably PSHE (Personal, Social and Health Education) by exploring the issues that present themselves in the *Inanimate Alice* episodes. In both cases, *Inanimate Alice* is used as source and exemplar material. The lesson plans are comprehensive and are well supported by pupil activity sheets and online exercises, though I would query the suitability of the online recommended reading lists in some cases¹¹, especially as the age range of intended pupils is not always clear.

¹¹ Having delivered part of the *Inanimate Alice* programme I can attest that the reading matter for students is far too difficult for fourteen year olds, which I estimate as being the approximate age of any intended audience. This is a significant weakness of the project as a whole and, clearly, there is a mismatch between the creative input of the writers

At the beginning of each set of teaching plans, is an acknowledgement of the inspirational work of a number of organisations concerned with the development of literacy, which have informed the production of *Inanimate Alice*. *ReadWriteThink* (<http://www.readwritethink.org>) is an online resource for teachers resulting from the partnership between the American-based International Reading Association (IRA) and the National Council of Teachers of English (NCTE). This website is dedicated to the provision of online resources designed to develop and foster the comprehensive literacy skills as outlined by M.A.K. Halliday in his influential paper *Three Aspects of Children's Language Development: Language Learning, Learning through Language, Learning about Language* (2004), first published in 1982. Halliday identifies, among other things, that 'the child is not an isolated individual' in terms of language acquisition and that 'language is a process of construction' (Halliday, 2004, p. 309). The *ReadWriteThink's* lesson plans aim to ensure the provision of 'literacy engagements' that,

simultaneously involve **learning language** (as students listen to it and use it with others in their everyday lives), **learning about language** (as students try to figure out how it works, engage with their teachers in focused instruction on how it works or in critiquing its impact), and **learning through language** (as students use it to learn about or do something). (ReadWriteThink, 2009).

This Hallidayan, child-centred approach is evident in the work of *ReadWriteThink's* parent organisation, the NCTE, with regard to literacy generally. However, *Inanimate Alice* is a sophisticated attempt at the realisation of the NCTE's more specific 'position statement' regarding 'multimodal literacies', as it aspires to embody many of the NCTE's principal aims in this respect, some of which I reproduce here:

- The Integration of multiple modes of communication and expression can enhance or transform the meaning of the work beyond illustration or decoration.
- The use of multimodal literacies has expanded the ways we acquire information and understand concepts. Ever since the days of illustrated books and maps texts have included visual elements for the purpose of imparting information. The contemporary difference is the ease with which we can combine words, images, sound, color, animation, video, and styles of print in projects so that they are part of our everyday lives and, at least by our youngest generation, often taken for granted.

(Kate Pullinger and Chris Joseph) and the structuring of the pedagogical aspects of it. Included among the recommended texts are works by Manfred Jahn and Martha Driver, for example.

- From an early age, students are very sophisticated readers and producers of multimodal work. Pupils can be helped to understand how these works make meaning, how they are based on conventions, and how they are created for and respond to specific communities or audiences.
- With the development of multimodal literacy tools, writers are increasingly expected to be responsible for many aspects of the writing, design, and distribution processes that were formerly apportioned to other experts. (NCTE, 2005).

Inanimate Alice is developing not only as an educational tool designed to meet these criteria. It is also visually and acoustically appealing and, in comparison to many online multimodal productions, highly immersive. This is due in part to the high production values and the cinematic flow of many of the visual sequences, allied to a simple but gripping narrative and elements of game play, all intended to attract and enthrall younger users. It has been consciously constructed with a view to ensuring its 'tellability' (Labov, 1972, cited in Jahn, 2005, p. 36) has direct appeal to a teenage audience, achieved by an awareness of the powerful effect that the deployment of various modes can have, and by which narrative and character are explored. Although four episodes exist, the storyline in each is, typically, one in which Alice is put in a position of danger only to be rescued by the intervention of Brad, her digital friend and alter ego. In the most recent episode, *Hometown*, the multimodality that characterises all four is seen to full advantage and it is here that I shall begin my analysis.

I will first of all attempt a general narratological analysis using the work of Genette (1980), as outlined in my methodology and presented in table form (see below). Subsequently I will look at specific aspects of the narrative, namely some of the underlying themes that inform the pedagogical nature of the work. Each episode deals with issues that might be relevant to the age range of children that *Inanimate Alice* seeks to engage, while simultaneously providing a thrilling, entertaining and interactive viewing experience. In *Hometown*, for example, themes of alienation, bullying and peer group pressure are explored, and the art of creative multimedia writing is developed in a metaleptic episode set within the main story line. Although the written text is sparse, the visual, sonic and ludic components are used to considerable effect at times, to drive the narrative on and to maintain the user's interest.

2.3.2. A Narratological analysis of *Hometown*.

Inanimate Alice is, essentially, a first person fictional narrative by Alice of her growth and development and the various adventures that she and her family experience. In the previous three episodes, Alice's family have been portrayed as wealthy adventurers who are able to travel the world. They enjoy a good standard of living, and this is referenced by the visual and written descriptions of the accoutrements of wealth: large and luxurious living accommodation, home education for Alice, leisure for Ming, Alice's mother (who paints), skiing holidays and so on. Alice's father's occupation is not precisely described, but he seems to work in the oil trade, and this is confirmed by the family's residency in the oil producing regions of China, Saudi Arabia (although they holiday in Italy where episode 3 takes place) and Russia respectively. However, following a relatively unexplained incident in Russia, Alice's family have fled, without their wealth, to an anonymous town in Central England. It is here that Alice resumes her narrative in episode 4. No clues are given as to why this episode is called *Hometown*, but it is reasonable to conclude that it is the home of one or both of Alice's parents, or a place where Alice herself feels more at home than anywhere in the previous episodes. The episode itself is structured very much as previous episodes, but it is longer and contains more extended ludic interludes and game play. Such is the general similarity between episodes that any analysis of *Hometown* can be readily applied to anything prior to it.

The plot of *Hometown*, quite simply, consists of Alice finding herself bullied by her peers into climbing a set of stairs, outside a dangerous and disused building, which collapse beneath her. She undertakes the climb to demonstrate her eagerness to be approved of by her 'friends', and in this respect, her act can be judged a 'rite of passage' in which Alice begins to claim her independence from her parents as she is initiated into the group. As Alice clings to the crumbling ladder, a series of 'flashbacks' give the reader the opportunity to learn something of her past and present circumstances. The user has no option but to view all these *analeptic*¹² (a

¹² Genette defines analepsis as 'any evocation after the fact of an event that took place earlier than the point in a story where we are at any given moment' (Genette, 1980, p. 40).

flashback sequence providing a résumé of how Alice's family had to leave Russia) and *metaleptic*¹³ interventions (where the user has an opportunity to discover something about Alice's home, hobbies etc.) and, on completion, the story resumes. (In fact, *Hometown* contains several anachronous interruptions of both these types, all of which dramatically extend the length of the episode to view whilst not impinging on the actual events that take place over a matter of seconds or minutes). As a last resort, the user, situated in Alice's position, can call on the help of 'Brad', her imaginary friend. Eventually Alice escapes to the roof of the building to the general applause of her peer group, their approval assured.

All of the Alice stories can be classified as *homodiegetic* narratives (Genette, 1980, p. 245) in which Alice is the principal character, the *narrating* and *experiencing-I*, through whose eyes, in a conventional textual adventure, the reader experiences the action. However, the interactive and ludic aspects of this online narrative effectively suspend the singular position of the *narrating/experiencing-I* in favour of the *experiencing-Me*, (or even *We*) where *Me* is the online user who assumes the role of the character, in this case, Alice. Although this overlapping interplay between narrator and narratee (and narratee as an active participant as reader/user) is a common feature in any first person narrative, the indeterminacy of the relationship between the two is exacerbated by the overtly ludic and interactive nature of this type of text. The point of view shots that the interacting user sees (and here I intend the user both as a nominally passive, but interpreting, reader *and* as one who physically interacts via the mouse control or keyboard) are qualified by Alice's written commentary which is, temporally, at odds with the visible situation shown.

For the purposes of this analysis, it is necessary to be conscious of the differing levels of user interactivity and the outcomes they imply (a topic I will return to much later). In Table 1, I define user activity levels (in terms of mouse control) whilst Table 2 (following) tracks the revelatory progress of the text that makes up *Inanimate Alice*, and here I express this confusion in the term '*experiencing-I/me/we*' which I have adapted from Genette's work on narrative theory (1980). In fact, *Hometown* never rises above level 2 activity, but it is

¹³ Genette's definition of metalepsis is 'the transition from one narrative level to another (which) can in principle be achieved only by narrating, the act that consists [...] of introducing into one situation, by means of discourse, the knowledge of another situation' (Genette, 1980, p.234). The suspension of action whilst Alice recounts her past history conforms to this definition.

worth beginning to develop a simple framework concerned with the degree of physical interaction since it is a reliable indicator of the direct transference or distribution of authorial control from producer to user, and from narrator to narratee. Beyond level 3, it becomes necessary to regard the construct of any narrative as being much more collaborative than any of the *Inanimate Alice* episodes so far. It would necessarily invite readers and users to interact much more directly with the text, such as in controlled blogging or as contributors to online experimental novels like Kate Pullinger's on-going networked novel *Flight Paths* (Pullinger, 2009).

Table 1 Mouse interaction

0: No interactivity on behalf of the reader/user. Read only. (Author defined)
1: Action is advanced forward/backwards in a linear fashion by one click of the mouse. (Author defined).
2: Action is advanced once a choice has been made from several available options. Action is linear, unidirectional and recursive until all options are explored and the narrative continue. (Author-defined range of options. Order of access determined by the user. Final outcome is author-defined).
3: Action is advanced once a choice has been made from several available options and the narrative continues along this new path. Some potential areas of narrative will remain unexplored. (Author defined range of options, some surplus to the requirements of the user who chooses his own particular route).

It will be intriguing to discover to what extent the *Inanimate Alice* project allows for the development of the autonomy of the *reader-as-writer* within each future episode. The pedagogical remit is likely to prohibit, or at least inhibit, this potential, not least on the following grounds; firstly, the pedagogical need to deliver a consistent, finite and predetermined body of information and skills to all; secondly, the difficulty of assessing pupil progress and attainment in an equitable and systematic way, without the boundaries that predetermination implies. At present, pupil experiments in the construction of their own literature are not incorporated within the Alice episodes but are enabled by use of the separate 'I-Stories' software which is illustrated within the *My Project* sub-episode. Students and teachers are invited to submit their efforts to the *Inanimate Alice* website and, in fact, there are a number of pupil-authored episodes available to view. In this respect then, the *Inanimate Alice* series exists as a template intended to inspire young writers and by showing

what is possible. However, there is no possibility of altering the original storyline or of diluting the pedagogical content, which would reduce the measurable learning experience.

The analysis of the principal units of activity that make up the *Hometown* episode shown in Table 2 (next page) is not intended to be fully comprehensive, but simply lays out events in the order in which they appear (with some deviation at points where the user can decide the next action).

Table 2 Narrative analysis of *Hometown*.

Unit	Scenes and actions	Type	Tense	User Interactivity Level	Function/ Comments
1	Incipit (into): Alice (re-) introduced	First person narrative. Alice as narrative-I/ homodiegetic/autodiegetic	Present	1	Introduces Alice now aged 14 thus setting the scene for subsequent action
2	Action A: Alice in danger: Proleptic episode <ul style="list-style-type: none"> • Alice responds to dare • Climbs ladder • Writes name on wall <hr/> Action B Ladder collapses	Experiencing- I/me/we	Past – but indicating foreknowledge of events yet to be revealed to user/reader	1 introduction of the ‘hand’ cursor/pointer, used to indicate user interaction and ludic interludes	A: Alice responds to peer group pressure (bullying) indicating a desire to belong, and suppressing her knowledge that her action is dangerous and would not be approved of by parents B: The collapsing ladder is the event that provides opportunity for the subsequent activities where Alice’s life story, talents and aspiration can be shown, following Actions C and D
3	Action C: Recursive Ludic interlude 1 (any order) <ul style="list-style-type: none"> • Ladder is sheared off • Alice left dangling • Friends run off and return, screaming ‘Hang on, Alice!’ • Alice is ‘stuck here’ 	Experiencing –I/me/we	Past	2 ‘hand’ pointer in use	User is given the chance to share Alice’s vantage point as she hangs precariously from the ladder (although obviously she has to be saved for the story to continue!) Order of choice is irrelevant and the narrative is not affected, and the story resumes
4	Action D: Return to narrative: ‘I’m stuck here’ etc.	Narrating/experiencing -I	Present – the user has now ‘caught up’ with the action	0/1	Prepares the user for the ‘flashback’ analeptic episode to follow Present tense intensifies the action and highlights Alice’s difficulties by encouraging user engagement in her predicament
5	Action E: Explanatory Flashback Analeptic sub-episode which recalls Alice’s escape from Russia (see <i>Inanimate Alice</i> 3) ‘Everything’s changed for my family since we had to leave Moscow’	Narrating-I	Past	0/1	Used to explain the background to Alice’s present situation. Crucial for new users as it explains Alice’s loneliness, sense of alienation and fear Prepares the user for subsequent metaleptic scenes, still as flashbacks, since Alice is still dangling
6	Action F: Amplifying Flashbacks Metaleptic sub-episodes conveying information about Alice’s life (introduced via the ‘Igrat’ hand held game machine) <ul style="list-style-type: none"> • School (read only) <i>My Project</i> (mise en abîme) (level 2 linear interaction) <ul style="list-style-type: none"> • Home (level 2 recursive interaction where user determines route through house) • The City (level 1 interaction) • Friends (level 2 with some ludic and recursive interaction) 	Narrating -I/ experiencing - I/me/we	Past	0/1/2	Order is variable but non-crucial, as before. Over-arching narrative continues afterwards. Each of the five autobiographical features listed are informative, adding a huge amount of textual detail regarding Alice and, in a sense, are the centre of the narrative without actually being involved in the plot ‘Brad’ introduced as a friend, different from her new friends (and as a precursor to subsequent appearance) (See detailed analysis of some of these features)
7	Action G: further background material expressed as a different type of flashback sequence, as a written account displayed on Alice’s Igrat	Narrating-I	Present	1	Diary entry concerned with expressing Alice’s relationship with her parents and their own marital difficulties, due mainly to their perceived loss of social status, personal wealth etc. Alice, however, feels advantaged by the change, probably due to the acquisition of new friends and freedoms
8	Action H: sudden return to the plotline. Alice still dangling on the stairs	Narrating-I	Present	0	Alice now calls for help to help her get to safety
9	Action I: User choice between <ul style="list-style-type: none"> • Read Only or • Ludic interval 2: Play the game (with option to call on Alice’s imaginary friend ‘Brad’ if needed)	Impersonal Instructions on ‘choice’ screen, subsequently, Narrating-I and experiencing-I/me/we	Present	1 (click to choose)	In Read Only version, Alice progress through the gloomy and frightening building is accompanied by sound effects, intended to instil a sense of mystery and danger in the reader To play the game, the user must navigate through the maze of rooms that present themselves. The disembodied ‘hand’ cursor reappears and choices are made at every change of scene Many of the rooms appear to be underground which is at odds with the defined space of the exterior action (high up off the ground). If the user gets lost, then Brad may be called on to point the way
10	Action J: Resolution and Escape Alice makes it to the top of the building	Narrating-I	Present	1	Both Read Only and game versions have the same outcome. Alice has made it to the top of the building, overcome her fear, survived the danger, and won the approval of her peer group (All she needs to do now is to get off the roof and find her way back through the maze!!)
NB	At any point in the storyline, previous areas may be revisited, and user can jump between units			1	

2.3.3. Alice in danger: *The Dare*

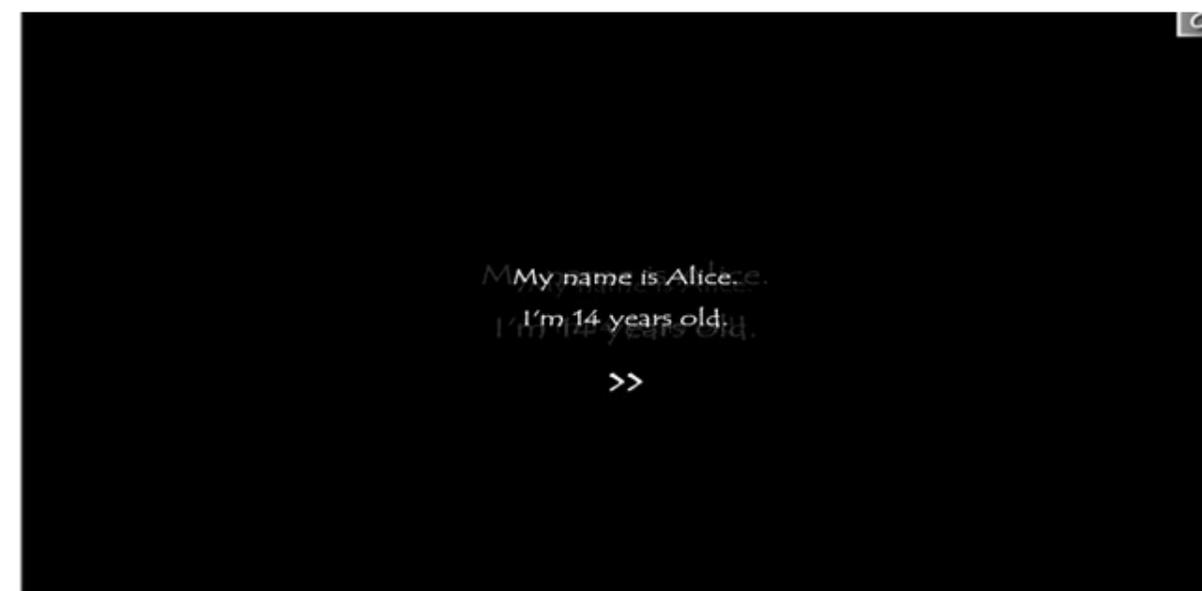
This episode begins darkly, foreshadowing the tale to come while reprising the dark and brooding atmosphere of the previous episode, *Russia*, which ended with Alice and her family making a desperate escape. The glowering sky and anonymous street scene create a sense of foreboding (Screenshot 1), and the opening frames are accompanied by indeterminate electronic sounds, ‘whispers’ that accompany the image. These sounds and the moving and repeated block chords set against an uneasy driving drum rhythm were originally introduced in episode 1. They are intended to create anxiety and tension and are consistently used throughout each successive episode and, therefore, act as an *affordance* when this sense of foreboding uncertainty needs to be quickly re-established¹⁴. As Alice introduces herself (now aged fourteen), the black screen, interference noises, and the stutter of mobile phone sounds, establish the mood conclusively (Screenshot 2). After a click of the mouse on the >> symbol (to induce a metaphorical ‘turn of the page’), the user now assumes Alice’s viewpoint and begins to be informed of the situation that Alice (and hence the user) is experiencing. The user sees what Alice sees, but has to rely on the brief, laconic verbal narrative to comprehend fully the onscreen imagery. This verbal narrative also helps to qualify the selection of data about the world that is presented. The use of the past tense in the next few scenes has an explanatory function and, juxtaposed against the moving action of Alice climbing up the stairs, this mix of the present action set against the verbal description of past circumstances that lead to the present situation, can be construed as a particular type of *interpolated narration* (after Genette, 1980, p. 207). Acting as Alice’s ‘passenger’, the newly informed user is now involved in the action and begins to empathise with Alice’s character and predicament.

The written and sonic sense of foreboding is reinforced by both the nature of the imagery and the colouring of the next screenshots which signal Alice’s imminent ascent of the staircase.

¹⁴ It is interesting to note Nattiez’s comment about the expectations aroused by the use of music and its narrative potential: ‘if the listener [...] experiences suasions of what I would like to call the narrative impulse, this is because he or she hears [...] recollections, expectations, and resolutions, but does not know what is expected, what is resolved’. (1990, p. 128). This is derived from Adorno’s notion that music is a ‘narrative that narrates nothing’ (Adorno, 1996 (1976), p.117 and cited in Nattiez, 1990, p. 128). Kress and van Leeuwen’s concept of *affordance* neatly circumscribes the difficulty of expressly specifying the nature of musical narration.



Screenshot 1 *Hometown* opening frame.



Screenshot 2 Establishing frame.

As Alice approaches the bottom of the staircase (Screenshot 3) the sentence 'My friends dared me to climb to the top of this building' explains the whole *raison d'être* of this episode: her dare is undertaken so that she may be initiated into the group she wants to join. The setting*, a disused factory in a deserted, urban, run down street, and the hyperreal, highly saturated liverish colour palette, conveys both her sense of being acutely conscious and highly sensitized to the task that lies ahead and also nauseated with fear at the prospect of attempting something she knows is both wrong and dangerous.

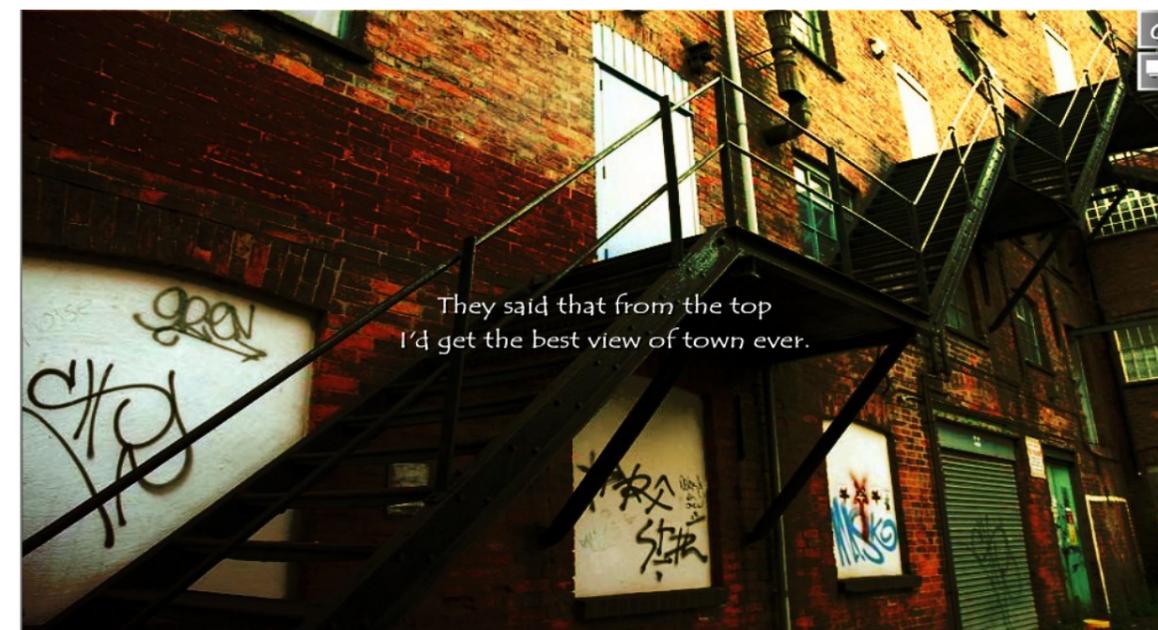
The colour scheming of the surrounding buildings, and indeed, in many scenes throughout all the *Inanimate Alice* episodes, is always extreme, and as such mimics and conveys the intensity of Alice's response, an experience which is shared, at least vicariously, with the online reader/user. The jaundiced colours of the background setting of buildings contrast with the intense darkness of the stairs, thus heightening Alice's consciousness of the most prominent feature in the screenshot, the set of stairs. In subsequent screenshots the staircase, although *naturally* represented (Panofsky, 1970), is the dominant or most *salient participant*, standing in relation to Alice (and, by implication, the user/reader situated as the hybrid *experiencing-I/me/we*).

However, looking at the visual imagery alone, the staircase can be described as a *non-transactional participant** (or 'Actor', a term Kress and van Leeuwen sometimes use to describe *participants*) since it is a passive bystander to the action which Alice is about to initiate. As Kress and van Leeuwen note, this type of 'non-transactional action process is [...] analogous to the intransitive verb in language' (1996, p. 61). In short, the staircase seems to do little except stand by passively, a silent witness to Alice's action and thought processes. In fact, the ascent of the staircase itself is the *goal** that Alice aspires to, though this is not directly indicated in any single frame, but can be deduced from the qualifying verbal text that accompanies the imagery. Her intended action is communicated through a sequence of screenshots in which Alice's view of the stairs, and hence her interaction with them, moves from being *impersonal** and *detached** (that is, far distant and signified by a long, oblique camera shot) to *intimate** and *involved** (denoted by a close up, frontal view of the steps) as they become the centre of her interest and concern. Screenshots 3, 4 and 5 display the staircase as a *vector*, pointing Alice's route as she moves from the *real* earthbound space at the base of the



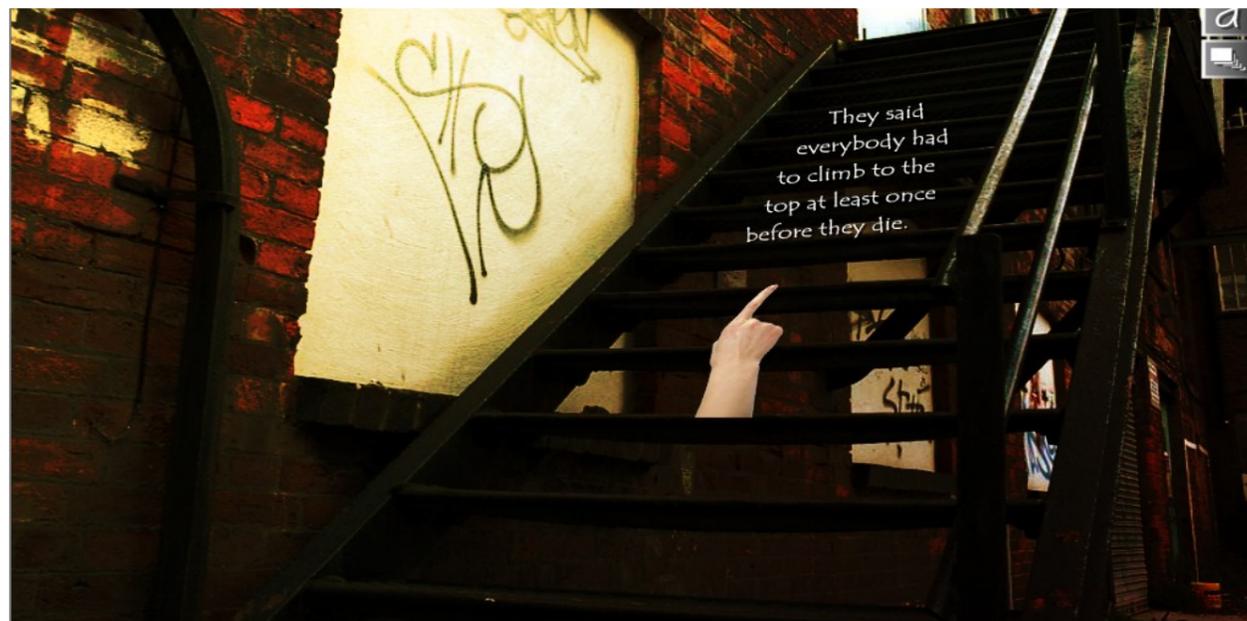
My friends dared me
to climb to the top of this building.

Screenshot 3 *The Dare*: the *raison d'être* for Alice's escapade.

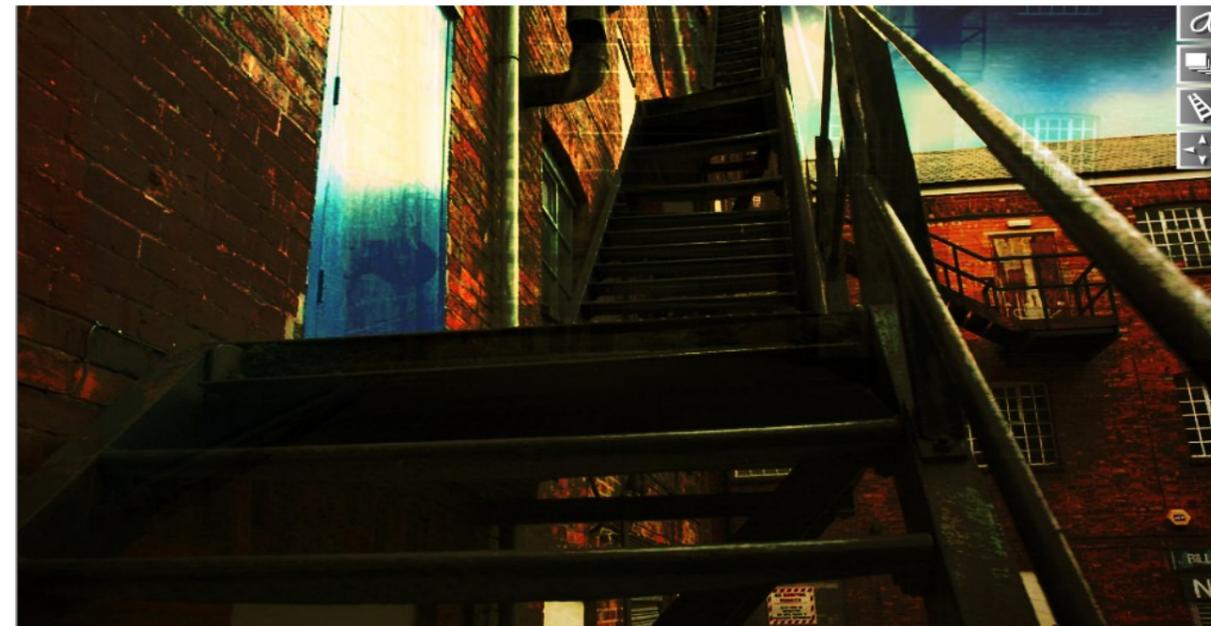


They said that from the top
I'd get the best view of town ever.

Screenshot 4 *The stairs as vector*.



Screenshot 5 The forbidding stairs and the pointing hand.



Screenshot 6 The dense and forbidding shadows

ladder to the *ideal* spot at the top where, she hopes, her dangerous endeavour will be rewarded by gaining the friendship of her peer group, waiting below. In the earlier shots, the left to right upwardly diagonal direction of the staircase is indicative of Alice's journey from the *given* safe space at ground level, towards a *new*, unexplored, uncertain and dangerous place above her. Screenshot 5 shows the stairs as towering over Alice, effected by the very low angled frontal *point of view* shot, which places any viewer in the subordinate position in relation to them. This visual trick not only confirms Kress and van Leeuwen's notion of *represented participant power**, but metaphorically suggests Alice's feelings of unease and subjugation to an entity that is much more powerful than herself.

As Alice approaches the bottom of the staircase in Screenshot 6, the general sense of foreboding is heightened even more by the intensity of shadow that seems to emanate from the staircase itself, rather than being a consequence of it. To the imaginative Alice, the staircase assumes the form, not of a mere obstacle to be physically overcome, but a manifestation of all those internal difficulties that haunt her which

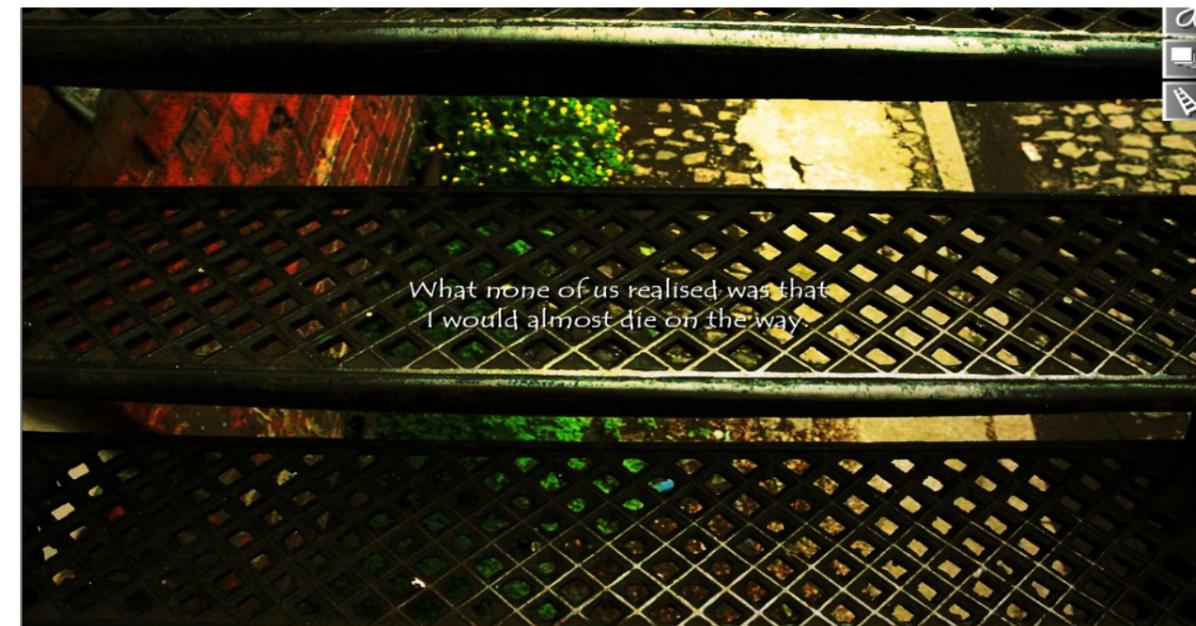
are the result of her previous experiences of which, at present, the new reader knows little. Thus, in Kress and van Leeuwen's terms, the staircase, as well as being regarded as a *non-transactional participant* because it has a suggestive presence that connotes Alice's internal distress and alienation, can also be construed as a *Carrier**, since clearly it 'carries' meanings beyond its intended function. For example, the staircase casts intense shadows, far more than might be reasonable considering the time of day and relative brightness of other objects (Screenshot 6). The pregnant density of these shadows illustrates Kress and van Leeuwen's concept of *symbolic suggestive processes**, in which an image loses some of its detailing in favour of creating a mood or atmosphere. Kress and van Leeuwen note that the rendition of colour or alteration of focus and so on 'lends the Symbolic suggestive pictures their genericity, their quality of depicting [...] a generalized essence' (1996, p. 110). Alice approaches the staircase full of dread, its shadows compounding the sense of horror she feels. This is a mountain to be climbed in every sense. What confronts her is monolithic, a North face of the Eiger; massively overpowering and always in deep shade. Of shadows, Baxandall (1995, p. 144) notes: 'the shaped and often grotesquely imitative mobility of a shadow, like some parasitical animal, can [...]

be experienced as uncanny', and further, he suggests that shadows can signify 'the domination of a destructive presence'. Baxandall's assessment of the unnerving power of shadows reflects Alice's susceptibilities, and the verbal text that accompanies Screenshot 7 gives voice to her fears: she could die in the attempt on the summit of the brooding monolith before her. The staircase is the physical embodiment of her internal and external uncertainties.

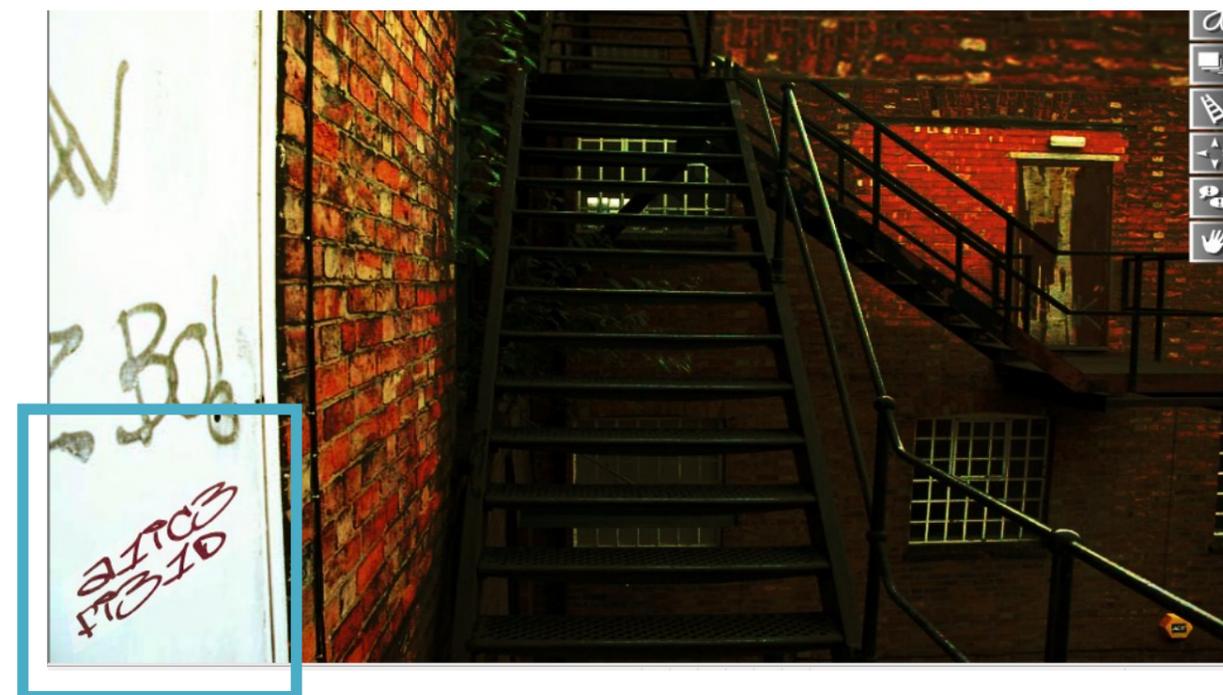
Though Alice voices her fears about the climb, her actual ascent of the stairwell is not explicitly described in the verbal text, which is centred on informing the reader, obliquely, of the justification and explanation of the actions Alice undertakes. The imagery has a complementary relationship with the text, exemplifying Barthes's notion of *relay*, since these two aspects of the message work together as 'fragments of a more general syntagm and the unity of the message is realised at a higher level' (Barthes, 1977, p. 41). The 'unity of the message' is the clear subtext that this complementary relationship delivers, and one which is expressed by what lies between the visual imagery of the staircase and the verbal text describing Alice's arrival at this point; Alice's sense of alienation, loneliness and desire to belong, even to a group that demands that she put her life at risk. The staircase is a visual metaphor expressing her aspirational desire and need to writing of her name (Screenshot 8) are indicators of the 'rite of passage' that she is undertaking.

The gradual sense of elevation and movement are captured in the carefully framed *point of view* shots, visibly (re)creating Alice's ascent and, acoustically, Alice's progress is suggested by the clattering sound of feet on the metal stairs. The written text often mimics the direction of Alice's progress by flying in as a *vector*, before establishing its position on the steps, as is indicated clearly in Screenshot 5; and the upward movement is doubly reinforced by the introduction of the disembodied pointing 'hand'. (This is later used more extensively in the game playing sections of *Hometown*, but is introduced here to ensure that the user is familiar with it). By the time Alice writes her name, the relationship she has with the stairs is beginning to change, becoming much more *equal*, indicated by the eye level shots of the scene around her. Although not at the top of the stairs, Alice has overcome her initial fears (Screenshot 8).

It is the collapsing of the stairs (Screenshot 9) that will shortly introduce the first ludic interlude, and the collapse is described visually by a montage of rapidly changing images suggesting that Alice is falling



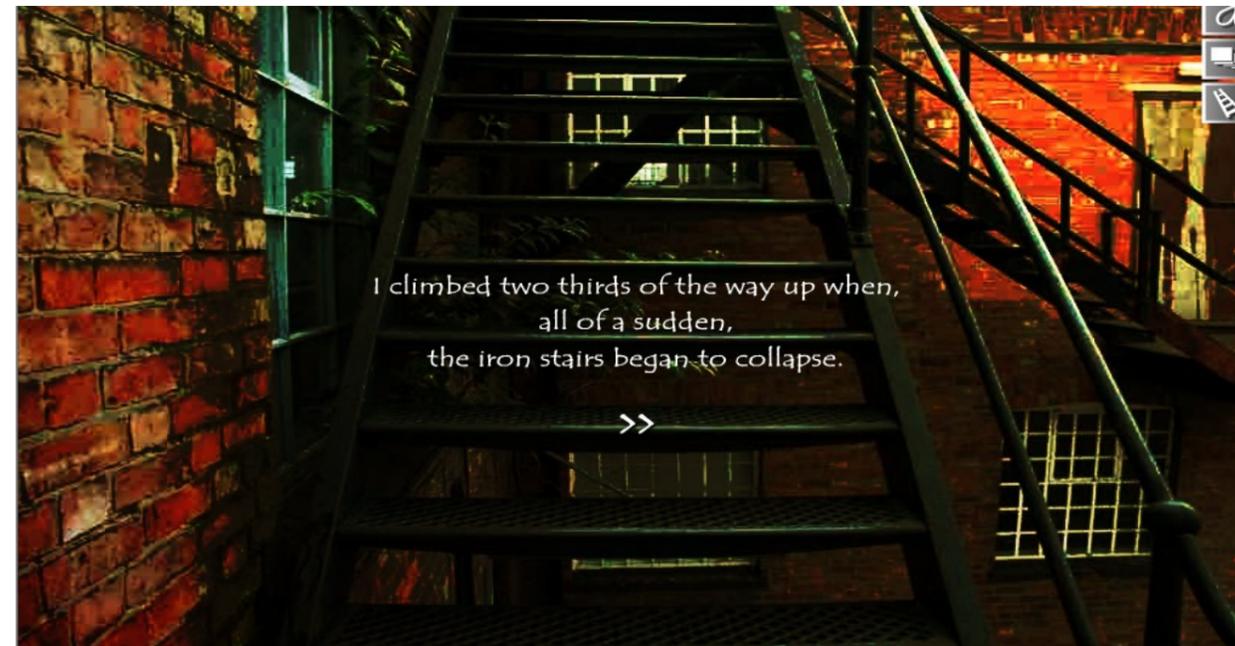
Screenshot 7 A prescient moment



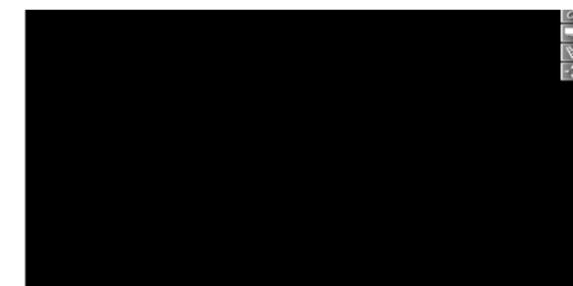
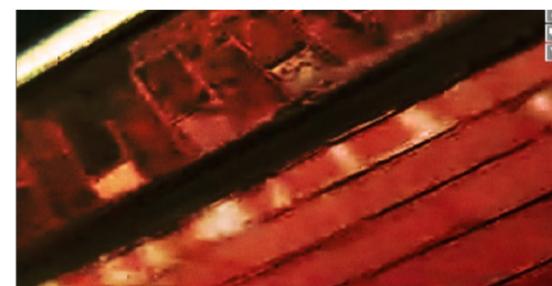
Screenshot 8 Alice's act of graffiti

through space. However, the most notable mode used to convey Alice's fall is sonic. Up to this point the audible accompaniment has consisted of a mix of electronic sounds: a mobile phone buzzing and, once or twice, the sound of camera shutter, synchronised with frame changes, suggesting that someone is making a visual record of Alice's climb, probably on the mobile phone itself. The combined effect of these sonic interjections is to compound the sense of unease and unreality indicated by the hyperreal colour palette and on-going narrative. The heavy distorted 'twang' is made by some indeterminate instrument or is, more likely, an entirely synthesised electro acoustic production. Set against mobile phone interference noises at the 'page turn' pauses, and with the addition of more instruments (drums, hi-hat cymbals, swanee whistle etc.) the tension of the narrative increases due to the excitement the intensity of the music produces. The tempo of the piece is fast, about 160 crotchet beats per minute, the equivalent of a high heart rate, resulting from either high exercise or stress. Individual instruments subdivide the crotchet beat, and the resulting complexity of sounds, allied to the cross rhythms that the polyphonic instrumentation produces, intensifies the sense of anxiety that Alice (and the user) experiences as she approaches and climbs the ladder. The timbre of the instrumentation is insistent too, harsh and unforgiving, and this mirrors the harshness of hyperreal colour scheming to great effect.

As the most *salient* musical feature the driving, but uneasy, rhythms of the 'indie' (independent) instrumental sound track are an appropriate choice, written specifically for *Inanimate Alice*, since the 'indie' movement is associated with alternative and independent music making, free from the authoritarian control of established recording companies. The development of the 'indie' movement is usually perceived as being associated with youthful rebellion and, particularly, within an urban setting. Choosing this type of musical accompaniment reinforces the idea of Alice's quest for independence and is a type of music with which, it is reasonable to assume, online users would be familiar, and who are aware of its ready availability via the Internet. In fact, the *Inanimate Alice* soundtracks are available from an 'indie' music site, so even someone new to independent music making has immediate access to a source via the *Inanimate Alice* website. The subversive nature of 'indie' music, when applied to *Hometown*, echoes Alice's own act of



Screenshot 9 The stairs are about to collapse.



Screenshot 10 Montage to suggest Alice's fall.

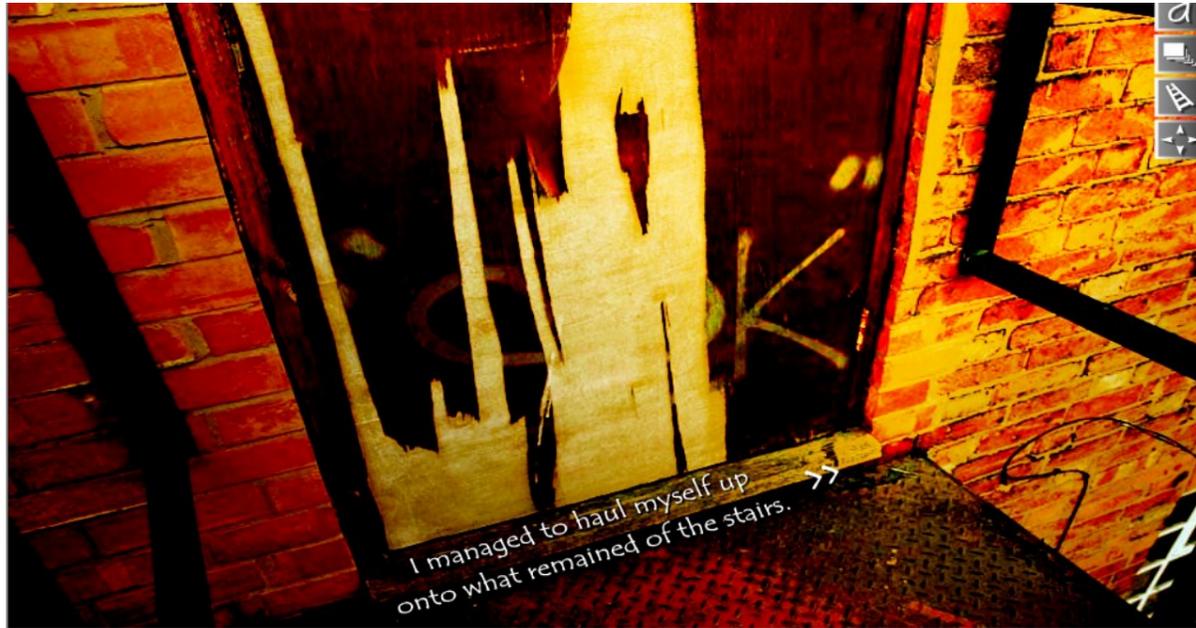


Screenshot 11 Ludic interlude. User is offered the appearance of choice.

subversion in climbing the stairs, which she must know is something that would be countermanded by her parents if they knew. At the point of her fall the music diminishes, to be replaced by crashing sounds and noises, as the kaleidoscopic images pass by in front of the viewer (Screenshot 10). As the black screen appears, a final crash is heard and then: silence. Alice, or more precisely the *experiencing-I/me/we* already referred to, is confronted with a choice of what to do next by clicking on any of the four disembodied hands that appear (Screenshot 11). In fact, the choice is irrelevant, since every option is eventually explored. This recursive action always results in Alice successfully hauling herself up to safety, and the main point of this interlude seems, at first, difficult to assess. However, it seems likely, after a number of readings, that this interlude has several intentions; to revitalise the interest in the piece by offering the reader a different interactive activity; to teach a novice user something about the means of interaction, and to offer the opportunity to explore the themes of bullying, peer pressure and alienation.

The next sequence of screenshots (Screenshots 12 to 15) can be accessed in any order, and the written commentary is so constructed that nothing seems out of place. Its expression is both generalised enough to allow for seamless connection with whatever frame is selected next, yet specific enough to communicate Alice's rising panic and despair when it seems her friends leave her. Her friends are not actually pictured in any of the scenes, and this intentional choice on behalf of the producers allows the reader/user to empathise fully with Alice. The lack of distinct faces and characters enables any user to substitute his/her personal, interior concept of 'friends', unhindered by another's representation. Much like a first person written narrative, these deliberate omissions allow the reader to construct his/her own interior imagery. At the same time, they convey Alice's inherent sense of disassociation with the peer group *she* is endeavouring to join. In fact, the deliberate lack of any kind of physical appearance by Alice, allied to minimalist verbal characterisation often limited to the type of observation that any adolescent might make about the world to express their dissatisfaction with it, ensure that the teenage user has every opportunity to become personally immersed in the text, through the substitution of themselves into the role of Alice.

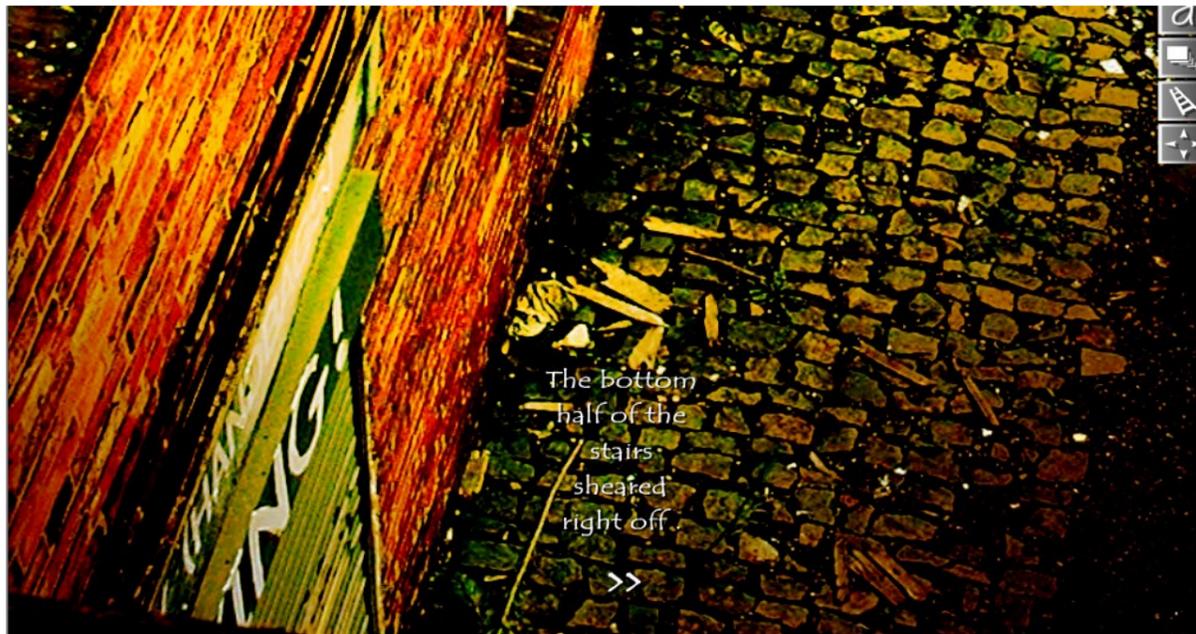
Of the four apparent options available, it is the last shown here (as it appears in Screenshot 15) that explores the nature of peer pressure. This option is made up of a number of frames in which it appears that Alice's friends desert her. This is indicated by a perceptible darkening of the colour palette as they leave, as though a cloud were passing overhead and connoting despair, only to disperse on their return when the 'normal' palette to which the reader has become accustomed is resumed. The intense, highly saturated yellow hue and granular nature of these screenshots connote the depth of Alice's experience as all her consciousness is engaged in survival. Many of the techniques used earlier to signify a variety of ideas appear again; the *vectoring* of phrases, different kinds of musical accompaniment and so on. Once Alice's friends have returned, the screen falls temporarily silent until children's shouts and calls are heard, but again these are indeterminate, denoting the anonymity of Alice, her friends and the *setting* (Screenshots 16 and 17). However, the use of the speech bubbles is interesting, not least because, in keeping with the anonymity described earlier they appear to emanate from invisible mouths, thus allowing readers to make their own



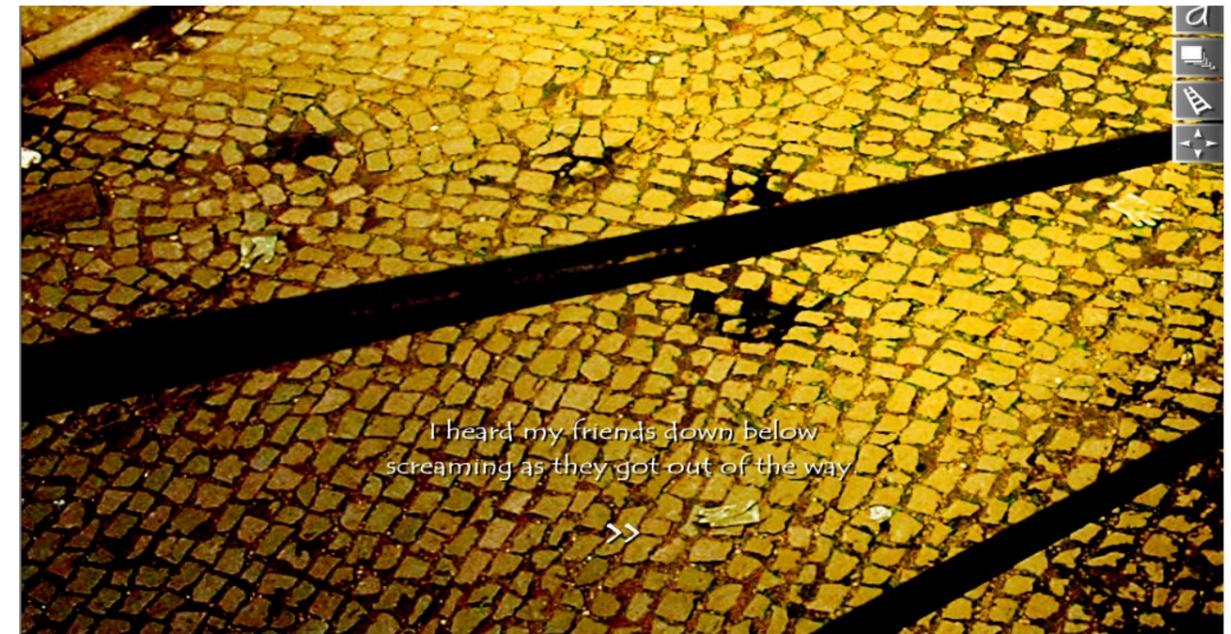
Screenshot 12 Option 1.



Screenshot 14 Option 3.

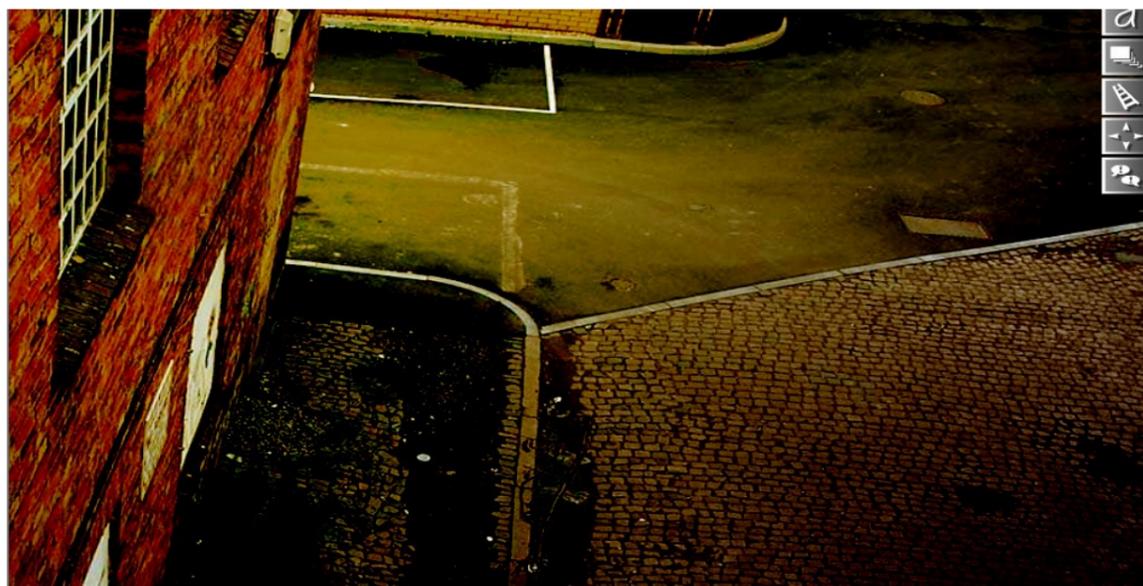


Screenshot 13 Option 2.



Screen shot 15 Option 4.

Screenshots which show the options available to the viewer, although all 'avenues' arrive at the final screenshot where Alice feels deserted by her friends.



Screenshot 16 Indicating the absence of participants.



Screenshot 17 Speech bubbles to indicate the position of implied reactors.

mental substitutions whilst their position, simultaneously, describes the *social distance* existing between Alice and her peers.

Kress and van Leeuwen classify this type of intrusion (Screenshot 16) into the visual narrative as a particular kind of *vector* (1996, p. 67) as the bubble usually emanates from an identifiable source, or *reactor**, that is, someone who speaks or reacts within a given situation. Since the bubble, in this case, represents spoken speech and must originate from a speaker but its source is not visible, I shall coin the term *implied reactors* to identify the missing persons that the bubbles represent. The *implied reactors* are witnesses to the action undertaken by the *experiencing-I/me/we*. A line of sight exists between the *implied reactors* and the implied first person (Alice) which itself can be only implied, due to the physical absence of *all* participants. The proposition of visual interaction between all participants is confirmed by the positioning and nature of the mediated speech act, which is directed at Alice: 'hang on Alice' and 'climb up to the top', despite the absence of any visual representation of the reactors involved. Hence, the visual transaction that takes place between the *implied reactors* and the *experiencing-I/me/we* is evidenced in the frame by the speech bubbles which mediate a sonic interaction, the speech act, by making it visible. The *implied reactors* can also be construed as *(implied) sensors**, which is the term Kress and van Leeuwen use to describe the *participants* that institute the *phenomenon** of the *verbal process* enclosed in speech or thought bubbles.

Screenshot 17 also conforms to the Barthesian criteria of *anchorage* since the speech bubbles qualify the visual imagery. The same scene (shown in Screenshot 16) without the bubbles makes the point since, within the context of the presented action sequence, this relatively empty screen conveys little. Once the speech bubbles are in place, the meaning of this particular scene becomes clear: Alice's friends have returned to offer her support and advice, communicated by the speech bubbles. Even allowing for the bias of Alice's viewpoint in all previous scenes, this is the only instance of Alice's friends behaving in a positive way. At base level 'the text *directs* the reader through the signifieds of the image [...] remote-control[ing] him towards a meaning chosen in advance' (Barthes, 1977, p. 40). Here, the message is simply that Alice's peer group has returned to help her. But, within the context of the *whole* narrative, this same frame connotes many other

meanings, (which places Screenshot 17 within Barthes's remit of *relay* as previously described) including the recognition by Alice's friends that what Alice is attempting on their behalf is dangerous, and that they have colluded in her recklessness. The recognition of the deleterious consequences that their bullying has had on Alice, in positioning her in what now appears to be an untenable and dangerous situation, is redemptive. In a cowardly fashion, they ran away, but now, recognising that Alice is genuinely at risk, they return. Importantly undergo a character reformation. This allows the undesirable peer group pressure, applied in the earlier scenes, to be disrupted in favour of a more amenable companionship. Within the context of the whole, the 'unity of the message' is that true friends do not desert one another, or place them in positions of risk but, loyally, give support. It is the sequencing of these events that provide the *relay* of which Barthes's speaks since the mediating speech bubbles alone provide insufficient information to contextualise meaning in a single screenshot. As individual frames are part of a continuum, the *anchorage* and *relay* phenomena exist together in a reciprocating relationship, and by degrees, layering up meaning.

As Alice scrambles onto the platform she realises that, as the stairs have fallen away, she is stuck. From the sides of the screen, black curtains move across to terminate this part of the narrative which, like Alice, is in a state of suspension, giving an opportunity for Alice to consider various aspects of her past and present life (Screenshots 18 and 19). She begins with an analeptic episode that recounts, for the benefit of the reader, the circumstances that led to her arrival in England. In doing so, Alice is clearly in the *narrating-I* position, rescinding the overtly shared relationship with the user.

2.3.4. My Project

My Project is one of a number of alternatives on offer at this midpoint of Alice's history while she is still trapped on the stairs. Each of these alternatives can be considered as a metaleptic interruption to the first level narrative framework (i.e. Alice's ascent of the ladder and subsequent fall) in which they are embedded. As Ryan notes, such narrative interpolations 'interrupt[s] the current story and divide[s] the cognitive activity of the reader between the tale of the highest level, which always occupies the centre of attention, and the unfinished stories of the lower levels, which remain present in the back of the mind' (Ryan, 2006, p. 205).



Screenshot 18 The 'curtains' move across to end this episode.



Screenshot 19 Closing frame of the first episode of *Hometown*.

Although the user can access any one of the five aspects of Alice's life, shown in Screenshot 20, in any order, all must be explored before the remainder of the narrative can continue, and Alice is trapped on the stairs until the reader catches up with her again. None of the five topics is concerned directly with Alice's present circumstances, but each provides the reader with detailed information about her interests, family and friends.

Alice's task, *My Project*, is self-imposed and is something she enjoys working at that gives her the opportunity to develop her skills on the way to fulfilling her long term aim to become a games designer. She also uses it as a way of developing friendships with the new acquaintances she has met at school (Screenshot 21). Her 'project' is the construction of fiction using the software 'iStori.es'. She accesses this software using her 'Zeron Igrat', an imaginary handheld electronic device which has much in common with Apple's popular iPhone, released in 2007. Like the iPhone, Alice's Igrat¹⁵ has the capacity to do many things: to phone, text, compute, play music, send email, be a sat-nav and so on. Like the iPhone, a menu of icons indicates its capabilities. This is touch activated via its screen, though the online reader/user must still use the mouse. These visual metaphors represent the tasks the Igrat can perform, and they are self-explanatory. Included is the satellite dish symbol used to generate the picture of Alice's hometown, the operation of which is shown in sequence (Screenshot 20).

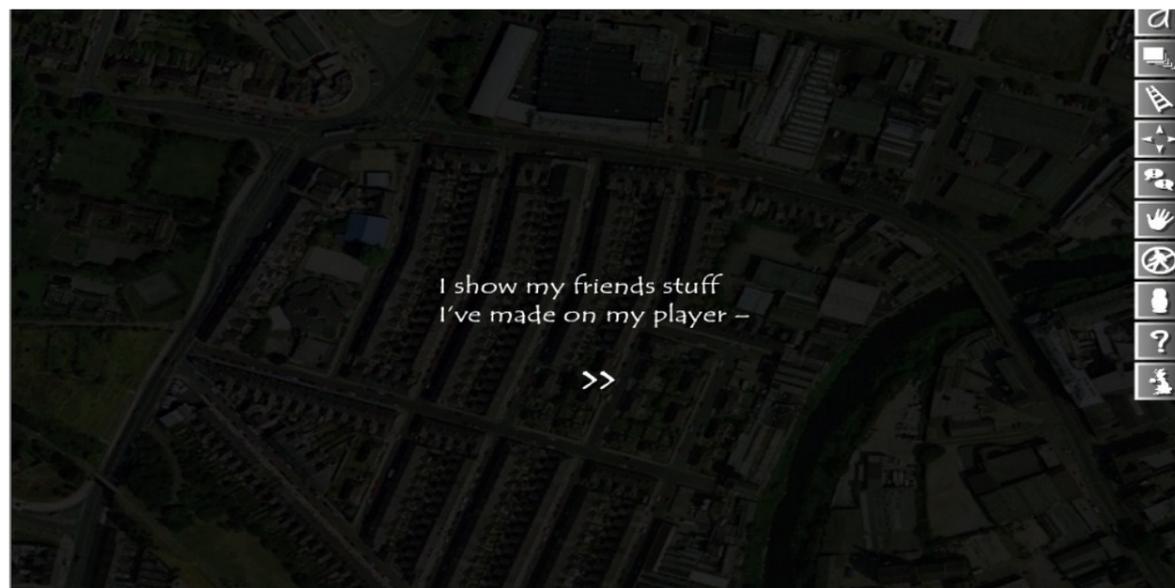
Alice uses the machine to make friends and is happy to demonstrate her skill (Screenshots 21 and 22). It is not clear from the tone of the narrative here if she is showing off, but Alice is shown to be quite self-deprecating in other episodes. It is reasonable, therefore, to assume that her friends are eager to develop their own skills and have simply picked up on her competence. This positive presentation about the acquisition of Information Technology skills is crucial so that the whole of *Inanimate Alice* can deliver one of its key educational remits: to develop computer literacy skills. The story of Alice constructing a tale using iStori.es as a demonstration for her friends is, in a sense, a miniature version of the episode *Hometown*, being constructed in more or less the same way. *Hometown* is itself a subset of the entire *Inanimate Alice* project and is similarly constructed. Existing as a miniaturised replica of the whole, *My Project* can be regarded as an

¹⁵ In fact the Igrat makes its first appearance in Episode 4. In previous episodes a similar but simpler machine was in use, the 'Ba-xi' and, as yet, the change of machine remains unexplained. 'Igrat' and 'Ba-xi' mean 'player' in Russian and Chinese respectively (Harper, 2009).

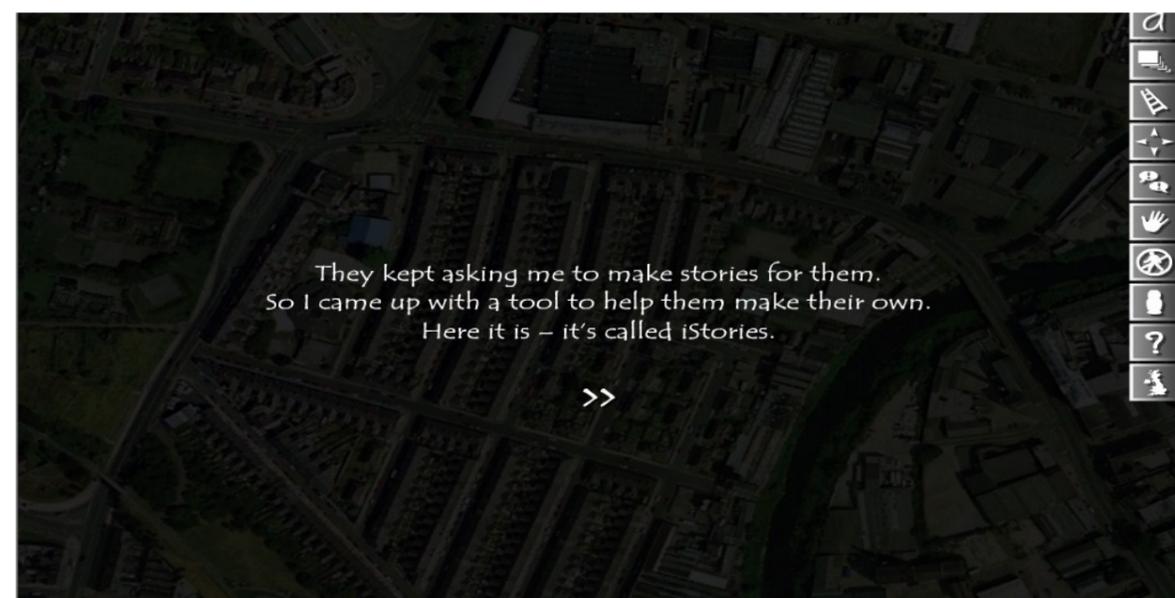


Screenshot 20 Montage showing the satellite sequence on Alice's Igrat.

example of *mise en abîme* since Alice appears as 'a character [...] engaged in writing a novel similar to the novel in which [s]he appears' as described by Rimmon-Kenan (1983) (cited in Jahn, 2005, p. 24). In fact the story that Alice recounts as her demonstration piece seems to be a brief reprise of the very first *Inanimate Alice* story, *China*, in which her father goes missing and Alice and her mother take their jeep and find him. Again this conforms to the nature of *mise en abîme* since the *hyponarrative* (Alice's iStori.es tale) is embedded in the *matrix* narrative that engenders it (Jahn, 2005, p. 22). I would suggest that the repetition of



Screenshot 21 Alice begins to share her work with her friends.



Screenshot 22 Alice begins to demonstrate her computer skills.

this technique has a reinforcing role in the delivery of computer skills; the recapitulation in miniature of what has gone before serves to embed the process of construction in the minds of young users while exemplifying its possibilities.

The Igrat comes in a choice of colours (Screenshot 23), which the user can determine by clicking on a 'hotspot' on the Igrat's frame, and subsequent showings retain the colour chosen. The range of colours and the fact that such a choice can be exercised, would favour the notion that the intended audience for *Inanimate Alice* is mainly teenage girls¹⁶, even if the previous episodes within *Hometown* have not already done so. The symbols on screen indicate that it has the capacity to take photographs, take notes, inputted by a stylus, and play music. These are the features that she uses, in conjunction with the iStori.es software, to create multimedia fiction. In fact, the iStori.es software is available from the *Inanimate Alice* website, and pupils all over the world are beginning to use it to create stories of their own having seen what is possible following the release of the *Inanimate Alice* series.

Apart from its pedagogical function, *My Project* has little impact on the immediate narrative of *Hometown*, and, in terms of plot, it could be excluded from the episode. However as part of the projected *Inanimate Alice* series its function is crucial. This is the first time that Alice has used the Igrat explicitly for the benefit of others. Past episodes have seen Alice use the machine for her own entertainment and pleasure, so this externalising of her own experience by sharing it with her friends marks another phase in Alice's growing up, and a further development of the

¹⁶ The fact that *Inanimate Alice* is geared towards girls was conclusively proven (to me, at least) when I delivered a couple of lessons on it to a group of Yr9 pupils. The girls were delighted by the chance to choose the colour of the Igrat and, generally, by the excellent graphics and caring storyline. The boys on the other hand found it all a bit dull, used as they are to the much more violently interactive games dealing with horror and war themes. Again, further work is needed here to substantiate my initial observations.



Screenshot 23 Showing some of the Igrat's colour range.

Bildungsromans to which *Hometown* is the latest addition, at the end of which the mature Alice will emerge.

Alice's sharing with another something as precious as her Igrat is not only an act of maturity but one that

may, indirectly, influence the outcome of

Hometown. It is conceivable that the return

of Alice's friends to shout encouragement in

her time of need as she dangles from the

broken ladder is a reciprocal act of kindness

in return for her own, as shown in Screenshot

22.

The actual construction of an iStory

using the Igrat is quite straightforward, but

the presentational orientation has altered

from portrait to landscape format, which

allows for greater visual content, whilst also

inexplicably growing in size during the move.

The compositional process involved in

making a multimedia fiction is simply

illustrated in the online sequence as shown in

Screenshots 24 and 25.

Essentially it consists of assembling

photographs shot by the Igrat together with

sound and text to produce a mini story. The

iStori.es software, which is (genuinely) available at present to schools and institutions, must make the

assembly process quick and easy. In fact, the website claims that the iStori.es software 'has been developed

to integrate seamlessly with the series encouraging budding iStorytellers of all ages to use their imaginations

and tell their stories in this powerful and highly original way' (<http://www.istori.es>, 2007). To the

sophisticated computer user, this compositional process might well be easily accomplished on a laptop or PC

using more conventional software and indeed, the *Inanimate Alice* project may have the development of this

competency as a long term aim. However,

the idea of using something like an Igrat,

even as a metaphor that stands for complex

computing power has appeal. Its function

here is to demystify the computing process

for beginner users and the reduction of scale

and ease of use of equipment like the fantasy

Igrat, and its deliberate styling are

instrumental in normalising the use of

sophisticated technology by the functionally

computer illiterate. The Igrat itself is overtly

constructed to be an object of desire and,

apart from the colour range, already noted,

its overall design is intended to be attractive.

Its slim, rectangular shape is softened by the

femininity of rounded curves and corners

which reduce the overtly male associations

that such technology often embraces.

Presumably engineered to be ergonomically

efficient, it has a number of extraneous and

redundant knobs and buttons, playfully styled to look efficient that afford the possibility, however unreal, of

actually performing some unknown functions. In many ways, the Igrat is a toy, a simulacrum of something

that truly exists, in as much as Alice exists, and deliberately constructed to conceal its supposedly large

computing power so as to lessen its powers of intimidation.



Screenshot 24 The start of Alice's iStory.



Screenshot 25 The conclusion.



The touch screen of the Igrat (Screenshots 26) is the interface between its functional capacity and its user, Alice. Careful attention is paid to ensure that the visual metaphors, the icons used to represent its functions and applications, are easy to recognise and, although apparently very simple, they are highly stylised graphic reductions of the objects and processes they represent. They are presented as decontextualized, simplified images on a neutral background, and in front elevation relative to the viewer; the three dimensional aspect is minimised to the point that what remains is emblematic. These conceptual representations allude to activities or processes which are only suggested by the icons. For example, the envelope icon suggests the act of physically sending a real letter but, by the process of affordance, the image of the envelope is ascribed to texting and emailing. Their equality of status is confirmed by ensuring that each graphic object is allocated the same amount of space, demarcated by a retaining border describing it. Regardless of the true size of the object that each represents (for example the telephone and the pencil) the symmetrical organisation on the screen is equitable and, therefore, each icon/application has the same degree of importance (Screenshot 26) even though the imagery is of *low modality* in terms of the accuracy of the depiction compared to the actual object it represents. Kress and van Leeuwen's concept of *classificational processes** (1996, p. 81) is useful in trying to identify the nature of the relationship between participants (the icons) which are inherently different from to identify the nature of the relationship between participants (the icons) which are inherently different from one another, although it is commonplace now to see such disparate objects and functions placed together. Until recently, it would be unusual to group together icons for a sat-nav and a joy stick, or music and envelopes, since at first glance they seem to have little in common¹⁷. However, due to the advent of various technologies, like the iPhone, such relationships are normalised. In the case of the Igrat and similar, real devices, it is the functionality of the technology that promotes such ontological groupings. In Alice's Igrat, the lack of hierarchical structure, allied to the symmetry of the layout suggests these symbols belong to a *covert taxonomy** in Kress and van Leeuwen's terms (1996,



Screenshot 26 The Igrat's touch screen, housed in its attractive casing.

¹⁷ Somehow this is redolent of the attributions that denote various saints and martyrs described by Panofsky. To the ill-informed, a woman carrying shears or a man with a beehive is meaningless when they appear in a mediaeval painting. Likewise, the icon of a satellite dish or envelope carried on an i-phone or computer screen might equally mystify. These icons conform to Panofsky's definition of *conventional subject matter*, being allegorical in nature (Panofsky, 1970, p.54).

p. 81). While the rigidity of the arrangement is in line with Kress and van Leeuwen's description of this type of taxonomy, the Igrat's icons are all *participants* belonging to the same 'overarching category', in this case the category of 'being applications and functions of the Igrat' (1996, p. 81). Kress and van Leeuwen would recognise the icons as being *possessive attributes** of the Igrat which acts as the *carrier* of its (therefore of the applications they represent). This suggests that the relationship between the icons and the Igrat machine is *overt** rather than *covert*, since it is clear that the icons designate particular functions that are an inherent part of the machine. In considering the nature of the Igrat by applying Kress and van Leeuwen's *analytical process(es)**, it is possible to see that the Igrat is the sum of its parts, expressed through the possessive attributes which it carries. In qualifying the nature of these possessive attributes, one could classify them as being *disengaged** since their connection with one another is incidental, apart from being aspects of the generality of the Igrat.

However, it is the intent of Alice to combine some of these distinctive functions together, as her demonstration story shows. It is the intervention of Alice as human agent that unifies the functionality of the different applications available. In this respect, the Zeron Igrat is a tool, one sympathetically and attractively presented, intended not only to enable the fictional Alice to be creative but to develop in children the realisation that it is possible for them to do the same. Although not part of the main narrative, this brief, introductory excursion into the functionality of the Igrat (and by inference, computers and palmtops generally), is an important aspect of *Hometown* and one that will, no doubt, be developed in future episodes.

2.4. Conclusion

It is not the purpose of this thesis to make evaluative judgements about the success and effectiveness of the two works studied in terms of their literary or artistic worth beyond that which is expressed using the semiotic resources delivered through the various modalities employed in their production, and which are intended to convey meaning. However, the interactive nature of these works goes some way to blurring the boundaries between creative artist as producer and creative reader as receiver (I will consider this relationship more fully at a later point). None the less, I believe that it is impossible to demarcate the point at which the 'poietic' (the creative process) ends and the 'esthetic' (the process of aesthetic response) which is

also a creative act, begins. In assuming Nattiez's terminology here, it is possible to distinguish, in the 'trace' (in this case the two works I have analysed), those factors that produce (at least) the desired response in the reader/user that the author intended. Inevitably, however, the everyday social experiences that develop our semiotic literacy are constantly under construction, revitalising and re-energising our concept of, and involvement in, the attribution of meaning. Kress and van Leeuwen's methodology successfully makes possible an examination of the 'trace' in visual imagery and provides a framework, a grammar, for the analysis of this important aspect of human communication. I believe I have shown how their work can be usefully and successfully applied to a variety of texts that exist in the still new, and developing medium, of cyberspace. The combination of Kress and van Leeuwen's approach with that of other theorists in the field of extracting meaning marks the beginning of a developing appreciation about how the 'esthetic' experience is generated.

Although Nattiez was partly concerned that the 'esthetic' experience (as he terms it) was 'a complex process of reception that reconstructs a "message"' (Nattiez 1990, p.17), the collective works of Barthes, Halliday, Panofsky, Genette and Kress and van Leeuwen and so on, indicate that meaning is configured through a network of social experiences and expectations. This acts as a library of resources that can be tapped into whenever a text (of any nature) is accessed. Kress and van Leeuwen have begun to quantify the visual experience by developing a vocabulary that articulates the relationships between the participants we see in images. Application of a similar logic to the sonic suggests it is possible to do the same. Indeed, van Leeuwen's later work (1999) has begun to address the issues related to the construction of meaning in music. He does so by trying to marry together some basic formal analyses of the elements that make up music (the score, instrumentation and so on) to the notion of power relations between those actively involved (as producers and/or receivers) in the trace that is the consequence of such activity. In this respect, van Leeuwen is perhaps influenced by the pioneering work of both Adorno and, more particularly, McClary, whose analyses of music is concerned with identifying how music acts as 'the most sensitive social barometer' (McClary, 1991, p.28). More recently, David Machin (2010) considers carefully the 'meaning potential' of popular music, identifying the metaphoric relationships of certain musical expressions such as

ascending or descending pitch or varying rhythm. By ascribing to identifiable features within music, for example, a particular harmonic progression, a motif, or by long standing associations with external events or genres or ideologies, it is possible to posit the notion that the various roles of voices or instrumentation can in some way reflect or represent, for example, the power relations between groups in society at large. Equally, it can express tension, anger, love etc. However, the extrapolation of significance is more problematic when there is informality in the production of music itself, or where it is actively seeking to disassociate itself from the norms that usually cause it to be meaningful. In *Faith*, the sonic accompaniment is relatively easy to understand since, essentially, it is limited to the use of stock sounds. These either allude to the physical presence of particular items (buttons being pressed etc.) or make use of conventional borrowings, for instance, bells and harp to induce a sense of the ecclesiastical. The musical accompaniment to *Hometown* is much less susceptible to easy analysis since its novelty of production renders no score that can be pored over, and little referencing to other musical norms. What can be gleaned about its significance relies on the listener knowing something about how and why 'indie' music is made and, in the specific context of the *Alice* saga, through coming to recognise the association of identifiable bits of music or sounds to certain situations or, in the case of Ming (Alice's mother), to certain characters. I recognise that, to do justice to the relationship between the sonic elements of *Hometown* and its graphic and written text requires much greater consideration (and space) than I have at my disposal here.

Nevertheless, I believe that both *Faith* and *Hometown* are captivating and immersive works that function quite differently to produce the 'esthetic' experience of which Nattiez speaks. The graphic richness of *Hometown* is self-evident and, although it is the longer of the analyses here I feel I have barely touched it, as so many aspects of it are yet to be uncovered. I am not insensible to its shortcomings, however. The relative lack of narrative progression, the misalignment of some of the teaching support materials are clear weaknesses that need consideration if the rest of the project is to remain both engaging and purposeful. *Faith* too is problematic, and here it shares with *Hometown* some of the difficulties that the multimodal approach necessarily engenders. These difficulties are related principally to resource management since the demands of manufacturing a multimedia production, where the semiotic codes are intertwined are complex.

How easy it must be to be so engaged in the activity of making, so enthralled by the fascinating technology that facilitates the creative process that sometimes the purpose of the activity itself is in danger of being forgotten! Both these productions have their weaknesses I believe: *Hometown* in the ways already mentioned, while *Faith* seems preoccupied less with the state of one's heart and mind than with an exhibition of technical aptitude, although I feel sure that Kendall would aver exactly the opposite. Certainly, it is the case that, as both *Faith* and *Hometown* effectively demonstrate, and which is revealed by the kind of semiotic analysis I have applied, it is entirely possible to configure meaning in affectively in cyberspace. The production of the remarkable is always the result of some indefinable process that marries together technical ability with the aesthetically sensitive, yet both these works represent serious attempts to realise the excellent in the new and fast growing context of cyberspace.

Chapter 3: ANALYSIS OF *THE SHOWER* BY NICOLAS CLAUSS

3.1. Background Information to: a) *Psycho*, the Movie and b) *The Shower*.

The power and influence of *Psycho* (Hitchcock, 1960), the movie, are very considerable and, given the referential nature of a substantial amount of Nicolas Clauss's work, it seems almost an inevitable choice for him to select and re-work a scene from it, as he does in his online interactive artwork *The Shower* (Clauss, 2005a). In order to appreciate the adaptations fully and changes that Nicolas Clauss makes to the shower scene, it is expedient to consider the original work first, its place in cinematic history and the reasons behind its continuing popularity and influence, before moving on to a full examination of *The Shower* itself.

Based on the 1959 Robert Bloch novel of the same name, *Psycho* has, in essence, a fairly straightforward, linear plot: Marion Crane (played by Janet Leigh) and Sam Loomis (John Gavin) are unable to marry due to Sam's debt. Contrary to the respectable conventions of the day, they meet in secret, at a hotel, to conduct their love affair, a situation with which Marion is unhappy and dissatisfied. When the opportunity to acquire forty thousand dollars comes her way, Marion steals the money, thinking at first that this will alleviate Sam's debt enabling them to marry and so legitimising their relationship. After the theft, Marion decides to drive to her lover's hometown, breaking her journey at the Bates Motel. After an encounter with Norman Bates, the psychotic son of the motel's owner, she is murdered in the shower. The first section of *Psycho* is principally concerned with Marion's journey (both physical and emotional) following her appropriation of the money. In the rest of the film, Marion's boyfriend, Sam, and her sister Lila (played by Vera Miles) retrace Marion's steps in order to solve the mystery of her disappearance; in doing so, they discover the skeleton of Norman's mother, the truth about Bates Motel and the nature of Norman's mental dysfunction. His condition is explained to the viewer by the appearance of a (somewhat unconvincing) psychiatrist in the closing moments of the film. By the end, the spectator is fully cognizant of the reasons for Norman's behaviour and manner and is fully satisfied that the established order of the world is reaffirmed. Norman's oddness and mental derangement are explicitly exhibited in his final scene where he has surrendered to the domineering

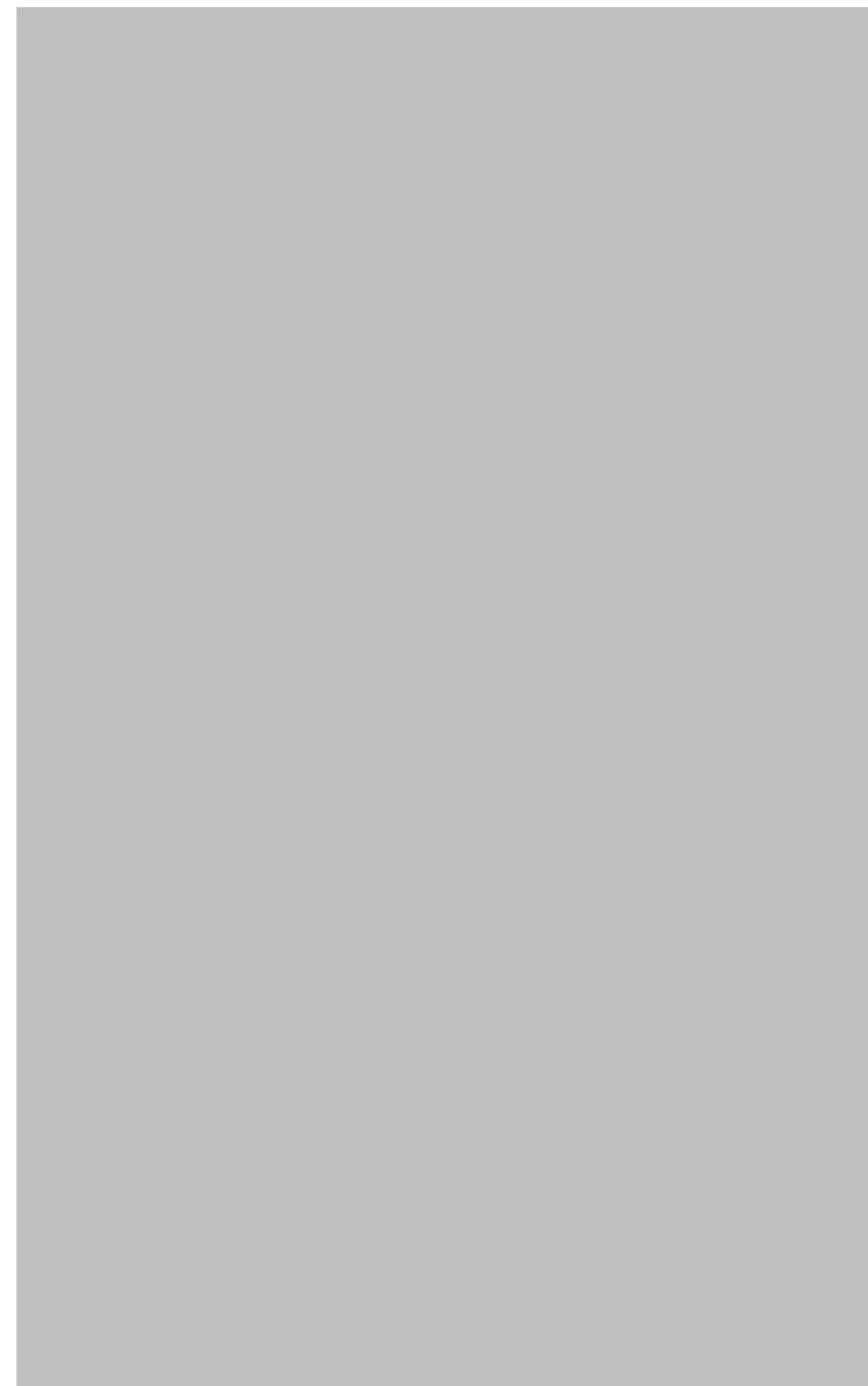


Figure 18 The poster advertising Hitchcock's 1960 movie, *Psycho*.

personality of his mother, whose 'presence' now fully inhabits Norman's body.

Thus, the film is constructed in two parts; as Kutner observes, 'a pure *film noir* until the moment Janet Leigh drives up to the Bates Motel, at which point it shifts gears into gothic horror' (Kutner, 2006). The early part of the film, following the theft of the money, vividly describes Marion's departure from the normal, rational world; the descending darkness and torrential rain metaphorically illustrate her inward journey away from order and rationality to a place where fear and irrationality reign. Her 'obsessive flight' and her increasing loss of 'rational control' (Kolker, 2004, p.77) are enunciated emphatically in the movie by Marion's direct interaction with the camera (and hence the spectator), and the use of her voice over the images to relay her increasing paranoia, hysteria and guilt. It is at this point that she encounters Norman Bates, when her increasing tiredness and the inclement weather conditions force her to seek refuge for the night at the Bates Motel. After settling her into her room, Norman prepares supper for her and then engages her in conversation. As Kolker notes, this conversation is at 'the core of the film' (Kolker, 2004, p.78) since, by the end of it, Marion has begun to recognise the 'logical extension of her present condition' (Kolker, 2004, p.78) though her observation of the psychotic tendency of Norman as they discuss various sorts of 'traps'. As Norman describes the psychological trap that is imposed on him by the dominance of his mother's personality, Marion recognises her own situation as being a trap that she has 'stepped into' (her words) by stealing the \$40,000. In intuitively identifying the madness of Norman, her own rationality is restored, and it is at this point that Marion determines to set matters to right by returning the cash. However, before she has an opportunity to do so, Norman, in the guise of his mother, murders Marion in the shower.

At the time of the production of *Psycho*, the vast majority of Hollywood films were produced in the *Classical Hollywood Narrative* style (Wells, 2001, p.29) which consisted of a series of conventions used to induce a state of wellbeing in audiences at the end of the film. Essentially, films produced in this conventional manner begin at a point of equilibrium where a 'state of 'balanced calm' [...] exists in the world [...] before the "events" of the film' (Wells, 2001, p.29). When this 'balanced' state is disrupted for some reason, the lives of the characters (the protagonists) are disturbed. Once the disruption is overcome, following the cause and effect events that make up the plot, then closure is achieved, and the film ends, usually happily. By the time

of *Psycho's* first screening, cinema audiences were growing tired of formulaically produced films with predictable endings and this, together with the growing popularity and convenience of television, had significantly reduced film audiences. When initially released in 1960, *Psycho*, ostensibly on paper a conventionally dark thriller and suspense movie, caused a furore as its (then) novel structure and cinematic daring was revealed; a novelty reinforced by the striking way in which it was publicised. Wells notes that, 'Hitchcock sent out a dictum to all cinemas stating, "The manager of this theatre playing *Psycho* has been instructed, at the risk of his life, not to admit any persons after the picture starts."' (Wells, 2001, p.6). In order to maximise suspense and impact, Hitchcock instructed cinema managers regarding the screening of the film, and included explicit details about what was to happen at the end of the showing. The house curtains were to remain closed for at least half a minute because, 'during these 30 seconds of stygian blackness, the suspense of *Psycho* is indelibly engraved in the mind of the audience.' He adds, 'you will then bring up the house lights of a greenish hue, and shine spotlights of this ominous hue across the faces of your departing patrons' (Rebello, 1990, p.151). All the strategies that Hitchcock employed were designed not only to engineer audience experience but to popularise his film at a time when cinema-going was in decline (Wells, 2001, p.9). In order to stimulate audience interest to ensure the success of *Psycho*, Hitchcock resorted to the unusual strategies outlined above and also indicated explicitly, in the publicity material, the inherent boldness and difference of the film from those that had gone before it.

For instance, the movie poster (Figure 18) clearly heralds the film's internal difference from previous movies. Although the poster references the imagery of the covers of potboilers and pulp fiction, by depicting the various protagonists involved in the action, its graphic construction was entirely modern. The use of fluorescent colours to illuminate isolated figures lost in the darkness of what might be construed as a shattered mirror. The film's title broken into two pieces compounds the effect of the sense of the 'normal' being disrupted. The image of Marion sitting, provocatively, in her underwear is designed to titillate as well as intrigue. Interestingly, the mix of the old and the new depicted in the poster is reiterated in the film itself. Whilst *Psycho* incorporates many of the features of well-established film genres, notably the *film noir* and the

gothic horror¹⁸, Hitchcock is more concerned to provide audiences with 'a cinematic experience that was more emotional and visceral' (Wells, 2001, p.9) than these conventions allow. He achieves this in *Psycho*, as Raymond Durgnat notes, 'through *suggestion*, through *atmosphere*, not *stating* ideas, but *generating* them, in the minds of the audience' (Durgnat, 2002, p.1). This is in contrast to the *Classical Hollywood Narrative* style where dialogue, set, costumes and cinematography style etc. were designed to advance the plot to a successful and satisfying conclusion. Hitchcock's *Psycho* manipulates the audience extensively. Hitchcock himself avers this: '*Psycho* has a very interesting construction and that game with the audience was fascinating. I was directing the viewers. You might say I was playing them like an organ.' (Hitchcock cited in Durgnat, 2002, p.1). The infamous shower scene is a case in point, where the calculated use of montage, visual imagery and an evocative screeching musical score work together to intensify the emotional experience of the viewer, as promised by the poster.

3.1.1. The Shower Scene

This pivotal scene of the film takes place in the shower where, against audience expectation, Marion, the principal protagonist, is slaughtered. Everything about the shower scene flies in the face of conventional filmmaking. This begins with the idea that (a now repentant) Marion, intent on returning the misappropriated money, should be disposed of at the very moment of her salvation in the act of washing away her sinful guilt. The setting too was unusual; cinematic murders up to this point normally took place in dark, forbidding and hostile surroundings. The stark, brilliant white of the bathroom tiles, the cleansing, purifying properties of the water emanating from the shower head and the deeply personal nature of Marion's activity in washing herself in that most private space, the bathroom, suggest a state of happy redemption and resolution. Her open-mouthed smile as she begins to shower, expresses the overwhelmingly cathartic nature of her internal emotional state, as she is freed from the doubt and repressive guilt so evident during her car journey. Her

¹⁸ At surface level the film ends conventionally enough as Norman's madness is revealed and Marion's body is recovered, thus reverting to a *Classical Hollywood Style* ending with a reestablishment of the status quo. However, the circumstances of the ending, namely the *depiction* of Norman's overwhelming madness, his loss of self, etc. all enunciated by the movement of the camera and the internal voice of his mother continuing to speak, subvert the convention as this disorder exists beyond the realms of the rational that the *Classical Hollywood Style* seeks to impose.

guilt is nullified by the baptismal act of washing. When the murderous act is committed, seconds later, the intensity of the action and the intrusion into Marion's personal space not only shocked audiences much more than can now be appreciated; it magnified its incomprehensibility. The audience's mystification is sustained until the end of the movie when all is revealed.

Structurally, however, the shower scene is quite straightforward: Marion undresses, climbs in the bath, starts to wash (her sins away), an ill-defined and unknown person enters the bathroom (whom we are primed to think is Norman's mother), draws back the curtain and viciously attacks Marion. Once her assailant leaves, Marion is left to die, slowly. She slides down the tiled wall, pulling down the shower curtain, tumbles over the edge of the bath and slumps to the floor. Her dead eye gazes out; a water droplet runs from her eye.

3.1.2. Nicolas Clauss: *The Shower*

It is hard to imagine a more easily recognisable snippet from a film, a scene where even the briefest glimpse of a still or a few seconds of music or soundtrack is sufficient to enable the instant recall of the whole work and the place that the shower scene occupies in the narrative. To this extent it is iconic: universally recognised and representative of Hitchcock's directorial mastery in producing a piece of near perfect-film making in terms of its affective impact. Given these attributes, Nicolas Clauss's selection of the shower scene from Hitchcock's film *Psycho* as a starting point for his own work is clearly no accident. The shower scene's innovative nature and affective qualities set a precedent that Clauss utilises when reworking it to make his online artwork.

It is worth noting the parameters which define the extent of Clauss's reworking of the shower scene since, once they are incorporated into his online interactive work, those limits are, to all intents and purposes, lost in the fluctuations which mark the work itself. The original scene is linear, where there is a logical progression from shot to shot. The symmetry of the scene (which I discuss at some length later) defines the cinematic space that Clauss appropriates. The scene ends with Marion's glassy, dead eye staring at the camera and spectator. A close scrutiny reveals, as a recurrent feature, the prevalence of eye imagery: the circularity that it suggests (since the iris and pupil are round) is reiterated in the physical objects commonly found in a bathroom: the toilet pan, the drain hole and, most notably, the shower head. The

concept of circularity in general is so marked, in both the shower scene and in *The Shower*, that the point of departure of Clauss's work is also indicated: Norman's eye looking through a peephole as Marion undresses. Between these two points, all the other elements of the original scene are maintained in *The Shower* although they are not expressed consecutively, as in the original, or with the same degree of amplitude.

The Shower is made up of all the filmic sequences that are present in the original shower scene from *Psycho*. It is constructed in such a way that it lacks the linearity that provides narrative cohesion in the original. While each filmic extract maintains its own *internal* integrity, each is presented randomly and out of order with the rest, thus dispersing the narrative drive. *The Shower* has no sequential imperative and no definitive ending because the appearance of the various segments of the filmic original is not governed by the need to deliver the storyline. In addition, specific images are singled out and presented as free-floating individual motifs, superimposed over the surface of the filmic sequences. These items are those which are circular in nature (the drain, the eye et al) and have the capacity to be dragged, stretched and distorted across the screen. The appearance of these motifs occurs independently from the filmic sequences that play under them. The consequence is that, when interacting with Clauss's work, it becomes immediately obvious that each passage through the online presentation is not only significantly different from the filmic original and any previous online viewing of *The Shower* but that what is seen on-screen must be generated randomly by the program he has created. As the sophisticated program generates random appearances of various bits of the filmic text, every passage through must be different.

Although Clauss limits himself to using all the various bits of the shower scene, he does incorporate a single element from the next part of the film, and it is an essential one, included, perhaps, as an endnote to the action: a still of Norman running down the steps from the house to motel in order to 'discover' Marion's body to dispose of it. To get the film moving again, Hitchcock allows the camera itself to become a mobile presence within the scene as it tracks from Marion's dead body, through the bedroom, dwelling momentarily on various objects in its path, before it looks out of the window towards the Bates' glowering house, set behind the motel, and from where Norman emerges. The uncanny nature of this traverse demarcates the

shower scene from the rest of the narrative and sets the end point of Clauss's concern, apart from this exception.

The power of *Psycho* has 'spawned a host of cinematic clichés, imitations, sequels, a shot-by-shot remake, a song and even an installation at a London art gallery' (Wells, 2001, p.6). The shower scene in particular seems to have a particular resonance for creative writers, and its most recent reincarnation is in the form of comic pastiche used as advertising; Lenny Henry, as the 'face' of Premier Inns, a budget hotel chain, plays the part of Marion being attacked in a sub-standard hotel room. The ironic and comedic use of a black man playing a white, blonde woman is used to considerable effect in order to demonstrate the superiority of Premier Inns over its competitors, and simultaneously alludes to, and yet disperses, the horror of the original film. The plethora of work that *Psycho* has generated, both creative and critical, suggests that its appropriation and adaptation in the cyber world can be seen as inevitable. Hence Nicolas Clauss's reworking of the shower scene for online access will be only one of any number of such adaptations based on the original film which will ultimately reveal themselves, each constructed with specific, though variable, intent. In addition, the amount of analytical writing, which attempts to explain and comment on the work, is equally astonishing. From the very beginning, *Psycho* engaged some of the best analytical minds in the task of precisely trying to identify the nature of its success, and the reason for its compulsive attraction. There exists comprehensive discourse regarding the film's many components which covers various aspects, including its inception, Hitchcock's use of montage, auteur theory and scopophilia. Durgnat covers the ground comprehensively in his wide ranging work *A Long Hard Look at Psycho* (2002) whilst *Alfred Hitchcock's Psycho* (2004), edited by Robert Kolker, introduces a selection of in-depth essays by a number of writers who adopt various critical approaches to the film, including a psychoanalytical analysis and a consideration of gender and reception issues. George Toles's essay (2004, pp.120-145) has especial relevance in the consideration of the eye and drain imagery used extensively throughout the original scene and just as powerfully in Nicolas Clauss's art work. In the same volume, Brown's essay (2004, pp.102-117) on Herrmann's score is highly thought-provoking, notably in its analysis of the supposed 'Hitchcock chord' and the identification of the

avoidance of diegetic theme music in *Psycho*, and I shall return to the topic of the affective nature of music used in both versions a little later.

However, it is my belief that the purpose of Nicolas Clauss's work is not to extend or amplify any of the discourses that presently exist. I believe that the task he has set himself is much simpler: choosing to re-work this particular scene, and including such clear references to the manufacture of it, can be regarded as honorific; Clauss is paying homage to Hitchcock, and in doing so both maximises and delimits the impact of the new work. By borrowing from the works of such a master of his craft as Hitchcock, Nicolas Clauss is consciously tapping in to the kudos and gravitas that Hitchcock achieved throughout a lifetime of work. Simultaneously, the manner of Clauss's reworking is suggestive in that, by revealing the underlying structure of the original scene, he proposes a critique of it. To this extent Clauss's work is a meta-text which seeks to expose the original, and in doing so, he draws attention to the already existing discourse that surround the object of his study.

3.2. Methodology

3.2.1. Capturing the text

Despite the innovative content of the shower scene in the film *Psycho* (namely, the death of the main protagonist at her moment of salvation), cinematically it has a clear, linear construction with distinct beginning, middle and end passages. Capturing images from the scene is an easy task when using a home PC and a DVD of the film. In contrast, the collection of a representative sample from Nicolas Clauss *The Shower* is much more onerous, and I describe some of the difficulties below. For clarity, I present a series of stills (Figure 19) illustrating the true order of the original shower scene from the film *Psycho* which act as an anchoring reference point against which Nicolas Clauss's artwork, *The Shower*, can be viewed. In turn, its nonlinear character can be identified and contrasted with the original. At a later point, I have grouped the original screenshots according to Durgnat's concept of 'stanzas' (2002), which I explain as part of my analysis. I believe there is a correlation between this grouping and the groupings that Clauss uses to construct his piece, which I also show, set against Durgnat's Stanzas.

The Shower is distinctive partly due the extreme randomness of its presentation and its purportedly interactive nature, and this poses problems in trying to capture a representative sample of images. Since there is no way of pausing any part of *The Shower* while the business of saving a screenshot goes on, the text may well have jumped to another point quite unrelated to the screenshot just captured. It is, therefore, impossible to present a record of any *single* passage through it. However, I believe that, although each passage through *is* different, there are sufficient similarities between them to make it feasible to collect a series of images taken from the various sections from several passages through the text to produce a selection which is, indeed, representative. After many viewings, this seems to me to be a reasonable approach. What I present here, then, can be seen as something which is more than generic and less than specific; a compound collection of stills from Nicolas Clauss's work which could well be a single passage through it, but is not. However, I hope that the selection of images I present adequately captures a sense of the singularity of each passage.

I had originally intended to view *The Shower* for a specified period and present the collected imagery as a single incident, hoping to both record and, in some way, to quantify what I saw. However, as this has proven to be impossible to manage due to the difficulty of capturing the imagery, I abandoned the idea in favour of the methodology outlined above. In any case, since Clauss's new text is unending, infinite and without a definite sense of resolution or closure, any timed viewing span would be an arbitrary selection and have little value in terms of representing something that is as indeterminate as *The Shower* clearly is. As it remains in the hands of the viewer to decide at what point one may exit the work, the validity of a timed viewing is extremely limited, unless some quantitative research could be attempted which seeks to correlate length of viewing with frequency of the appearance of imagery etc. across many viewings. This seems pointless given the determinedly indeterminate programming that is the bedrock of Clauss's work. Against this, the original shower scene is, in fact, very short with a proper sense of resolution attached to it, and consideration of the implications of altering the sense of wholeness that the original has is a critical aspect of the process of analysis. Such an analysis invites a comparison between the brevity and internal structure of the original and the infinite disruption and temporal expansion of the other; this will necessitate



Figure 19 Screenshot stills from Hitchcock's infamous shower scene from the movie *Psycho*.

Please Note: For ease of referencing a letter and grid identification system has been applied.

the atomisation of both texts, now rendered possible (though difficult) by the ability of the modern PC to capture screenshots (stills) from the reproducing surface of the screen itself.

Even beyond those I have already identified in the specific circumstance of *The Shower*, there are other inherent difficulties in trying to capture and represent mobile and event-based texts like film and, by extension, interactive texts, in such a way as to render them susceptible to scrutiny. Raymond Bellour discusses at length the difficulties of producing a 'quotable text' from filmic sources, and not simply in the physical sense of acquiring a copy of the original, a task much easier now than at the time when Bellour produced the chapter *The Unattainable Text* in his book *The Analysis of Film*. This was published in 1979, prior to the DVD and the recent capacity to download from online Internet sources; he also identifies the difficulty of capturing a filmic text due to the very nature of the text itself. He suggests that, 'the material possession of the work alone permits one full access to the textual fiction, since it alone allows one a full experience of the multiplicity of operations carried out in the work' (Bellour, 2001, p.21). He is only too conscious of the fact that, by breaking apart a text in order to study it, one is committing an act that has at least two consequences. Firstly, that in attempting to 'quote a fragment of it' one has 'taken up a textual perspective' (Bellour, 2001, p.21) as this activity is akin to the process of parsing because it seeks to segregate distinctive elements of the film in order to draw attention to each in turn so that a written analysis can be performed. He notes too that this process is, on one level, regressive, since the holistic nature of work that has no written text is reduced by a methodology that is indifferent to this aspect of it. There is a mismatch between 'the object of study and the means of study' (2001, p.22), the one being essentially visual and the other textual. The lack of 'undivided conformity' (2001, p.22) between these two objects is not so apparent when the analysis of a written text is conducted, as the 'quotation is invisible: it is quite naturally absorbed into the page' (2001, p.22). What arises from this is a new text, an enriched and elaborated version of the first, a consequence less probable where the means of analysis is distinct from its object. In short, the potency of the image and all of its layers of meaning and its internal relations cannot be adequately expressed through written language. As Bellour notes, in his extensive analysis of a ten minute scene from

North by North West, 'Textual analysis is irreducible in that it cannot be summarised without yielding only the bare bones of a structure that [...] can never be the multiple whole which is constructed in it' (2001, p.137).

3.2.2. Approaching the text

The second consequence of adopting a linguistic approach to textual analysis might, however, be seen as a reversal of this: the de(con)struction of the whole is a liberating rather than a reductionist process, since the quoted text makes itself open to detailed study of all of its elements and its connotative values can be assayed. The use of language allows for the text not only to be revealed but communicated. As Barthes notes, 'the text directs the reader through the signifieds of the image' (1977, p.40), implying that the analogical image has only a reduced power to be understood in its own terms. Therefore, its meaning is only fully extrapolated when supported and examined by language. A written textual analysis, in Barthesian terms, must not only enrich a visual text but must also contain it, structure it, and delimit it in some way. His own extensive analysis of the written text *Sarrasine*, though comprehensive, is, nevertheless, finite; as finite as Barthes's own level of competency, not only in understanding the text but his capability to express that understanding. Despite recognising the polyvalent nature of the text and its openness to the interpretation of meaning by other readers, the fact of producing a monumental amount of additional text delimits the original, and his analysis both advances and curtails the efforts of others in the same pursuit. If a similar technique is applied to the visual or musical text, how much more so can the original be both expanded and reduced by the critical activity of written analysis? The analysis of a fluid and interactive text like *The Shower* poses even greater problems. The text of a book or a film generally has the virtue of remaining constant and fixed even though a reader may choose to move through it as he wishes; the text, therefore, remains as a fixed point in space and time and any analysis takes place, usually, in relation to this fixity. In much of Claus's work, for example, *White Rituals* (2006) and *All together* (2009), it is impossible to resolve the text into a linear progression, or even to a clear relation between the objects that perpetuate the text itself. Some textual components are so much at odds with one another that it is the discovery of or, at the very least, the *manufacture* of the relationship between them that constitutes meaning. Necessarily then, and as an

extension of a Barthesian approach, such construction of meaning must be intensely personal and *singular* due to the non-repeatability of these fluid works, heightened by the programming that enables it.

There is an obvious problem in analysing multimedia artefacts using analytic tools designed for single medium texts. The analysis of *Faith* and *Inanimate Alice* required the merging of several distinct, though related, methodologies in order to render a suitable analysis of its various elements. The analysis of *Faith* and *Inanimate Alice* required the merging of several distinct, though related, methodologies in order to render a suitable analysis. This worked as well as it did, I believe, because the subject matter was essentially poetic or narrative; as such, they are susceptible to a methodology designed to function with a written text, which is only subsequently applied to a visual text, which not only realised the written text in some way, but also, simultaneously extended and enriched it. In the case of the visual or musical text, then, the use of written textual analysis can only offer an approximate description of the function, internal relations and meaning of the various elements that make up the whole.

However, the methodology proposed by Kress and van Leeuwen (1996), which I used extensively in the analysis of both *Inanimate Alice* and *Faith* as visually fluid texts, would seem to offer the potential of being entirely suitable for the analysis of a text such as *The Shower*. Since its origins lie in the structural analysis of sentence construction and, therefore, remains entirely systemic and functional, when applied to the visual, it maintains its highly organised and rational approach. It is particularly suitable for discerning the visual and power relationships within a piece by examining the grammar of pictorial construction. Kress and van Leeuwen's analytical processes are most suited to identifying key relationships within visual (and musical) productions that have narrative appeal, or which are designed to impart specific types of information (such as those I have described previously). *The Shower* is based on the rearrangement of elements from a work that already has strong narrative content, and one in which certain visual images have particular significance and meaning. Therefore, applying Kress and van Leeuwen's methods would seem appropriate. However, while their theories would be entirely suitable for an examination of the original scene, I believe that *The Shower* defies examination of this nature because its own existence as a meta-text is already a form of analysis. What is required then is an approach which is more freely interpretative and intuitive. Although one can begin to

unravel the significance of the relations between the kaleidoscopic imagery of *The Shower*, one soon feels the need for a more descriptive mode of analysis. This relies heavily on one's own reader competency in bringing to the work one's own cultural values, knowledge and experience, much as Barthes suggests, even if we lack his brilliance. Genette's narratological work (1980) underpins my own analytical approach to *Inanimate Alice* as a suitable methodology which complements Kress and van Leeuwen's theories to use for the complex homodiegetic production that constitutes *Inanimate Alice*. However, neither of these methodologies, nor indeed, any of the others I have utilised so far, is sufficient to attempt to unravel texts whose nature is indeterminate, such as those produced by Nicolas Clauss.

The paradox recognised by Bellour, where the visual text is examined by a *written* addendum to the original, an alien adjunct (though one which all speakers of the same language can access¹⁹) demands a different response to resolve it. My submission is this: that some of Nicolas Clauss's productions, his 'paintings', invite such a response because his work is plural in operating both as artwork in its own right and also as a critique of the original - in this case, Hitchcock's shower scene re-presented as *The Shower*. If this is true, then Bellour's call for a methodology that examines the object in its own terms becomes a possibility. The difficulty remains, however; as much as one can regard *The Shower* as a critique of the scene using a visual approach that is in some ways closer to the original, *my* analysis of it requires a textual explanation of the processes and means of construction used by Clauss which enable it to function as it does as a meta-text. By attempting such a descriptive approach, I hope firstly to demonstrate how Clauss uses *The Shower* to highlight specific qualities and meanings embodied in the Hitchcock original, whilst simultaneously revealing the honorific nature of Clauss's reappraisal. Therefore, my examination of Nicolas Clauss's *The Shower* is threefold:

- consideration of its function in which the artwork acts as critique (meta-text) of objects which are external to itself but which, in this case, form the substance of the new work, specifically *The Shower*
- how this critique is honorific in character

¹⁹ I think that Bellour means that musicians understand written criticism about music, artists understand artistic criticism etc. The shared language is the medium being critiqued – not the language of the critique itself.

- consideration of how meaning is constructed in the interactive works of Nicolas Clauss, specifically *The Shower*

In contrast to *The Shower*, much of Clauss's other work functions differently in not referencing other texts directly or by borrowing from them. *Blue Han* is such a project, and one which allows Nicolas Clauss's assertion that he produces a kind of painting to be tested. Hence, my examination of Nicolas Clauss's work is extended, in Chapter 4, to include a consideration of its potential in respect of the claim to be 'painting' and art focussing especially on those contested areas relating to its materiality.

3.3. Analysis of *The Shower*

3.3.1. Situating *The Shower*

It is useful to situate *The Shower* within Nicolas Clauss's artistic oeuvre (and in the sphere of experimental art in general), since it is only one of numerous online productions he has developed. Clauss, born in 1968, is essentially a self-taught artist based in France, living close to Paris. A mixed academic background in experimental and social psychology, followed by further study in arts and picture technology, go some way to explain his recent endeavours in the field of multimedia and online art. His portfolio is extensive and available to view on his personal website <http://www.flyingpuppet.com>, where his achievements, including numerous exhibitions, awards and prizes, a brief biography and written articles about his work, are also listed. Moving from the canvas to the computer screen, some ten years ago, has enabled him to produce a range of work which fully utilises the possibilities of increasingly sophisticated software. He produces rich, multimedia texts that combine graphics and music whilst encouraging the active online participation of his viewers. Additionally, he collaborates with a number of other artists and musicians; one of these, Jean-Jacques Birgé (who is a composer and film maker with a particular interest in the relationship between sound and pictures, especially within those areas that permit interaction in multimedia productions) provided the musical accompaniment to *The Shower* and I discuss his contribution at a later point.

In one of the articles accessible on Nicolas Clauss's website, Angelia Molina, the Director of Ciber@rt Festival, Bilbao, speaking at some length on the nature and philosophy of the multimedia artwork on show at the Canarias Mediafest 2004, notes that:

Multimedia art obliges us to become involved [...]. We find ourselves facing a single medium which integrates different codes (video, audio, graphics, words etc.) through hypertext, which involves a process of re-semanticising and re-contextualising through which a new textual reality is formed. The hypertext includes nonlinearity and frees the texts from psychological, sociological and historical determinisms, opening up an apparently infinite range of relationships (Molina, 2004).

She goes on to refer specifically to the work of Nicolas Clauss about whom she comments:

Nicolas Clauss is a prolific and versatile artist. His work, full of nuances and different genres, travels from the most intimate spaces to social discourse. The origins of this author are found in the two dimensional space of painting, an influence that is obvious in all his work (Molina, 2004).

Indeed, in an article originally written by Giuila Simi (2007) for Digicult (<http://www.digicult.it/en/>), and also available on his personal website, Nicolas Clauss claims that his work constitutes a type of painting. He claims he is developing forms of 'autonomous painting(s), where the spectator can interact or let the machine 'do the talking'' and that it is 'governed by interactivity'. He further declares 'my work is made by me and by spectators' (Molina, 2004). These productions can roughly be divided into two types: the vast majority which are made up of overt borrowings from other sources put together as animated montage (and to which he adds his own contribution), and those (a much smaller grouping) which can be classed as being entirely original pieces. In the first case, where Nicolas Clauss appropriates the work of other artists and film makers, or makes use of iconic symbols; the outcome, whilst being entirely original and distinct, inevitably maintains some of the characteristics, features and even, one could say, the 'momentum' of cultural significance that each of these items has accrued over time. Nearly all of his pieces still bear the marks of production in the original form (be they fractions of a canvas, scenes from a film or an advertisement, or lines from a poem) and, therefore, retain some trace of the original meaning. In fact, these pieces are often selected because of these properties, ready for their subsequent redistribution and utilisation in the new arena that Clauss develops. The 2005 production *The Shower* is representative of Nicolas Clauss's work in this manner as it evidences much of the original imagery borrowed from Hitchcock's *Psycho*, though highly disrupted and disturbed.

3.3.2. The Power of Indeterminacy

Any assay of *The Shower* must, necessarily, include consideration of the production and presentation methods that Nicolas Clauss employs; three aspects seem to be crucial in determining the type of outcomes that Clauss manufactures, not only in *The Shower*, but in his work in general. The first of these relates to his positioning as an exponent of experimental art in general; secondly, as a producer of new media *digital art*, and thirdly, by his choice and use of the programming software *Macromedia Director* to enable him to develop and deliver his pieces. In addition, and as a corollary to these three aspects, the consideration of Clauss's relationship with his spectators is most important. This relationship is expressed physically and externally through mouse interaction and, ultimately, as reader response.

Clauss's work is, in fact, predicated on the notion of uncertainty and randomness as any passage through any one of his works will attest. By producing artworks that incorporate randomness and indeterminacy as part of the creative process, Nicolas Clauss continues in the tradition of those experimental artists who developed the concept of 'chance operations' and the use of the 'readymade' or 'found object' as a means of producing work which develops its identity as 'art' solely by the designation of the artist himself. In *The Shower*, the 'found object' is the excerpt from *Psycho*, which is redesignated, in Nicolas Clauss's adaptation, specifically as an artwork. This is effected not only by Clauss's claims to produce interactive art, but also by the delineation evident on screen. The suggestion of a painting canvas or sheet of paper onto which *The Shower* is projected distinguishes the selection from its background, and from much of Nicolas Clauss's other work where the whole screen area is fruitfully used. This clear delineation of the 'found object' from its background contextualizes the new work principally as 'art' rather than as 'film'. In enunciating his work in this way, Clauss aligns himself with Marcel Duchamp, Man Ray and Picabia (and successive generations of artists) who not only incorporated found objects in their work but reclassified it as 'art' by the process of exhibition in a place specifically set aside for the viewing of *Art*, that is, a gallery or museum. In Nicolas Clauss's case, the simple act of on screen separation substitutes for the gallery while the white, neutral area of the screen displaces the hanging wall. The spectator is already disposed then, to re-evaluate what is presented because of the special nature of the viewing arena, and this is reinforced by the nature of

construction of the production process itself which foregrounds randomness as a means of drawing attention to the nature of both the original and the new. The implication of these acts is clear; influenced by the work of *avant-garde* artists like Duchamp and his associates, and the novelty of his own approach, Clauss's work is necessarily intended to be enigmatic, thought provoking and confrontational.

The concept of the actual construction of *The Shower* is further derived from the work of the Surrealist and Dadaist artists of the early twentieth century, where the possibility of producing works of art by the implementation of 'chance operations' was practised. Prior to that, Lewis Carroll (Carroll, 1883) had also described a methodology for the production of poetry:

For first you write a sentence,
And then you chop it small;
Then mix the bits and sort them out
Just as they chance to fall:
The order of the phrases
makes no difference at all.

This equates readily to Tristan Tzara's instructions in the *Dada Manifesto* (Tzara, 1920) about the creation of random poetry:

Take a newspaper.
Take some scissors.
Choose from this paper an article of the length you want to make your poem.
Cut out the article.
Next carefully cut out each of the words that makes up this article and put them all in a bag.
Shake gently.
Next take out each cutting one after the other.
Copy conscientiously in the order in which they left the bag.
Then the poem will resemble you.
The vulgar herd.

The equivalent experimental visual processes were practised by Hans (Jan) Arp who created his first random painting by tearing up a failed work, throwing the pieces down and then being struck by the resulting composition. This work, now known as *Collage with Squares Arranged According to the Laws of Chance* (1916-17) (Figure 20) is a direct antecedent of Nicolas Clauss's online production *The Shower* since it manages to integrate the 'found' object (the failed painting) with the 'chance operation' of tearing it up and letting it fall randomly. Essentially, this is precisely what Clauss does in his own work though he utilises the capabilities of modern computing to produce a highly complex and sophisticated adaptation of these processes of production.

There are, of course, many other historical precedents which demonstrate the use of randomness to manufacture both paint-based and digital art. Sometime, after Arp's scattering of torn shreds of paper to produce a random effect, there developed the concept of 'action' painting. The most famous exponent, Jackson Pollock, rescinded his personal control in favour of something that was generated, within the constraints that he applied, more or less randomly. The generation of 'drip' painting represents a relinquishing of the artist's control over his medium, and the 'abstract expressionist' paintings Pollock produced were precursors, in one sense at least, to the computerised digital artworks produced by such pioneers as Frieder Nake, Georg Nees and A. Michael Noll in the sixties (<http://dada.compart-bremen.de/>). Further (and quite recent developments) by herman de vries (he refuses the use of capitals, considering them to be hierarchical) and Manfred Mohr are described and catalogued at the *Institute of Artificial Art Amsterdam's* website (<http://iaaa.nl/>) and its sister site, *Radical Art* (<http://radicalart.info>).

These sites provide complete and comprehensive accounts of the development of chance in art and the role that computer technology has had to play in its development, together with information about these two leading proponents in the field. The possibility that the computer offers to enable seemingly randomly generated work (and work that constantly changes over time or in response to user intervention) is

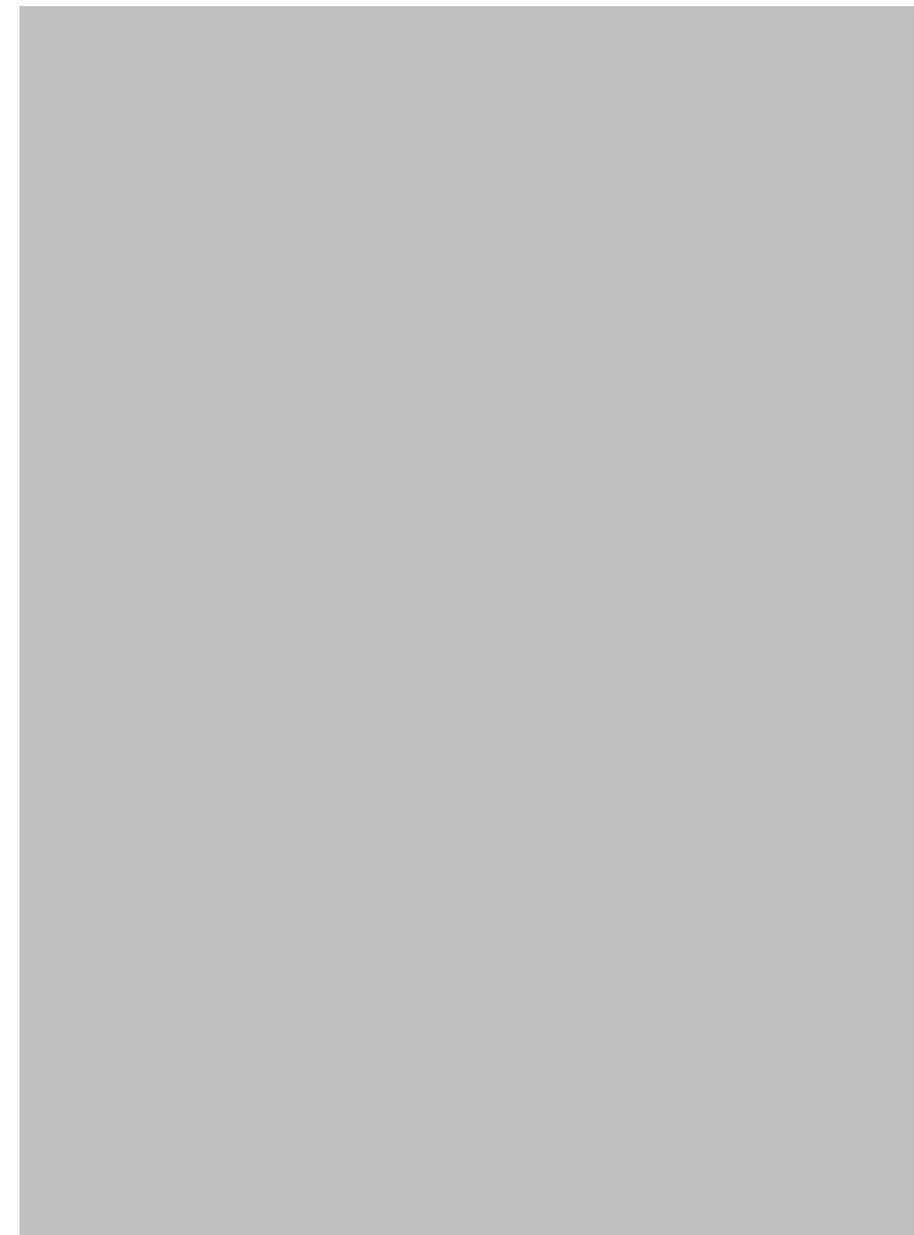


Figure 20 *Collage with Squares Arranged According to the Laws of Chance* (Arp, 1916-1917).

something that artists were quick to appreciate in order to develop their work. In all cases, the production of computer artwork necessitates the development of algorithms, that is, a series of well-defined instructions, which are used to carry out particular tasks, including the selection of random samples. As Remko Scha notes:

From the earliest days of algorithmic art, the probabilistic approach to art generation has been very popular. Its *modus operandi* can be summarized as follows: (1) a space of possibilities is defined in explicit, mathematical terms; (2) a probability distribution is defined over this space; (3) an algorithm is executed which draws random samples from the space, in accordance with the probability distribution (Scha, 2006).

In this respect, the choice of the programming software *Director* is crucial, since it is Nicolas Clauss's application of this (and his skill as a programmer) that fabricates the complex series of events and actions that take place on screen during the course of a viewing. What is seen, in all its indeterminacy, is the result of the 'probabilistic' approach he has adopted and enacted.

As part of the Adobe suite of software, *Director*, in conjunction with Shockwave, is used specifically to create and publish multimedia work on the web and beyond. In fact, the Adobe website's own description of these two products for potential buyers and 'multi-media authors' is worth noting:

Adobe® *Director*® 11.5 and Adobe *Shockwave*® Player software help you create more robust, compelling, and highly interactive demos, prototypes, and other multimedia applications. The enhanced multimedia authoring features in *Director* let you integrate virtually any popular audio, video, and image file format, including video created with Adobe *Flash*® software and native 3D content. Create once and publish to Mac and Windows® desktops, DVDs, CDs, kiosks, and the web (Multimedia authoring, 2010).

It is *Director*'s capacity to integrate a variety of differing media that Nicolas Clauss utilises so effectively in all of his works. He achieves his effects either by appropriating material from elsewhere, as in *The Shower* or by creating his own 'base' text (*Blue Han*), and in all cases he subsequently controls and manipulates the various elements (including sound) to produce unique and compelling interactive work. However, as any user will note, a passage through any one of Nicolas Clauss's productions is considerably different from what one might expect from previous experiences of reading hypertexts, using spread sheets, paint programmes, gaming, or any one of the applications of software with which one is familiar. Conventionally, normal programming seeks to enable a user to understand quickly how to achieve a swift and easy passage through a

text or, in the case of gaming, by learning through experience the rules that govern the game. This is not the case when approaching *The Shower*, or indeed, any of Clauss's work.

In *The Shower*, he deliberately sets out to produce a fluid text which defies resolution through a disruption of the natural narrative order and the distortion of the visual imagery of the original. The application of the *Director* software is instrumental in this, and an examination of Nicolas Clauss's program, to which he has kindly granted me partial access (Clauss, 2010), reveals his methodology. Essentially, Clauss has divided up the original shower scene into a number of different elements and filmic sequences, all of which are controlled by various sub-routines, which act either in combination or in consequence with one another, to produce the on screen effects. These subroutines, known as 'scripts', are written in a variant of the scripting language 'HyperTalk' which uses (as far as possible) familiar English syntax, thus making it easily accessible to nonspecialists seeking to produce creative work of their own. Nonetheless, mastery of the language and programming still requires years of practice as well as aptitude, as Nicolas Clauss's work effectively demonstrates.

Multimedia development programs, such as *Director*, depend on 'scripts' in order to function. A script is a series of instructions that control how a sequence of multimedia files will be presented (meaning the images and sounds, their timing, and the possible results of user interaction). In fact, a script is 'the collection of statements associated with a particular object' (Winkler, 1994, p.9); the 'objects', in this case, being pre-prepared excerpts from the original shower scene. *The Shower* is made up of many scripts, each of these scripts being relatively small programs or routines that can be executed/activated in a number of ways:

- At the entry point of the program (e.g. the beginning of *The Shower*) or
- Following another event or action (including mouse movement, click or the passage of time or some combination of these)
- Within the program where the start of each script is indicated by:

`on` (followed by the instruction) and concludes with: `end`.

The instruction, 'on', initiates an action (known as an 'event'). For example, 'on mouseUp' something will happen in response to this action. On the command 'end mouseUp', this action is concluded. The intervening

action can be exercised by the use of subroutines which function within the script, and can themselves contain many complex instructions that initiate various actions or effects. Subroutines are indicated by the term 'if... end'. Example 1 shows a simple sample script and its embedded subroutine. Between the start and end points, the string of instructions contained within the sub-routine is sometimes extensive, and many variables are included to produce simple or highly complex arrays of actions and consequences. Nicolas Claus uses this technique extensively to build random complexity into his multimedia work.

The use of the mouse is the point of physical interaction with the program, hence, its function and effects are worthy of detailed consideration. In *The Shower*, it seems quite possible to observe where the mouse action and its position initiates the appearance of an image, or produces a sound. Example 2, which is an extract from the programming of *The Shower*, quantifies the mouse action that determines what will happen next. When the mouse button is pressed (mousedown), a message is sent to the area of the screen under the click-point to effect an action. Here, this message is combined with a further message 'rollover', which enables one of the elements on the page to change when the user uses the mouse to move the cursor over something on the page (like a line of text or a graphic image). In normal programming, the rollover mouse action is designed to invite user interaction by causing text elements in a menu to "pop up" and, for instance, explain something, or otherwise become lively as the mouse passes over each line. However, in this instance, another effect is observed; a previously invisible graphic image, or other element, suddenly appears when the user rolls the mouse over an active part of the page. This initiates the appearance of a 'sprite', which is a ready-prepared graphic shape such as the drain, for example. This would be an example of one type of 'object' controlled by the script, as previously mentioned). The rollover function has a value (13), which may refer to the duration, position or nature of rollover. In Example 2 Nicolas Claus offers an alternative consequence, signalled by the instruction 'else' where, if the first mouse action fails to take place at all, or the parameters of 'mousedown' and 'rollover (13)' are not met then two sprites appear instead of one.

```
On mouseUp
If random(2) = 1 then
Show field "heads"
Else
Show field "tails"
End if
End mouseUp
```

Example 1: A sample script and its embedded subroutine.

```
if the mousedown and rollover(13)
then
sprite(MyHappy2).blend = 0
else
sprite(MyHappy2).blend = 0
sprite(MyHappy2).ink = 39
end if
```

Example 2: Extract from Claus's programming.

```
if random(50)=1 then sprite(133).membernum =
random(57,58)
if gHauteur<=11 then sprite(133).blend = 100
else
sprite(133).blend =0
end if
```

Example 3: Generating randomness.

```
if random(30) = 1 then
gRandPaint = 0
member("happy2").image.copyPixels((the stage)
.image,rect(0,0,800,600),rect(0,0,800,600))
end if
```

Example 4: Generating randomness.

Examples 3 and 4 show two instances of the randomness generation that Nicolas Clauss applies throughout *The Shower*. These not only create the continuous disruption that marks the piece but control the appearance of many of the different snippets that occur. It can be readily observed during several viewings that the prevalence of different aspects of the original scene is highly variable and that some appear more often than others. For example, despite my many viewings, I rarely saw the actual knife attack, the one snippet which seems such a powerful component of Hitchcock's original. At the other extreme, Marion's demise, characterised by her slow descent down the tiled wall, features extensively in Nicolas Clauss's work. This degree of differentiation is achieved by varying the parameters that control the appearance of various elements. Clauss does this by introducing a series of 'variables' into his work. Two types exist:

Local variable: one that only has effect whilst a particular sub clause is running. Once any repetitions have concluded, this variable is exhausted and stops running.

Globals: these variables have stable content and remain to be called into use by other sub clauses and so may function several times in different circumstances. Globals (also known as Absolute variables) are declared at the beginning of the whole program. These include: cursor shape/volume control/brush shape/as well as determining the consequences of holding down or releasing the mouse button/length of time mouse can be held down before action is initiated etc.²⁰

The combined use of global and local variables throughout *The Shower* is what produces the appearance of the fluctuating imagery and sound to the extent that nothing is ever repeated exactly, although one always feels that it might. As randomness is such a salient feature of Clauss's work it is worth considering just how much he includes. In Example 3, the element of randomness is high and controls the appearance of the sprites that appear next. Hence:

If random (50)=1

²⁰ More information regarding globals, variables and programming generally can be found in *Hypertalk 2.2* (Winkler, 1994), from whence this information has been gleaned.

instructs the computer to select a number between 0 and 50. If the number selected is 1, then a particular action follows. If any other number is selected, then the action is suspended and, therefore, does not appear. In Example 3 then, the sprite will only appear if the conditions are met. In Example 4, the likelihood of the next action happening is slightly better because the value is set at (30). Nicolas Clauss increases the complexity, and, therefore, the degree of randomness throughout the program, by using high values or by adding further sub routines. For example, sometimes the random element can be as high as [if random 500=1] which produces an extremely low incidence of an event actually happening. In addition, though not shown here, parameters are set to determine the area of the screen where the action is to be initiated and/or its duration. It is crucial to note that Nicolas Clauss makes much use of this technique of using the 'if' and 'then' and 'end if' (and others like it) instructions to build extensive variability and randomness into his work.

An earlier piece of artwork illustrates effectively how Nicolas Clauss uses mouse position to control what can be seen and heard. In *Legato* (Clauss, 2001), the images and sound vary according to the mouse position on the screen to produce the effect of different instruments playing, and which are aligned to the position of the on screen dancers. In reality, the music is continuous, but the mouse position determines the foregrounding of different solo lines as the volume of others is reduced. It is quite possible, after a number of readings, to identify quite exactly the zones where the mouse action determines the different effects. *The Shower* uses a similar technique in a much more complex and sophisticated way and in conjunction with a high degree of randomness (incorporated into the programming) which produces the profusion of overlapping images and sound that are typical of the piece.

Other conditions also apply that seem to be included deliberately to unnerve or wrong-foot the user. For example, holding down the mouse and then releasing it after a specified time (unknown to the user) will effect change or initiate some other action. However, as the user is unaware of the constraints that govern the mouse (his only point of interaction with the program) or that these constraints are constantly fluctuating because of some inbuilt randomness in the program's construction, then the user has no real control over what is happening on screen. Although the user's click or move of the mouse seems to initiate action, he has no way of controlling what happens next. This flies in the face of conventional programming that is designed

to ensure ease of use by the interactee who, over time, learns how to manipulate the program. The effect of this degree of indeterminacy needs to be considered as Nicolas Clauss claims that his work is collaborative (between himself and the user). In fact, for Clauss, the role of the mouse user needs to be distinguished from the role that the spectator has. Clauss's *actual* claim, which I have stated previously, is that, 'my work is made by me and by *spectators*' (my italics). However, the diminution of the mouse user's role is significant as the mouse itself normally expresses an invitation to become involved and to take control. Through custom and practice, this is what the user expects when he handles the mouse. This expectation is so strong that the realisation that this is not the case, in any of the works of Clauss that I have viewed, takes an inordinate amount of time to become apparent and followed, subsequently, by an appreciation that one has been duped into thinking that one could exercise some control over what happens on screen. What can be the purpose of such a deception?

I believe that, since *The Shower* has, principally, two functions (as an *hommage* and as a critique of the original) the teasing of the spectator/mouse user by presenting the possibility of true interaction is, in the first instance, a means to engage with the viewer. Clauss exercises complete control over what is seen, in the sense that he has programmed *The Shower* to function in a specific way which incorporates an extremely high incidence of randomness. Moreover, he resists the convention of allowing the viewer to wrest any significant degree of control from him, even by proxy, or to be able to effect change in the program's running order. However, allowing the user the semblance of control will, at the very least, ensure that the viewer stays long enough to discover that he has, in fact, little actual control. The temptation for the user to test and discover the extent of what control may be possible suggests that there is a gaming aspect to the viewing experience. As this possibility runs through the mind of the user, who vainly tries to discover how control is exercised, the viewing experience is extended, and the 'looking' experience is initiated. Whilst this fraudulent mouse activity ensures repeated interaction with the piece, it simultaneously subverts the user's intention by denying him real control. The prohibition of the absolute control that the mouse promises, and the satisfaction that such control generates, reveal and confirm Clauss's alliance with Dadaist sentiments in wanting to deny the logic of the obvious. As Tzara notes, 'Nothing is more delightful than to confuse and upset people' (Tzara, 1922).

Therefore, by the rejection of the convention of offering his viewer/user the power to bring the work to a satisfying and pleasurable closure, the bourgeois *plaisir* of which Barthes speaks (1975), Clauss produces a work that is slippery and constantly changing. Painful effort is required to examine and resolve the text into meaning. The ineffectual mouse signifies the necessity of regarding *The Shower* as an 'open' work (Eco, 1989), capable of the delivery of the pain-pleasure 'jouissance' as the flip side of *plaisir*. As a Frenchman, what better way could Clauss find to honour the work of Hitchcock? (I will consider the extent to which *The Shower* overall constitutes an 'open' work in offering the possibility for 'jouissance' at a later point).

If the mouse user's role is so attenuated as to be practically meaningless, then the site of collaboration must be centred outside the realm of physical interaction. Therefore, spectator function *in response* to *The Shower* must be in the ascendant and Nicolas Clauss uses the programming to direct and manipulate the viewer. *The Shower* is so constructed, however, that once the program starts to run, it functions autonomously. Nicolas Clauss has relinquished control over his work in favour of the program rather than the user. This occurs immediately, at the point at which the user/viewer of the computer initiates the program. In fact, the mouse click that starts the run through and the one that ends it, are metaphorically at least, the equivalent of a visitor entering and leaving the gallery where a picture is hung. The spectator's *physical* position, regardless of the invitation to interact that the mouse, deceitfully, presents, remains unchanged from that of the spectator in the gallery. The internal algorithmic structures and the visual appearance on screen determine the spectator's physical position in relation to what is seen. The demarcation that Clauss presents on screen, the canvas with its perimeter more or less well defined and cogent, is a stringent reminder that the artist retains control of his work at the sites of production and presentation. Further, even in the on screen arena of the World Wide Web, where interactivity is the order of the day, absolute control of the spectator position as being external to the work is ordered by the artist himself. (I shall consider more thoroughly spectator position in relation to both Hitchcock's original work and Nicolas Clauss's interpretation of it at a later point in this analysis).

In fact, the *Director* software provides an enabling structural framework that permits *The Shower* to function, but what is produced is deliberately kaleidoscopic. The program contains but does not control the

interior pieces; like the tube of the kaleidoscope, it provides a set of circumstances that permit the randomness that the viewer experiences. The fragments of *The Shower* can be likened to a grisaille stained glass window²¹ where the shards of the work (sprites) correspond to the shards of coloured fragments in a kaleidoscope whose positioning is always random: their patterning is effected by the user to some extent, but more usually, by the structure of the casement that the tube provides. The analogy breaks down at the point of user intervention; this is always required in the case of the kaleidoscope but only at the beginning and end point of *The Shower*. As the program is autonomous and infinite until the user's exit, it has the capacity, once initiated, to perform a 'silent running' regardless of the conscious regard of the viewer. The kaleidoscopic mix of the various shards of the work causes the spectator to look more carefully, see more thoroughly what is presented. Thus, the kaleidoscope now functions as both peephole and microscope; as the individual 'cells' of the original are revealed for scrutiny by the influence of the program, Marion's demise is subjected to repeated voyeurism (through the peephole) and for conscious analysis (via the microscope). The viewing experience is changed significantly from the original by constant repetition, and by the physical apparatus (the PC), the home conditions of viewing and the (empty) potential of the viewer to interact. All these conditions lead to the distancing of the spectator from the filmic events that Nicolas Clauss portrays. Although the use of repetition and the semblance of mouse control et al are designed to ensure user engagement with Nicolas Clauss's work, the involvement is, essentially, an intellectual one. Such reiteration dulls the emotional impact, and the original sense of drama that Hitchcock's version promoted is lost, indeed, eradicated; the user has a dispassionate view of the work. Denied the narrative charge of the original film scene, the individuated pieces can now be assessed and admired for their craftsmanship. It is in this sense that Nicolas Clauss's work is an *hommage*. This function of Clauss's work is clear; the dichotomy he presents is the paradoxical use of controlling software to manufacture an artwork that is noteworthy for its indeterminacy, and one that is designed specifically to draw attention to Hitchcock's mastery of film making.

²¹ The example that springs to mind is to be found at York Minster. Here the *Five Sisters* consists of five lancet windows made up of varying shades of grey glass. Centuries of restoration and repair have created an object that, despite its original restraint and order, now appears somewhat chaotic and kaleidoscopic, hence the correspondence I perceive between this work and Clauss's offering.

3.3.3. *The Shower: The Constraint of Looking and the Spectator's position*

A closer scrutiny of the original shower scene (see Figure 19) reveals the sense of disquiet and unease engendered in the mind of the spectator due to the filmic construction that Hitchcock employs. The invasion of Marion's private space, exercised by the close proximity of the camera and the nature of the observable act that engages her (showering), is disturbing. One is conscious that, as a spectator, one is occupying a prohibited space and, since Marion's upper body only is revealed, in the opening section of the scene, the presumption is that the camera, and hence the viewer, has voyeuristic intent. Although there is no eye contact between Marion and the camera lens, the camera itself dwells for an extended period time on Marion during her ablutions. This is quite unlike the earlier part of the film where she addresses the camera directly, though unconsciously indifferent to it, in order to relay her thoughts and emotions. In fact, she looks through the camera like a window, out into to a space unperceivable to the spectator. In the shower scene, it is the camera that does the looking and in doing so becomes the window through which the viewer observes, with increasing prurience, the succeeding action. There is at one level the necessity to do this since, seconds later, the figure of her murderer appears behind her, obscured by the opacity of the shower curtain; the need to show that approach is contingent for the advancement of the action. However, her unawareness of the camera reduces this image, in Kress and van Leeuwen's terms, to one of 'offer' since, 'it "offers" the represented participants to the viewer as items of information, objects of contemplation, impersonally, as though they were specimens in a display case' (1996, p.124). In fact, the clinical surroundings of the shower itself, the whiteness of the tiles, the gleam of the chrome showerhead and the purifying effect of the running water all compound this effect, although her nakedness, the vulnerability that this implies, and the intrusive nature of the camera/spectator positioning mitigate against this interpretation. The duality of Marion's visual accessibility is disturbing. One knows one should not look, but one does all the same, secure that one can abdicate responsibility for the voyeuristic nature of the intrusion to the camera.

Throughout the entire scene, the positioning of the camera is instrumental in creating the emotional impact and horror that the viewer experiences. Hitchcock has adopted an unconventional approach,

notwithstanding the alternating montage of shots he has employed. One might have expected Marion's activities and subsequent murder to be rendered using the convention of a point of view shot followed by the reverse of this. In fact, this is not the case, but such positioning would enable the spectator, unequivocally, to experience more precisely the activities that engaged each of the protagonists by 'standing' in the position of each in turn. The shot/reverse shot system is claimed to create the effect of 'suture'. The spectator at first experiences a sense of loss in becoming aware of the illusion of the film, and the loss of absorption this implies. The sense of loss is generated by the realisation that the look of the camera is such that it poses the question, 'To whom does this look belong?' in the mind of the viewer. For example, the voyeuristic and intrusive nature of the shot of Marion in the shower is sufficiently disturbing to disrupt the seamless absorption the spectator has, who then goes on to pose the inevitable question. However, in order for the process of suture to take place, the next shot would need to show the owner of the first look. Such a revelation would be intended to dispel the 'disturbing uneasiness [...], assuaged in a satisfactory manner' (Magrini, 2007). This system, first outlined by Oudart (Oudart, (1969)1977) and developed by Dayan (Dayan, 1974) recognises and utilises the Lacanian concept of subject formation where, as Magrini (2007) explains:

The psychological concept of 'suture' begins with the Lacanian notion of subject formation, i.e., the psychical 'junction' of the symbolic and imaginary realms. This is the pinnacle moment in linguistic discourse when the symbolic (the lacking self) is assuaged and fulfilled through the intervention of the imaginary self (the 'I' as ego).

Once the second shot reveals the response to the question posed by the first shot then, according to the theory of suture, the viewer is once more reabsorbed into the fabric of the film. The system of suture is highly contested, mainly because the extent of the two shot exchange accounts for only about thirty per cent of on screen activity according to Barry Salt, film historian (who is quoted in Magrini's 2007 article though he gives no source for Salt's claim). This implies that other mechanisms must be at work in the production of meaning and subject positioning. Nevertheless, Dayan's (1974) work (in support of Oudart) is valuable in identifying the point at which (in their view) a 'seeing' of a film becomes a 'reading'. He expresses it thus:

When the viewer discovers the frame- the first step in reading the film- the triumph of his former *possession* of the image fades out. The viewer discovers that the camera is now hiding things, and

therefore distrusts it and the frame itself, which he now understands to be arbitrary [...] This radically transforms his mode of participation.

As it happens, the second shot(s) in the shower scene concerns the actual attack on Marion. The intimacy of the shot is heightened as the knife attack on her body takes place. The point of view of the camera does not simulate the view of her assailant, whose knife-bearing arm invades the screen space in such a way as to emphasise this difference. The system of suture, as explicated by Oudart, breaks down at this junction. As Žižek notes, as part of his three step explanation of the 'elementary logic of suture', the system works when the pleasure of the spectator is firstly totally engaged then dissolved. As Žižek describes it: 'this full immersion is undermined by the awareness of the frame as such: what I see is only a part, and I do not master what I see. I am in a passive position; the show is run by the Absent One' (Žižek, 2001, p.32). Subsequently, it is the complementary shot from the place where the Absent One (the missing protagonist implied by the previous point of view shot) looks that restores immersion, that 'sutures' the gap. The shower scene lacks resolution since there is no participant or protagonist (no Absent One) that owns the camera view in this instance.

A more satisfactory account of camera positioning, and the gaze it can create is provided by Francesco Casetti who identifies a range of four types of shot that can occupy the screen space. Two of these framings offer the possibility of quantifying the 'looking' that takes place in the shower scene whilst simultaneously accounting for the strangeness and discomfiture of the experience. Firstly, at the beginning of her shower, Marion is observed, coolly, by the camera, and the spectator can only share this view. This can be regarded as an 'objective framing, since it belongs to no identifiable presence, no known protagonist, save the camera itself. In this circumstance, the spectator, or as Casetti names him/her, the 'enunciatee', has little choice but to 'assume the position of a witness. It is the one led to watch, the one permitted to see, but the mandate is never made explicit, and the accomplishment of the task never interferes with the events' (Casetti, 1998, p. 47). The spectator cannot look away and is subjected to an intimacy with the viewed object regardless of preference. In the following seconds, where the knife attack takes place, a second objective shot is employed. This is the position of the 'impossible objective view' and relates to the camera being positioned close up to

Marion, standing somewhere between her and her attacker and slightly to one side. Holding such an unlikely position would embroil any real person in the attack itself, either as a potential victim alongside Marion or as joint perpetrator of the attack. As it is, the camera view is graphic in its ability to relay the horror of the attack. At the same time, it remains curiously detached from the events themselves. A similar combination of 'objective' and 'impossible objective' shots is used across the rest of the scene as the camera tracks the decline of Marion into unconsciousness and death; in particular, the impossible objective shot is used to significant effect to witness the impartiality of the showerhead to Marion's predicament. Although the shot of the camera looking upwards at the showerhead was technically difficult to achieve, its effect is remarkable. By creating a shot that 'no one' (Casetti, 1998) can experience, taken from an impossible position under the shower, suggests that the shower head is cognisant of the events 'it' has witnessed, as 'it' gazes out toward the spectator. This compounds the already strongly felt sense of unease the viewer has. The final objective shot of Marion and her dead eye is merciless and, as the objective camera withdraws from the close up of her eye, the 'spectator' is *made* to look. The camera view may qualify as being technically objective in not representing anything but itself as viewer, but its view is affective; the spectator is stunned by all that he has seen, not least by the impotence that his own spectator position imposes on him.

The shower scene is notable not only for its brevity and shocking content, but also for its cinematic construction; one in which the positioning of the spectator is only one element. Overall, it is made up of an intense array of shots which are used to generate in the viewer's mind the sense of terror that Marion, as victim, must feel as the murderous act upon her is committed. Such is the pace of this original scene, which is closely followed by the resumption of the narrative, that it ensures that the spectator, still numb from witnessing the brutal attack on Marion, has little time for reflection on what has passed. The cold and clinical scene that follows, in which Norman methodically and remorselessly cleans up the bathroom and removes Marion's body because he (and the audience) believes that his mother was the perpetrator, is equally shocking and compounds the numbing effect and helplessness already felt by the viewer. Still reeling from the horror of what has been witnessed, and swept along by the pace of these two adjacent scenes, the viewer is denied the opportunity to examine the logic of what has just occurred. It is unlikely a knife would kill so

swiftly, or that Marion's body would survive so little marked, given the viciousness of the attack. What Hitchcock presents is a highly stylized account of murder: a ritualised event that relies on the viewer's conditioned response born out of reading or watching similar events in other narratives and films. Although Hitchcock's version of violent death in *Psycho* was unique and new at the time, it contains sufficient visual shortcuts to enable the construction of a viable version of the act of killing in the viewer's mind. What Nicolas Claus spotslights in his adaptation of the shower scene are selected aspects of it. By tearing the scene apart and reordering the fragments, he juxtaposes the various elements in order to clarify the significance of each one in relation to the rest, in a way not permissible in the linearity of the original. His 'microscopic' analysis of the film, in which the normal passage of time is suspended, enables the spectator to dwell not only on the events themselves, but on the disturbing anomaly that the uncanny and indeterminate camera position presents. In *The Shower*, Claus emphasises the meta-textual nature of his work by deliberately making obvious the picture frame which renders each filmic sequence, not as an immersive cinematic experience, but as a 'reading' as identified by Dayan. This transformative process is compounded by the degradation of the imagery, where the black and white contrast of the original is leached to a much more uniform grey. Much of the extent of each filmic frame is excised, so that the action that each contains is emphasised, and the narrative content disturbed; these effects distance the online spectator optically as well as emotionally from the events portrayed. Further, by suggesting, through the action of the mouse, that the spectator has some control over what is seen, in contrast to the cinematic experience where the spectator's only option is not to see at all by closing one's eyes, is empowering. I have already noted that the view 'from the mouse' is necessarily a dispassionate one, however illusory the actuality of control exercised in this way may be. It is dispassionate because true immersion relies on the complete surrender of the viewing subject to the fantasy of the filmic experience, which Hitchcock achieves, and which is deliberately dispelled by Claus who offers the viewer the temptation of the mouse as an adjunct to his already transformed presentation. The consciousness that the mouse implies is the final act by which Hitchcock's shower scene is dissolved from cinematic experience to instrument of analysis.

In this respect then, Nicolas Clauss's work can be further construed as critique, in addition to being celebratory, in that his own presentation seeks to analyse and examine the original. Although he does this in a number of ways which I have outlined, I now hope to show in some detail a possible, though typical, excursion through his text. I include a number of screenshots which are representative of that journey; it differs from any other passage made through the text. However, as *The Shower* is relatively straightforward because the base text is limited, then every journey through it is likely to be similar regardless of the inherent randomness that Nicolas Clauss incorporates into it which I have already attempted to explain. I cannot categorically assert that I have seen all that there is to see; there may well be effects that only come into view when a specific configuration of elements occurs, or after an extended period beyond the limit of my own observation, or some other such condition.

3.3.4. Durnat's Stanzas and Clauss's Elements and Motifs: a brief visual analysis

Notwithstanding the difficulty of capturing Clauss's text (as already explained) and fully acknowledging the limitations that such a procedure inevitably imposes, in that there is no substitute for viewing the text oneself, nevertheless an attempt at capture is necessary. Although much is lost by the process of reducing a mobile set of images (that run together to produce an intended effect) to a series of detached, single pictures, it at least affords the opportunity to examine single frames more clearly and to reflect upon the purpose of their existence, albeit as part of a continuum.

To aid that process, which renders the text more manageable by displaying a reasonably comprehensive sample of it, it is useful to refer to the work of Raymond Durnat. He has attempted to divide the shower scene up into sections, each concerned with different aspects of the whole. His set of six 'stanzas' that make up the shower scene action (Durnat, 2002, p.113), are so called because he considers that their 'lyrical' nature is better served by such a description, and I believe that Nicolas Clauss uses roughly the same divisions. Hence, Durnat's divisions provide a convenient starting point for an investigation into Clauss's work. Durnat's Stanzas are:

1. Induction (Marion prepares herself for showering).

2. Marion, showering, relaxes.

3. Prelude to the attack (her attacker enters the bathroom etc.).

4. The struggle.

5. Marion dies alone.

6. Marion lies dead.

Although Clauss roughly divides up the action of the shower scene in a similar fashion to Durnat, his divisions are not quite the same. There is a lack of clear delineation in some cases, and extensive superimposition and juxtapositioning of imagery in others. Nonetheless, the stanzas remain more or less identifiable and, for the purposes of a visual analysis, I show Clauss's work set against the divisions that Durnat suggests, even though the appearance of each of these extracts is unlikely to appear in the order that I present them here. However, such an activity reveals those points which Clauss seeks to emphasise and those which are clearly of lesser importance or even of no importance at all. A quick glance through the following pages will show that some filmic sequences are, as far I can reasonably tell after hundreds of viewings, completely omitted from Clauss's work; others are shown extensively. For example, imagery from the early sequence which Durnat identifies as Stanza 1 is rarely seen or is shown only as a roundel element taking up a role adjacent to the main action, thus increasing the significance of both items. The consequence is that there are relatively few images in Clauss's work that correspond to this first stanza and this paucity is notable in what I was able to present here; where other stanzas have extensive coverage there is an abundance of manipulated imagery from which to choose. However, in either case I concede the impossibility of exactly representing the on screen activity and hope that what is shown is sufficient to convey at least something of the viewing experience.

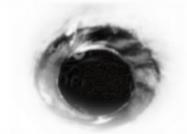
Before analysing the visual aspects of Clauss's work, I provide a table giving some terms of reference, together with examples, that can be used to describe in more detail certain aspects of *The Shower* to which I will make reference later (see Table 3). Initially, the most evident feature that strikes one in making a comparison between the filmic original and Clauss's work is this: the original scene is considered novel and different because of its unusual setting in the white and clinical surroundings of the motel bathroom (a point

to which Wells draw attentions (Wells, 2001, p.48)). However, the tonality of each frame is comparatively dark. A comparison between any film frame and the whiteness of the paper it has been copied onto reveals this conclusively, even at the central point of the scene where Marion is pictured against the gleaming whiteness of the bathroom tiles. What is lacking, perhaps, is the luminescence of the light projected onto the white, reflective screen found in the cinema onto which the film is played; the perceived image is the result of reflected light, and the varying degrees of opacity of the celluloid that inhibit its progress. It is the light which adds an extra glow to the scene; the pigment which produces a print on paper absorbs light rather than dispersing it. The result is dull and dark, much darker than the *recollection* of the experience of watching the scene itself might suggest. In Clauss's work, the perception of whiteness is reinforced and aggravated; he achieves this by the leaching away of the soft graduations of tonal difference. Most frames are reduced in both content and form so that many of the incidental details are lost. This brings into prominence the most salient features of each extract to direct the viewer to focus explicitly on these aspects to a much greater extent than Hitchcock himself determined, even by his own exceptionally tight directorial control. A second obvious difference is to do with the size and scale of the imagery.

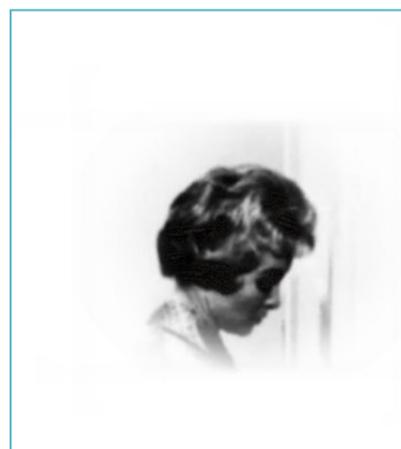
The negative, the camera lens and projection screen are limiting factors in the determination of size and proportion of image in the original. The perimeter of the frame remains a constant in Hitchcock's scene, the close ups and action shots functioning within the limits that the physical size of the frame imposes. *The Shower* is anchored to the centre of a much smaller computer screen but is not confined to it, every image having the possibility to expand or contract in response to the program that generates it and, at times, the user's mouse action. This allows Clauss the opportunity to vary the impact of images and to manipulate them further by applying the techniques of *amplification*, *reiteration* and so on that I have identified in the table and which I use to describe Clauss's manipulated images in the remainder of this analysis. Each of the following pages presents Clauss's imagery set against Durnat's Stanzas, and I will content myself with providing a commentary, in the form of extended captions, on what I have observed throughout my procession through Clauss's text before providing a more substantive analysis subsequently. I have attempted to retain the size differential of Clauss's work in order to convey at least some of the visual impact

this has. Where possible, I have also retained the order in which these images appear, although this is not of any great value since the indeterminacy of the work and the reiteration of sequences mitigates against the need to do so. What is shown is and can only ever be, a vague approximation of the whole product. The captured images I present here are simply a pragmatic attempt to represent an object whose substance is fleeting and ephemeral and subject to unruly change.

Table 3 Visual elements of *The Shower*.

Element	A single object which is removed from its original context, usually circular, and often juxtaposed with other objects from another part of the original scene.	
Motif	Short filmic sequence which retains something of its original cohesion and order.	
Amplification	A single image or element which is doubled or tripled, onscreen and with an increase of scale. The imagery/clip is usually played forwards and backwards to create a pulsating effect.	
Reiteration	The constant repetition of an element, motif or image.	
Superimposition	Where several motives or elements appear together, not necessarily in the order dictated by the original film.	
Layering	The superimposition of elements and motives where the emphasis is placed on their transparency in order to show events/imagery from other parts of the scene or as a 'peephole' into a different reality (e.g. the 'real' world of the film maker). (superimposition and layering are often used together)	
Distortion	Where an element is dragged across the screen (initiated by the mouse) to produce a distorted image of the original, as in this image of the drain hole.	
Degradation	The impact of the image is severely eroded in some way, for example, by a reduction or increase of tonal contrast, or through aspects of the original being wholly excised from the image Clauss presents.	

STANZA 1 Induction: Marion prepares herself for showering.



1



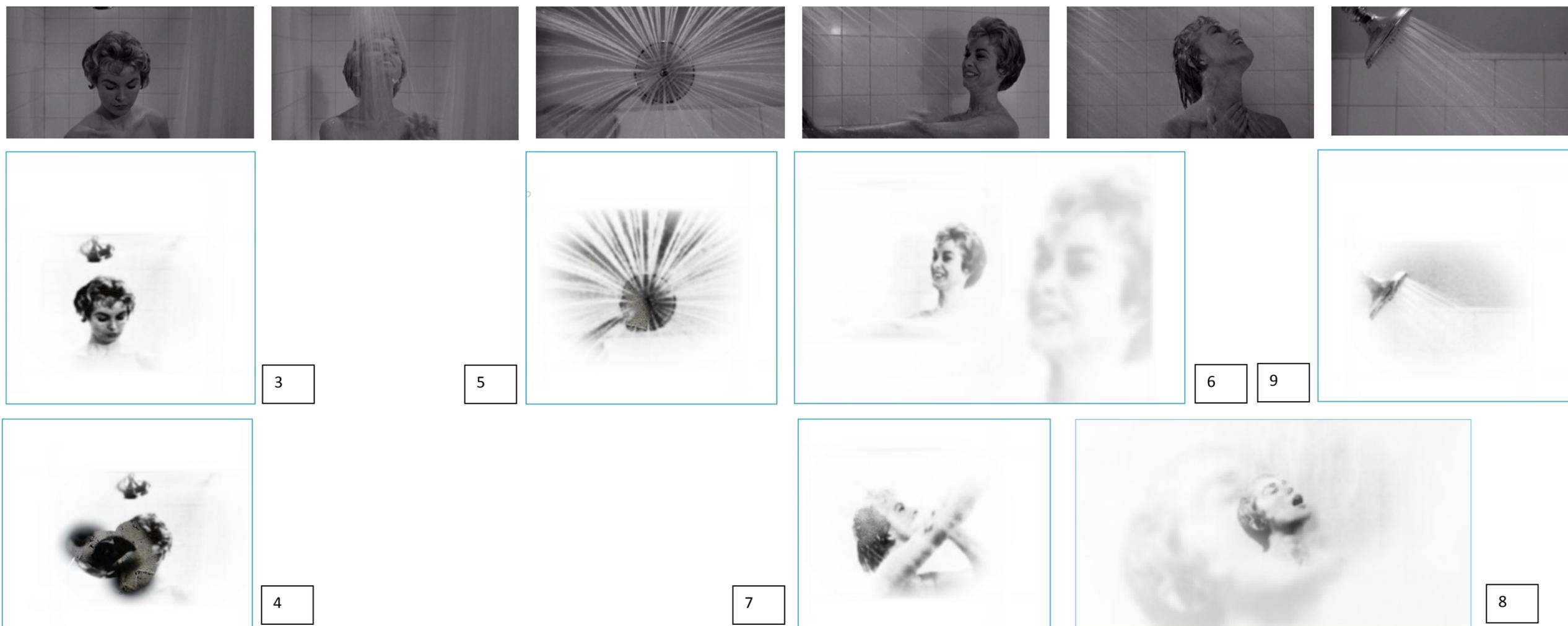
2

This first Stanza is poorly represented within Clauss's work. Very few images exist and, of those that do only Marion's action of stepping into the bath (2) is shown more or less in its entirety. Here, the captured image is shown both amplified and degraded, a second washed out version being superimposed over the first. Images from the early part of the scene exist as roundel elements, often juxtaposed with other circular objects such as Norman's eye and the drain hole. Since they have an autonomy beyond the remit of Durgnat's description of Stanza 1, and because, in themselves, they lack the narrative cohesion evident in a sequence of images that constitute a motif, I have omitted them from my description here, although I discuss these elements later. What is surprising is that the toilet bowl, in the form shown in Stanza 1, with its implicit and explicit references to the disposal of waste material, and its potential as being a signifier of the 'void' (and as something that one 'voids' into) is not used by Clauss. Its circularity and function clearly reference the drain hole and would have had the potential to perform a similar function within Clauss's work.

The close up of Marion (1), taken from the early part of the scene, is reduced to a circularity, signifying Norman's voyeurism as he peeps through the hole in the wall of his parlour, but it maintains its position within this reduced motif sequence.

The incidence of this sequence is small compared to the appearance in Clauss's work of Stanza 4. Overall, the contrast of the tonal values evident in the original film and Clauss's presentation is abundantly obvious. Hitchcock's original seems muted and, in comparison to *The Shower*, each frame has a claustrophobic intensity which is dispersed in Clauss's heavily mutated version.

STANZA 2 Marion showering, relaxes.



This part of the original scene shows Marion in a happy state of redemption, washing away her guilt. However, Clauss subverts the seeming innocence of this activity his selective degradation of the image shown in images 3 and 4. In the first instance, the background details are reduced so that the imagery of Marion is heavily fore-grounded, set against the shower head which now assumes a portentousness not, at this point, evident in the original. This effect is compounded in image 4 where the superimposition of the face of Marion from a later point in the narrative is shown. As a result, the shower head assumes a greater importance in (5) and its 'eye-like' qualities are emphasised because of the attention drawn to it in (3) and (4). Even a viewer with no prior knowledge of this scene is drawn to the conclusion that there is an unnerving relationship between the showerhead and Marion, a relationship which implies a degree of sentience on the part of the shower. In short Clauss's arrangement of these different elements exaggerates the forbidding nature of the shower that Hitchcock only hints at in this early part of the original scene.

Pictures 6, 7 and 8 demonstrate Clauss's use of amplification and degradation. Marion's radiant happiness is emphasised by the glowing whiteness that inhabits this portion of Clauss's motif. This is achieved by the selective editing of the original, and by the fluctuating, pulsating amplification that Clauss applies which is impossible to reproduce here. In image 9, the shower head's voyeuristic characteristics are emphasised by its presentation as a circularity. Here, the concept of circularity is a metaphor that encompasses the notions of watching and being watched. Clauss makes it much more evident than Hitchcock, that voyeurism is an implicit and disturbing aspect of this scene, achieved by the slow reiteration of this motif.

STANZA 3 Prelude to the attack: her attacker enters the bathroom.



10

11

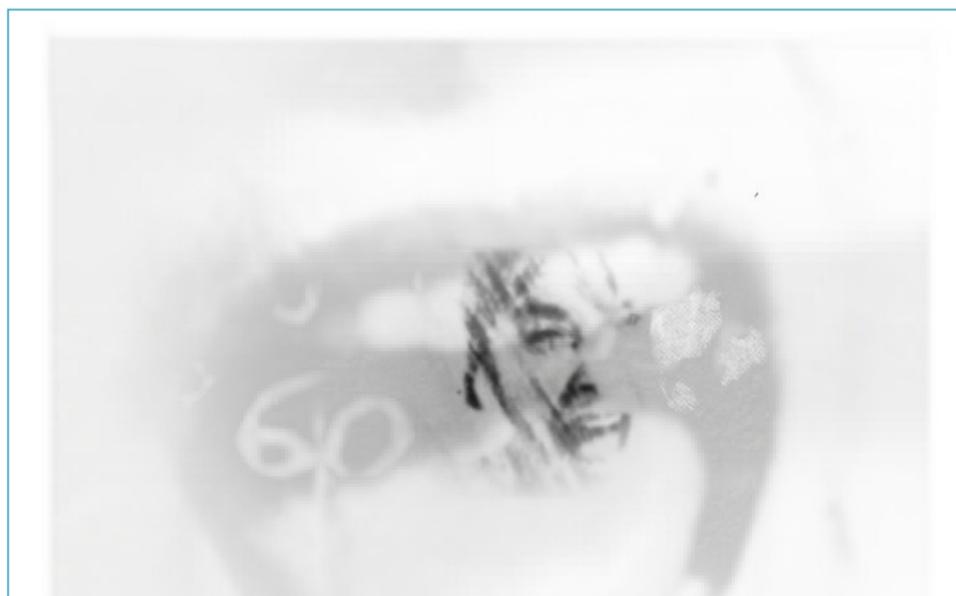
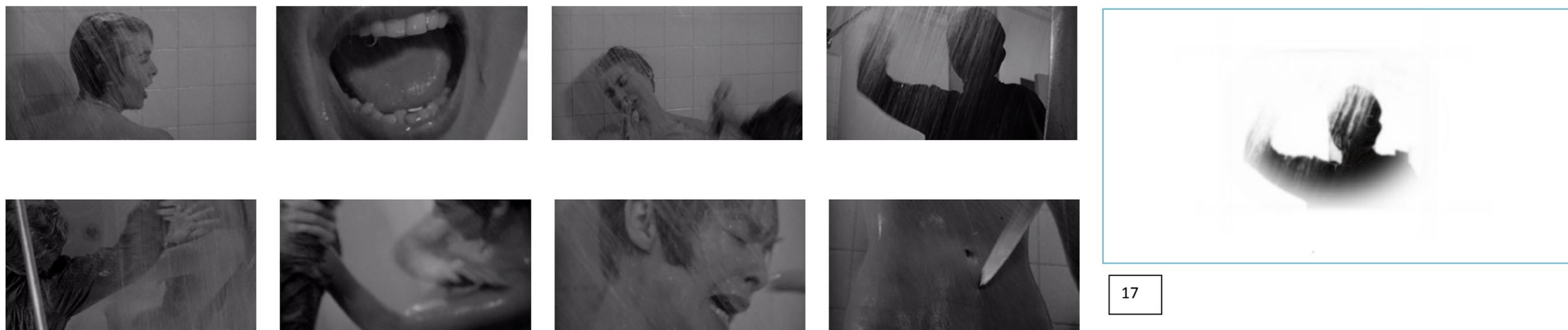
12

13

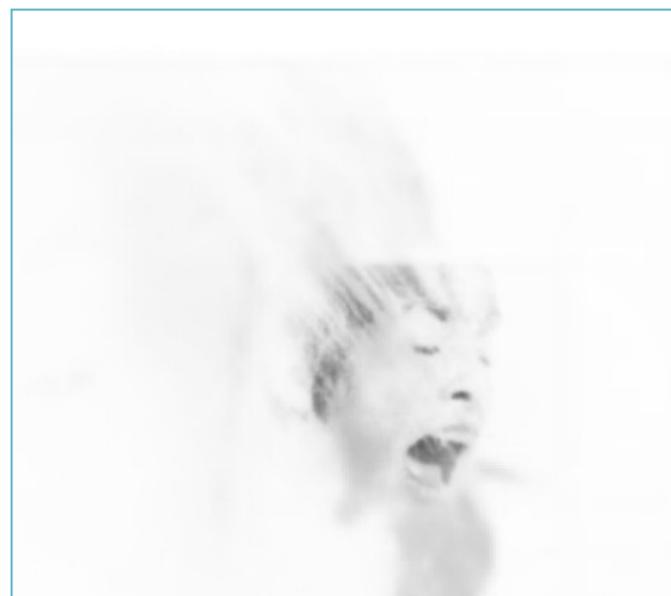
The brevity of this aspect of the original is mirrored by its comparatively rare appearance in Clauss's work. Again, degradation, amplification and reiteration are compounded together to highlight the horror and visual impact. Marion's lack of awareness of her imminent attack is played and replayed while the looming shadow of her attacker amplified for greater effect. Clauss's isolation of Marion in a sea of indeterminate whiteness (10) emphasises her vulnerability and here, the pulsating use of reiteration magnifies, for the viewer's benefit, the helplessness of her situation. Similarly, her attacker's approach is amplified and reiterated (11); a detached, ghostly presence until the moment of the attack itself, when Marion's assailant draws back the killing knife, ready to strike. The relative darkness of this (albeit degraded) image (13) is sufficient to make the point. Images 10, 11, 12 are indeterminate, whereas the image of the assailant in 13 retains much more of the original's stronger and fuller tonality, in contrast to the tonal weakness of Marion. This emphasises the nature of their momentary relationship; the power of the attacker versus the weakness of the victim.

This 'prelude to the attack' as identified by Durnat, functions in both versions, though in a dissimilar way. The spectator is conscious that something is about to happen in both versions, but in the original, he knows not what. The subsequent action takes place with breathless speed thus denying the viewer the opportunity to comprehend the prescient nature of the 'prelude' fully. In *The Shower*, in contrast, the reiteration of the attacker's approach compounds the now-expected horror which is ritualised and deadened through slow repetition. Again, circularity (13) is used to mark the intrusion and voyeurism both of the spectator and Marion's attacker and to connect to Norman's eye at the start of the scene and Marion's dead eye at the end.

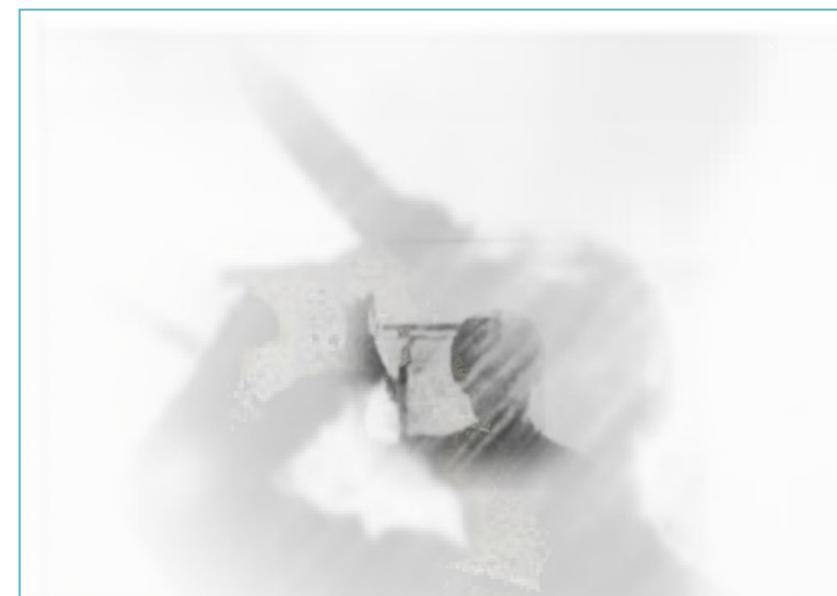
STANZA 4 (A) The struggle.



14



15

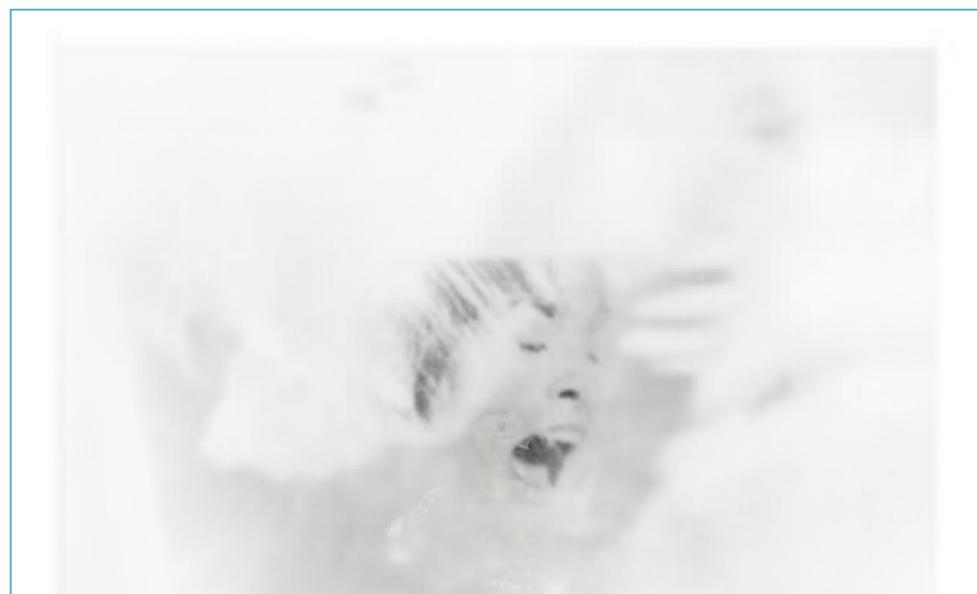


16

17

Stanza 4 can be considered the climax of the action in both presentations. In Hitchcock's original, the assailant's frenzied attack is communicated by the effective use of montage suggesting Marion's shock and pain. The soundtrack, that accompanies this attack, is compelling, and is an essential component of the scene (I will return to this topic shortly). It is dispensed with, in *The Shower*, other audible effects being substituted. In contrast, Claus uses the techniques of amplification and superimposition (14) to convey the horror of the scene, the focus on Marion's responses being of paramount concern. The flickering and pulsating effect of amplification in the form of Marion's screaming, gaping mouth (14) recaptures the immediacy of the original; the ironic use of layering (14) reminds the viewer of the fictitious nature of the event and Claus's appreciation of Hitchcock's bravura. In his degradation of the imagery in (15), Claus largely expels any extraneous matter to reveal Marion as an isolated expression of suffering, compounded by the muted tonality he allows. Images 16 and 17 show amplification and degradation, though the image of the assailant is remaindered by the excision of the background (17), thus intensifying the tonal contrast and its implication of power and domination.

STANZA 4 (B) The struggle.



18



19



20



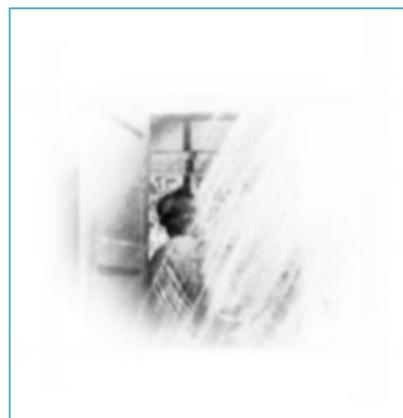
21



22

The frantic motion of the central portion of the original scene of Marion's stabbing gives way to a horrifying silence, visually if not acoustically, as she sinks into the torpor that precedes her death. In Claus's work, this segment is reduced to only two iconic images which are repeated endlessly. The first is Marion's open-mouthed scream (18) as already described which, in his reduction of this aspect of the scene, Claus uses to stand for almost all of the violence which is inflicted on Marion; the second is the pathos and helplessness of her situation and imminent demise, signified by the prevalence of 'hand' imagery. As the 'coda' of Stanza 4, the weakening hand, as it presses against the tiles, denotes her loss of bodily control as her vitality ebbs. Her grip on the wall tiles is as slippery and weak as her grip on life (19, 20). Claus degrades this image by altering not only its tonality and contrast, but by exaggerating the flow of water from the shower head. The strength of the diagonal water flow across the surface of her hand suggests her dissolution; the tonal lightness of this watery cross-hatching begins to 'rub out' the three-dimensional solidity of the filmic image (19, 20). Marion begins to evaporate, melt and dissolve. At the close of this scene in *The Shower*, the imagery often assumes the appearance of a still wet watercolour or a pen and ink drawing. Thus, there is a consolidation between the watery location of Marion's murder, (the bathroom, the shower), the wateriness of her death (the relentless flow from the shower head) and the apparent wetness of Claus's presentation. The depiction is fluid in its relentless repetition, variable in its appearances and, most pertinently, at some points of this final part of Stanza 4, the wet image on a canvas is washed away by the constant onslaught of water. The pixelated 'pigments' slowly dribble to the bottom of the frame marking the end of this segment (21, 22).

STANZA 5 (A) Marion dies alone.



23

24



25

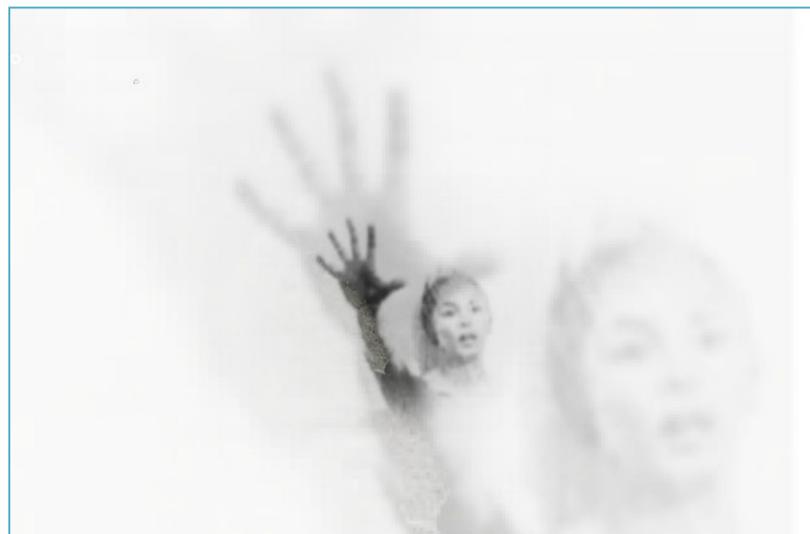
26



27



28

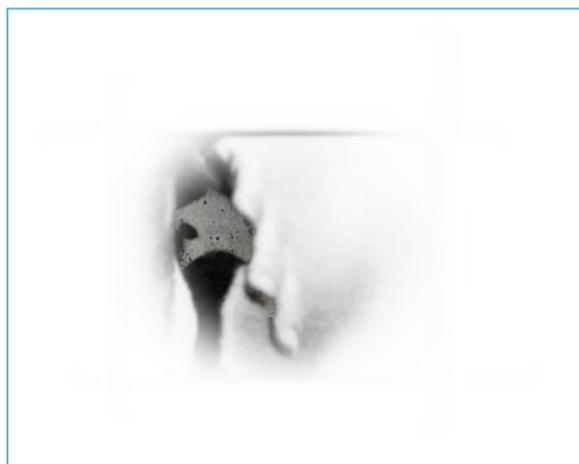


Although Claus applies all the techniques he has previously used to manipulate the imagery of this section (degradation (23), amplification (28), reiteration), the intrusion of individual roundel elements (in the form of static stills in contrast to the mobile motifs) is acutely apparent. These are superimposed against the background of the final episode of Marion's death and reference the fictitious nature of the base text (25), earlier aspects of the scene (25, 27) and, very occasionally in my observation, a part of the succeeding scene (24). The effect of this juxtaposition of the eye-like circularity of the elements against the reiterative motif of Marion, where it occurs, is curiously portentous, since only the temporal unity of the original is seriously disrupted by the appearance of these disparate items; the essential inevitability of Marion's death as a component of the fictitious narrative is maintained and fore-grounded. The spectator's eye, Norman's eye and the camera lens are signified by the roundels, and the flickering, limited movement and appearance of these elements across the screen (over which the viewer-as-mouse-operator has only limited control), suggests a roving eye; an eye, consciously (though unwittingly) drawn to watch the scene's events as they unfold. However, the partial view of each still militates against this helpless property of the looking; Norman's view through the dividing wall between the parlour and Marion's motel room is referenced, and the surreptitiously secretive and guilty nature of his watching is revealed. The drain (26) has a different import, since its circularity is determined by its practical function, though its appearance here benefits from the cache of significances already accrued by the other circularities made visible.

STANZA 5 (B) Marion dies alone.



30



29



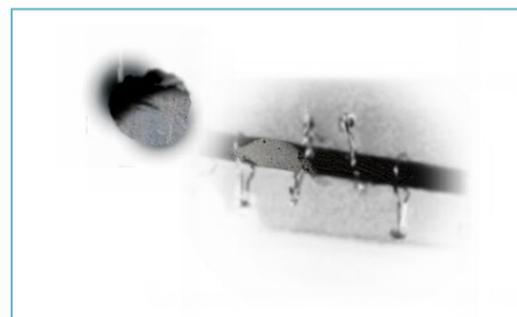
31

32



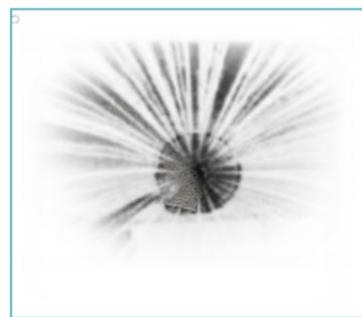
The solidity of form is much reduced (30), the deep shadow of Marion’s reaching hand being substituted for a layered image of her (supposedly) dying face. In fact, Marion’s face is extracted from the point in the scene when she begins to start showering where she is depicted enjoying a moment of cathartic ecstasy now that she has repented of the sin of stealing and intends to make reparation. It is no accident that Claus chooses this imagery, so close visually in nature to the other images of Marion’s expiration. In the first, she is overwhelmed by the relief of repentance and the freedom from sin this implies, and her facial expression reflects her spontaneous inner joy. In the second, as she loses consciousness after the trauma of the attack and sinks into death, a similar loss of control ensues and her facial expression also reflects her inner state. The capacity of the human visage to express these moments of extreme mental distraction is limited, hence the obvious similarity between the two; Claus provides an extra opportunity to suggest Marion’s demise because the image is linked to the desperate reaching out of her hand. Image (29) shows the heavily degraded imagery of Marion’s outstretched arm and the amplified hand (itself degraded almost to the point of being unrecognisable). It signifies not only her fading life force, but also the wateriness of her demise. She seems to be washed away. Image 31 is a complex conglomeration of layered and superimposed imagery and is made up of four distinct elements; Norman’s eye, Marion’s hand, Marion’s face and the shower rail from the beginning of the scene. This complexity is sustained in image 32, the point (continued)

STANZA 5 (C) Marion dies alone.



33

34



35



STANZA 6 Marion lies dead.



36

37



38

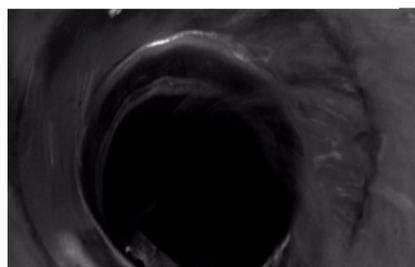


being to encapsulate in single representations the inextricable process of the scene overall.

The remainder of Claus's version of Stanza 5, and indeed Stanza 6, uses exactly the same combinations of effects to produce a visual melee, where the directness of the original is tempered by the kaleidoscopic processes that Claus's programming initiates. At this point, I show reduced numbers of images from the rest of *The Shower*, as there is little to be gained from an excess of unnecessary examples. The processes I have identified so far have a universal tendency across the production, so repetition merely for the sake of it is redundant. Images 33, 34 and 35 relate to the latter part of Stanza 5 whilst the remainder (Images 36, 37 and 38) show those relating to Stanza 6, the conclusion of *The Shower* (in as much as one can say that there is a conclusion to Claus's work).

I turn my attention now to one or two other particulars of the scene which includes the drain hole element which, although I have mentioned it previously, requires a more detailed study. I show a number of variants of the drain hole since this element is most susceptible to manipulation either by the user who can distort it by dragging the mouse, or as a result of the random programming. Additionally, I show the drain hole in situ with its companion objects and will attempt to draw attention to the importance of these relationships.

Other Imagery 1.



37



42



38



43



39



44



40



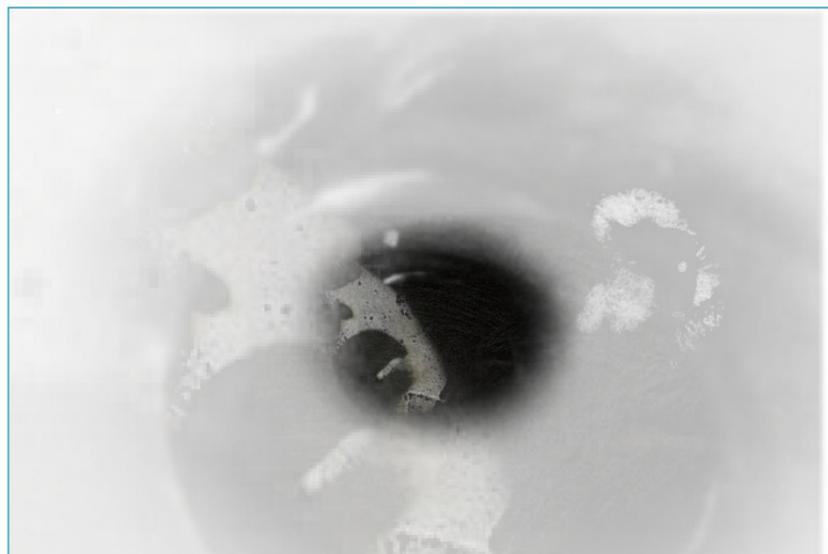
45



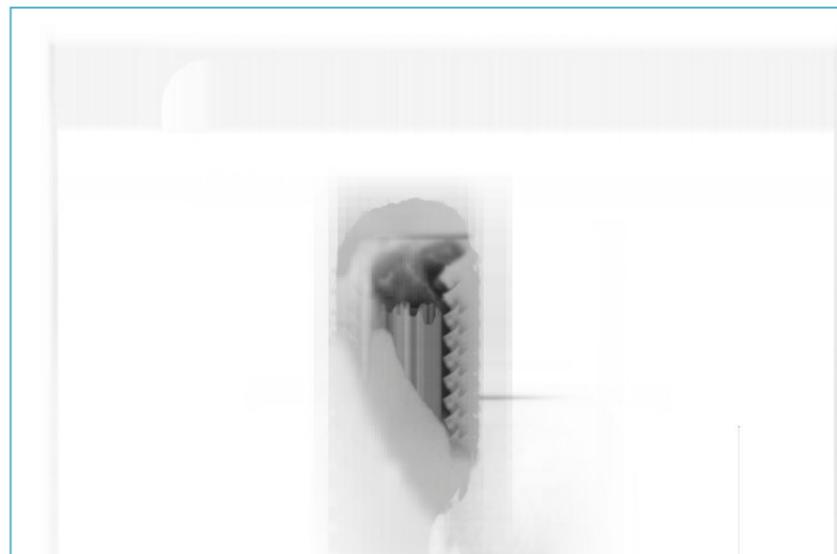
41

The drain hole (37) is ubiquitous, appearing at any juncture during a viewing of *The Shower*, in contrast to its late arrival in Hitchcock's original scene where it is shown as the void through which the tumbling shower water and Marion's blood escape. In its least distorted form, the drain is seen in combination with key images and motifs from the scene, often seeming to spiral across the surface of Clauss's presentation, emulating the path of the discharge of water from the shower head as it hits the surface of the bath and flows towards the drain as its exit point. The image pulsates as the water ripples across its metallic surface, emphasising the relentless flow of water and blood. The impending death of Marion is fore-grounded as an inescapable inevitability by combining the drain imagery with various aspects of the scene (38 to 41). In Images 40 and 41 white streaks appear on the surface of the image and recall the fractures that appear on the original poster. These streaks signify not only the fracturing of the temporal organisation of the scene, but the unnatural disruption of the narrative that the scene delivers. The death of Marion, as key protagonist, is an unconventional twist in the plot at this point. The 'lightning' streaks serve to remind the viewer of Hitchcock's avowed intent, as clearly indicated on the movie poster (see Figure 18), to confuse and mislead his audience, by providing them with a 'new and altogether different screen excitement'. Images 42 to 45 show the distorted drain, achieved either by the user dragging the mouse or as a result of the random programming. The drain assumes a stain-like quality, and its tonal intensity (and the frequency of its appearance) promotes its importance as the end point of Marion's physical being to a much greater extent than Hitchcock allows. The powerful darkness of the drain-as-stain is in contrast to the highly degraded imagery where much detail is lost, thus compounding the notion of Marion's evaporation and dissolution. In image 45, which is rarely seen, Marion's facial features are depleted; only her empty eye is remaindered, signifying the extinguishing of life.

Other Imagery 2.



46



47



48

Images 46 to 48 show an array of many of Clauss's techniques: amplification, layering and degradation of various motifs are clearly apparent. What is not evident here, and difficult to capture in a series of statics, is the combination of the eye and drain imagery where one segues into the other in a pulsating visual maelstrom which emulates the spiralling water flow. The reiterative nature of much of *The Shower* is construed to recreate the frenzy of the original effectively, although Clauss is not concerned with the business of storytelling as there is always the presumption of prior knowledge in his work. *The Shower* exists as a series of elisions, where Clauss emphasises the relationships between various objects and events and strikes up new combinations in order to celebrate Hitchcock's directorial mastery in leading the unsuspecting viewer down the path of horror and belief/disbelief.

In all these images, Clauss makes the most of his own (programming) skills to change the balance of the scene. He offers the viewer an opportunity for a new, and more reflective, relationship with the imagery presented. For example, the last two stills I present here are typical of yet another interesting visual aspect of the work. At one level, *The Shower* exists as a continuum, since it will run indefinitely until switched off. However within it, it is also clearly episodic, each episode more or less equating to Durgnat's Stanza. The end point of each episode, when it occurs (and there are insoluble difficulties in trying to identify how, why and when such an 'ending' might occur) is usually marked by the appearance of a watery finale, as already described as the terminus of Stanza 4 but which can be equally applied throughout the presentation. These disintegrating 'endpoints' offer the viewer a temporary respite from the unrelenting rhythmic movement of the whole; their relative visual 'silence,' allied to their composition and dissolution, is sufficiently intriguing to promote a questioning and reflective response, an opportunity lacking in the original scene.

3.3.5. The Disruption of Narrative

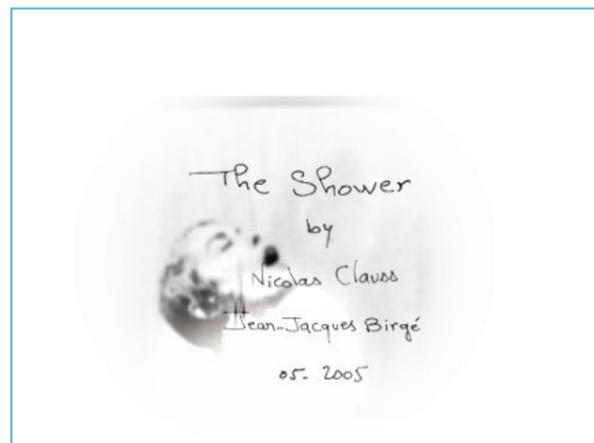


Figure 21 The title piece (incorporating a preloading sequence) of *The Shower*.

The creation of a new artwork such as *The Shower* is predicated on viewer foreknowledge of the events that make up the original scene from the film *Psycho*. Although the presentation of this scene, disrupted as it is in the online version, is divorced from its place in the original narrative, there is still sufficient narrative content for it to remain meaningful on its own. However, the fact of its removal from its context in the original film, *Psycho*, followed by its subsequent manipulation, is suggestive. Interestingly, most of Nicolas Claus's recent productions include a preloading sequence which enables the spectator to interact with them prior to the work being fully active (Figure 21). During this time, it is possible to sample, to try out, what is to come.

Once the program has loaded, a single click of the mouse initiates the action. The opening sequence is usually consistent each time and is a montage of two iconic images taken from the end of the original filmic scene: the drain hole and the dead eye of Marion, the hapless victim (Figure 22). These two fragments alternate with one another rhythmically, pulsatingly appearing and disappearing as they are absorbed one into another. The pulse is achieved by the increase in size of the fragment followed by an immediate reduction before the next fragment comes into being to replace it. Immediately noticeable are several things, not least that the area of interest, the focal point of the spectator's sight, is small relative to the available area of the whole screen. This becomes apparent in later shots, although the area, in which the imagery

appears, fluctuates in size. This is variously delineated as the piece progresses, equating quite possibly to the flickering of a cinematic screen or perhaps an artist's canvas or even, in this particular case, a bathroom tile. Each of these explanations is possible, and, at times, the dominance of any one of these possibilities is determined by the action taking place in the space within the perimeter it defines. What is significant about this initial selection of images to begin this piece is that, as a compression of the concluding sequence at the ending of the original, it portends the ultimate fate of Marion.

To begin a reworking of the shower scene by giving away its ending suggests that the narrative content has only a subsidiary role to play within this construction and that the purpose of such an adaptation differs from the original intent of the filmic version. Information about the film and its crew (and, of course, the Director, Alfred Hitchcock) is self-consciously revealed by the incongruous appearance of the clapperboard floating behind the drain hole and Marion's dead eye. The fact that this information is revealed confirms what is known already, that this is fantasy, that the images are most certainly a drama; an artificial construct. The incursion of the real world of filmic production into the drama represents a breaching of the boundaries that normally separate the two, thus dispersing the narrative power of the images themselves. Equally, since it is already known by the user that this scene has had an existence prior to its present form, the collision of these two separate worlds, that is, the *process* of the manufacture of the film and the physical existence of the film itself, dispels any possibility of the means of manufacture being made invisible. In short, films conventionally strive to conceal the fact that they are films in order to engage the viewer fully in the action presented on screen. In presenting his online, highly altered and manipulated adaptation, Nicolas Claus has added substantial layers to the original to expose the actual layering he has observed. He makes references to the materiality of film itself, the nature of filmic production, and the inherent artifice of the shower scene, made by the actors, technicians, editors and production team. All work together to produce a simulacrum of a supposed reality. As a critique of the original, his online production is yet another fold in the extensive fabric of the discourse that surrounds the scene itself; a fold that distances the spectator from the original cinematic events making up the scene. As it is atomised, dissected and displayed by its fractured re-

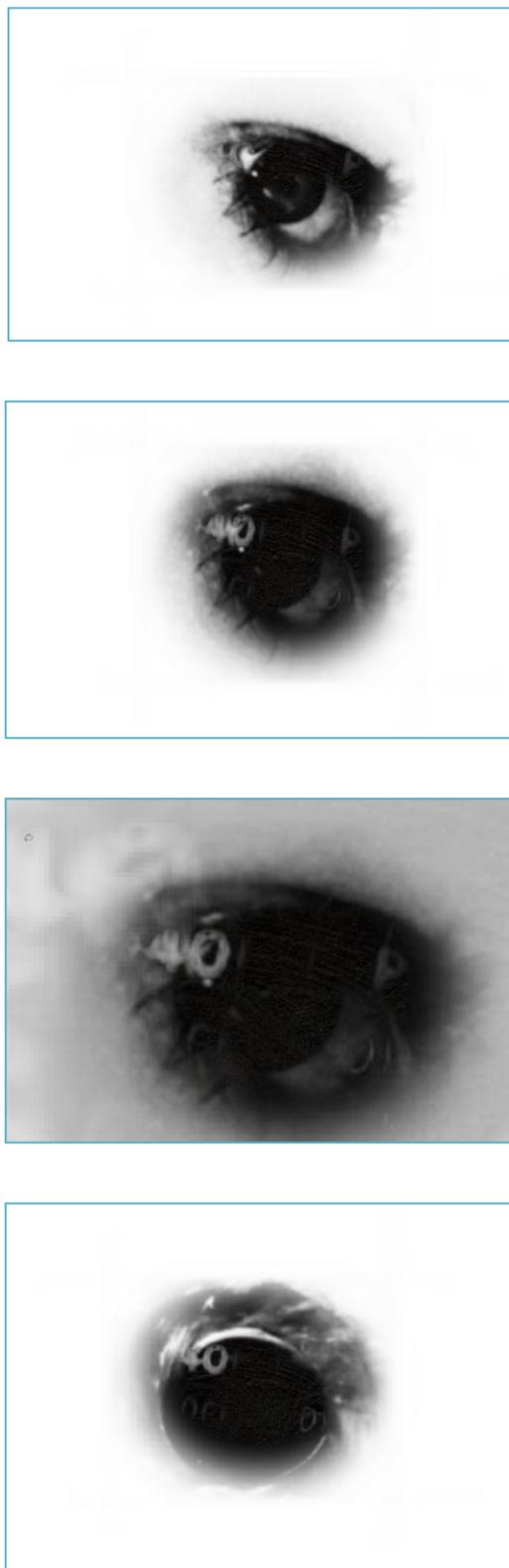


Figure 22 *The Shower's* opening sequence.

presentation online, the original construction of the shower scene comes under scrutiny as its component parts are actively and consciously revealed.

The original scene is cohesive, revealing a syntagmatic organisation of the individual shots to produce a meaningful *sequence*. Metz describes a sequence as being 'a real unit-that is to say, a sort of coherent syntagma within which the "shots" react (semantically) to each other' (1974, p.115). Conforming to Metz's description of an 'alternate montage', the individual shots are ordered carefully to render meaning. As he describes it, the ordering is 'both *codified* (i.e., the fact of alternating itself) and *significant* (since the alternation signifies simultaneity)' (1974, p.117). Although the scene is diachronic, respective elements (which are always present) have some narrative or symbolic, functional meaning, and these are represented within the piece by the use of the alternation of shots. For example, the stabbing sequence is made up of a series of close ups showing details of the knife attack on Marion's body. These are alternated with shots of her facial expressions, showing her terror and pain. Clearly there is a simultaneity between these two aspects of the same cinematic event and, to convey the actions and their effect convincingly to the viewer, relies on the convention of the codified relationship between the two kinds of shot that function together to manufacture the sense of the whole.

A glance at the shots, taken from the original (Figure 19), reveals the symmetry of movement across the scene. It begins with an eye and ends with one, although Norman sees whilst Marion does not. The toilet pan and its circular shape are echoed at the end by the drain hole, while Marion's action of disposing of waste material is mirrored in her own bodily material, her blood, wasting away by disappearing into the void. The diagonal spray from the round shower head is shown at both ends of the scene. Marion pulls the curtain across to cover her body as she steps into the bath tub; later she reaches for the curtain and pulls it down around her as she falls in her dying seconds. This 'mirroring' is prevalent throughout, so much so that a rhyming pattern of imagery emerges both leading up to and away from the median point of the scene, Marion's stabbing, as a close examination reveals. In fact, it would be entirely possible to subject this scene to a formal, structural analysis, such as that ably demonstrated by Bellour in his essay *System of a Fragment* (Bellour, 2001). Here, Bellour deconstructs a scene from *The Birds* to reveal the relationships between

individual frames and the meaning they construct. However, it is enough to be conscious of the construction without the necessity to enact the comprehensive study that Bellour suggests since it is my submission that Nicolas Clauss's artwork seeks to identify, just as clearly as does Bellour, the nature of the relationships between individual frames and short sequences of frames and the meanings they construct. By the manner in which Clauss projects the original, and the manipulations he makes to it, he subjects it to examination. In this way, he realises Bellour's longed for ideal of examining the text in its own terms where 'the object of study and the means of study' are one (2001, p.22). However, knowledge of Bellour's methodology is useful for comparative purposes as it offers a contrast to Clauss's own. While Nicolas Clauss's mode of operations is less formal, less mechanistic, it is proactive in that it *constructs* the relationships synchronously in order to draw attention to them. These relationships are the result of *The Shower's* program, which throws together an almost random selection of imagery. Bellour employs identification processes that are much more conservative and passive (a term I use advisedly) than Clauss's. It is in the construction of new relationships between the various elements that make up the whole that Clauss makes commentary on the syntagmatic process revealed in the original scene.

In *The Shower*, Nicolas Clauss rejects the formal ordering of cinematic events evident in the original shower scene as the programming that generates the appearance of the images and sound also promotes continuous disruption of the order of the various elements. The montage that he produces, via the programming, sometimes seemingly initiated by the viewer clicking the mouse, is of a different category; it is essentially paradigmatic in that it not only juxtaposes different aspects of the original narrative together but, in most cases, the appearances of these disparate elements of the scene are arranged contiguously, even to the point of overlapping. The conjunction of inanimate objects (the plughole, shower head shown in various screenshots) or disembodied body parts (Norman's eye, Marion's hand) suggests the inevitable demise of Marion. Compared to the original, this constant reiteration of Marion's assault, Norman's frenzied attack, and then the final death throes are a voluptuous indulgence. The brevity of the original, so shocking at the time to audiences, suddenly seems spare and economic. Nicolas Clauss draws attention to the intense economy of the original scene by prolonging and repeating the action. By disrupting the narrative flow, he enables the

possibility of dwelling on specific imagery. Long and drawn out, each sequence becomes tortuous, both to the victim and the user. The scene is pornographic in its constant dwelling on the nature of the defilement of its subject, which is revealed repeatedly. This pornography is prolonged so that the act of defilement is never fully seen either in the film or on the web so its repetition could be regarded as a deliberate act of excitation; the titillation of the original is extended online by a frenzy of overlaid images and is compounded by the reiteration of the circularity of various objects, substituting as 'eye'. Editing out extraneous matter to reduce objects to a general circular conformity emphasises the voyeuristic nature not only of Norman (whose eye is seen regarding Marion at various points), but the camera and ourselves as spectators. Although Norman (in the guise of his mother) is present as Marion's murderer, the implication of his eye being present at other points in the scene suggests his imaginative capabilities as well as his voyeuristic tendencies to view Marion as a sexual object for his consumption. The viewer, either cinematically or online, is implicated in those same acts, a position which is compounded by the curious mix of the objective and impossible objective views that the camera offers.

However, I believe that Nicolas Clauss seeks to reveal this uneasy aspect of the act of viewing to identify the pleasure and enjoyment of witnessing the death of another, especially one whose vulnerability is intensified and eroticised by her nakedness and her occupation of an intensely private space. As spectator, inevitably, one is subjected to the camera view and, however initially horrifying and shocking that initial view may be, curiosity and interest are aroused. Mulvey notes that, 'the cinema satisfies a primordial wish for pleasurable looking, but it also goes further, developing scopophilia in its narcissistic aspect' (Mulvey, 1989, p.17). She goes on to add that: 'curiosity and the wish to look intermingle with a fascination with likeness and recognition: the human face, the human body, and the relationship between the human form and its surroundings, the visible presence of the person in the world' (Mulvey, 1989, p.17). Such curiosity and recognition allow the spectator to both identify and empathise with the onscreen character. Equally, the view of the camera creates such a degree of strangeness in the shower scene, positioning the spectator in a place that social taboos would normally prohibit. As revealed by the objective/impossible objective views of Marion

as she begins her shower, suffers her attack and later as she dies, the camera apportions to the viewer the role of voyeur with its implicitly sexual overtones. Mulvey claims that:

mainstream film, and the conventions within which it has consciously evolved, portray a hermetically sealed world which unwinds magically, indifferent to the audience, producing for them a sense of separation and playing on their voyeuristic fantasy (Mulvey, 1989, p.17).

This description of a world that is indifferent to its viewer is acceptable on one level, in the sense that, the film itself remains unchanged by its viewing audience. However, its intention must always be to be affective, to generate in its spectatorship at least some of the responses intended by its director. Here, the dual aspects of the spectator's role, that of identification with Marion as victim and the perpetrator of the scopophilic gaze (by proxy), are deliberately formulated to create a dichotomy which adds to the general sense of unease that the viewer has. The intensity and brevity of Hitchcock's scene develops the spectator's emotional involvement with Marion, while her lingering death indulges the viewer's voyeurism. Nicolas Clauss allows these feelings to be fully realised and explored because of his disassembly of the original; simultaneously, the 'microscopic' analysis he initiates distances the viewer. Therefore, at the same time, the online spectator can not only view and experience the *causes* of his sense of disquiet but can examine them as well, and at his leisure, though not at his control.

For example, the click of the mouse seems to ensure that the *elements*, as previously identified and presented, are replaced, while the eye sequence segues to the showerhead and a sweeping movement to the upper left with the mouse opens out the picture frame to its fullest extent. This movement can, sometimes, elicit the most powerful imagery, as shown in images 34 and 35 where evidence of Marion's brutal death is shown in the form of disembodied feet, which lie prone and immobile, beneath the still functioning and indifferent showerhead. By altering the scale of the various elements of his selection (cf. Figure 19 (D2) with Image 14, Figure 19 (G2) with Image 28, or Figure 19 (A6) with Image 2) and by the superimposition of one image over another (*amplification*) Clauss intensifies the emotional pull that the formerly separated images have. Similarly, Images 24 and 27 demonstrate once more Clauss's use of dual imagery either in opposition to one another (two fragments that in the original have no such synchronicity) or as a reiteration of the most

salient events, as in the Marion's desperately futile action of reaching out her arm (Image 28) and in the final image of her corpse (Figure 23). This doubling up of the same imagery, intensified by an alteration of scale and the use of a layering effect, presents the viewer with no option but to look at that which is depicted – wherever one looks one can only see the enormity of the event which remains visible for an extended period compared to the filmic original. Marion's deathly, unflinching stare reiterates the stare of the (original) camera in capturing the event and in which the viewer is implicated through the act of looking. Unlike the cinematic experience where the spectator, trapped in the dark for the duration of the film and where looking is a compulsory part of the act of cinema-going, the online experience is potentially much less captivating. The use of the double image is an attempt, I believe, to engage the viewer in the act of looking (acting in partnership with the futile mouse action previously mentioned), in the less formal and non-conditioning environment of the home. The magnification and duplication of imagery is compelling and is aided by the jittery editing of most sequences, which loop back, only to repeat over and over, producing an eerie simulation of what was once a single filmic event.

These short loops or extracts from the scene which I describe as motifs reoccur aleatorically, in differing



Figure 23 The amplified image of Marion.

combinations. In the original, action is constructed from montage, where the momentum of the scene is determined by the nature of the montage itself. The central section, corresponding to Durgnat's Stanza 4, depicts the struggle and murder of Marion, and is figured by 'bold cuts' (Durgnat, 2002, p.117). Echoing the style of Eisenstein, Marion's scream is expressed 'in three, successively bigger close ups, all from the same angle' which is a 'classic Russian montage trope' (Durgnat, 2002, p.117)²². Over seventy shots, taken from several static camera angles, are crafted together to produce the whole scene (Durgnat, 2002, p.113); the intensity of the murder in the shower, an event which lasts approximately twenty seconds in total, is manufactured from the majority of them. Although impressionistic in nature, the effect is compelling. Nicolas Clauss, in carefully unpicking aspects of this scene to produce short, but individually cohesive segments, goes on to construct his own work by retaining much of the original structure, though subverted. These 'motifs' are the building blocks of his artwork which he then overlays with a number of differently refurbished elements from the original. The motifs are themselves montages and conform to Deleuze's definition where 'Montage is composition, the assemblage of movement-images as constituting a direct image of time' (1983, p.30). Effectively then, Nicolas Clauss has not only disrupted the narrative content of the scene, but has also re-ordered space and time both in the manipulation of the scene as a whole and within the individual motifs themselves, where the filmic smoothness of the imagery is disturbed to produce an uneasy and uneven presentation. The constant repetition and reiteration of individual motifs extends the action so that the temporal cohesion and linearity of the original is fractured by his aleatoric reordering. This draws attention to the specific horror of the individuated motif. As Toles notes, 'Discomfort with this work is [...] an endlessly renewable response; it is like a slowly spreading stain in the memory' (Kolker, 2004, p.120).

The secondary elements which Nicolas Clauss uses to overlay the temporal and linear disruptions are of a different order, and are made up of the circularity of objects, as previously described. However, their application is significantly different. In the first instance, the appearance of the segmented motifs is

²² It is impossible to do justice to Durgnat's penetrating analysis here, or to comment fully on the extent to which the Hitchcockian style of film making, particularly in his use of montage, is indebted to the work of Eisenstein and other early film makers. It is sufficient to note that, in dividing up the scene much as Durgnat describes, Clauss recognises, intuitively perhaps, not only the structural and narrative integrity of the work but, in his disassembly of it, releases the various elements to be used for his own purposes.

sometimes initiated by the click of the mouse, or by the internal algorithmic system itself. In contrast, the secondary elements are capable of being directly manipulated, their form and position being subject to change by the interactee who can drag them across the surface of the screen. In doing so, the element, most often the drain hole, is stretched and drawn out creating a distorted representation of itself, and the dark mark that this produces is very much like a stain, a blood stain, thus recalling Toles's comment. In fact, the combination of mouse-moves to create these stain-like marks and the endless repetition of the various elements are designed precisely to recreate the discomfiture of which Toles speaks (images 42-45). The mouse action which initiates the creation of the stain of the drain hole is suggestive. Since the drain is the ultimate receptacle for Marion's blood, but is itself a void, the notion of becoming empty arises. As her life force seeps away, the concepts of seepage, blood and the void are unified in the single, distorted image of the drain hole. By the act of her blood seeping into the hole, which is altered and described by the user mouse action, the idea of stain and void are unified. As life flows from Marion into the void that is the drain, the drain itself becomes a metaphor for her loss, her becoming emptiness. Since the appearance of the drain hole is almost ubiquitous within the presentation, its distortion is symptomatic, not only of death and loss but, in its earliest manifestation within the piece prior to its deformation (and revealed repeatedly), it portends the subsequent action even when set against a background, a motif, anachronistically. Thus, in a single episode, Nicolas Clauss compresses both the narrative content and the temporal extent of the original, most powerfully, whenever the drain hole appears, since it acts as a summation of the whole, embodying all that has been and all that is to come. In this way, there is both continuous resolution and a total lack of it since the work represents a state of indeterminacy, or as Deleuze observes, 'the infinitely divisible event is always *both at once*' (Deleuze, 1990, p.8).

As the start of the original scene initiates all the intermediate steps that produce the end result, that is Marion's death, then it can be conceived of as a 'sorites' as defined in the Encarta Dictionary (2010). It is 'an argument consisting of a series of premises arranged so that the predicate of each premise forms the subject of the next. The conclusion unites the subject of the first premise with the predicate of the last'. This must remain true even when those steps are disrupted as in the Nicolas Clauss production. Since the presentation

of the original scene is arranged in Nicolas Clauss's work much as a jigsaw puzzle, one where the final construct is known by the picture on the box, eventually the assembled pieces assume some point of recognition; in short, they make 'sense'. In fact, none of the individual elements that are used to overlay and which act either in opposition to, or in support of, the more or less cohesive filmic motifs, have much substance in themselves and rely heavily on the assumption of foreknowledge of the original scene. Without that knowledge, it is tempting to suggest that the construction of meaning would be fragile, though, of course, not impossible, since it is entirely possible to construe meaning from even the slightest of clues. One only has to consider the case of the mobile phone text message, crossword puzzle or the possibilities derived from archaeological finds. It is possible to infer meaning from the slightest evidence, but the reconstruction of an accurate account that resembles the original, or at least results in the production of sense, is much more suspect when the events are disrupted to any great degree. In the article prepared for the *Stanford Encyclopedia of Philosophy*, Daniel Smith (Perdue University) sums up Deleuze's position regarding his analysis of Lewis Carroll's *Alice Through the Looking Glass* in the production of 'sense':

If *Logic of Sense* is in part a reading of Carroll's work, it is because no one knew better than Carroll about the conditions for the production of sense, which Deleuze elucidates in detail: the extraction of differential elements or pure event, their organization in multiple series, and most importantly, the aleatory point or paradoxical element that links the series (the ideal "quasi-cause" that produces the effect of sense out of nonsense) (Smith and Protevi, 2008).

It may seem that the random appearance of fragments from the original might constitute 'nonsense', but they are, nevertheless, easily resolvable to 'sense' despite their inherent state of indeterminacy caused by the disruptive nature of their presentation. In adapting this meditation on the meaning or 'sense' in *Alice* to the shower scene in Hitchcock's film, and Nicolas Clauss's modification of it, each motif, each distinctive element can be identified as always existing in a state of becoming; of becoming something else, passing through the irreducible, momentary stasis of being, both to and from the point of departure (Norman's eye) and to and from the point of arrival (Marion's eye). The destruction of the continuum that constitutes the whole scene to expose the individual shots, whose combination produces the invisibility of filmic manufacture, is key to the determination of the Carrollian/Deleuzian understanding of the concept of 'sense'. This, in turn, is determined by an appreciation of the transformation of 'being' from one state to another. In contrast to the

imperceptibility of the movement through the scene in the linear direction demanded by its narrative content, Nicolas Clauss's presentation actively reveals these states of becoming by the use of repetition and reiteration. Each motif repeats and never resolves; the uneven and dislocated moment of the fragment, the doubling up of the imagery, the variations in scale and the superimposition of other elements (the drain, the eye) and the transparency of these objects and the revelation of differing layers, all conspire to make visible the constant flux that marks the movement from one state of being to another. The paradox of Nicolas Clauss's work is that it makes 'sense' by demanding the spectator to reconstruct the format of the original in all its linearity, whilst at the same time foregrounding the instability of the individual elements that make up the seemingly static whole.

3.3.6. *Psycho's* music: Herrmann's dialectic

Bernard Herrmann's score is as iconic in musical terms as Hitchcock's imagery and is constructed not merely as an accompaniment to *Psycho*, but as an active ingredient which reinforces the action and atmosphere of the film (see film clip: Hitchcock and Herrmann, 1960). Royal Brown's essay (Brown, 2004) refers to the Herrmann score as being 'the music of the irrational', and he argues that the musical structures and devices that Herrmann employs provide not only an apt accompaniment to the film, but a dialectical dimension which proposes a questioning response to what is sometimes pragmatically projected on-screen. To test this notion, by comparing Herrmann's music with Birgé's, who proposes a differently constructed, but equally effective dialectic of his own, requires an examination of both works, in some detail.

As Rebello notes, the score for *Psycho* was 'a summation of all of Herrmann's previous scores for Hitchcock's films, conveying as it did the sense of the abyss that is the human psyche, dread, longing, regret – in short, the wellsprings of the Hitchcock universe' (Rebello, 1990, p.139). To achieve this, Herrmann used a variety of musical techniques, including the extensive use of the so-called 'Hitchcock chord' which was allied to an unusual and, at the time, unique orchestration made up entirely of strings. The selection of only stringed instruments complements the deliberateness of filming in black and white, the music being pure, monochromatic sound. Rebello refers to Herrmann's score as 'a cello and violin masterwork, "black and white" music that throbbed sonorously as often as it gnawed at the nerve endings' (Rebello, 1990, p.139). The



Figure 24 The so-called Hitchcock chord and its variant.

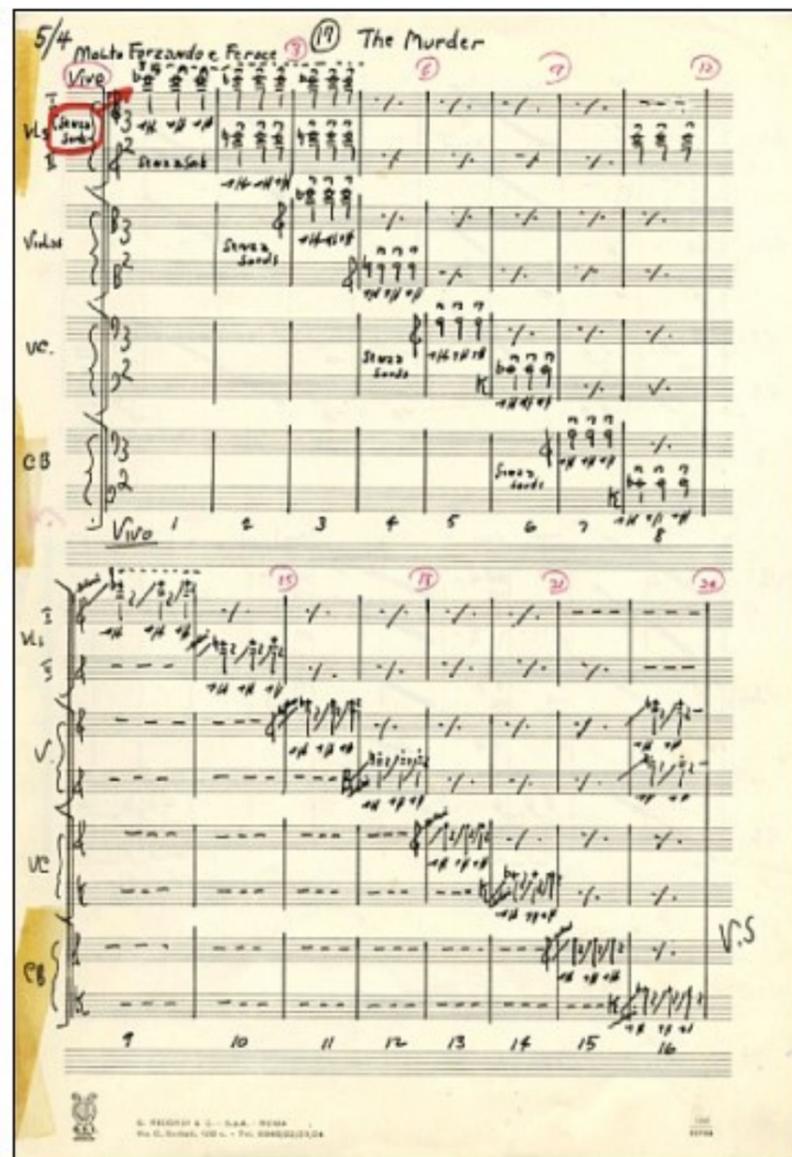


Figure 25 Herrmann's original score for The Murder.

beginning of the movie illustrates conformity of style between Sal Bass's opening titles, consisting of expanding and contracting horizontal and vertical black and white lines and the musical score, where the graphics somehow marry perfectly with the strident, screeching strings.

The tonal ambiguity of the 'Hitchcock Chord', its tetrad consisting of a Bb minor triad in root position with an added major seventh, sounded in a high register, is used to great effect in the opening 'Prelude' music and characterises the themes of ambiguity and uncertainty that run throughout the film. As Brown notes, 'the prelude [...] goes beyond any other Hitchcock music [...] in its array of jarringly dissonant chords, the bitonality of which reflects on the film's ultimate narrative theme' (Brown, 2004, p.107). Brown uses the term 'bitonality' to suggest a marriage of the separate practices of major and minor tonality which are combined to produce a single sonority, in this instance, the tetrad known as the 'Hitchcock chord' already mentioned (see Figure 24). The effectiveness of this duality of expression relies heavily on preconceived notions of the functions of major/minor chords to suggest various attributes or moods (major= positive/happy/bright and minor= negative/sad/dark). This 'bitonality' is put to effective use as the rhythmic cut and thrust of the shower music amplifies the act of murder by the rhythmic stridency of reiterated, high pitched, and then descending, dissonant chords whose structure is a modified version of elements of the 'Hitchcock chord'. Rearranged here, the original major seventh having been inverted to produce a biting semitone and compressed into a tighter registral space, it provides 'the perfect aural counterpoint to the glinting cold knife that appears to be plunging into the body of Marion' (Wells, 2001, p.63).

A glance at the image of Herrmann's original score (Figure 25) for the murder scene reveals this descending motion vividly, so much so that even those with no musical training can see, as well as hear, the trajectory of the music. Brown notes, 'the general tendency of Herrmann's motifs and occasional themes – and his harmonic progressions – is to move downward' (Brown, 2004, p.112), and this is particularly apparent in the shower scene. Hence, there is a correspondence between the musical realisation and the activity of the scene where various kinds of downward motion are evident: the thrusting knife, the relentless flow from the shower head, Marion's flailing arms, her slide down the tiles, the curtain torn from its rings, the water and

blood flowing into the void, her body toppling over the side of the bath and the downwards trickle of a water droplet from her eye. In this extract the first, stabbing dissonant chord is reiterated across the entire scene, the sense of 'descent' being achieved by the addition of lower pitched strings as the scene unfolds. There is no conventional harmonic progression at work here and hence little development of a melodic line to encapsulate either the action or to represent a protagonist. This move away from the development of melody to represent the diegetic content of the film indicates Herrmann's increasingly idiomatic approach to composing for Hitchcock's work. Brown comments that:

Although Herrmann, with his nonthematic devices, had already been heading toward a more nearly pure film-music genre that would not cut across the grain of inherently cinematic procedures, the composer obviously sensed that he would have to further stifle Westerns music's tendency to organise itself into diachronically elaborated blocks in order not to gild the lily of Hitchcock's ingeniously organised filmic totalities by setting up conflicting movements (Brown, 2004, p.103).

The score from the shower/murder scene ably demonstrates Herrmann's nonthematic approach; as Marion is attacked, the lack of diachronic movement (melody) is replaced by the reiterated dissonant chord which supplements the violent action on screen. Whilst the music avoids the banality of 'mickey mousing', the rhythmic drive of the shrieking violins allied to undefined tonality undoubtedly magnifies the horror of the moment. Even as Marion slides into unconsciousness, a musical resolution is denied; descending octaves in the darker strings are juxtaposed with a variant of the 'Hitchcock chord', a tetrad made up now of a diminished triad with an added major seventh played on the lowest strings of all available instruments induce a state of uneasy and dreadful horror in the viewer/listener. The reiterated chord remains undeveloped and unresolved; the constant use of tonally non-functional chords and the stasis and lack of harmonic resolution this creates, is set against the anomaly of the sustained, descending notes, to create the sense of unease which epitomises the scene. Brown recognises the correspondence between Hitchcock's own quasi-musical approach to film making where there is a crucial relationship between each shot and its neighbours in the creation of meaning, much like the normal chording of music, where it is the progression from one to another that is suggestive (Brown, 2004). The peculiarity of the murder scene music lies in the fact that significant horizontal, diachronic movement exists mainly in the visual imagery as the murder proceeds. In contrast, the

musical score, unusually, provides no such forward movement; only a vertical expansion. Brown defines this as a vertical 'synchronicity' (Brown, 2004) of the chording, and this is highly evident until the uncertain and doom-laden, irresolute end is reached. The musical ambiguity of Herrmann's writing here underscores (quite literally) the strangely prosaic yet inexplicable nature of what has just been seen. Brown notes that this vertical 'synchronicity' of the music seems more like a single graphic image because of its relatively unchanging nature and lack of melodic progression despite (and because of) its repetition. More generally, it is his prolonged use of the 'Hitchcock chord' in its various guises, and used with similar disruptive harmonies throughout the film that suggests a dialectical relationship between the music and the imagery, rather than providing a score that apes the action directly, since:

the very nature of these chords, with their simultaneously minor/major aura, immediately throws the viewer/listener off the rationalised normal Western tonality into a more irrational, mythic domain in which oppositions have no implications that will be resolved by the passing of time, but exist as two equal poles of the same unity (Brown, 2004, p.106).

That Herrmann wrote in this way suggests that he was highly conscious of the visual and emotional impact of Hitchcock's work and produced his score in *response* to it²³. This is in contrast to the early films of Eisenstein, and other later movie makers, where the art of synchronising music and imagery was an activity where an *already* prepared score was subsequently visualised cinematically. For example, in the case of Eisenstein's film *Alexander Nevsky* (1939), the famous *Battle of the Ice* scene was conceived of as a visual representation of Prokofiev's score which, admittedly, was the result of extended, collaborative discussions between the director and the composer (Eisenstein, 1968), although other musical interludes followed the visuals. The activity of producing 'visual music' has a long (and broad) history that may be traced from sublime work of Kandinsky's *Composition* series of paintings to the bland capability of media players to convert sound into wave patterns. One of the most extreme examples of this kind of synchronicity between sound and image was generated by animated film maker Oskar Fischinger whose award winning 1947 *Motion*

²³ In fact, Hitchcock had intended *Psycho* to be entirely devoid of music (apart from accompanying the opening and closing titles), relying only, as Rebello notes, 'on the impact of image, not music' (Rebello, 1990, p.138). Seeing Hitchcock distressed and disappointed at the first rough cut of the film, Herrmann ignored Hitchcock's wishes and composed the string score as we know it today, including the shower scene.

Picture No.1 (1947) is a visualisation of Bach's *Brandenburg Concerto No.3*. In this painstaking work, the rhythmic pulse of the music is what predominates and the other qualities of harmony, melody etc. are submerged (Betancourt, 2007) in order to generate a visualisation that was readily acceptable to a public audience. Prokofiev's original score for the Eisenstein film was composed to integrate with the director's ideas about the battle scene, yet undoubtedly Eisenstein formulated the final montage to synchronise accurately with the music (beyond the simplicity of rhythm) so that a visual unity between the two different forms is maintained as the melody lines and inner movements are represented on screen. Herrmann's score operates differently, in that it is constructed without diegetic content; it 'does not tell a story' in the way the Prokofiev music intends, neither is it bound to the imagery as a kind of extra sound effect, as is the case with 'mickey mousing' cartoon music, nor is it constrained by rhythm as in Fischinger's sophisticated work. Herrmann's music has a dialectical dimension because it does not simply describe the inexplicable nature of events, and the underlying forces that drive them, in a different manner from the visual cues that Hitchcock provides; it offers a simultaneous and reflexive commentary on them, evidenced by the ambiguity of the tonally indeterminate chordal structure that makes up the music. The synthesis of these two different forms, the cinematic and the musical, not only compounds the horror of the narrative – it extends and magnifies it.

3.3.7. The Shower: Birgé's Music

The musical and sound accompaniment for *The Shower* is provided by French avant-garde composer and film maker Jean-Jacques Birgé. For forty years he has been deeply involved in producing artworks where the relationship between music and moving imagery is paramount, and he has won not only much recognition for his work, but many awards and accolades too. In the nineteen eighties, he formed, with two other colleagues, *Un Drame Musical Instantané*, a fifteen piece orchestra dedicated to the manufacture of music to accompany silent classic movies. As a film was screened, the orchestra would provide a live accompaniment where both prepared and improvised music and sound were integrated together using a combination of conventional and nonconventional instruments and electroacoustic equipment. His personal website (<http://www.drame.org>) charts his artistic achievements, his work with *Un Drame Musical Instantané*, and his collaboration with other

artists, including Nicolas Claus. His development as a composer and musician is significantly different from the formally trained Bernard Herrmann and, being deeply rooted in the post-war French avant-garde school, inevitably his music making is markedly different from that of Herrmann. Producing work that has much in common with *Music Concrete*, where the variety of sounds is not limited to conventional instrumentation, and the formal elements of music (harmony, tempo) are abandoned or restricted his collaboration with Claus on multimedia pieces seems appropriate. Although it is unlikely that he produces a score, his work is clearly well thought out, his compositions consisting of 'organised sound', a term coined by Edgard Varèse, the influential, radical French composer to describe new forms of music existing outside of conventional meters and structures (Varèse, 1998). A viewing of video extracts of recording by *Un Drame Musical Instantané* demonstrates his methodology. The complexity of these works infer careful structuring and planning even though there is a high incidence of spontaneous extemporization taking place. Birgé's work with Claus is extensive and together they have produced numerous interactive works apart from *The Shower*, most notably the epic *Somnambules* (Birgé and Claus, 2011).

It is not clear why an original soundtrack to accompany *The Shower* was thought necessary, rather than an adaptation of the Herrmann score, though according to Jean-Jacques Birgé, the potential difficulties of infringing authors' rights were a consideration. Additionally, the short, rapid chords, which make up the Herrmann score, with their harsh, strident and detached production, would seem to deny the possibility of recycling by Claus; the resultant cacophony would be incoherent and distracting. The effect of not using the Herrmann music is, however, interesting. Indeed, the denial of the inclusion of such an iconic part of the original whole seems at odds with Claus's encomiastic intent that, regardless of any pragmatic reasons for exclusion, which surely must have been surmountable, a different set of motivations must be at work. In this extract of his correspondence with me, Birgé outlines his methodology for producing the piece:

I proposed t him (Claus) to use a purpose of Sir Alfred, meaning to treat a sex scene as a crime scene and **a crime scene as a sex scene!**
On my point of view it absolutely needed to be seen totally different from the original.
[...] I also suggested a minimal, very quite treatment to get a sensual effect.

I recorded 3 different sound families...

Thinking Nicolas' images were looking as drawings, I suggested that all the interactive movements should be composed with **the tools of a painter** (a draftsman) such as paper, pencil, etc.

To play the crime scene as a sex scene I've recorded my own girlfriend's voice making **"love" sounds!**

You never know if it's pleasure or suffering ;-)

Finally I've added some quiet and mysterious music extracts of old pieces by my 15 piece orchestra, Un Drame Musical Instantané, recorded in the 80's. Many strange instruments were chosen.

Paper+voice+orchestra build the very special ambience of *The Shower*.

(All spellings and emphasis by Birgé) (Birgé, 2010)

In contrast to Herrmann, Birgé incorporates a range of sounds beyond the conventional cohort of musical instruments, not differentiating conceptually between them in terms of their ability to produce the 'musical' aspects he requires. Briefly, the three different categories he outlines function alongside the imagery that Clauss supplies in quite different ways. In hoping to comprehend Birgé's concept for music made with 'the tools of a painter', some personal experimentation suggests that the simple act of scribbling pencil on folded paper or card will reproduce the relentless water flow from the shower; tearing thick paper reproduces the shower curtain torn from its rings and so on, and it is not difficult to see how other techniques might be developed to produce sound pictures to match the visual imagery of *The Shower*. Although prevalent whenever curtains and shower heads are apparent, it is sometimes possible to hear these artificially created sounds at other junctures, indicating, perhaps, that at least some degree of randomness was incorporated into the manufacture of their auditory appearance. The 'love' sounds always appear when the episode of Marion sliding down the tiled wall is showing whilst the orchestral sounds seem to run as a continuum as long as *The Shower* plays.

In his creation of the first set of sounds, made from paper, it seems from his description that Birgé operates quite differently from Herrmann, not least in being prepared to include simulated diegetic sound into his musical concept for the accompaniment to Clauss's, *The Shower*. According to Rebello (1990), Hitchcock originally had conceived the shower scene as being without any musical accompaniment at all relying, as he had done in a number of previous films, only on everyday sounds associated with showering,

the naturalness of which was intended to amplify the horror of the encroaching murder. The precious seconds that elapse before the murder takes place enable these sounds to assume a portentous quality as the viewer suspects something is about to happen, but knows not what. Like hearing the cracking of a twig, or a mysterious rustle in the forest's undergrowth, the listener/viewer is alerted to the possibility of the untoward. The fact that Birgé has *recreated* this type of sound is significant; not only does he view his role as 'composer' differently from Herrmann in assuming responsibility for the incorporation and development for such diegetic sounds, which indicates a shift in the concept of what composing might be, he also, inevitably, defines the purpose that such work might have differently. By resorting to paper and pencil to recreate sounds that could easily have been achieved simply by actually tearing a curtain from its rings, or by recording the sounds of water emanating from a shower head, Birgé has strayed, deliberately, into the field of artifice. He has produced a work that, although it is conceptually aligned to some aspects of Clauss's work, is differentiated from it because of his entirely original compositional techniques. For Clauss, the encomiastic nature of his celebratory work both prohibits freedom of choice and limits his means of expression (a point to which I shall return later when I discuss Clauss as painter), tied as he always is to the Hitchcock original. Being conscious of the graphic nature of Clauss's work, Birgé utilises 'the tools of the painter' in acknowledgement of Clauss's intent to produce a kind of 'painting', as well as homage. These artificially created sounds consolidate the self-consciousness of Clauss's work as 'art' in its own right, regardless of any other function *The Shower* may have. Where Birgé is liberated from the original score and is licensed to formulate his own 'artwork,' since he has minimum instruction from Clauss, the latter is constrained always by the original text. The choosing of the paper and pencil may be apt, but in the sense that Birgé had sufficient freedom to choose *not* to use these tools, the fact that he did so suggests that his approach is more like Herrmann's than could be first imagined. He, like Herrmann, recognised the need to produce something independent of the original creator that suited the visual imagery exactly, in terms of its musical function. For Herrmann, his instrumental music functions to add drama and intensity to the murder scene whilst conveying the underlying (and unacknowledged) themes of ambiguity and indeterminacy. In contrast, Birgé's work acknowledges the artistic pretensions of Clauss by bringing into prominence those 'natural' sounds and activities, which he creates

artificially, that have a significant resonance across the scene; diegetic sounds that in the original, presage the dreadful events to come, or develop a poignancy beyond their prosaic inclusion.

A similar case can be made regarding the incorporation of the 'love' sounds, so freely provided by Birgé's girlfriend. Their inclusion, to which Birgé refers in his letter, supports the well attested Hitchcockian view that murder scenes are like love scenes (Truffaut, 1985, p.345) and, certainly, the filming in the shower seems to substantiate this. The initial stages of the attack simulate the intensity of a first encounter where arms and legs and bodies entwine; the latter part of the scene mimics a lover's loss of self in the passion of the moment. Within the close, intimate murder scene in which the spectator occupies the same space as the two protagonists, and later, when Marion's breathy screams subside, only Herrmann's music with its well-spaced dissonances punctuates the silence of Marion's dying. It is at this point in *The Shower* that Birgé employs the 'love' sounds, and they are obliquely matched to the vista of Marion sinking (repeatedly) into unconsciousness, the intimate sighs and murmurs that Birgé attaches enabling the scene to be overtly construed as Marion experiencing the ecstasy of sexual pleasure. The tendency of the scene to generate a voyeuristic response in the viewer is explicitly revealed by the addition of such vocalisations. Although not evident in the original scene, these sounds seem to cross the boundary between diegetic and non-diegetic audio effects since their function is at least twofold; firstly to provide a naturalistic audio dimension to the repetitive episodes on display (like the paper work), and secondly to qualify an interpretation of the spectacle on screen. The suggestive qualities that both these families of sounds (the paper and the 'love' sounds) have, in promoting the conscious response of the spectator, are analogous to Clauss's activity of disassembling and reassembling the various motifs and elements of the scene.

Although the two families of sound may pose questions about the nature of viewing (and, indeed, what is being viewed) it is the third family, the orchestral sound track that binds these disparate elements together. The linkage between the images and orchestral track (this term seems the most adequate way to describe the rich ensemble of instruments, both novel and conventional that produce these sounds) seems tenuous and less structured than the other two. The programming that Clauss has developed to produce *The Shower*

overall controls the random appearance of the inner elements and their attendant two groups of musical sounds, as already described, whilst this third musical aspect seems to have a much more independent existence as a continuum against which *The Shower* is played out indefinitely. In the same way that there is always something on screen, there is always something to be heard. The interjection of the other parts disturbs this continuum thus emphasising the nature of what is seen. Both tone and timbre of this continuous loop of musical sounds is sombre to underwrite the sober nature of the on screen events which are continuously played and replayed. It is here that the contrast between the Herrmann score and Birgé's composition is most marked. Despite the relative incongruity of the chordal structure that Herrmann uses to imbue the original scene with a sense of the irrational, the underlying structure of his music is still recognisably in the conventional, formal Western harmonic tradition. All the normal scaffolding is there: stave, key signature, tempo and expression markings, notation that instructs the player in his performance. However, though the harmony is stretched it can still be identified. Where the comfort of melody is lacking, and diachronic flow is non-existent, even the untrained ear can identify the intended meaning that lies behind the ambiguity of the chordal structure; that dissonance in the music infers disharmony in the world, and that discord prevails. The dichotomy that Herrmann's music presents is that, even in an ordered world (the musical as well as the real one), disorder creeps. It is the contrast between the normal expectations that Western harmony provides and Herrmann's deviation from it that develops the sense of the irrational of which Brown speaks (Brown, 2004). There is no such dichotomy in Birgé's musical world as he applies it to *The Shower*. Belonging as he does to a separate musical tradition, his music's inherent unruliness makes a different claim. It does not suggest the irrational: it proclaims it.

Birgé admits that the music for the continuous loop which underscores Clauss's imagery consists of extracts from the recordings made by *Un Drame Musical Instantané*. (UN DMI, 2011) This recording collection is extensive and although I have listened to a number of pieces and have identified (perhaps!) several sound snippets used to make up part of *The Shower* music I cannot claim to be able to identify it all, nor do I think it necessary. These parts were chosen because of their mysterious qualities, to help 'build the very special ambiance of *The Shower*' as Birgé describes it and clearly he must have felt they were an appropriate choice.

The somewhat unidentifiable instrumentation, the irregularity of the track, its sombre tone sometimes set against screeching strings (deliberately inserted to reference the Herrmann score?); all these effects compound the indeterminacy that Clauss shows on screen, in his juxtapositioning of different elements and motifs in order to highlight the incongruity of the narrative action and its inexplicable nature. Birgé's music completes the drift *into* irrationality by his use of an irrational sonority; his unruly music is freed from any generally understood structural tendency and, unlike the Herrmann score which is still constrained by musical form, Birgé's composition for *The Shower* compounds the ascendancy of the irrational. Where Hitchcock and Herrmann suggest ambiguity and hint at madness and psychosis (at this point in the film) they also seek to restrain the slippage, not least so that the rest of the narrative can unfold. Freed from such necessities, and revelling in the fact of the already-known, Clauss reveals the irrational at play, while Birgé abolishes any possible doubt. The inexorable process of Clauss's work is matched by the looped track of Birgé's music; the incongruity of 'love' sounds as a murder take place, the artifice of manufacturing everyday sounds with paper and pencil and the strange sonority of his quasi-orchestral work confirm the nature of the spectacle on screen. The irrational dominates, and the seemingly safe, ordered and clinical world of the bathroom is revealed unequivocally for what it was always intended to be: a place of disorder, madness and death.

3.3.8. *The Shower: an attempt at openness*

Nicolas Clauss's *The Shower* evidences many of the features that one would associate with the concept of 'openness' and, more particularly, as a 'work in movement' as elucidated by Eco in the opening chapter of his seminal book *The Open Work* (1989). The indeterminacy and ambiguousness of the work, the juxtapositioning of its many different elements and its unlimited nature would tend to situate *The Shower*, operating as 'a field of possibilities' as proposed by Pousseur (and quoted by Eco, 1989, p.1), clearly within the remit of the second category of openness that Eco describes. The first category is mainly concerned with the author's intent to:

present(s) a finished product with the intention that this particular composition should be appreciated and received in the same form as he devised it.' while at the same time acknowledging that 'the individual addressee is bound to supply his own existential credentials [...]. Thus his comprehension of the original artefact is always modified by his particular and individual perspective' (Eco, 1989, p.3).

The second category, controversially, seeks to overturn the conventional determinism of the traditional artwork by rejecting accepted prescriptive structures and forms, and by offering a much greater degree of active participation and collaboration on the part of the addressee in the production of the work itself.

Eco cites a number of works which suggest varying degrees of 'openness', of which the composer Pousseur's *Scambi* is given as a prime example of a work where the author offers the performer (and the performer as interpreter and addressee) 'a work *to be completed*' (Eco, 1989, p.19). *Scambi* (1957) is prescriptive only in the sense that certain motifs or passages of sound (rather than music) are available to the performer who can exercise choice over how to arrange them. In short, *Scambi* is devoid of all of those features by which we are able to identify a musical work as belonging to the conventional and established Western musical tradition. It lacks the recognisable structure of the symphony or song, the concerto or sonata; it is deprived of any tonal centre, thus rendering the possibility of cadential progression redundant; the production of sound is engineered through an electroacoustic process rather than by the use of musical instruments, and it is not governed by an underlying tempo which usually confers upon a musical production a sense of order and drive in support of the expressive nature of the music itself. Above all, it is infinitely mutable and, at first hearing, it seems not to be anything that might rationally be called music, the work being made up of fragments of recorded, electronic sounds that can, in principle, be re-ordered at will. At the time of its original production, the technology to do such rearrangements lagged behind Pousseur's concept, thereby making any attempt at reordering not only a laborious process in itself, but one only available to specialist technicians with expensive, though primitive, recording equipment. Pousseur defines *Scambi* as, 'not so much a musical composition as a *field of possibilities*, an explicit invitation to exercise choice.'

From my previous descriptions of how *The Shower* functions it can be seen to demonstrate a structural affinity with Pousseur's experimental electroacoustic work, and it is in this sense that *The Shower* can be considered an open work. It is also constructed as a 'field of possibilities' in which its numerous motifs and elements can be variously arranged. As in *Scambi*, it consists of many sections, which can be re-ordered or overlaid. There is a notable correspondence between this aspect of Clauss's work and Pousseur's own technique. As Pousseur describes it, 'several sequences [...] can even be superimposed and thus lead to a

polyphony of divergent situations – until they come together again on a common point.’ (Pousseur quoted in Dack, 2005). The ‘common point’ in *The Shower* is the consistency of the ending of each episode where a watery dissolution is always evident. Pousseur gives explicit instructions on how the performance of *Scambi* is to be managed (Eco, 1989, p.2) and indicated that only certain sequences could be rearranged. Clauss’s clever programming, though providing a *feeling* of almost infinite randomness, actually preserves the coherence of the various motifs, despite the layering and juxtapositioning of other aspects of the scene. Indeterminacy is restricted in its application, much as in *Scambi*, thus refuting the notion that an open work is the consequence of total and indiscriminate randomness or wilful personal choice. The maintenance of a set of strictures that govern *Scambi* and the algorithms that generate *The Shower* imbue each with a sense of purpose and, simultaneously, qualifies each production as a ‘work’ rather than simply an assemblage of unrelated sounds or imagery. Eco recognises the necessity for some degree of purposefulness as being an essential factor in the determination of an open ‘work’, one whose ‘fields of possibilities’ are energised and explored by the intervention of the performer/addressee or the operation of chance. He describes such works as ‘works in movement’, but cautions that:

the ‘work in movement’ is the possibility of numerous different personal interventions, but it is not an amorphous invitation to indiscriminate participation. The invitation offers the performer the opportunity for an oriented insertion into something which always remains the world intended by the author (Eco, 1989, p.19).

He adds that such works, including the aleatory pieces by Berio, Stockhausen and, naturally, Pousseur, may differ at every performance ‘yet they will never be gratuitously different. They are to be seen as the actualisation of a series of consequences whose premises are firmly rooted in the original data provided by the author’ (Eco, 1989, p.19). It is the property of ‘mutability’ which confers this aspect of openness, although this exists only ‘within the specific limits of a given taste, or of predetermined formal tendencies, and is authorised by the concrete pliability of the material offered for the performer’s manipulation’ (Eco, 1989, p.19). As it is with *Scambi*, so it is with *The Shower*. The base text of the shower scene, the ‘original data’ taken from *Psycho*, provides a framework of ‘predetermined formal tendencies’, the inevitable consequence of its narrative importance within the film as a whole, and the necessities of the processes of film production.

Despite the divisions, elisions and the complexities of amplifications and re-iterations and so on that Clauss instils into his adaptation of the scene, he is constrained to work within the original parameters. However, much alteration he makes to the individual shots or film sequences, whatever degree of ‘mutability’ he prescribes, the base text is always revealed, and Clauss’s performance of it never produces anything that could be construed as ever being ‘gratuitously different’.

In the light of this observation, can one regard *The Shower* as a truly open work in the manner of *Scambi*? It would appear to have many of the features that would make it so, in a mechanical sense at least; its parts can be rearranged, and new relationships between these parts brought to the fore so as to create the necessary conditions to provoke a disturbing and reflective response in the viewer. The user/reader seems to have the power of intervention to reorder at least some aspects of the work, and this is allied to the execution of ‘chance operations’ in an environment determined by the program that Clauss has created. Nevertheless, a principal difficulty in attaching the descriptor ‘open work’ to *The Shower* is the fact that it is a *metatext* of an original ‘closed’ piece, and a piece which is the creation of another’s hand. The function of the original shower scene, however disturbing it may be, is relatively straightforward; within the *fabula* of the whole film, Marion’s demise at the hands of a mysterious assailant, but one we are led to believe is Norman’s mother, serves to change the direction and thrust of the storyline. From being a straightforward story about illicit love, theft and deception, the film becomes an encounter with neurosis, madness and obsession. This shift from the pragmatic to the psychological is achieved in just a few seconds and is what generates the long lasting sense of unease that the film has, even in recollection. However, the shower scene itself is deterministic, its careful construction militating against any possibility of denying Hitchcock’s intent. However, I maintain that Clauss’s work has, at least, a partially hermeneutic function and that the new mutability and mobility of the original base text, as he re-presents it, are the principal means by which he attempts his analysis *of* it rather than in the creation of a fully open work *from* it.

I refer again to Bellour’s call for a means of examination where there is ‘an undivided conformity of the object of study and the means of study’ (2001, p.22). Clauss’s visual adaptations of the original text represent an external expression of the interior mental processes that are more usually assigned to the

reader/viewer/addressee that generates them, as an inevitable product of watching and seeing. More particularly, I suggest that *The Shower*, in its infinite capacity to reorder the original text in a way that synchronises new combinations of its inherent imagery, both maximises and illuminates the suggestive possibilities which are normally the result of the recollective process of memory. Clauss makes visible these connections which are conspicuously displayed for consumption, the programming ensuring that endless possibilities are generated which prompt the reader to respond critically to the work. This externalising of the mental process of bringing disparate elements together marks only the beginning of the analytical process for the viewer, whose principal concern is to make sense of and private commentary on, what is seen. What is crucial here is to recognise that Clauss's intent is not to offer a work over which the viewer has physical control, which is the case with *Scambi*, where openness is achieved through the novelty of the sounds and the capacity for rearrangement which then leads to the development of new interpretations by the performer as addressee. *The Shower* is conceived of as a work whose *principal function is to engage the intellect of the viewer*, specifically with the purpose of generating hermeneutic activity in response to a work that has been 'opened out' for him. In this sense, Clauss offers 'the interpreter, the performer, the addressee a work to be completed' (Eco, 1989, p.19) by the invitation to form a critical analysis. As he acknowledges, 'I supply the co-ordinates and induce the final effect obtained' (Molina, 2004).

In this respect then, *The Shower* is a curious and contradictory object; it conforms easily to Eco's first category of openness where even a 'closed' text can be subjected to an 'opening out' without 'impairing its original essence' (Eco, 1989, p.3). I would submit that my previous analyses of *The Shower* show at least some of the possibilities of this 'opening out' process, without impinging on the original meaning of the shower scene as it appears in *Psycho*. At the same time, it has, clearly, some of the attributes that would place it in Eco's second category. This confusing dichotomy arises because of Clauss's use of a 'closed' text generated by another as the starting point for his own work. Yet, his own constructive techniques, in producing *The Shower*, belong to the field of operations that are most likely to promote total openness. Clauss's strength lies in the virtuosity of his programming skill, and there is an irony in the knowledge that the work he produces conceals its means of production whilst exposing the text for scrutiny. The program he has constructed

remains a hidden gem of consummate capability inferred only by what is seen on screen and not, in itself, ever explicitly revealed, while the base text is consciously paraded for examination as an object for study.

3.4. Conclusion: Blurring the Boundaries

The Shower is a complex work that is difficult to categorise easily. It is assembled from a single scene from a film, yet it cannot be seen as being cinematic in the same way as the original. In addition, Clauss has manipulated the imagery to produce something distinctive and personal to him; it is stylish and typical of him as an artist, and is instantly recognisable to anyone familiar with his other works. *The Shower* references many other works directly or indirectly; some of these references form the subject matter of my analysis. Like much of Clauss's work, *The Shower* seems to straddle several worlds and displays its lineage in its reflexivity. Interestingly, as I have conducted my examination of Clauss's works I have become increasingly conscious of the debt he owes to the Modernist antecedents who have clearly influenced him and to which I have already referred (Duchamp, Picabia et al). In its construction, *The Shower* manifests many Modernist ideas and techniques; it is indeterminate, labile, recursive; as a metatext it deliberately and self-consciously draws attention to the construction of the original and emphasises its fictitious nature by referencing the clapperboard with Hitchcock's name scrawled upon it. This corresponds very much to the Modernist painters' tendency to declare the artifice of the medium in which they worked. As Greenberg notes of Manet's work, 'Manet's paintings became the first Modernist ones by virtue of the frankness with which they declared the surfaces on which they were painted' (Greenberg, 2003, p. 775). *The Shower* attempts to position itself as an artwork, specifically a painting, in its own right by defining its spatial parameters as a virtual canvas. In this Clauss aligns himself with those Modernist artists who recognised one of the inherent properties of painting as being an area of flatness, an area which, in Realist art, was the space where the illusion of three dimensional forms was deceitfully manufactured. As Greenberg declares, 'Flatness, two dimensionality, was the only condition painting shared with no other art, and so Modernist painting oriented itself to flatness as it did to nothing else' (Greenberg, 2003, p. 775). Despite the moving image, projected on the virtual canvas in *The Shower*, a consciousness of the underlying form of an area dedicated to painting prevails.

In one sense, both the shower scene and *The Shower* can be regarded as complete entities that refer only to themselves without needing to reference to any external object. Both offer the same possibilities and opportunities for reflection, though the *prime* function of each piece differs. Although the shower scene is a pivotal point in the whole film nevertheless it can be seen as a distinct and complete narrative on its own terms. This characteristic is transferred to *The Shower* which is then exclusively constructed for the purposes of analysis and as a celebratory offering in acknowledgement of Hitchcock's genius. Of course, this begs the question of why Clauss has fashioned *The Shower* in the way he has, or perhaps why he is not satisfied with the substantial body of analytical work already prevalent. I submit that, as a visual artist, the temptation to make commentary of other artists' works is too tempting a proposition to be resisted. One only has to consider the plethora of derivative and exploratory texts referencing the Mona Lisa, some comic, some serious, in order to understand the attraction of one artist for another. However, in dissecting and displaying the work as Clauss has done, he shows his inheritance of one of Modernism's most fundamental precepts in using 'art to call attention to art' (Greenberg, 2003, p.774). The mission of Modernism was to disrupt the bourgeois constraints of the Realist approach to art, an approach where, as Greenberg notes, 'illusionist art had dissembled the medium, using art to disguise art' (2003, p.775); in other words, the medium of paint itself is disguised in the act of painting. In this move away from the representation of reality, by foregrounding the medium itself, Modernist artists ultimately devolved the construction of meaning in the visual arts to the individual, thereby rendering understanding an increasingly esoteric experience. In this respect, Clauss has fulfilled the Modernist's remit: *The Shower* is presented in such a way as to make personal reflection and response inevitable while revealing the artifice of the original.

However, his claim to make works as 'paintings' is at odds with the Modernist call to expose and declare the surface of painting or by inference, the manufacture of other artworks. Clauss seems, in contrast, to want to disguise the virtual nature of his working environment. Even though *The Shower* reveals the original film as artifice, the fact that Clauss references the world of painting and wants his work to be seen as painting (the Modernist's view being that painting is either principally concerned with the illusion of representation *or* the declaration of the painted surface) is confusing. He *must* be conscious that the digital

environment is often seen as antipathetic to the delivery of artistic experience under any circumstance; the physical materiality of (dry) paint itself as a solid, three dimensional substance, with weight and form and having tactile qualities all its own necessarily excludes it from the virtual world. But, Clauss so fervently wants his works to be regarded as paintings - to be illusory - despite the obvious difficulties of crossing impossible boundaries. Not only is this physically impossible but undermines his connections with his antecedents who (just as fervently) wanted to declare the artifice of the painterly surface. Standing in opposition to his predecessors on this front reveals Clauss's postmodern tendencies in his quest to try to do the seemingly impossible: to paint without paint, to create the illusion *of* paint and illusion *with* paint.

Chapter 4 explores how Clauss attempts to create the illusion of paint in the digital environment in one of his other works, *Blue Han*. This piece is chosen because it avoids the plurality of works like *The Shower* which are fabricated from richly diverse sources. *Blue Han* allows for a clear, unencumbered consideration of the possibilities of digital painting.

Chapter 4: BLUE HAN: THE ILLUSION OF PAINT

4.1. Blue Han: Interactive painting?

Nicolas Clauss considers himself not only as an artist but, more specifically as a painter. He regards his online productions as paintings that happen to exist in and benefit from the digital environment where they are made and distributed. Although much of his work is made up from borrowings from other artists, these snippets being put together as animated collages, he does sometimes produce wholly original works. Trying to determine if *these* works can be considered painting is a slightly easier task because the confusion of adding other bits and pieces borrowed from other places, which in themselves may or may not be paintings, is avoided. In any case, these borrowings are subject to a 'stick and paste' process that instantly militates against the idea (though not necessarily the *fact*) that Clauss does, in fact, paint. Additionally, Clauss is keen to emphasise the collaborative nature of his work, suggesting that the interactive pieces he makes are developed by the involvement of his viewers and users. In this chapter, I test these two assertions by a close examination of one of his entirely original works: *Blue Han* (Clauss, 2005b).

Consideration of the type of work that Clauss produces poses a number of questions which need to be addressed as part of the process of meaning-making, of which the work's materiality is but one aspect. The development of an understanding of the nature of the relationship between himself as an artist and the viewer, who, it seems, can make a similar claim to be an instrumental part of the creative process, must be included in any analysis of this sort. In all his work, Nicolas Clauss claims to engage the viewer in the *active* creation of his online art, which seems to suggest the possibility of a more democratic division of labour, a sharing of the creative act. While no one would dispute an intellectual engagement such as that proposed by Eco (1979) and Barthes (2000) and so on, the nature and extent of the affective involvement as claimed by Nicolas Clauss is a hallmark of many new media creations. Therefore, the extent and role of the user/viewer/reader/ beholder as a creative force needs investigation and consideration, and the technology that permits and enables such interaction needs to be examined and, if possible measured.

Regarding the materiality of *Blue Han* and his other works, to what extent, if at all, can they be considered as painting, since there is no application of any substance recognisable as paint which is deposited on a canvas, board or paper, the traditional receiving surfaces for paint? What painterly qualities are evident which might support his claims that the labile, online texts, which constitute his work, are, in fact, paintings, rather than amorphous *objets d'art* whose genealogy is more questionable? Many of Clauss's artefacts are manufactured from video clips, photographs and other oddments which are 'montaged' together to produce new, sometimes monstrous creations. How can this type of work, which lacks the stasis of traditional forms of painting, be considered painting? And how do the viewing conditions affect the reception of Clauss's work? Above all, how does the materiality of his 'paintings' and their dependency on forms and methods alien to the general understanding of what constitutes painting *per se*, affect their meaning and reception?

4.1.1. The Materiality of Electronic texts

Before addressing these issues about the nature of Clauss's work, it must be recognised that electronic media have a unique kind of materiality. There is a common assumption that textual representations that appear on a computer screen are ephemeral and easily discarded. Kirschenbaum argues convincingly that this is not the case. He contends that, 'electronic textual theory suffers from a[n] [...] uncritical absorption in certain of the medium's own self-representations' (Kirschenbaum, 2005). He goes on to suggest that numerous academics, writing on the topic of electronic representation do so in such a way as to constitute a 'Romantic ideology', because of the metaphoric nature of their descriptive language. He illustrates this by quoting their 'dominant tropes and rhetorical markers' as follows:

Heim's "electric language," Eco's "golden pinions" and "light of critical reason," Poster's "pixels of phosphor" and "speed of light," Bolter's "fractions of a second" and "evanescent electrons," Hayles's "patterns of blinking lights" and "flickering" signifiers (Kirschenbaum, 2005).

Such language is not only inaccurate in terms of describing how electronic media is actually constructed, but also denies it the possibility of having a real physical existence which, even when erased, might leave a trace behind. He asserts that, 'practically speaking, *most* things that are written and transmitted via electronic media *are* stored and "reinscribed." A simple email message may leave a copy of

itself on a dozen different servers and routers on the way to its destination, with the potential for further proliferation via automated backup systems at each site' (Kirschenbaum, 2005). He continues his argument for the materiality of electronic media by describing how electronic forensic investigators can reconstruct digital messages by working from the residual remains (known as 'data remanence') left inscribed on a machine's hard drive, much as forensic pathologists gather physical clues from the scene of a crime. Because it is possible to detect 'data remanence, the physical residue of storage and inscription' forensically, then Kirschenbaum identifies that:

much of our prevailing electronic textual theory presents a Romantic, screen-biased view that unhelpfully and arbitrarily jettisons material storage and inscription from its purview, and so misleads us in our fundamental thinking about the medium (Kirschenbaum, 2005).

He adds:

for the familiar conceit that electronic writing is ephemeral and evanescent, forensics substitutes evidence that it is remarkably stable and persistent, one of the stickiest forms of inscription we've ever devised (Kirschenbaum, 2005).

In his recent book *Mechanisms: New Media and the Forensic Imagination* he states categorically that, 'Electronic textuality is [...] locatable, even though we are not accustomed to thinking of it in physical terms. Bits can be measured in microns when recorded on a magnetic hard disk' (2008, p.3). He goes on to suggest that the application of what he calls 'computer forensics' to study electronic texts is, 'the natural counterpart to textual criticism and physical bibliography'. N. Katherine Hayles sums up his approach:

Kirschenbaum pioneers in *Mechanisms* a methodology that connects the deep print reading strategies already in effect with scriptons (letters on the page, in this instance) to the textons (here the code generating the scenic surface). He thus opens the way for a mode of criticism that recognizes the specificity of networked and programmable media without sacrificing the interpretive strategies evolved with and through print (Hayles, 2007).

Since *Blue Han* and *The Shower* are distributed in exactly the same way as any other Internet based texts on numerous 'servers and routers on the way to its destination', it follows that the coded marks that make up these works have a material existence as binary code on multiple computers. Kirschenbaum has submitted a plausible case for the materiality of electronic texts, which convincingly repudiates the

assumptions commonly made about the nature of the electronic environment. Messages are still encoded, recorded and stored, to be retrieved at a later date and, as such, can be subjected to analysis.

4.1.2. Situating *Blue Han*: a genealogy

Nicolas Clauss claims that what he makes is not only 'art' but, more specifically, painting, and *Blue Han* is offered as a particular example of this type of work. It is relatively easy to accept, superficially at least, that his pieces overall constitute works of art. After all, a century of controversy regarding the ever changing nature of art and the attendant shift in the boundaries of what constitutes it, has conditioned many of us to be at least prepared to consider something as being art even if, in the final analysis, we reject it as not matching up to the criteria we impose. It is the determination of what such criteria might be and how they can be applied which is contentious and fluid, and it would require an extensive study of his work, beyond the range of this thesis, to determine if Clauss's work meets these conditions. However, I have already drawn attention to Clauss in relation to Duchamp and Tzara (see Chapter 3) who provide model works and processes that Clauss incorporates into his own work; his inclusion of the found object and the use of chance methods situate Clauss squarely within the avant-garde movement. I have suggested too, that the use of chance operations within certain defined parameters aligns him with Pollock (and others) in the creation of art objects. Although Clauss has adopted similar methodologies, his motivation for doing so is sometimes significantly different, in some respects, from those of his predecessors. Nevertheless, Clauss has benefitted from the promotion and promulgation of these ideas and methodologies. He hopes to rely on the justifications, provided by his antecedents, to qualify his own work as art without the necessity of having to rehearse the arguments himself. I submit that it can be taken as read that his work inhabits at least one corner of all that might be considered as art.

As I have indicated, I detect many influences acting on Clauss, to the extent that his work overall displays an interesting heterogeneity in its range, though each individual piece is characterised by an internal morphology which enables the viewer to trace its ancestry and derivation. Not that this means that Clauss is unoriginal, but rather that the extent of this mixing and bringing seemingly disparate elements together

suggest that Clauss is essentially a 'bricoleur'. As Lévi Strauss notes, 'It is common knowledge that the artist is both something of a scientist and of a 'bricoleur'. By his craftsmanship he constructs a material object which is also an object of knowledge' (1962, p.28). In fact, Clauss suggests such a categorisation himself as he describes his processes in this translation²⁴ of comments he made in a newspaper article:

I collect, I assemble all kinds of audio-visual materials, collected from different public and single (places), I reconstruct the world around the theme chosen initially. I still do not know what it will produce in the end, because everything comes from the connections that I make, it's always a bit magical (La Provence, 2007).

Nearly all of Clauss's works can be classed as montages since they are made up of selected items drawn from a huge range of source material, including Classical painting, film and so on. Clauss mixes these elements with his own film footage, photographs, drawings and paintings. More particularly, it should be noted that much of his montage work is highly referential in both manufacture (of the imagery rather than in its means of distribution) and content, linking directly to the past work of Surrealist and Dadaist artists. Lévi Strauss describes the activity of the bricoleur:

His first practical step is retrospective. He has to turn back to an already existent set made up of tools and materials, to consider or reconsider what it contains and, finally and above all, to engage in a sort of dialogue with it (1962, p.11).

It is by this recycling of already existing material that qualifies Clauss as the bricoleur that Lévi-Strauss describes, since he uses 'whatever is at hand' (1962, p.22). The 'tools and materials' that Clauss engages with are the methods and images that he has acquired from other artists' works which he manipulates to formulate his own work, much as the Surrealists and Dadaists did themselves, although without the advantages of the modern computer.

Clauss's collected works, available on his personal website (<http://www.flyingpuppet.com/>) show pieces ranging from the highly political to the entirely frivolous. A number of these works were originally exhibited as interactive installations in a gallery situation but have transferred reasonably successfully to the small

²⁴ In the original French: 'Je collecte, je rassemble toutes sortes de ces matériaux audio-visuels, recueillis dans différents publics et seul, je reconstruis l'univers autour du thème choisi au départ. Je ne sais pas toujours ce que cela va donner au final, car tout vient des rencontres que je peux faire, c'est toujours un peu magique.'

screen of the personal computer, which in turn offers the spectator a private gallery of his own, where the interactive nature of each piece as it was displayed is, at least partially, retained. Some of Clauss's earlier work is wonderfully joyous and invites a playful response from his users (*Legato* and *Dervish Flowers* both 2001, and *Peinture Morte*, 2003); his more recent work is much more sombre. It is in these works that Clauss's affiliation with the collage and montage works of the Dadaists and Surrealists is highly evident, and a clear relationship can be drawn, as already noted, between Clauss's work and Duchamp's found objects and readymade art. Clauss is clearly influenced, too, by the early collages of Picasso, Braque and Picabia, especially by the experimental nature of their construction; in addition, the sense of the darkness of Max Ernst's graphic novels (often made up from cut out pieces of nineteenth century pulp novels and catalogues, his *Une semaine de bonté* (1976) being a prime example) is very prevalent in some of Clauss's more disturbing montages. Both absurdist and satirical tendencies are in evidence, some pieces having an overtly political flavour, concerned as they are to expose and critique the enslaving nature of extreme consumerism and the corruption that such consumerism promotes. His 2009 collection (*All Together, Random Walk* and *Home*) targets conspicuous consumption: the helplessness of the individual to resist the entrapments and persuasiveness of international marketing is suggested by the presence of an empty silhouette or a fragile puppet or doll overlaid above symbols taken from dollar notes. In *Random Walk*, money is pinned to a monkey holding a globe, the combination of these elements indicating the inextricable nature of the relationship between the consumer and the world in which he lives. In fact, the ideas of ideological subjugation and exploitation are common themes in these works, suggesting strongly that Clauss, in line with some of his antecedents, has strong left-wing or Marxist views. Although themes of exploitation overlap in most of the works of the last five or six years, Clauss has targeted a number of specific areas: the cynical exploitation by the pharmaceutical industry of the medically afflicted is attacked in *Side Effects* (2008) and the genetic modification of crops in *Modified* (2008). His most recent work is very overtly political and specific. *Les mouches* (2009), as its title suggests, consists of flies so arranged as to form a dollar sign, the flies moving in response to the user's action before settling again. This re-establishes the dollar sign as an indelible mark, much like the nation and the ideology it represents. Constructing the symbol for money from an insect, and

one that is associated with rot and decay is suggestive. It is a powerful indictment of the global dominance of the USA, its all-pervading wealth and influence; the mobility of the dollar sign itself is a metaphor which implies the fluidity of the state it represents, but one where mutability is governed by self-interest alone (indicated by the constant reestablishment of the sign). The fly as a symbol of corruption is used again in *La liberta de popolo* (2010), which both lampoons and lambasts the scandalous (former) Italian Prime Minister, Silvio Berlusconi. This is a particularly direct and effective work, and one where less is definitely more, since the simple graphic images of Berlusconi, crawling with flies, seems to sum up exactly popular opinion about both the nature of the man himself and the effect his disreputable behaviour has upon perceptions of Italy. The click of the mouse sounds a doom-laden and portentously ominous tolling bell which overlays the *Hebrew Chorus* from Verdi's *Nabucco*, the story of Nebuchadnezzar. A clear analogy is drawn between Nebuchadnezzar, the destroyer of Jerusalem and its temple, and Berlusconi, perceived as the destroyer of Italy. The lyrics of the Hebrew Chorus are nostalgic and bewail the fate brought upon them: 'Oh, my country, so lovely and lost! Oh, remembrance so dear yet unhappy.'

However, within the broad category of montage, a number of variants exist, that is, individual pieces like *Blue Han* (2005b) (Figure 26) and *White Rituals* (2007). In these, Clauss uses a limited range of original imagery, rather than predominantly borrowed excerpts from other sources, to produce works that seem to have much more in common with traditional painting. These pieces are neither political nor satirical but are, I propose, investigative works, since Clauss conducts an examination of the nature of the relationship between the physical materiality of pigment-based paint and the mimetic possibilities of the computer. As entirely original works, animated and purportedly interactive, they are constructed to have a surface appearance that, at times, mimics actual paint. It is by examining these works in terms of their structure, materiality and conception that Clauss's claim that he produces a kind of 'interactive painting' is most likely to be verified, if at all. I shall consider *Blue Han* in the light of Clauss's claim. In attempting this, it is necessary to both recognise and examine those conditions that may allow such a descriptor to be applied, and to question if there might be more than the obvious, superficial correspondence between the virtual materiality exhibited on the PC and conventional painting.

4.1.3. *Blue Han: a description*

As Claus indicates on his website:

Blue Han, a portrait of Han Hoogerbrugge filmed in 2004, is an interactive tableau where video meets painting. This is the interactive online version. A generative version for wall display is available, it moves by itself and can be modified by the spectator presence. (Clauss, 2005b)

Hoogerbrugge is a Dutch digital artist, noted for several influential digital series, notably *Modern Living Neurotica* (1998-2001) and *Hotel* (2004-2006), music videos, prints and comic strips. Although he features as the nominal subject of Clauss's work, *Blue Han*, the piece is in no way biographical or narrative, and Hoogerbrugge's particular presence in the work seems incidental, the role of the moving figure being quite anonymous so that it is reasonable to suppose that anyone might have fulfilled the part. Online, the work is offered in two sizes suitable for different processors but functioning identically. In both cases, interaction is via the mouse, which equates to the spectator presence that the gallery version offers. The mouse would seem to offer a much greater degree of control by the individual than would be possible in a public space, although Clauss's application of random programming, which is as much a feature of this work as any of his other pieces, militates against this.



Figure 26 *Blue Han*.

Blue Han consists of nine rectangular panels (Figure 26 and Figure 27), each capable of an independent showing of the figure of Hoogerbrugge, in various degrees of close up, who conducts a series of movements involving the raising and lowering of his arms, turning his head this way and that, and a partial



Figure 27 Assorted screenshots from *Blue Han*

rotation of his body. Only the top two thirds of his body are visible, and sometimes this is reduced to a view of only his upper torso. The original film seems out of focus, although this might be the result of computer manipulation, to such an extent that the facial features lack definition, as do the folds in his clothes and so on, the result being the formulation of a presence rather than the depiction of a person(ality). At times, the imagery is spread across several panels, up to a maximum of four (as many as I have seen at any one time) thus resulting in a change of scale of the figure, though no more detailed because of that. Sometimes the word 'painting' is seen behind the figure. As in *The Shower*, the imagery dissolves into wateriness, the 'pigment' running away to the bottom of each panel. When devoid of the figure, the blank rectangles have the surface appearance of being coated with a thin layer of watercolour paint. Such dissolution happens sometimes in response to the mouse and sometimes not. A dot-like cursor is activated by the user's mouse, which is shadowed by an amorphous white 'blob' (Figure 27). This sometimes traces the path of the cursor, leaving behind a vapour trail of whiteness simulating a brush stroke; at times, the blob pulsates giving the impression of a fullness (of water) bubbling from a fountain. At other times, the blob remains static simply pulsating where it last appeared. Several layers of imagery can appear at once, and although they remain distinct from one another, the layering adds depth and complexity to the apparently simple display of Hoogerbrugge as he enacts his restless series of actions. When no user intervention takes place the tableau still functions, and there is an audio track running in the background. In fact, the similarities between this work and *The Shower*, at this structural level, are highly evident.

4.2. *Blue Han: on interactivity and painting*

In order to consider the validity of Clauss's claim that his work is both 'interactive' and 'painting', I propose to address these terms as independent items rather than as a single definition of his work. This is simply because his work may be either or both of these things, with each descriptor functioning independently as well as having the potential to act together. Let me first consider the term 'interactive' and its possible usage in the context of Clauss's online and galleried pieces (where they function as installations) and, later, I shall return to the topic of painting. I have adopted the definition supplied by Sheizaf Rafaeli, who

works in the field of computer mediated communication, which is 'predicated on the issue of responsiveness' (Rafaeli, 1988, p.118) to identify differing degrees of interactivity, 'The distinction called for is between interactive, quasi-interactive (reactive), and noninteractive communication sequences.' (Rafaeli, 1988, p.118).

He states that:

interactivity requires that communicants respond to each other. But the content of response may have one of two forms: regular response – reaction to previous messages – or response – which, itself, acknowledges prior responses. The conditions for full interactivity are fulfilled when later states in a message sequence depend on the reaction in earlier transactions, as well as the content exchanged. A situation remains quasi-interactive when the latter type of response is absent (Rafaeli, 1988, p.118).

Rafaeli supplies his definition in order to clarify the somewhat vague notions about the usage of the term interactivity in describing two way communications. He notes that, 'interactivity is a widely used term with an intuitive appeal, but it is an undefined concept. As a way of thinking about communication, it has high face validity, but only narrowly based explication, little consensus on meaning, and only recently emerging empirical verification of actual role' (Rafaeli, 1988, p.110). Rafaeli's definition is useful, because it provides a workable framework that can be used to determine to what degree it might be possible to judge the extent to which work such as Clauss's *The Shower* or *Blue Han* can be called interactive. It is tempting to think that because the on screen imagery changes, apparently in response to the movement of the mouse (an aspect I have previously discussed at some length), then the work is necessarily interactive. A close application of Rafaeli's definition to Clauss's work is revealing and demonstrates the dubious nature of Clauss's claim that his work is truly interactive. Rafaeli's theory recognises that, 'interactivity is feedback that relates both to previous messages and to the way previous messages related to those preceding them' (Rafaeli, 1988, p.120). I believe that, since Clauss has incorporated a high degree of randomness into his programming, that the mouse and the keyboard (the normal means used to effect an interactive interchange) seem functionally useless. It is impossible, as a user, to direct the work. This contradicts normal computing practice resulting in the user experiencing feelings of frustration and helplessness at being able to exercise any effective control. However, as Clauss's lineage as an artist can be traced back to Dadaism, as I have done in my work on *The Shower*, then the production of texts that frustrate and perplex (and perhaps irritate) the viewer is hardly

surprising. Clauss's work illustrates the Dadaist tendency for 'the absurd' by the provision of a mouse interface which is useless. Such irreverent disregard and lack of respect for the viewer are symptomatic of Dadaism, a movement which had, at its heart, the desire to reject the values and precepts of a previously established order to highlight the meaninglessness of the modern world following the tragedy and horror of the First World War. Clauss is the inheritor of 'anti-art' and absurdist ideas and techniques which he incorporates into his works, and by which he continues to make satirical comment on the world as he sees it.

As a result, in *Blue Han* (and his other work), while it is clear that something is happening in that 'messages' are being transmitted and received, the user is never sure what those messages are, or who or what is responsible for any effects that might (or might not) occur. Hence, Clauss's work cannot be considered truly interactive since the idea of 'messages' supports the notion of a progressive and meaningful *exchange of information*. In fact, the intensity of the randomness effect is such that it actually mitigates against *any* possibility of full interaction. What is produced by random operation lacks the logical consistency of a forward-driven, sequential set of communicative acts which are the hallmark of interactive messaging, as one finds in blogging, conversation or letter writing, for example. Instead, what occurs in works like *Blue Han* and *The Shower* is an array of randomly produced, episodic appearances of some of the base material which is thrown together with other base material to produce new combinations, new collisions, new coincidences of imagery and sound. The most one can say of much of Clauss's work²⁵ is that it has the potential to be *quasi-interactive*, meaning that there is simply a *reaction* generated to what has gone before and that subsequent reactions are casual rather than causal, except in the sense that all the imagery and sounds belong to the same set available within the artefact he has produced. The reoccurrence of the imagery supplies a visual cohesion, even though there is no logic to each appearance, despite the supposed intervention of the user. There is, therefore, little evidence of a coherent *exchange* of information between the user and the artefact/artist and, lacking exchange, no true interaction, under the terms suggested by Rafaeli, is possible.

²⁵ There are notable exceptions. *Legato*, one of Clauss's earlier pieces is more truly interactive since the user controls the movement of the dancing figures and, in doing so, the melody lines of the music.

It seems to me that Clauss has not necessarily deliberately set out to deceive the viewer by proposing, yet ultimately denying, the possibility of true interaction with his works. As Rafaeli notes, the term 'interactivity' has 'wide intuitive appeal' and is now in common and everyday usage so that even the most self-aware artist, like the rest of us, may have only a nebulous concept of what it truly is and, therefore, might be seduced into applying the term misleadingly and inappropriately. When considered in the light of Rafaeli's precise definition of interactivity, as a term which describes the development of a meaningful dialogue in which there is not only a constant reversal of the roles and relationship between the original author of the initial text and his recipient, but one which is reasonably equitable, Clauss seems not to want to subscribe to such a democratic process. Indeed, to do so would require the relinquishment of authorial control of the work to the point where *his* personal, recognisable style and artistic coherence are necessarily forfeited, and the origin of the work is lost in its development. Interactive communication has the potential to be without boundaries, and though it is bilateral and developmental, it is also the result of collaboration between equal participants. Clauss's work suggests an asymmetrical relationship between the two parties, where the bilateral communication (if it can be described as such) is mediated via the computer and, although he claims that his work is interactive, he has engineered a situation, unwittingly perhaps, where it is not nor can ever be. While Clauss has the capability to be, and no doubt is, an excellent exponent of such mediated communication, he is careful to preserve his own distinctive contribution as an artist. The price of this distinction is the diminution of the spectator's meaningful collaboration as an interactive force within the development of the work.

All of Clauss's works are self-contained entities that allow no extension beyond the limits he imposes. *Blue Han* is no exception. Movement within the piece is largely beyond the conscious control of the user; although the work itself can be judged to be revelatory when one considers its potential function as an open work (an aspect I have discussed in relation to *The Shower* elsewhere) the motivation for *that* lies beyond its own mechanistic structuring. Since Clauss limits the physical and communicative interactions with the work to incidental moments that lack cohesion and progression then his application of the term 'interactive', as I have come to understand it, is fallacious and misleading. In working in a new medium which celebrates the

potential of equitable collaboration, Clauss is clearly tempted by the appeal of such endless mediated possibilities. However, the notion of 'interactivity' is only loosely applied by Clauss to his work and, in terms of functioning either to develop the work, or as a means to engage the viewer in a meaningful dialogue with it via the PC, is severely limited. In fact, as an artist with a developing and distinctive style he seeks to control both the reception and distribution of his work by preserving the (essentially) traditional relationship between artist and spectator, regardless of any (debatable) interaction that might take place. However, a kind of intellectual interaction, the processes of response and reception, remain steadfastly within the beholder's domain in even the most asymmetrical of relationships. As an artist, Clauss stimulates these *receptive* capabilities, which are interior and intellectual, using a number of techniques, of which quasi-interactivity is but one. In addition, to aid this process, Clauss needs to provide very specific viewing conditions in order to engage the viewer in the full contemplation of his work.

4.2.1. The Conditioning of Reception

That Art tends to be consciously displayed in areas which are specifically constructed to elicit maximum reaction by a willing spectator is ably demonstrated by Wolfgang Kemp in his essay about the aesthetics of reception (Kemp, 1998). This begins with a brief analysis of the conditions of reception in a quoted extract from Franz Kafka's *The Trial*, where *K* is viewing a religious painting in the dimly lit interior of a church. Kemp sums up *K*'s viewing experience (and more generally, all spectator viewing of art, even in secular environments) thus:

There is a work of art, a painting, which has a location, in a church, in a side chapel, and on an altar. There is a beholder who wants to see the painting and who takes appropriate steps in order to do so. He is disposed, not only because of the environment that he and the work of art share, but also because of his inner preconditions – as a beholder he has a specific gender, presence, and a history (Kemp, 1998, p.180).

In his work, Kemp identifies the importance of the external conditions, under which religious paintings were originally experienced, as being essential to the generation of a predictable and controlled response. In fact, the viewing conditions within the church are cleverly orchestrated to maximise and extend the interactive potential of the work itself. The plethora of works in the West, produced by an (essentially)

anonymous army of painters, were an expression of the powerful and dominant Catholic church and displayed in such a way as to induce a sense of the majesty, mystery and glory of God in the beholder, or to recreate the religious feelings, suffering and holiness etc. that the depicted protagonists experienced. The pre-Renaissance artist's function was to supply paintings that were partially instructive narratives, as sanctioned by the Synod of Arras in 1025 (Eco, 1986, p.15), substituting for written scripture generally unavailable to the illiterate masses in feudal society. These works sought to achieve the transmission of the religious message and experience by the manner in which the painting was to engage with the viewer within a very specific place.

To the uneducated peasant the opening of the panels of a triptych on feast days must have been, literally, 'sensational' and overwhelming. The sudden explosion of brilliant colour, the immediacy and affective nature of the imagery and, in some cases, vastness of scale, could only serve to magnify the religious response already invoked in the mind of the communicant by the use of ritual in the carefully constructed and atmospheric architecture of the church building. The architectural spaces, that even the humblest parish church or the grandest cathedral defined, were consciously conceived to intensify the religious experience of the viewer when contemplating religious works. In all cases, the physical viewing experience was an integral component in the generation of a suitably spiritual response. For instance, in Orthodox Russian churches the interior space is usually devoid of windows and all illumination is by candlelight. In the shadowy, and dimly lit wooden interior, the gold of the icons that flicker in the candlelight of such a close and intimate space, add to the sense of wonder and mystery. The bodily senses are strictly controlled by the environment in order to induce a collective response from the congregation. Such a response is engineered to be an appropriate one, evincing a proper set of reactions to the spectacle (including any art works), to which the attendee bears witness. However, from the Renaissance onwards, the increasing secularisation of society saw a decline in interest, in religious works, and religion generally. Simultaneously, the cult of the artistic personality developed. Witnessing the degree of immersion that religious painting achieved, partly through the manner of their display, named secular artists were keen to ensure that the viewing conditions of their own work

were just as effective. The development of the art gallery must be seen as a step in the direction of the provision of a suitable environment which induces a particular response. As Kemp notes:

aesthetic objects are only accessible to both the beholder and the scholar under conditions that are mostly safeguarded by institutions and that, in themselves, require certain patterns of behaviour on the part of the recipient. Extrinsic conditions of access comprise, for example, the architectural surround and the corresponding ritual behaviour expected by the ritual cult, the court, or the bourgeois institutions of art (Kemp, 1998, p.185).

In the light of this observation, it is no coincidence that some of the methods of display of religious works have been appropriated by the secular artist who actively seeks to control the presentation and reception of his work by manipulating the exhibition space. The Installation artist in particular demonstrates the same tendency to control a specific environment, and this type of work is frequently presented in enclosed spaces, separated off from the rest of the gallery. The visitor enters a viewing area to be confronted by the work before and, often, around him. The carefully constructed viewing space is often dark, small and intimate and serves to focus the viewer's contemplation of the artwork. Nicolas Clauss shows diagrammatically, on his website (<http://www.flyingpuppet.com>), how a number of his pieces first appeared as gallery installations. In these works, the viewer walks through or in front of the piece which then changes in response to the spectator's physical presence. Although secular in nature, these pieces are constructed to immerse the viewer in much the same way, I believe, as religious art displayed in the very specific conditions of the church as described by Kafka in the extract from *The Trial*, quoted earlier.

Kemp suggests that the viewing conditions which apply to the beholder apply equally to the work itself; he adds that, 'one could argue [...] that the work of art and the beholder come together under mutually imbricated spatial and temporal conditions' (Kemp, 1998). Such a meeting ensures a 'mutual recognition'; that somehow there is an inbuilt mechanism within the painting that not only expresses the 'desire to be observed' (Kemp, 1998, p.181), but actively seeks out and responds to its own beholder. Since the painting has several functions, each of which may be foregrounded according to the state of receptiveness of the viewer, then not only has 'the function of beholding [...] already been incorporated into the work itself' but that 'in the same way that the beholder approaches the work of art, the work of art approaches him,



Figure 28 *The Eavesdropper* (Maes, 1655).

responding and recognising the activity of his reception.' (Kemp, 1998, p.181). Such anthropomorphising is reminiscent of Roland Barthes, who describes, in *The Pleasure of the Text* (Barthes, 1973, p.6) that 'the text you write must prove *that it desires me*'. Both Kemp and Barthes grant the painting/text some power of independent agency; that each is active rather than passive. Barthes expresses such agency strongly: 'the text chooses me, by a whole disposition of invisible screens, selective baffles' (Barthes 1973, p.27). He argues that the text is 'flirtatious', 'seductive' (Barthes, 1973, p.6) in order to ensure the 'blissful' engagement of the reader. More prosaically, Kemp's argument that 'the function of beholding has already been incorporated into the work itself' (Kemp, 1998, p.181) suggests the possibility of a visual equivalent to the act of 'blissful' reading that exists as a necessary and intrinsic characteristic of painting, and one that the artist actively and knowingly instils. In his analysis of Nicolaes Maes's painting *The Eavesdropper* (Figure 28), Kemp identifies a number of mechanisms which are deliberately included to 'seduce' the beholder thus ensuring his fullest

collaboration. Nicolas Clauss employs a similar repertoire of techniques intended to engage the viewer in his own work. I hope to illustrate these by referring to Kemp's analysis of Maes's work.

In Maes's painting the main protagonist, a maid, is caught in the act of eavesdropping upon an event which is largely obscured by a painted curtain which hides the action. She implicates the external beholder by gazing out of the unreal world of the painting into the real world in order to catch the viewer's eye. The visual dialogue that now takes place between the internal and external eavesdroppers' initiates the beginning of a process of 'beholding completion' on the part of the external spectator. Gombrich refers to this process as 'the beholder's share' as he traces the development and recognition of the increasing role that the viewer has in the meaningful interpretation of imagery in his interesting chapter of the same name in his brilliant work *Art and Illusion* (Gombrich, 2002, p.155). In this he refers, as his starting point, to Philostratus's account of the life of Apollonius of Tyana in which Apollonius, in conversation with his disciple Damis, considers the nature of painting as a mimetic art. Apollonius recognises, intuitively that 'the art of imitation is twofold' since 'one aspect of it is the use of hands and mind in producing imitation, another aspect the producing of likeness with the mind alone' (Gombrich, 2002, p.155). Gombrich then outlines and expands the concept of the 'imitative faculty'. This is the facility to be able to make sense of, or to recognise, in an image, a sufficient likeness to the original to be able to classify it. A viewer can achieve this by referring to their own internal filing system, their own memory, in which are stored experiences of the visual world. Such a reservoir of imagery is called upon by the beholder to both recognise and, in some instances, complete the work. In the case of *The Eavesdropper*, I would submit that the exercise of the imitative faculty is not restricted to only the imagery, but is applied to the situation too. To understand Maes's picture, the processes of mental recall can replay and recount similar incidences of eavesdropping which the viewer may have experienced. By recognising and then responding to the coded instruction as shown in the picture, the beholder is invited to join in the act that is only partly depicted. Hence, meaning is both revealed and completed. Thus, the imitative faculty extends the narrative content of the imagery through referencing a common, everyday experience. Similarly, in Clauss's *Blue Han*, the moving figure gazes out of the picture frame in the direction of the viewer. His waving gesticulations are unavoidable and his facial features, though often indistinct, are designed to attract the

attention of the viewer. An act of engagement takes place between the spectator and the figure within the frame; it is at this point that the process of 'beholding completion' is initiated. In trying to make sense of *Blue Han*, the beholder scans his internal memory banks to try to make connections between the work under scrutiny and previously viewed works or situations by exercising the 'imitative faculty' (as described above). Inevitably this is a personal experience, and I outline my own responses a little later.

However, for a picture like *The Eavesdropper* (and indeed, *Blue Han*) to be fully effective, an artist must be cognizant not simply of the possibility of a beholder completing his work but of the need to instil in the work those aspects which are most likely to attract an empathetic yet negotiated response. Kemp recognises that 'the function of beholding has already been incorporated into the work itself' (Kemp, 1998, p.181). Hence, it is clearly the responsibility of the beholder, acting on the incomplete information that the artist-created image provides, to expand the narrative. This suggests that some art works (if not all) are created to address an 'implicit beholder' as described by Kemp (1998), this being a visual equivalent (and adaptation) of Iser's 'implied reader' (Iser, 1978). Kemp asserts that 'each work of art is addressed to someone; it works to solicit its ideal beholder' (Kemp, 1998, p.183). Iser's implied reader (and by extension, Kemp's implicit beholder) is not necessarily an extant being but rather a theoretical construct that designates the active participation of an actual reader in the reading process. As Iser notes, 'As no story can ever be told in its entirety, the text itself is punctured by blanks and gaps that have to be negotiated in the act of reading' (Iser, 2006, p.64). Such an actively involved implied reader is then able to cope with any given text to such an extent that 'the reading process transforms the text into a correlate in the reader's mind' (Iser, 2006, p.64). Kemp's implicit beholder performs a similar function in relation to the visual text, the spectator acting to develop the painting beyond the limits of the canvas, sometimes being directly implicated in the narrative events, as is the case with *The Eavesdropper*. The nature of *Blue Han* is such that the beholder has a physically active role as well as an intellectual one; the work is partially manipulated in the gallery by body movement and online via the mouse (which is activated by the hand). In both cases, the physical and the intellectual, these processes are necessarily individual and transformative, extending beyond whatever authorial intention may be deliberately instilled into the text. Although physical intervention impacts on the order of

presentation of the text of *Blue Han*, the reader/beholder still has to bring to bear his own creative 'imitative faculty' using 'the mind alone' to complete the piece. Gombrich refers to this process as a kind of 'projection' (Gombrich, 2002) a term used to describe how pictorial illusion is the result of a complex series of cooperative acts between the creative artist who provides the visual clues, and the beholder/spectator who interprets and supplements them. The result is a text which is much enriched by the dynamic act of collaboration between the text and its reader, or the painting and its beholder. Iser suggests that:

the convergence of text and reader brings the literary work into existence, and this convergence can never be precisely pinpointed, but must always remain virtual, as it is not to be identified with either the reality of the text or with the individual disposition of the reader (Iser, 2000, p.189).

In response to Iser's observation, I believe it is possible to argue that Clauss's concept of painting warrants serious consideration. In the following analysis of *Blue Han*, I demonstrate that Clauss does indeed offer a kind of painting, not by the deposition of pigment, but by reliance on the ideas I have just introduced, namely, a guided projection and the imitative faculty. By creating a proper arena for the sympathetic reception of his work and by appealing to an implied, yet competent, beholder I submit that Clauss's work is capable of bridging the gap between the virtual nature of its representational medium (the pixel) and the actual substance of paint itself.

4.2.2. The Conditioning of Reception: guiding the beholder to see paint.

Although I am unaware of what precise adaptations Clauss may have made to the gallery version of *Blue Han* to make it suitable for PC presentation, clearly there must have been some significant changes. The mere fact of a change of scale would suggest this; the colour intensity of the original, the sound effects and its complexity must make this a commanding and compelling piece. To duplicate the possibility of immersion, in the art work, which scale and colour impose in the gallery, requires a fresh strategy on the home computer. It is for this reason, I believe, that Clauss imbues his online version of *Blue Han* (and his other work) with the (fallacious) suggestion of allowing the viewer to wrest control from the artist himself at home, where a physical presence is replaced by user mouse activity. As previously discussed, this temptingly suggests that the viewer/user has much more interactive capability than the casual visitor passing through the same piece

as it functions in a gallery. By actively engaging the spectator/user in the seemingly collaborative act of manipulating the artwork the gaming aspects of the piece are magnified; these aspects must already be apparent in the installation format that precedes the online version. It is in the nature of installation art that the presence of an onlooker develops the piece; the expectation that an installation *will be* interactive strengthens the urge to 'see what it will do' and invites the interectee to perform a whole series of movements and actions. The mouse substitutes for at least some of these actions in the diminutive version but, accustomed as we are to the mouse extending absolute control as the interface between ourselves and the computer, the discovery of the severely limited control that Clauss is prepared to relinquish and the frustration that this generates is an attempt to ensure that the work is engaging, despite the reduction of size and scale.

However, such engagement is simply the first step in the creation of the conditions that might permit the descriptor 'painting' to be applied to Clauss's work. More significant are references to actual paintings, which might suggest to the viewer that Clauss does indeed make paintings, despite the virtual nature of his work. Clauss provides the visual clues that enable the viewer to see the correlation between his own work and the work of others. Such an alignment is suggestive; it allows a kind of 'transference' to take place. By mimicking various aspects of a static, painted work, which the viewer can identify, Clauss's work may be regarded in the same light as the referenced works. By association then, the viewer is invited to consider the possibility that *Blue Han*, in this instance, may function as a painting. In short, the viewer is 'guided' (in line with Gombrich's theory) to the conclusion that what is shown is not simply film or video, but has at least some of the characteristics of a painterly work. To complete the transference, or perhaps more correctly, the transmutation, Clauss must rely on the individual's 'imitative faculty' to complete the illusion.

Clauss most obviously influenced by the paintings of Francis Bacon. A quick comparison between Bacon's work (in this instance *Three Studies of Lucian Freud*, (1969) although others could have been chosen) and *Blue Han* makes the point (Figure 29 and Figure 30). In both cases, a sense of isolation is a compelling feature. The isolated figure occupies a space that has no depth, one that gives no visual clues to indicate a

specific location. Uniform fields of colour surround the figure (the flatness of which, in Bacon's work, excludes a true perspectival orientation) suggest that the figure is without gravity and free-floating. Similarly, in *Blue Han*, the background field of colour renders the space fathomless and indeterminate, although the relative solidity of the subject diminishes the possibility of achieving the free-floating of form that Bacon describes. As Deleuze notes, the fields of colours 'have a structuring and spatializing function. They are not beneath, behind or beyond the figure, but are strictly to the side of it, or rather, all round it, and are thus grasped in a close view' (Deleuze, 2003, p.4). In Bacon's triptych, the painted figure casts (impossibly) no shadow except onto objects that are directly entailed to it (the chair being the receiving surface for the shadow of the thigh); in Clauss's manipulated video, the figure, as a physical object, inevitably does. However, the softening of the image and the monochromatic nature of the piece mitigates against the degree of shadowing becoming the dominant effect that, in normal pictures, paintings and films, defines the three dimensional form of an object. Clauss has minimised both the effect of shadowing and tonal contrast to retain the isolation of the figure that seems lost in the misty wateriness of blue-whiteness that pervades each panel.

Bacon uses other structuring devices like the wired cube and the chair; these act as props to enable the figure to demonstrate or to signal a kind of mobility. The figure relates to the space that these supportive or enclosing items delineate by demonstrating a change of posture or position relative to the given shape across the panels of the triptych. Deleuze, in his book *Francis Bacon*, suggests that rather than rendering the figure immobile inside the confines of the wire cage, 'on the contrary (they) render sensible a kind of progression, an exploration of the figure within the place, or upon itself. It is an operative field' (Deleuze 2003, p.2). The triptych here might be seen as single frames in a continuum of movement with each panel concerned with a single instant that Bacon has captured. The wired frame becomes a point of reference that the plain coloured grounds cannot be. The distortion of the figure and, most particularly, the face, too, proposes a secondary movement; not the wholesale transport of the entire body that the wire cage references, but the subtle change of facial expression or miniature movement enacted by a bodily part. As a painting, the necessity of three panels is apparent in order to describe a range of movement, each panel being part of the continuum



Figure 29 Francis Bacon : *Three Studies of Lucian Freud* (1969).



Figure 30 *Blue Han*: A moving isolated figure.

that is expressed over time, as well as space. Like Duchamp's *Nude Descending a Staircase*, various movements are superimposed one upon another, every action inhabiting a space adjacent to the previous one. For Clauss, the filmed moving image substitutes, economically, for the painter's craft. Unlike the fragmentary nature of the Bacon work which shows a single series of movements across three panels, Clauss shows a whole episode of movement in a single panel. This is then displayed, manipulated (either by mouse-user action or the random programming) and reiterated across all nine panels. Where Bacon has graduated the image in paint to suggest movement, bringing it closer to the moving image, Clauss seeks to work *towards*

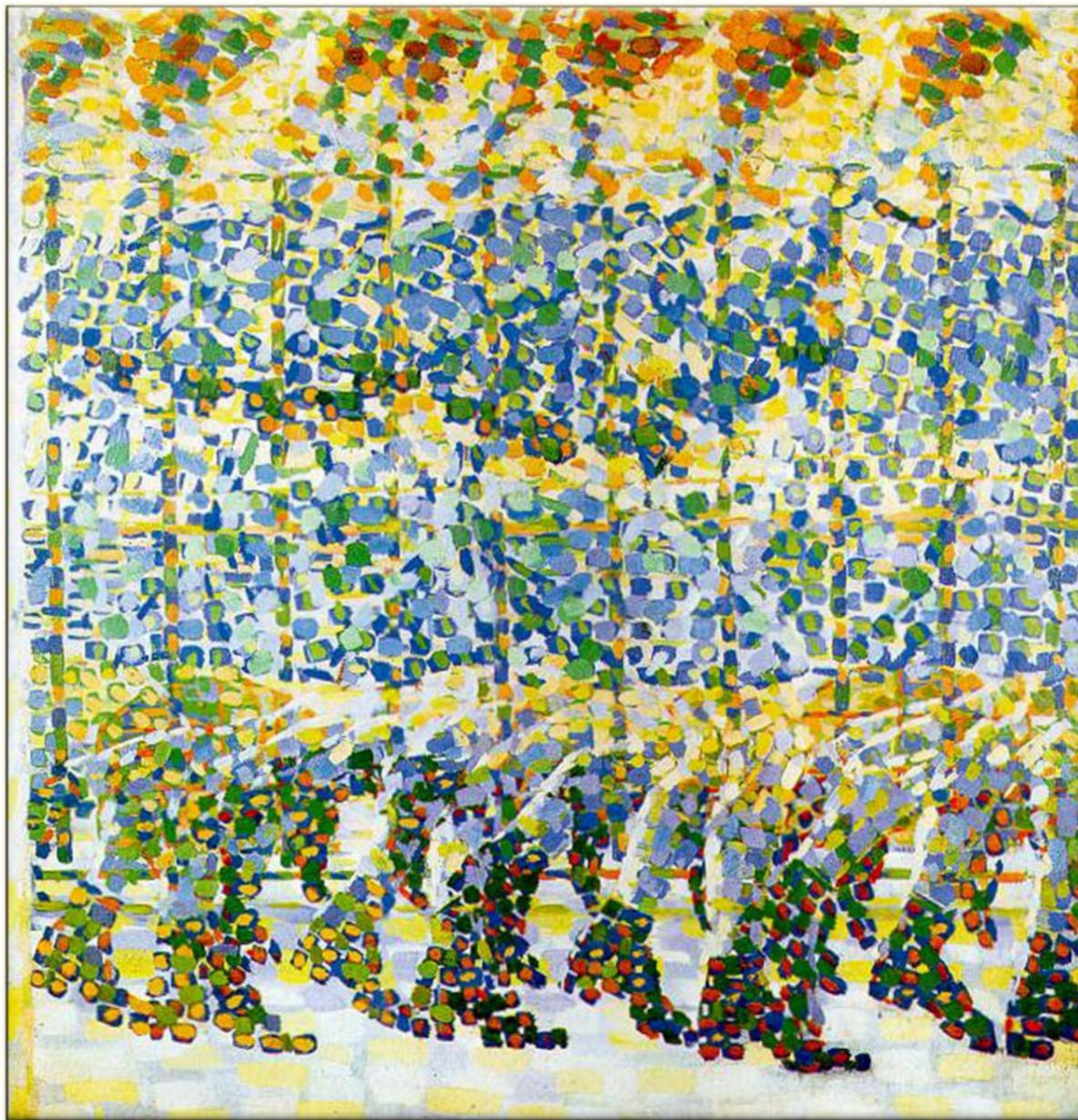


Figure 31 Balla's *Girl Running on a Balcony* (1912).

a state of painting by diminishing the pristine nature of the original cinematic imagery. In short, he disguises the filmic nature of the original, moving imagery by investing it with the outward appearance of paint, applied impressionistically. The added texture that he applies to the images, the simulation of wet paint, is more or less convincing depending on the extent of the subterfuge (Figure 30). Even so, the anomaly of a painting that moves is curious, a factor I shall consider now.

4.2.1. On codes and mobility

In fact, the mobility of Claus's imagery might be the most persuasive factor that inhibits his case for painting. However, I am prepared to argue that even those paintings that deliberately try to encapsulate movement have only limited success in the pursuit of the impossible, which is the transmission of movement through the medium of paint. In contrast, Claus's modifications to the filmic medium successfully convey the idea of paint, regardless of the mobility of the image. For example, the work of the Futurists attempts to marry the dynamism of movement to the inherent stasis of painting. To convey the sense of motion requires the superimposition of one instance of the moving figure upon another, slightly displaced to indicate not only the passage of time but the traversing of space. This is particularly noticeable in Balla's *Girl Running on a Balcony* (1912) (Figure 31) where the movement from left to right clearly indicates the suggestion of a progression and a time elapsed. Carro's *The Red Horseman* (1913) (Figure 32) functions similarly; movement, direction and the passage of time are indicated quite clearly. Balla's depiction of a moving dog, *Dynamism of A Dog on a Leash* (1912) (Figure 33) is perhaps only more convincing in respect of the conveyance of a dynamic force, an energy, rather than a clear indication of directional movement giving as it does the impression of a single dog with many legs and tails or, possibly, of a dog running on the spot. I find, in all of these cases, the use of a substance like paint (that solidifies) to depict ephemeral moving states to be an anachronistic use of the medium. Although the titles of the works (and the Futurist Manifesto itself (1920)) reference the idea of movement, the limitations of paint are obvious, and its choice a dubious one if the sole intention of these works is to capture the dynamism that movement implies which could be better captured by using a movie camera. This limitation does not detract in any way from the purposeful and analytical

nature of these paintings, or their beauty and appeal. The scrupulous investigation of movement, and analysis of form and light are successfully codified in these representational works but, nevertheless movement itself is not convincingly displayed; only the momentary instances of a succession of fleeting microseconds of stasis are depicted. The static nature of each image as it is represented in paint is antithetical to the concept of fluid, dynamic movement. The medium is inadequate to complete the function demanded of it.

Nevertheless, the desire to convey the sense of movement and dynamism in many of these works requires the artist to adapt his approach to painting. It is in this sense that the work of the Futurists (and other avant-garde groups) is at its most radical and experimental since it is partly concerned with the manipulation of the medium of paint itself. Traditional painting is centred on the presentation of images in the form of a static tableau where the beholder (re)constructs the narrative content, working from clues contained in the piece. In such instances, it is vital that the surface of the work is rendered invisible, so as not to interrupt the viewing experience. When the artist is primarily concerned with conveying other kinds of information (about the nature of paint itself perhaps) then his/her approach to painting necessarily changes resulting in a reduction of the narrative or representational content. Donald Kuspit proposes an intriguing thesis in which he suggests that the ontology of painting is fundamentally altered in response to changing ideas about the purpose of painting. He suggests that Impressionism and the avant-garde generally marked 'a time of transition from traditional analogue art to postmodern digital art that is, to an art grounded in codes rather than images' (Kuspit, 2011). Up until the Renaissance the invisibility of the representational medium (paint) was thought to be a necessity as part of the illusory process. Kuspit is arguing that paint's invisibility was replaced by an obsessive preoccupation with the materiality of the artwork²⁶; that paint itself and its application in the form of an overt 'code' becomes the subject matter of the artwork. In the section on

²⁶ The invention and development of the camera, which more or less coincided with the rise of Impressionism, hastened the process of dispensing with the painted image since it was no longer necessary for artists to produce likenesses, thus freeing the artist to attempt different kinds of painting. In fact, artists were quickly aware of the possibilities of the camera as an aid to their creative work. The frequently misquoted Delaroche remark, 'from today painting is dead' in response to seeing a *Daguerreotype* photographic image is misleading. Delaroche was an advocate for photography recognising the shortcuts that it offered the artist in recording subject matter quickly (Leggat, 2011).

Functions of Representational Systems in his book *Art and Representation* (1997), John Willats concurs with the notion that the process of producing a smooth surface made up of imperceptible marks is characteristic of those images that seek to generate a convincing illusion. His comments on the subject of 'mark systems' in which he refers to the work of Cennino Cennini, whose early 15th century treatise on painting offers a valuable insight into the techniques used by artists of the time, are relevant:

The surfaces of pictures intended to provide an illusion are invariably smooth, and the marks blend into each other imperceptibly: 'like a puff of smoke,' as Cennino Cennini said. The eye is not tempted to linger on the surface of the picture, but looks through it to the depicted scene. If, on the other hand, the surface marks are obtrusive, they draw attention to the picture surface. This is the case with mosaics, tapestries, and many Impressionist and Cubist paintings (Willats, 1997, p.222).

Willats notes that, in later Impressionist paintings the brushstrokes were increasingly evident, and had 'become more independent of the depicted form' (Willats, 1997, p.222) now assumed a different function. He quotes Anfam in describing the function of the brushstroke that the artist had created:

it no longer aided an illusion of recession, but emphasised the physical surface of the painting. Thus, the artist forced the spectator to remember that the picture confronted was a painting, which had its own reality, and was not simply an extension of the spectator's world (Anfam et al cited in Willats, 1997, p.223).

It is this type of brushwork that Kuspit recognises as being a 'code' which marks the beginning of transition of paint from being the medium that has an analogical function in creating images to a point where its function is simply to transmit the code itself:

The status and significance of the image changes in postmodern digital art: the image becomes a secondary manifestation -- a material epiphenomenon, as it were -- of the abstract code, which becomes the primary vehicle of creativity. Before, the creation of material images was the primary goal of visual art, and the immaterial code that guided the process was regarded as secondary. Now, the creation of the code -- more broadly, the concept -- becomes the primary creative act. The image no longer exists in its own right, but now exists only to make the invisible code visible, whatever the material medium. It makes no difference to the code whether it appears as a two-dimensional or three-dimensional image (Kuspit, 2011).

The concept of the codification of painting is especially well illustrated by Pointillist art works. Here, the code consists of innumerable dots of paint that only from a distance reveal the image. Seurat's *A Sunday on La Grande Jatt* (1884) and the later Futurist painting already referred to, *Girl Running on a Balcony* (1912), demonstrate the point. Kuspit implies that the images these dots of paint create is secondary to their method

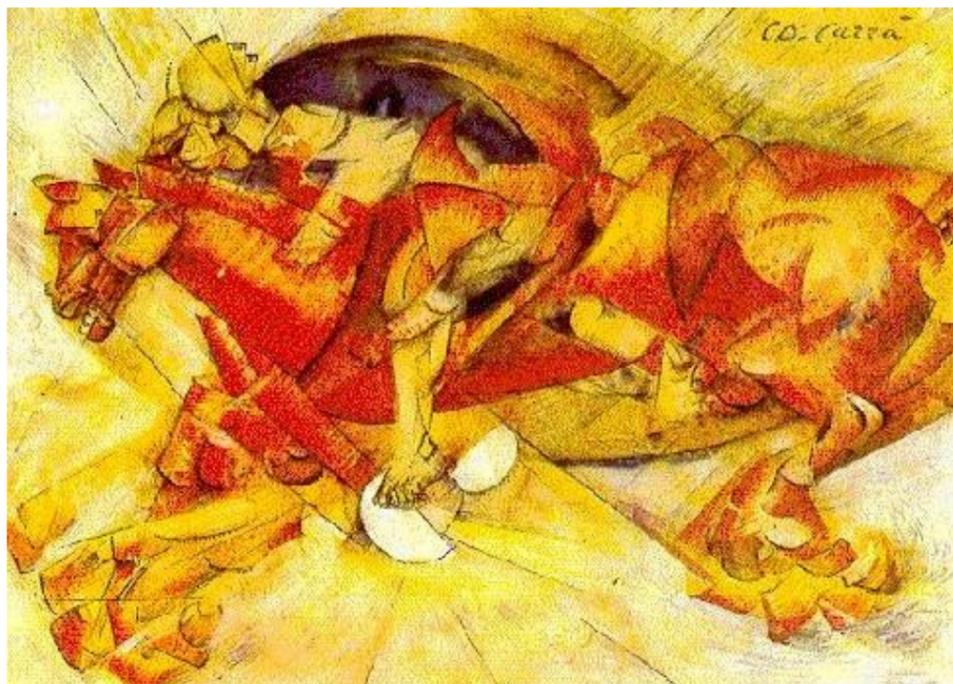


Figure 32 *The Red Horseman*, by Carlo Carra (1913).



Figure 33 *Dynamism of A Dog on a Leash* (1912) Giacomo Balla.

of construction or creation and that the images are little more than vehicles to demonstrate the code itself.

He further suggests that this move towards the digitalization of representation reveals the 'matrix of sensations that inform and sustain representation' (Kuspit, 2011). He makes the point that:

the traditional assumption that every appearance is grounded in objective reality, guaranteeing its own objectivity, is undermined by the discovery of this matrix of sensations. Above all, it is undermined by its digital articulation (Kuspit, 2011).

Kuspit seems to suggest that digitalised/codified painting (as in Pointillist works etc.) exist, not necessarily to represent anything in the real world. However, it is intended to recreate in the beholder a similar set of responses/sensations to those that the artist experienced either in the creation of the work itself or in response to some internal or external stimuli. The inclusion of a recognisable likeness to anything that might actually exist in the real world is incidental and, as artists became more comfortable with the idea of working with codes, the interest in representational imagery waned. The code itself is intended to reproduce the 'sensations' that the artist experiences.

Although these codified paintings are static, nevertheless one is aware of Cezanne's 'vibrating sensations' to which Kuspit refers (Kuspit, 2011), and on which he has based his own concept of a 'matrix of sensations'. Positioning different dots or blocks of colour next to one another produces an optical vibration which is always in constant motion and which 'generates an intimacy and vividness all its own' (Kuspit, 2011). The instability of these relations constantly refreshes the work and this optical vibration compensates, according to Kuspit, for the loss of the haptic dimension that such digitalization inevitably produces. However, some works use a mobile version of a digital code, which I regard as precursors to the digital code of the pixels that Clauss uses in the generation of his own work. Oskar Fischinger's *Motion Picture No. 1* (Fischinger, 1947) (Figure 34), which I have previously discussed briefly with regard to its musical content, is one such piece. This work consists of a glass plate onto which Fischinger paints, in oils, a series of dots and dashes intended to express the tonal and rhythmical qualities of Bach's *Brandenburg Concerto No.3*. During the

performance of the piece, the arrangements of dots and dashes expands, contracts, changes colour and assumes shapes and figures as layer upon layer is applied. The piece was made by photographing each change Fischinger made to the painting with a stop-motion camera. The result is a fascinating animated film which is now available online. Of his work, Fischinger suggests that, '*MOTION PAINTING No. 1*, as it unfolds itself, offers the viewer the same deep emotional feeling that he can receive from good music. Thus we find that music is not limited to the world of sound; there also exists a music of the 'visual world' (Fischinger, 2011). Fischinger has produced a visual code that is an optical equivalent of the original music, and which operates in tandem with it to produce a 'sensational' response in the viewer/listener. Although the original film of the work must have been analogue in production, its distribution now is extensively online. Hence this work is doubly encoded; firstly by paint and then by computer. However, there is another aspect of this work to be considered. Is *Motion Picture No.1* still to be considered a painting? The original glass plate still survives but presumably the only paint surface visible must be the one that makes up the final shot of the animation. All other interim steps must lie beneath this final image and are not available to view except in the analogue film which has now been digitised for the web version. All that really exists, then, of the totality of the piece, is the code that promulgates it. The transfiguration from paint to pixel is more nearly a transubstantiation in this case, since the fact of

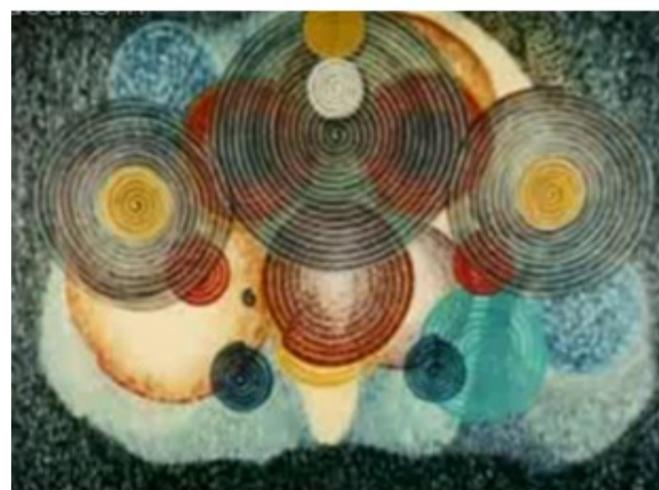


Figure 34 Stills from Fischinger's *Motion Picture No.1*.

paint has become an irrelevancy in this work; it is only the bearer of a code that enables the piece to exist at all, and it is the pixel that ensures its continued existence and transmission.

The connections between this work and *Blue Han* are obvious. *Motion Painting No.1* seems to cross the boundaries between two worlds; it is a painting that is codified to the point where the original substance is no longer identifiable. On the other hand, *Blue Han* is constructed from a code that is not identifiable, although we are all aware of the pixel since its presence is both ubiquitous and inevitable in digital media. As Clauss uses the pixelated code in *Blue Han*, he marks a reversion to a state where the code is once more subservient to the image. Clauss is not concerned with the investigation of the code itself, although one of his works (*White Vibes*, 2003) demonstrates, in an ironic way, his consciousness of it. The code has once more become a representational tool used to express his ideas, in *Blue Han*, about the nature and substance of painting, and in a way that the original substance of paint does not allow. Clauss uses the inherent flexibility of using a code which is constructed by appropriate software, to capture something of the changing states of painting that are normally hidden beneath the final surface layer. Francis Bacon's solution to the problem of capturing movement of the form and the development of the painting itself was to resort to the triptych and a partial doubling up of the image on the canvas. Duchamp reiterated movement across time by a surface displacement

of the figure, and Balla atomised the figure and presented its temporal and spatial aspects exclusively by the code he imposed upon it. Like the artists who produced these works, Clauss has produced a meta-painting which seeks to examine the nature of painting itself and in a way that the static medium inhibits. Clauss is advantaged, in that the code he uses is so minute and flexible he may use it as an investigative and analytical tool while losing none of the representational power of the image it can create.

4.2.2. *Blue Han: interrogative and propositional 'painting'*

As *Blue Han* functions, the figure of Han gyrates and gestures. He looks directly at the viewer sometimes before turning away and resuming his endless series of contortions. His 'blueness' ranges from deep, intense royal to a paler aquamarine, purple blues, grey blues, violets and lavenders - all are here. As he moves, his solidity dissolves and his definition blurs into the background and what remains is ill-defined and indistinct. This impressionistic rendering of the central figure is at the boundary of the indiscernible; only the basic shapes and contours are to be gleaned from an inspection. Yet the basic features of the face remain just recognisable and his direct view and soundless mouthings serve to focus the beholder on his presence and his purpose. The presence of Han and the manner of his presentation together with the word 'painting', either fully or partially spread across the several panels of the work, come into view. I believe that the combination of these two objects is propositional and interrogative. In this, Clauss relates to the work of Magritte whose famous painting *La trahison des images (The Treachery of Images)* (1928-1929) (Figure 35) deliberately identifies the incongruity of attempting the representation of objects (in this case, a pipe) that exist in the real world in a medium (paint) which is so unlike the object's actual existence. The incongruity is intensified by the anomalous caption which adds extra degrees of ambiguity about the image of the pipe's similarity to the real thing. The declaration that 'This is not a Pipe' and the fabrication of the image itself, expose the problematic relationship between resemblance (image) and representation (words), since neither image nor the caption (in any of its various interpretations) can be any more than a series of visual or linguistic signs.

This refutes the long held view which, as Foucault reports, suggests that (traditional) 'painting posits an equivalence between the fact of resemblance and the affirmation of a representative bond' (Foucault, 1983, p.34). Foucault notes that Kandinsky 'ruptured' the relationship, and referred to his paintings and



Figure 35 Magritte: *La trahison des images (The Treachery of Images)* (1928-1929).

objects in them as 'things' or as a 'red triangle' or a 'composition' or a 'rosy balance' thus effecting a 'double effacement simultaneously of resemblance and of the representative bond' by refusing to ascribe, to these lines and objects, names that relate directly to particular objects in the real world' (Foucault, 1983, p.34). The process of making marks in any medium to represent aspects of the real world relies heavily on the application of the imitative faculty by both the artist and the beholder of his work, who must collude together to produce the illusion of representation. If the link between the representation and the real world is as artificial and arbitrary as Magritte and Saussure (Saussure, 1915) suggest, it can be recognised as an intellectual proposition. The human, 'imitative' ability to generate connections, between what we see in the world, and representations of these existent objects is what produces this proposition. This suggests that it is entirely possible to look at a representation of the substance 'paint' and to accept it as paint to the same degree that it is possible to accept a drawing of a pipe as being a pipe. This calls for a suspension of disbelief when viewing a computer-generated image of paint made from pixels, just as when we look at a picture of a horse or a portrait, and we accept it as the true likeness. At this surface, unthinking level, the difference

between paint and non-paint is small, so small as to be negligible. *Blue Han* is made from pixels which are so construed as to offer a passable facsimile of true paint, which, in turn, offers a facsimile of a man, dressed in blue. Even in paint the image of the man would be a facsimile, so the function of paint and pixels is equivalent in terms of representation. Clauss's work is propositional in that he suggests that pixels are near equivalents of pigment since, functionally, they perform the same task. However, Clauss is also aware of the dichotomy that his work presents, and this is encapsulated in the appearance of the word 'PAINTING'²⁷. This performs a similar function to Magritte's caption to his own work. What we can read in *Blue Han* here is also open to a number of interpretations. It might be assertive:

This is a painting!

Or interrogative:

Is this is a painting?

Or philosophical:

What is painting?

It might also be conceivably read as something independent of the figure and his surroundings though I think this is unlikely. As the word 'painting' is confined to the same space as the figure, the tendency is to look for connections. I regard its function as directing the viewer to consider the nature of the work, so all possibilities of meaning need to be considered; it is not only an intrinsic aspect of Clauss's composition but labels it too (like Magritte's caption). Although the word is not part of a sentence, its size is declamatory, and this intensifies the call for its meaning and function to be investigated. 'PAINTING' acts as a conventional sign, the letters only having the meaning they do, in English. The figure can be read as an iconic sign as it displays

²⁷ It is curious that Clauss uses the English word 'PAINTING' rather than a French equivalent. There may be several reasons for this and it is interesting to speculate on what these may be. It seems to me most likely that two are most prominent. Firstly, English is universally understood, so any artist wanting to make a pitch for international recognition might think that using English is expedient; secondly, as the influence of Bacon on Clauss seems so strong, then it may be that Clauss wants to align himself linguistically as well as in his graphic style to Bacon, an English artist.

some of the features of a human being, and the clothes and colour of a particular one. Hence, it retains some truth of the original. It is the nature of the appearance of the figure, acting with the sign 'PAINTING' that qualifies what is seen, suggesting to the beholder the kind of interpretation that should be made of the work. Working together these two signs are propositional, the figure acting as a 'focalizer' (a term borrowed from narratology (Genette, 1980)), and the word as a qualifying statement. The figure in *Blue Han* conforms to Kemp's identification of a focalizer 'who can address the beholder directly, as figures that look at him or her, that point to him or her as well as to something else' (Kemp, 1998, p.187). He continues, 'as figures of reflection or diversion, they accomplish more than just pointing or guiding' (Kemp, 1998, p.187). Although there is no observable narrative dimension to *Blue Han*, nevertheless there is a meaning to be communicated. The blue figure functions to direct the viewer's thinking, by reminding him of related art works like the Bacon or the Magritte, and by exhibiting in his own material (virtual) form something of the very nature of the substance that *Blue Han* is purported to be, that is, paint. This dual role of the figure, firstly reminding one of paintings by composition, reference and framing and so on, then by having the surface appearance of paint, is emphasised further by the sign 'PAINTING'.

The illusion of paint that Clauss has engineered is finely balanced with knowledge of the impossibility of such a reality in both the virtual environment of the PC, and, I suspect, in the original installation format. I think that Clauss is actually less concerned with the nature of paint than with questioning its necessity. The *fact* of painting is an irrelevancy except in the sense that paint itself possesses certain haptic qualities that identify it as a particular substance. What paint has, as it is used to produce art, is a long and distinguished history as the bearer of imagery and representation produced by an individual hand mainly for powerful institutions like the Church and ultimately, as society developed along more secular lines, wealthy individuals from the aristocratic and moneyed classes. The commissioning of unique paintings, firstly in tempera and then in oils, ensured that these works were regarded with both reverence and awe, and the relative stability and longevity of the painted image and its uniqueness contributed both to its face value and its cultural worth, the 'aura' of which Benjamin speaks (Benjamin, 1999). However, I believe that in early works, the textural surface effects that paint makes possible, and which are so evident in later works, were effaced. This

was to render the image as real, and often as hyperreal, as possible. This was partly as a result of the practical capability that tempera has to offer in presenting a very smooth and even surface finish, but more significantly, I believe, in order to minimise the sense of difference between the real, existent world and the world of the image so that the viewer could slip easily between the two to experience the image as being reality. In religious paintings, this was especially important, as the mystical events depicted in the painting were to be as intimately connected to and experienced by the viewer as was possible. As Eco notes, in referring to a passage written by Abbot Suger on the topic of the transformation of aesthetic pleasure into mystical joy at the contemplation of religious art works:

Medieval taste [...] involved [...] an apprehension of all the relations, imaginative and supernatural, subsisting between the contemplated object and a cosmos which opened on to the transcendent. It meant discerning in the concrete object an ontological reflection of, and participation in, the being and power of God (Eco, 1986, p.15).

To facilitate the possibility of total immersion in the imagery, and thus intensify the religious experience, I believe that the diminution of the barrier that the surface of the painting presents was necessary. This was partly achieved by the denial, as far as was possible, of the materiality of the artwork. No brush strokes are visible to interrupt the viewing, no surface texture is apparent, and the paint is applied with a uniformity of depth and smoothness. The protagonists, be they angels or saints, are depicted in meticulous detail. What is shown is presented as a heightened and idealised extension of what already exists even when the mythic is depicted; for example, individuals are presented in the everyday apparel that beholders wore themselves, but more luxurious, more colourful, more lavish; Heaven or Hell are envisioned as actual places. The gap between the real and the unreal is minimised, not least by the conditions of reception (as discussed) and then by the invisibility of the medium, to the extent that the beholder is no longer separated from the image. The image is transformed finally into a living spectacle rather than a static tableau, and the viewer is implicated in the depicted events.

If, in the construction of these particular works, the presence of the manufacturing substance, paint, is denied (even metaphorically) in order to effect the total immersion of the beholder, then there is an implicit

acknowledgement that materiality is incidental to the production of imagery²⁸. It is reasonable to conclude, therefore, that there is little that is intrinsic about paint (or indeed any medium) that is so affective as to be considered an absolute essential in the creation of representation. Consideration of *Blue Han* suggests that it is possible to see that the creation of a painterly surface finish is just as much an *effect*, as is the denial of a painterly surface that the medieval artist sought. The reasons for both effects have, surprisingly, much in common; the transformative and affective quality of the medieval painting are derived from its ability to allow the beholder uninhibited access to its content, under circumstances where the beholder's responses are fully conditioned and controlled (as already described), as well as its own apparent immateriality. The affective quality of Clauss's work is derived from *its* viewing conditions, and the mimicry of the very quality that *now* denotes the formulation of a worthy work of art. It is Clauss's attempt at the mimicry of paint that invests *Blue Han* with an aura of authenticity which marks it out as being a serious piece. To produce a work that relies on the depiction of paint, rather than some other means of representation, necessarily says as much about the beholder's expectations as it does of Clauss's preferences and interests. The nomenclature 'interactive painting' is a broad and confusing labelling of a work that, in essence, is neither of these things. The acceptance of the possibility that *Blue Han*, and many of Clauss's other works could be both 'interactive' and 'painting' is, however, worthy of thought. The situation of both artist and beholder in relation to the artwork remains, in some respects, unchanged. Whatever the medium and however potent the technology might be that is used to devise and distribute it, the development of convincing representation is still dependent upon the imaginative, imitative faculty of both parties; a conceptual collaboration.

²⁸ I acknowledge that in much later works, from Impressionism onwards and after the invention of the camera, the materiality of paintings was a pressing concern. As painting and art generally became preoccupied with investigating its own parameters and substance and less concerned with depiction than the haptic and textual qualities of paint inevitably grew in importance.

4.3. Conclusion: From Pixels to Paint.

The observation I have made of *Blue Han* that it bears a resemblance to some of Bacon's work (or indeed, Magritte's, or any of the other artists' work mentioned), is neither an accident nor something to be unexpected in one, such as myself, who has a background in Art. For another viewer, who has a different set of experiences and expectations, the connection might seem much more tenuous; undoubtedly, each beholder will supply their own comparatives. The processes of recognition and classification of particular configurations of the visible objects in *Blue Han* are achieved by making mental comparisons with other works by other artists. However, watching *Blue Han* function, and being conscious of Bacon's triptychs, his artistic intent and philosophy, I see a greater match between these two artistic works than others may have considered. I am aware of a number of factors the two works have in common (a sense of isolation, space, intensity of movement etc.). This knowledge allows me to see a strong correspondence between the two works. Clauss has deliberately arranged the subject in *Blue Han* in such a way as to prompt the recognition of the connection with Bacon's work. In short, I have recognised aspects of the schema evident in Clauss's work as corresponding to that which exists in Freud's and, by extension to the other works to which I have referred. Gombrich discusses the process of 'making and matching' (Gombrich, 2002), and the use of mental schemata as part of the artistic, creative act. In his essay, *The Image in the Clouds*, he discusses the human tendency to make connections between objects, and to read and see forms that we recognise, even in the 'accidental shapes' of clouds, rock formations and inkblots (Gombrich, 2002). He cites the case of the painter Joshua Reynolds who, on viewing the work of his contemporary Gainsborough, regarded his loose style of portrait painting as being:

little more than schemata which serve as a support for our memory images; in other words they are screens onto which the sitter's relatives and friends could project a beloved image, but which remain blank to those who cannot contribute from their own experience (Gombrich, 2002, p.168).

It is easy then to see that viewing one painting might remind us of another and that, even where objects are fundamentally different we might project upon the second something of the first. Clauss proclaims his work as painting and, though the electronic medium itself denies the possibility of pigment, the conditions of

viewing and the notion of 'guided projection' sustain the illusion of paint. There is clearly no chance of the actuality of paint, but where the predisposition of the beholder and the intent of the artist coincide the visible outcome can be more or less agreed to be a kind of painting. As Gombrich notes, 'the artist trains his own élite and the élite trains its own artist' (Gombrich, 2002, p.196). Whilst it is trite to suggest that Clauss 'paints' because he thinks he does, or that I agree with him because I want to, nevertheless this investigation broadly recognises the essentially conceptual nature of art and the collaborative spirit that exists between the artist and the beholder needed in order to manufacture it.

Much as Duchamp's premise in selecting a commonplace object, a urinal, to exhibit as an artwork was to recalibrate the relationship between the artist and the art he produces, by revealing explicitly for the first time the conceptual nature of that relationship, Clauss has attempted to recalibrate the relationship between the artist and his material, which in turn is used to configure an art work. Although Duchamp's urinal itself can be regarded as a mundane object in its normal circumstance, the fact of its realignment (Duchamp laid it on its back and renamed it as *Fountain*) and re-presentation in the new context of the gallery changes the nature of its being without actually altering the object itself. It is this change of circumstance that both charts and generates the possibility of apprehending a perceptual difference in the nature of the viewed object by the artist and, by inference, his addressee and beholder. Similarly, as the writer 'makes strange' (Shklovsky, 1917) the commonplace words he finds in everyday use by recontextualising them as poetry, or the child in picking up a stone in order to throw it recontextualises it as a weapon, then the digital artist, in appropriating the seemingly mundane in order to display it as art, performs a similar act. Clauss has appropriated the pixel, the 'picture element' whose everyday use is fairly mundane and trivial in the myriad images that are displayed daily on computers and the Internet across the world, and recontextualised it as the code representing paint. In the guise of paint, the pixel expands the original material's potential by enabling flowing, mobile imagery to float across the computer screen. While the haptic dimension may be lost, 'the intensification of the optical quality that digitalization brings with it more than compensates [...], all the more so because the digitalized sensation is in constant optical motion, generating an intimacy and vividness all its own' (Kuspit, 2011).

Pixels, in the final analysis, may never be paint but, given the right conditions and a willing beholder predisposed to run with the artist's imagination, they may yet accomplish a grand illusion. Although speaking of representational paintings, Gombrich asserts:

the image, it might be said, has no firm anchorage left on the canvas – it is only 'conjured up' in our minds. The willing beholder responds to the artist's suggestion because he enjoys the transformation that occurs in front of his eyes (Gombrich, 2002, p.169).

I believe that Gombrich's observation applies equally to all manner of representations. In the light of this, Clauss's claim to make a kind of painting, using the representational power of the pixel, in the precise and expressive way that he does, is fully justified.

Chapter 5: CYBERNETIC ART, TELEMATICS AND THE CONSTRUCTION OF MEANING

In his prescient essay *Behaviourist Art and the Cybernetic Vision*, Roy Ascott (British artist, academic and currently President of the Planetary Collegium, University of Plymouth) frameworks his visionary ideas about ‘the emergence of a cybernetic vision in art, characterised by an evolving behavioural tendency in the artistic attitudes and forms of this century’ (Ascott, 2003). The term ‘cybernetic’, first used and defined by Norbert Wiener (Wiener, 1948), is conceived as a description of ‘attempts to regulate the flow of information in feedback loops in order to predict, control, and automate the behaviour of mechanical and biological systems’ (Shanken, 2003, p.18). By making the connection between cybernetics, on the one hand, and art²⁹ on the other, Ascott identifies quite clearly the route that many artists have adopted in their production of art works, especially since the inception of the World Wide Web. I believe that the works I have studied (*Faith*, *Inanimate Alice* and *The Shower*) reflect this movement to a greater or lesser extent, and I shall use Ascott’s model to examine their ‘behaviourist’ tendency and the effect this has upon their construction. I look too at other types of interactive artworks that exhibit the same tendency in an attempt to ascertain the effect this has upon the construction of meaning. I begin by explaining Ascott’s usage of the term ‘behaviourist’, and then continue by outlining some of Ascott’s ideas and proposals regarding the development of telematic and cybernetic art forms.

5.1. Ascott’s Behaviourist Vision

Ascott’s use of the terminology ‘behaviourist’ and ‘behaviourism’ is confusing to those familiar with similar terminology as used in the field of psychology. Before attempting to explain what Ascott means by these terms as he applies them to art, it is useful to recognise that ‘Behaviourism’ is a term more

²⁹ Ascott’s definition of ‘art’ is inclusive and is not restricted to the visual; although his commentary refers usually to painting and sculpture he is conscious of the development of the ‘behaviourist tendency’ in all other singular or hybrid art forms. He devotes considerable wordage to describing in some detail how experimental work in the fields of music and literature evidence the move towards a ‘cybernetic vision’ of art (Ascott, 2003, p.122-127).



Figure 36 Roy Ascott *Change Painting* (1959).

usually associated with a branch of psychology that insists that various human (and animal) behaviours are learned through conditioning, that is, the process of interaction with environmental stimuli. There are two main types of conditioning:

- Classical
- Operant

It was Ivan Pavlov (2011) who developed the theory of classical conditioning as a result of his experimental work with dogs as part of his study of digestive processes. Following his observation that dogs salivate not just in response to food being presented to them (an automatic reflex), but in *anticipation* of the appearance of food, provoked by the presence of white coated lab assistants, Pavlov devised a series of experiments to prove that salivating in expectation of food is a *conditioned* reflex. By introducing neutral or unusual stimuli prior to food being presented, a metronome, for example, he was able to show that, over a period, the dogs would begin to associate the stimuli with the appearance of food. They salivated in anticipation, even when the food failed to appear.

In contrast, operant conditioning, theorized by B. F. Skinner uses a system of rewards and punishments to control or manage behaviour. An association is made in the mind of the subject, between the behaviour exhibited and the consequence that occurs as a result (Skinner, 2011). The psychological usage of the term describes behaviour as the way in which people and organisms respond to a specific set of conditions (which remain constant in order to both predict and replicate conditioned behaviour). Such behaviours can, according to behaviourist theories, be studied by concentrating on observing, measuring and modifying behaviour without, significantly, having to take into account the function that the mind of the subject has in the determination of behaviour. Shanken likens this exclusion of the mind to the operation of a 'black box', a term used often in engineering to describe 'a device, object, or system whose inner workings are unknown; only the input, transfer, and output are known characteristics' (Wikipedia contributors, 2012). Shanken

observes that, 'Ascott conceived of behaviourist art as functioning, in part, like a cybernetic black box'³⁰, (Shanken, 2003, p.46) in that the work of art could be subject to input and output processes. By this Ascott intends that the input processes are provided by the artist who initiates the artwork (or, as is often the case with Ascott's work, he installs it – thus providing the spectator with an object with which he is invited to interact); the output processes are the observable responses and reactions that the involved spectator has. Shanken recognizes that the purpose of the black box analogy is to articulate Ascott's belief that 'the transformative potential of the artwork would result in the alteration of the viewer's information and behaviour'. However, Shanken goes on to describe how Ascott's concept of 'behaviourism' differs from conventional behaviourist theory since, 'the state of the black box of cybernetics or behavioural psychology was meant to remain unchanged in order to enable predictive control and replicability'. In contrast to this, 'Ascott's cybernetic, behavioural artworks were themselves meant to be transformed (within a certain range of possibilities) by the interaction of the viewer with them' (Shanken, 2003, p.47). Hence the 'black box' is, in Ascott's vision, not a neutral or static instrument that is ignored since it either represents the mind (behaviorally) or the invisible or mysterious workings of a machine (cybernetics). In fact, the work is seen as an active ingredient that both changes and is changed by the behaviour of its interactee.

Though not quite analogous, the concept of a mysterious black box of (artistic) tricks which effects change does have a certain appeal and Ascott uses it, as Shanken notes, to illustrate an alternative understanding and conception of behaviourism. Skinner 'believed that behaviour could be understood on the basis of environmental conditioning alone', as the result of sanctions and rewards to condition and replicate behaviour. He also proposed that (psychological) behaviourism 'offered an experimental mechanism for measuring the effect of conditioning on behavioral modifications that a cybernetician might describe in terms of feedback loops' (Shanken, 2003, p.45). in contrast, Ascott proposes a different view. As Shanken observes,

³⁰ 'the way scientific and technical work is made invisible by its own success. When a machine runs efficiently, when a matter of fact is settled, one need focus only on its inputs and outputs and not on its internal complexity. Thus, paradoxically, the more science and technology succeed, the more opaque and obscure they become.' (Latour,1999).

'Ascott [...] ascribed great significance to the ability of the internal processes of his artworks and those who participated in them to transform the behaviour of the system as a whole' (Shanken, 2003, p.47).

Hence, in contrast to the formal, psychological study of behaviour which is preoccupied with observation, or the use of conditioning to modify behaviour in measurable or predictable ways, Ascott uses the term 'behaviourist' to express (his desire for) unpredictable and individual responses to artistic stimuli. Ascott refines and qualifies various aspects of his own particular brand of behaviourism, and the extent to which these differences affect the artist, the work or the recipient. Very briefly these are:

- A behavioural analogue: where a work represents a form of behaviour such as walking, running: *Duchamp's Nude Descending a Staircase No.2*, for example.
- A behavioural trigger: a work is intended to spark off an event or series of responses: Bridget Riley's optical works are cited among others.
- A behavioural environment: a work that 'functions to increase or alter one's awareness of the environment'. Ascott cites work by Rothko, Newman, Pevsner and Gabo among others.
- A behavioural structure: 'structures that behave' – works that respond to internal or external promptings. Ascott cites 'kinetic' art in this grouping.
- A behavioural ritual: works where action/chance/choice are important. Ascott cites Pollock's ritualised approach to painting among others. It is the 'act of making' which is important.
- A behavioural synthesis: Ascott suggests a convergence of differing art form: painting/ dance/ music/ theatre to initiate a 'more inclusive experience'.

From these descriptions, all précised from his essay on *Behaviourist Art* (Ascott, 2003, p.108-157), it is possible to detect that Ascott's usage of the terms 'behaviourist' and 'behaviourism' is idiosyncratic in the extreme. Although it is not necessary to know in detail all that he has said and written about his behaviourist vision, it is useful to be conscious of at least some of his particular meaning(s) when reading my following analysis. However, this brief and simplified account of behaviourism is intended mainly to contextualize Ascott's very particular usage of borrowed terminology as he applies it to the creation of artwork and the responses this elicits in others.

5.1.1. Process and Change: Cybernetic Art



Figure 37 *Plastic Transactions* (1971).

Ascott's own work traces the trajectory of the development of cybernetics and its influence on the production and experience of art; one of his early works, *Change Painting* (1959), consisted of moveable painted panels which could be rearranged by the viewer (see Figure 36). By the time of his solo exhibition in London, in 1963:

Ascott had assimilated cybernetics as the primary theoretical foundation for merging Bergsonian ideas with constructivism and audience interaction, while at the same time employing the use of diagrams and text as a formal element (Shanken, 2003, p.29).

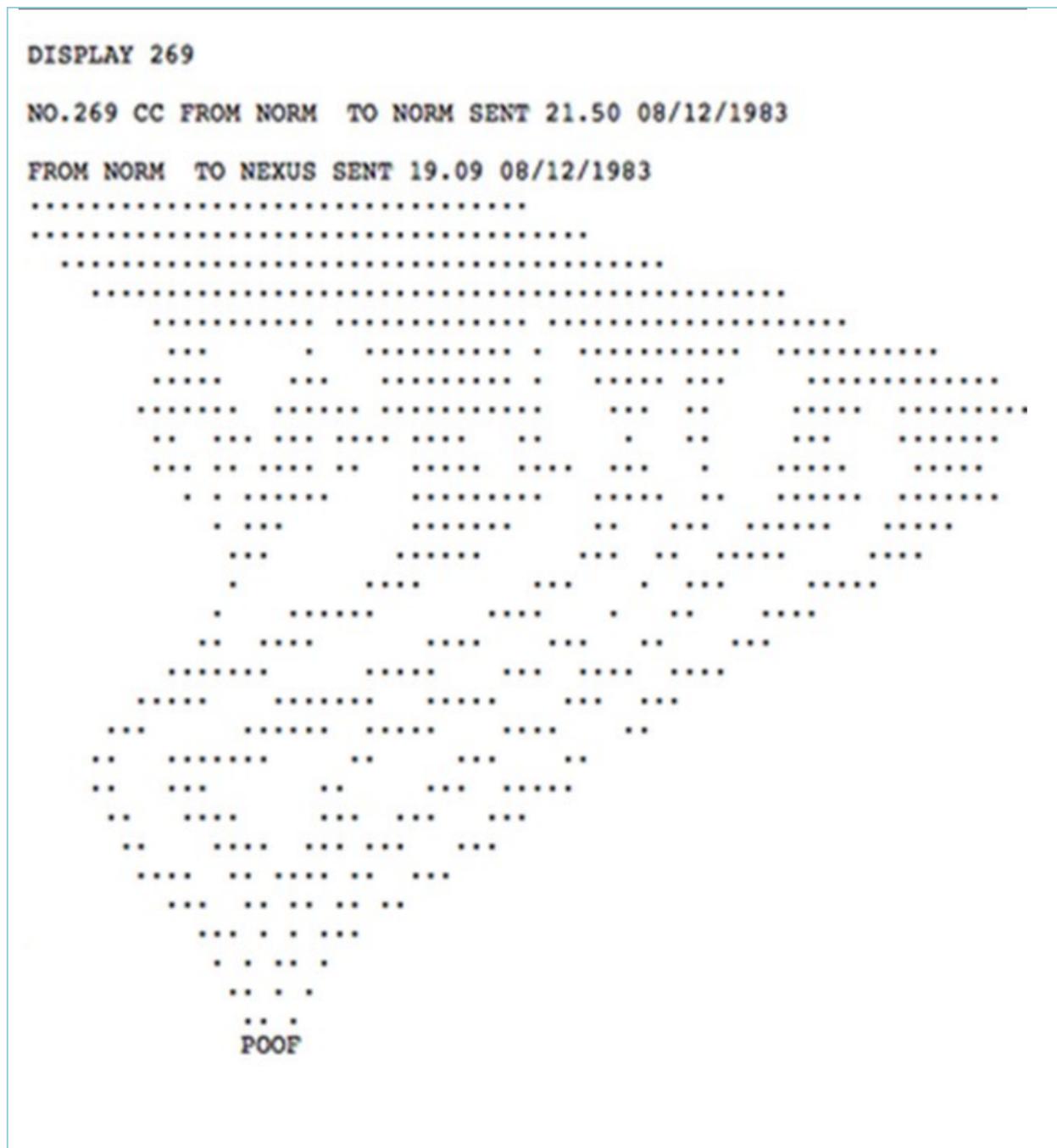


Figure 38 One image from *La Plissure du Texte* (1983).

Ascott's take on the Bergsonian concept of change and mutability across time³¹ was extended in *Plastic Transactions* (1971), a work that made use of found objects arranged on a table top that invited interactive play by two participants (Figure 37). Both these works seem to offer a practical realisation of Bergson's ideas about the ever changing state of reality; his ideas refute the notion of cause and effect and determined outcomes suggesting instead that every moment, every event is always different and that the exercise of free will is an integral aspect of the creative act. Ascott has presented, in his artworks, situations which allow for the possibility of this type of indeterminacy; his participants can interact with the pieces he provides for them thus developing the 'creative possibilities' of which Bergson speaks:

If reality is always changing, then this variability contradicts the theory that every event is causally determined, and that every event must necessarily happen the way it does happen. If reality is not a succession of static moments or immobile states of being, then there is an indeterminateness and uncertainty in events which produces a freedom of creative possibility (Bergson, 1946).

In both these works, which act as 'behavioural triggers', the participants are able to determine their own activity intuitively in order to develop the piece, regulated only by the original parameters set by the artist. While Ascott must have considered the likely range of options available to participants, he has tried to ensure that the flexibility that such works incorporate is significantly greater than traditional art forms where the viewer essentially has a contemplative role. As any participant is invited to interact *physically* with the work by rearranging the pieces, Ascott's artwork has the potential to offer a more open ended experience than the authoritative work that traditional artists allowed. It is in this sense that Bergson's ideas about mutability and change are exercised. In *Plastic Transactions*, the pieces are offered to the participants, and the table and chairs suggest some boundaries inside which the participants can work/play, but there is no prescribed activity or instruction that the participants must follow. Ascott's methodology ensures that there is a partial transference of responsibility from himself as originator of the work to the viewer/spectator, whose interactive presence becomes an integral part of the creative process. This is particularly evident in Ascott's

³¹It is impossible for me to do justice to Bergson's complex ideas about ever changing states of realities here; nevertheless, his ideas were highly influential and many avant-garde artists, particularly the Cubists and Futurists subscribed to his ideas. His concepts of *Élan vital* and *Duration* are particularly relevant to Ascott's work. (Lawlor and Moulard, 2011)

La Plissure du Texte (1983) (Figure 38) which he describes as a 'planetary fairy tale' (Shanken, 2001, p.61) which, though it alludes to the Barthesian work *The Pleasure of the Text*, is actually an experiment which had the concept of 'distributed authorship' at its heart. Ascott and his collaborators used fax machines, telephone links and other electronic devices to communicate internationally to construct their artwork, their activities prefiguring Internet communication, especially the practice of blogging and tweeting. Such involvement produces a 'feedback loop' which alters the behaviour of the participant as well as the work itself (Ascott, 2003, p.110). Ascott describes the artefact as a 'self-organising system, an organism' which, 'derives its initial programme or code from the artist's creativity and then evolves its specific artistic identity and function in responses to the environments it encounters' (Ascott, 2003, p.128). He readily acknowledges that all works of art, including traditional painting and sculpture, induce feedback loops between the artist, artefact and spectator. However, it is the fact that, 'actively' interactive works, like the ones he produces, are designed to change in response to that participation, which invites the descriptor 'self-organising system' to indicate the mutability of the work. He concludes that:

although in painting and sculpture the channel of communication remains largely visual, other modalities – tactile, postural, aural – are increasingly employed, so that a more inclusive term than 'visual' must be employed and the one I propose is 'behavioural'. This behavioural tendency dominates art now in all its aspects (Ascott, 2003, p.110).

He goes on to suggest that the artist is also dependent on feedback which, in turn, affects his own decisions and actions, hence, 'a feedback loop is established, so that the evolution of the artwork/experience is governed by the intimate involvement of the spectator' (Ascott, 2003, p.110). The consequence of this series of actions and reactions is that, 'Modern art, with its fundamental behavioural quality, is thus the art of the organisation of effects' (Ascott, 2003, p.128). It is the capacity of the work to stimulate particular behaviours in its participants, of whichever kind (artist or spectator) by the use of feedback loops that characterise it as cybernetic.

Ascott's work, in general, assimilates a number of differing ideas and concepts. As Shanken, in his comprehensive and introductory essay to his collection of Ascott's writings about art and cybernetics, observes:

Ascott's statement in the *Diagram and Boxes and Analogue Structures* exhibition catalogue exemplifies how cybernetics had become part of a complex amalgam of aesthetic, philosophical and scientific ideas that lead to his creation of interactive, changeable works of art (Shanken, 2003, p.30).

The mobile and mutable characteristics of these works 'reflected a concern that he shared with diverse strains of twentieth-century art, which sought to vitalise visual form through motion, enactment, and performative elements' (Shanken, 2003, p.31). The possibility of viewer intervention ensures that the work is always in a constant state of flux and is indicative of the influence of the works of Cezanne, Duchamp and other avant-garde artists have upon Ascott, as well as his adoption of the Bergsonian philosophical viewpoint.

Given his predisposition towards working in the field of indeterminacy and change, it is unsurprising that Ascott would be one of the first to see the advantages and possibilities that the creation of the World Wide Web and the Internet, allied to the easy availability of sophisticated software, might have on the production and distribution of artworks. In a thought provoking essay, *Is there Love in the Telematic Embrace?*, written in 1990, Ascott refers to what we now know as ICT (Information and Communications Technology) as 'Telematics', and defines it as 'computer-mediated communications networking [...] between geographically dispersed individuals and institutions [...] and between the human mind and artificial systems of intelligence and perception' (Ascott, 2003, p.232). Following this definition, Ascott recognises that artists can use the 'technological form' to develop a 'synthesis of the arts' to 'bring together imaging, sound and text systems into interactive environments that exploit state of the art hypermedia [...] that engage the full sensorium, albeit by digital means' (Ascott, 2003, p.233). He recognises the consequences of this type of production in terms of the need to regard such works as *Gesamtdatenwerk*. Firstly, all the various aspects function together, each mode of communication affecting the next and secondly, in the creation and transference of meaning or content. He questions too, how content (sets of meanings) can be 'contained within telematic art when every aspect of networking in data space is in a state of transformation and becoming' (Ascott, 2003, p.235). He suggests later that, 'it may not be an exaggeration to say that the 'content' of telematic art will depend in large measure on the nature of the interface' (Ascott, 2003, p.239) as it responds to the physical involvement of the viewer. This essay is characterised by Ascott's utopian view of the possibilities of telecommunicated exchange. He claims, 'the telematic process, like the technology that embodies it, is the

product of a profound human desire for transcendence', and believes that the computer, united with the 'telematic embrace', enables us to 'glimpse the unseeable, to grasp the ineffable chaos of becoming, the secret order of disorder' (Ascott, 2003, p.245).

However one may view Ascott's zealous and somewhat mystical promotion of the utopian possibilities of 'telematic' exchange, nevertheless his own art work both embodies and signifies a trend. He encapsulates, neatly, some of the ideas about interactivity (that it democratises the work, or that control is dispersed) that now have currency and which are embedded invisibly in our techno-culture. Interactivity is perceived as a natural characteristic of working online, or with computers generally, to such an extent that the degree of interactive potential has become a marker for judging the value of a piece. As Ascott notes, 'the modern means of communication, of feedback and viable interplay – these are the content of art. The message is that the extension of creative behaviour into everyday experience is possible' (Ascot, 2003, p.112). Such thinking is redolent of the McLuhan aphorism 'the medium is the message' (McLuhan, 1964) which proposes that the proper study of media should be the effects of the media as a social system rather than simply the carrier of information. However, Ascott recognizes the potential dangers of dispensing with the study of the 'content' (meaning) of art generated by cybernetic processes:

he (the artist) is searching for new ways of handling ideas, for more flexible and adaptive structures to contain them; [...] His concern is to affirm that dialogue is possible - that is the content and the message of art now; and that is why, seen from the deterministic point of view, art may seem to be devoid of content and the artist has nothing to say (Ascott, 2003, p.112).

Despite the dangers, Ascott affirms his belief that it is the potential for 'dialogue', that is, interactivity, that constitutes a new form of art:

This cybernetic process of retroaction generates a constant stream of new and unfamiliar relationships, associative links, and concepts. Each artwork becomes a sort of behavioural Tarot pack, presenting co-ordinates that can be reshuffled by the spectator, always to produce meaning (Ascott, 2003, p.112).

I can readily accept that the process of cybernetic action and 'retroaction' can produce a stream of, 'new and unfamiliar relationships' as would be suggested by the use of a Tarot pack. However, Ascott seems to regard 'meaning' and 'content' as interchangeable terms; I contest his ready acceptance of this and will

return to this matter shortly. I question too, to what extent Ascott's art and, by association, the works I have examined in some detail, actually indicate a shift away from the centralising force of the author. I will use the works I have examined and refer to a number of others to test the extent that process and change produce content and/or meaning.

5.1.2. Ascott's behaviourist tendency and retention of authorial control

Ascott identifies the trend of artists in the last century and a half to shift towards an interest in 'behavioural situations' in a number of ways; firstly, he traces the attempts by artists to capture certain behaviours like walking or running, and he references both Duchamp's *Nude Descending a Staircase* and Balla's painting *Dog on a Leash* as attempts at the expression of the *process* of motion. The movement of the dog is captured, as he describes it, by a 'quasi-stroboscopic technique' (Ascott, 2003, p.116). He suggests that these works, and others like it are 'analogues of dynamism' (Ascott, 2003, p.116). I have discussed these works elsewhere as part of my investigation into the development of digital codes, and I accept Ascott's usage of the term 'analogue' in recognition of the representational nature of such imagery, however residual it may be. Next, he proposes that artists began to regard their own involvement in the production of artworks as being behaviourist because they were more and more concerned and aware of their own methodologies for making art. He cites Paul Klee who 'takes a line for a walk' (Ascott, 2003, p.117), which suggests that the artwork itself has some kind of agency and independence. Eventually, and after an extremely detailed account of numerous twentieth century art movements, Ascott delivers a thoughtful consideration of how each art movement in its turn has shifted the artist's concern from representation to that of action and reaction³² by producing works that invite the direct involvement of the spectator. He recognises, too, that such action and reaction necessarily implies process and change. As a consequence, the boundaries between different disciplines, for example, painting, sculpture, music, theatre, become less distinct, as the artist

³² Ascott describes what became known as 'Process Art' in the Sixties to denote works where transience and change were key features rather than pictorial or narrative content. Art like this relies on serendipitous collisions of different objects and events, and it is the act of 'doing' that is important rather than the production of a definable end product. (Guggenheim Museum, 2012)

searches for 'more flexible structures and more inclusive forms' (Ascott, 2003, p.122) in order to realise the behaviourist vision of art.

I return now to the consideration of the online works I have investigated in the light of Ascott's vision about the behaviourist tendency in art, experienced through the 'telematic' environment. It is easy to imagine that, by the self-evident fact of their existence in a digital environment and all that we have come to expect in terms of interactivity, that *Faith*, *Inanimate Alice* and *The Shower*, all exhibit behaviourist characteristics, either in the ways in which they determine user behaviour or develop a particular artistic approach (see Ascott's definitions above). If we can imagine a line drawn from left to right that represents degrees of interactivity with the least being at one end and the most at the other, it is possible to rank these three works. All three benefit from the electronic environment, and the extensive use of various software to create visually appealing and mobile works (all of which use music and sound effects to great advantage), there are qualitative differences between them in terms of how their structure affects user interaction. At the left end of our line, representing the least interaction (therefore exhibiting the least degree of 'behaviourist activity') we find *Faith* which, despite Kendall's description of it as being a 'kinetic poem', is actually much more conventional in its presentation than one might expect given its digital environment. *Faith* is made up of a series of words and phrases which are conventionally arranged, with the verse form highly visually evident. The phrases express distinct ideas, or refer to other ideas in circulation or to specific objects or themes; these are arranged so as to communicate his ideas and concepts effectively, by making clear references to other situations, memories and cultural pointers. Kendall enhances his work by using visual and audible triggers to emphasise particular points or to spark off trains of associations in the recipient's mind. The poem ends when the stanza disintegrates in an animated visual metaphor which equates to the dissolution and uncertainty expressed in the work itself. His poem has a strong polemical content which he fully intends to communicate meaningfully to his reader. However, this work is so very prescriptive in terms of its presentation as to leave little room for a reader to do anything else except to accept the intentionality of the piece itself. In this respect, the work benefits only marginally from the fact of its digital environment, except, perhaps, in terms of its distribution. The potential for user involvement is kept to a minimum, thus

emphasising Kendall's authorial control; the (limited) kinetic nature of the poem allows only the activation of effects rather than user participation, which is reduced to clicking the mouse only to, metaphorically, 'turn the page'. It is hard to see how this type of restricted work can conform to Ascott's call for an art that embraces feedback or which is developed through user intervention. More likely Kendall could be described by Ascott's disdainful observation that, 'there are still in this transitional period many artists who contrive to force the new sensibility into old moulds' (Ascott, 2003, p.111).

Inanimate Alice seems a much more likely prospect to conform to Ascott's vision of art that allows user intervention and feedback. There is a seamless unity and ease between the different modes of expression that is missing from Kendall's work. There are many opportunities for user intervention and, in one or two places, the user can determine some of the features of the work. At one point, for example, the user can choose the colour of the 'Igrat' phone, which provides a momentary sense of power and satisfaction, but user intervention never really affects the piece's outcome overall, in the way that Ascott envisages. Whatever choices the participant makes as he/she works through the piece, the outcome is always the same; Alice is always rescued and her friends redeemed. The behaviourist tendency in this piece is mainly restricted to the conditioning of the participant's immediate responses within a limited field of operations. This is not an open-ended project, since the demands of the narrative, much as the demands of Kendall's polemic, need to be met in order to conclude the piece.

Nicolas Clauss's *The Shower* offers a slightly different perspective. Here, the work is a 'self-regulating organism'; one where the user seems incidental to its performance. Like much of Clauss's work, the programming of the piece allows it to function with only a minimum of active user intervention, calling into question the role of the viewer in the digital environment. As user participation in *The Shower* is so very perfunctory then I conclude that, despite Clauss's claims to the contrary, his work is not a collaborative project at all; the user is essentially in the same subject position as any visitor to an art gallery. Any interaction between the artist, artwork, and spectator is controlled by the artist and the parameters he sets in the creation of the artwork. As Ascott notes, all artworks have boundaries set by the artist/writer but it is

the degree of control exercised by the creative mind that determines the extent of user participation and behaviour. Of his own work, Ascott says:

behaviour is an important reference in my consideration of space, time and form. I make structures in which the relationship of the parts are not fixed and may be changed by the intervention of the spectator. [...] To project my ideas, I set limits within which he may behave. In response to a construction [...] the participant becomes responsible for the extension of the artwork's meaning (Ascott, 2003. p.97).

What is significant here is to acknowledge that Ascott's own works are, in truth, extremely limited in terms of their interactivity because the boundaries he sets are tight. He is not offering the participant a free for all, and his choice of materials, place of exhibition and duration of activity all affect his perceived ideas of how the participant might extend the piece, physically as well in terms of its meaning. I believe that Ascott retains this artistic control over the work in order to preserve the work's sense of cohesion; its 'thing-in-itself-ness' that demarcates it from other objects that may be adjacent to it, either deliberately (other works perhaps), incidentally (the floor for example) or transiently (this might include such disparate objects as passers-by/sunbeams/perfume/noise). In essence, works in the digital world accede to a similar set of parameters, and artists, writers and creatives work within their own set limitations. Even in digital works that are advantaged, by the inherent potential of the computer, to facilitate user participation, there is a noticeable reticence to surrender, to the participant, absolute control of the piece. In fact, one might argue that the very nature of the digital environment actually increases the need for authorial control even though there is a semblance of interactive participation offered to the user; the complexity of constructing and distributing digital works implies mastery and rigid control over the means of production. In order to protect the integrity of the work, and to avoid the dissipation that full interaction and intervention imply, the artist/writer/creator must skilfully anticipate as many possible reactions that any interectee might make. In works like *The Shower*, even the built-in indeterminacy is predicated on the notion of exploring all the possible options open to the user though Clauss ultimately denies the user full access to those very possibilities, as he enables them only by default or unwitting intervention. Regardless of the apparently limitless effect of his programming there are, indeed, limits. The nominal participation of the viewer seems incidental to Clauss's real intent of making an intensely personal art, and the quasi-interactivity evident in

works like *The Shower* and *Blue Han* is a sop, perhaps, to the fact that his works exist in a medium that suggests, rather than demands, the co-operative involvement of dispersed individuals. Hence, the artist's own behaviour, as a creative process, is modified in the production of the work in progress, and in response to the concept he has of the piece. I have already noted elsewhere that Clauss displays consummate skill in formulating works like *The Shower*. It is possible to regard his process of constructing the programme itself as an example of behaviour driven art, as in Ascott's concept of a 'behavioural ritual', while *The Shower* is merely the indeterminate outcome that results.

5.2. The Limits of Dispersed Authorship

It seems, then, that a tipping point is almost reached in works like *Inanimate Alice* and *The Shower*. Although operating differently, each of these authored texts bails out at the point at which it might have been possible to surrender control to the participating viewer. It is, in fact, extremely difficult to find works that are coherent pieces and yet are the result of unfettered, collaborative effort by dispersed individuals. Although there is a plenitude of interactive fiction online, much of it limits its (single) user participation and behaviour to choosing between one 'forking path' (Borges, 1941) and another, usually at the end of a section or chapter. Examples of this type of text-based work include the *Happily Ever After* (<http://happily-ever-afters.net/>) series which have a strong Christian ethos that runs throughout their Mills and Boon styled literature. Recent texts present many 'forking paths', where lots of keywords are hyperlinked to other parts of the text to enable the reader to progress through the nonlinear text in a variety of directions. *Blue Lacuna* (2011) (Figure 39) is a recent example of this kind of text though, essentially, it is hardly more sophisticated than the early examples of *Patchwork Girl* (1995) or *Victory Garden* (1995)³³. A text like *Inanimate Alice* falls

³³ In fact, texts like these can be tedious in the extreme to use or read through. The necessity to click on a hyperlink to move to another part of the story actually impedes the immersive qualities that a text needs to enable a reader to suspend their disbelief. Making sense out of the little snippets of the story as one moves from hyperlink to hyperlink is disruptive and more akin to jigsaw puzzle solving than reading, especially as the hyperlink itself stands out visually from the rest of the text that surrounds it, adding to the sense of disturbance. The recursive tendency of jumping from one link to another only to find oneself back at the starting point can be annoying and worse; all these characteristics of using an online text inhibit pleasurable reading while the constant interruption and change this disruption brings dissolves not only coherence but meaning since one's attention is given over to the process of navigation rather than in making sense of the work.

> **canvas**
The cream-white canvas is pulled taut as a drum, achingly empty. There's nothing magical about its fibers, of course, no strange alchemical mixture in your paints, no glamor in your simple **brushes**. You wayfare because of you: the act of painting simply helps your mind, your being to define the world you'll become part of. Each of the billion decisions you make as you paint, of texture, tone, pressure, position, size, helps winnow the spiraling infinities down to the single one that becomes your new reality.

The painting itself, the one you leave behind, is merely a painting. But always a masterwork.

As your fingers near canvas, the **Call** pulls strongly on your mind. The image you must paint burbles in your mind, almost clear.

> **answer call**
You hesitate long moments, fear and excitement trembling your fingertips as they hover just above your brushes. The **Call** whispers in your mind, teasing, wondering if you are ready to answer it.

Tutorial: Signs of hesitation often indicate you are about to do something that will change or advance the story. Make sure you really want to proceed, then repeat your command.

> **answer call**
Awkwardly, you set the oil lamp on a shelf and struggle to build up the fire, finally producing a blaze that floods the room with heat and light. That done, you retrieve your threadbare traveling clothes from the cellar and pull them on. You fumble for palette and brushes, knocking your shins on the easel. The smell of Rume still lingers in the air, clings invisibly to your body, as if your earlier choice of love now thwarts your fingers and intentions with delicate jealousy. A hesitancy seems to cloud your mind; though the Call seems inevitable, some sage part of you knows it is not, that you could abandon it and go back to bed and live out a happy life here in the mountains until unborn children bury you both behind the garden. You pause for a long moment before the blank canvas, brush in hand, a droplet of thick lemon-yellow quivering at the tips of bristles. Then, with a sigh, you press the brush against the cloth.

There is none of the deliberate experimentation, the careful decisions that come with your usual work: this time, the scene already exists in your mind's eye, formed by the Call. All you have to do is make it real.

There is no sense of time, but hours must pass.

By the time you force yourself to step back for a moment, to pull away from the **painting**, the intensity of the world you are already half a part of, you are almost finished. You can't leave Rume like this; there must be explanations, and pain, and goodbyes. But as you turn to head up the stairs you see **Rume** already stands on the landing above, smoking and watching you silently.

And you know at a glance he understands. He cannot come with you.

>

Figure 39 *Blue Lacuna*: an example of a hyperlinked text.

into this category though its complex use of multimedia and more overt gaming features elevates it above the norm. An attempt at a more dispersed and democratic kind of fictional writing is illustrated by *Inanimate Alice* author Kate Pullinger's online piece *Flight Paths*, which she describes as an 'interactive novel'. It is actually a collection of blogs, video clips, anecdotes and memories sent in by numerous online participants on a common topic. However, the consequence of this dispersal is that there is sometimes only a loose connection between the individual items, and the narrative thread, such as it is, is rambling and incoherent. Alongside of this, Pullinger provides a pictorial narrative (much like *Inanimate Alice*) which functions as a stand-alone feature where interaction is limited to 'page turning' by mouse action. This somehow intends to unite the disparate contributions sent in by dispersed individuals. I think that, if one accepts the general conception of the novel (even allowing for the experimental works of Joyce or Calvino and many others) as

being a fictional prose that has a plot that unfolds across time through the actions and speech of the characters within it, then it is a dubious claim to suggest *Flights Paths* can be recognised as such.

In contrast to interactive literature, finding online works that function principally as discrete paintings/artworks or musical compositions which are produced through a collaborative effort is difficult. The more usual appearance of collaborative music, for example, is as an important adjunct within video games. Composers provide music tracks that are intended to heighten the online experience of game playing, and these tracks are controlled and manipulated in the game by sophisticated software. For example, Audiokinetic Inc. has developed *Wwise* software, to ensure that music and sound effects are both adaptive and responsive to an on-going, online game³⁴. This extract from their website describes its function:

Wwise® features both an optimized sound engine for managing audio processing and a nonlinear audio authoring tool for creating audio asset structures, integrating interactive music elements, defining audio propagation, managing sound integration, and creating SoundBanks³⁵. The tight integration of the audio authoring application and the sound engine allows you to mix, profile, and modify sounds in real-time within the game itself (Audiokinetic, 2012).

The submissions of individual composers (actually known as 'sound designers', a term which indicates a technological bias rather than a musical one perhaps) are hierarchically organised by a third party who uses the software to align the music or sound effects to various aspects of the game. The collaborative effort is limited to the provision of tracks or sound effects; composers/designers are not generally involved in the decision making about their utilization and the player is only conscious of the music as an effect of his/her immersion in the game. He/she has no direct control over the audio dimension except in the sense that when, for example, a gun is fired there is an appropriate sound to accompany the action initiated. At other points, the music reflects the excitement or tension level of the game. Although highly adaptive and responsive, the music track is reactive rather than truly interactive at the point of delivery and experience by the player.

³⁴ *Wwise* is used to 'manage' the music and effects in numerous popular games, often derived from cinema, such as *Tron Evolution*, *Transformer: War for Cybertron*, *Warhammer 40,000: Space Marine*, *Star Wars: The Force Unleashed*. For a full list see <http://www.audiokinetic.com/>.

³⁵ *Soundbanks* are collections of synthesised sound effects, music tracks, drum riffs etc. produced by 'sound designers' rather than conventional composers. See <http://xenossoundworks.com/2.html>.

Although some individual composers with academic training in music seek to engage their participants more directly in the creation of collaborative work, their role is not significantly different from Ascott's in the production of their musical works. They set tight parameters, outside which the participant must not stray. Hence, they reflect the same behaviourist tendency that Ascott describes. The behaviour of the participant is determined by utilising the notion of the 'forking path' as a means to set up new relationships between different aspects of the work in progress. Composer and academician Jason Freeman's *Graph Theory* (Figure 40) illustrates this approach particularly well. As he explains:

Graph Theory seeks to connect composition, listening, and concert performance by coupling an acoustic work for solo violin to an interactive web site. On the web site, users navigate among sixty-one short, looping musical fragments to create their own unique path through the composition.

The navigation choices which users make affect future concert performances of the work. Before each performance, the soloist prints out a new copy of the score from the web site. That score presents her with a fixed path through the piece; the order of the fragments is influenced by the decisions that recent web site visitors have made (Freeman, 2011).

To start 'composing' the user clicks on various nodes on a diagram of a network to choose and then manipulates the volume and timbre of a sound snippet. Rhythm and tempo across the piece are altered by moving between the nodes slowly or quickly. Included are scores, or 'musical fragments', as Freeman names them, in conventional notation for each sound bite. A 'finished' complete score that was used for a live on stage performance is given on his website (Freeman, 2011). It is the result of a thousand choices made by fifty participants over a specific period of time in 2010 which was presented to a violinist just before the performance. At other junctures, alternative scores are produced for new performance and downloaded by recent participants and contributors. Hence each outcome is different; the title *Graph Theory* is, however, always used to identify the many versions of this single yet multiplicitous work indicating both the point of origin and the methodology of the piece(s). In many ways, this type of construction is analogous to Pousseur's *Scambi* (1957) which Eco defines as an open work and to which I have referred earlier.

A recent development which utilises a social network rather than a network created and prescribed by an artist or composer facilitates the creation and distribution of a particular kind of music. Sam Harman is a recent graduate of Bournemouth University where he studied Audio and Music Technology. Describing

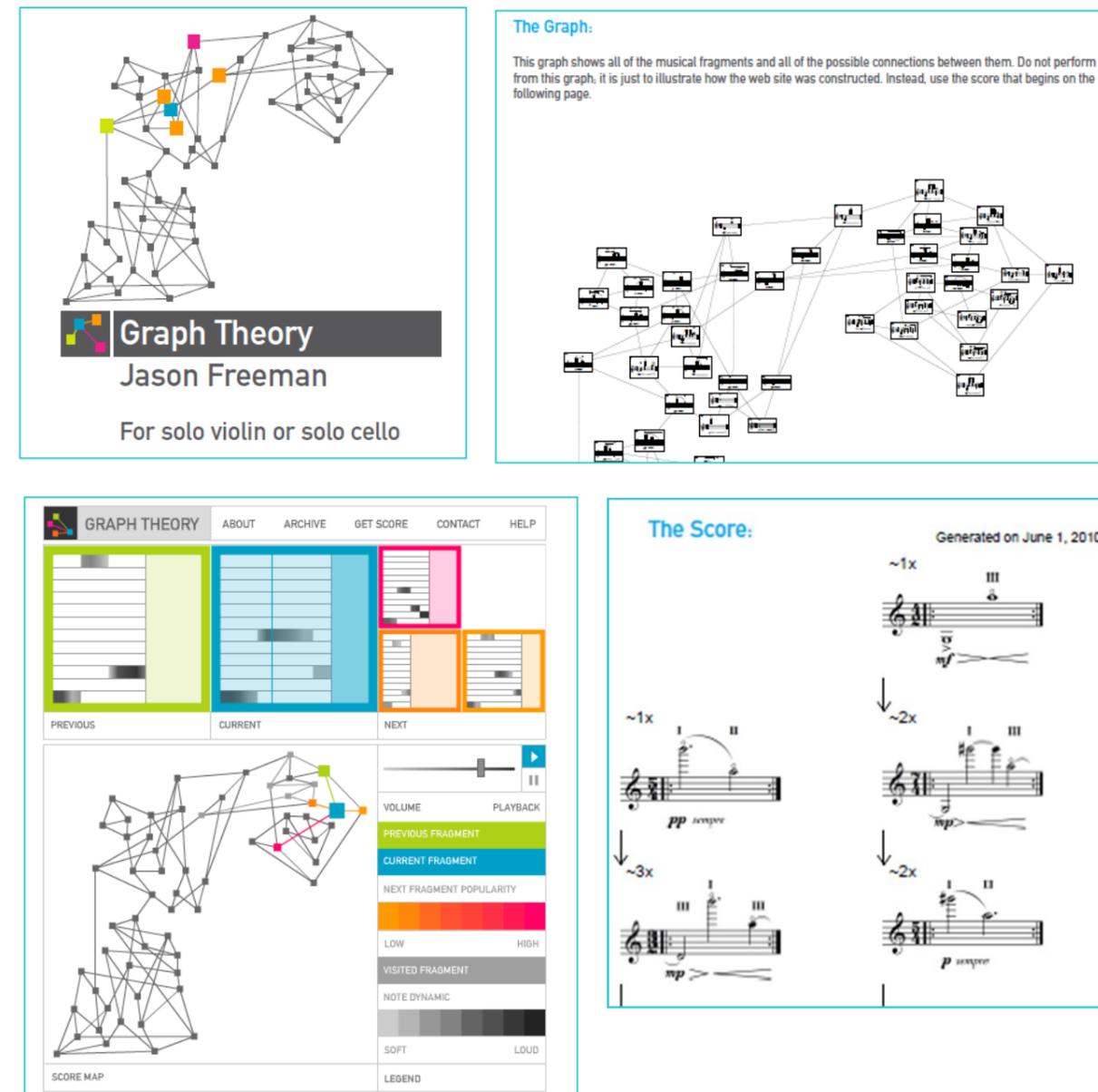


Figure 40 Freeman's *Graph Theory* (2010).

himself as an 'Audio Technologist & Mobile Applications Developer', Harman has developed *Twinthesis* (Harman, 2011) which uses the micro blogging Twitter service to allow individuals to create their own music. As he describes it, '*Twinthesis* is a MaxMSP patch I designed to explore the 'sound' of twitter, in an attempt to sonify the human randomness being generated on the service' (Harman, 2011). He identifies among the aims of the *Twinthesis* project the potential of his work to generate random sound from the 140 characters of code that make up a 'tweet'. Harman allows the performer, presumably by this he means sender, the opportunity to interact with the sound-synthesizer to create 'unique music'. Essentially, once a message is created the tweet is downloaded into the *Twinthesis* synthesizer which converts the characters into a numerical value which ultimately determines the kind of sound to be produced. Performance can be modulated by the operator³⁶ and the constant exchange of messages ensures that the flow of music never stops, generated as it is by a kind of collaborative effort. It seems that Harman's work is an extension to the stand-alone synthesizers that one can easily access online on a PC and use, more easily, as downloadable apps for touch pads and phones, and as such can be regarded as a game or toy. It is the social networking aspect of his work that makes it an interesting project. Rather than an individual using an online facility to create music (and, indeed, paintings using equivalent software) alone, the opportunity to at least share and collaborate is entertaining if nothing more.

All these cases illustrate the difficulties of distributing authorial control, to a greater or lesser extent. When authorial control is more strictly adhered to by setting tight parameters for use, while offering a range of pathways that the user may choose to follow, it exemplifies Ascott's view that modern artworks are determined by the exercise of the behaviourist tendency to develop the work to some degree. However, it also seems that where authorial control is strong then coherence is maintained, and there is only limited interactive participation by the viewer/listener. In contrast, where the author limits his involvement to making some kind of initiating statement and then rescinds his powers of authorship in favour of the democratising of his/her work then the outcome is something like blogging or tweeting. Such dissolution

³⁶ Please see Sam Harman's website for fuller information regarding *Twinthesis*. (<http://samharman.com/>)

militates against the cohesion and coherence of the artwork and, I believe, impairs meaning; I shall return to consideration of this shortly.

The originator has a compelling role to play not only in the initiation of a work, but also in the maintenance of style and content by setting specific parameters that inhibit forms of behaviour (interaction). Extensive relinquishment of authorial control can have the result that the purposeful nature of the work is somehow diminished. Harman's conversion of tweets to music seems to compound the often trivial nature of the original message. *Flight Paths* is (ironically) without direction. The production of violin works that rely on choices taken from a menu of possibilities seems more like an empty ritualistic exercise (and may possibly conform to Ascott's notion of a behavioural ritual). Other possibilities exist; where the behaviourist tendency is strong, and the work seeks to control the actions of its interactees, acting as a behavioural trigger, then there is a move towards gaming. The analogy of the line which represented a spectrum or range of degrees of interactivity that I used earlier can be put to use once more here. As we approach the extreme right hand end of the line where interactivity increases, authorial control is diminished and intended meaning is reduced. It is worth noting that, in non-textual works especially, the ultimate expression of the dispersal of authorial control is not the game perhaps, but rather the toy; a toy is a device which is designed to function safely in a particular way by an author/artist/designer but, once released into the world, the originator has no control over it. Its primary function is to entertain and to gratify its user and, in this respect, online toys are similar to conventional ones, although the sophisticated medium can give the illusion of considerable skill where there is, in fact, very little. The music making toy *Tonematrix* (Michelle, 2011) is one such toy; the user simply makes sounds by selecting from a matrix of squares. The toy ensures that the sounds are always harmonious and pleasurable.

5.2.1. At the Boundary: Art and Games

As already noted, all the works I have examined exhibit a number of features that suggest that they have, to a greater or lesser extent, some affiliation with the interactive games that populate the Internet. The ludic qualities that these works display are variable; *Faith* is not a game of any sort, though it can amuse and entertain. *Inanimate Alice* has many more gaming and entertaining features than *Faith*, though these are

usually limited to puzzles, or for suggestions for off-line working. *The Shower* and *Blue Han* set out to frustrate the would-be game player deliberately, the 'game' here being to guess that there is no game. However, in general, I see this movement towards gaming in these pieces (even in the negative, as Claus implies) as being significant; firstly to engage the viewer and then to control his/her behaviour and in doing so, the originator of the work expresses artistic control by influencing the interactive behaviour of his recipient. As online gaming is an increasingly popular activity for millions of Internet users across the globe, it is hardly surprising that those working in the field of making sophisticated online 'art' should be drawn to include some of those features which have proved so successful in engaging those millions across the world. However, all the pieces I have worked on demonstrate only limited interaction between a single user and the work itself. There is no opportunity to interact with other spectators, and again, this raises the issue of authorial control and the subject position of the viewer.

However, I speculate that one could argue that excessive interactivity, to the point where the artists loses control over the work, necessarily disqualifies the piece from maintaining its 'work of art' credentials. Even Ascott's experiment in 'distributed authorship', *La Plissure du Texte*, in which the baton of responsibility for creating a text/art work is ceded to a large group of participants, who are purported to interact freely with the text through the 'telematic' means, is not all it seems. The piece has a strong narrative content which suggests that it has much more in common with conventional literature than might be initially supposed and that the medium by which it is actually executed is, possibly, incidental to its creation. Ascott prescribed, to each remote location, a specific 'role' in what he referred to as a 'planetary fairy tale'. Additionally, the participants were briefed about the part they had to play (See Figure 41), and the well-known narrative form would ensure that participants would perform their character role according to preconceived expectations. In any case, they were a select group of artists and technicians, who were predisposed to cooperate with Ascott's vision of collaborative art; finally, Ascott imposed a time limit for the length of the project. The creation of *La Plissure du Texte* is only possible because of the relatively tight constraints placed upon the individual participants. Such constraints illustrate Ascott's declaration that, 'the general context of the art experience is set by the artist, and its evolution in any specific sense is unpredictable and dependent on the

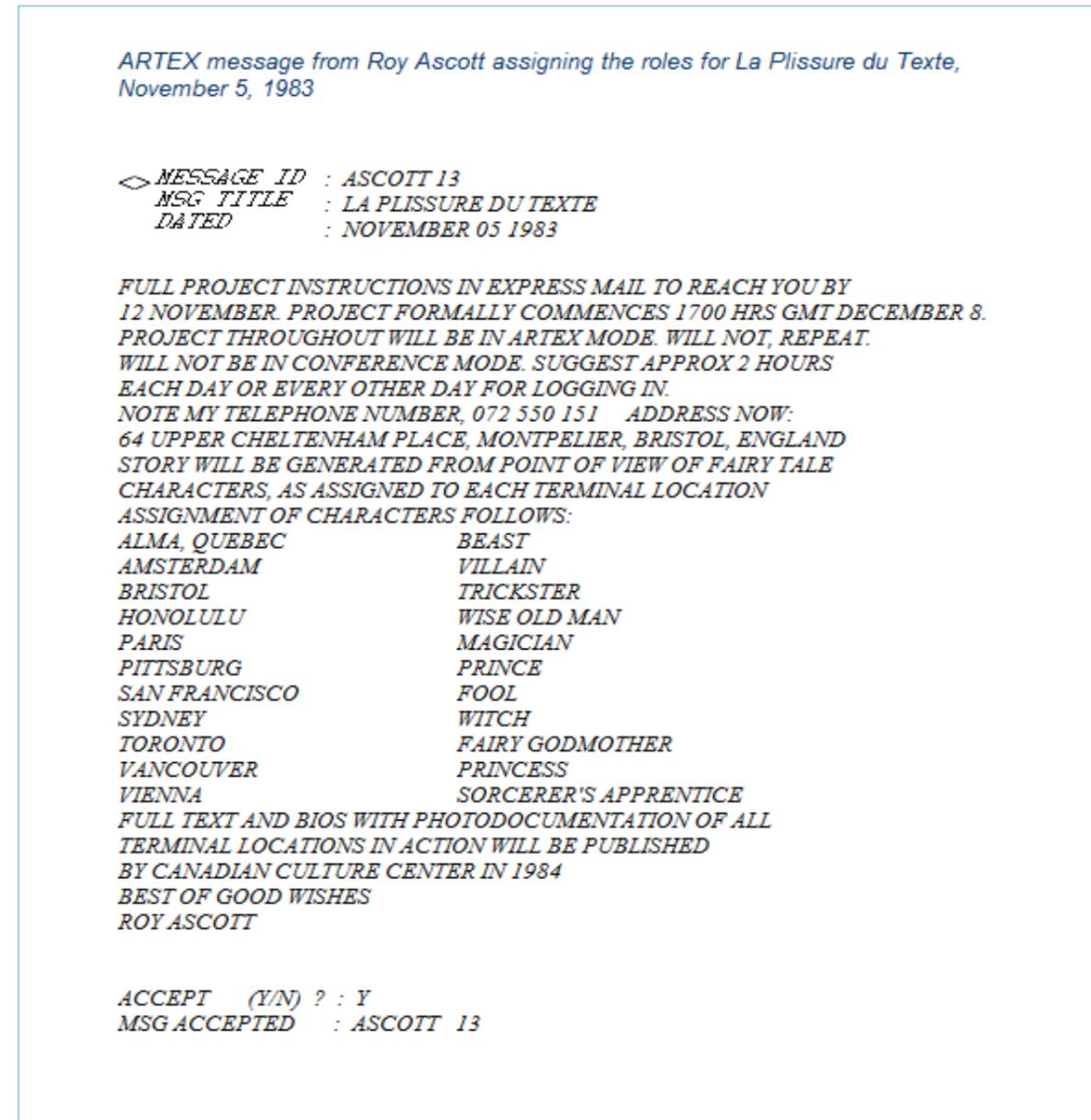


Figure 41 *La Plissure du Texte*: Assignment of roles.

total involvement of the spectator' (Ascott, 2003. p.111). Constraints of this order call into question the possibilities of ever democratising art, since whatever freedoms the participant enjoys are strictly governed by the artist, allowing the spectator only marginalised tinkering with the work. In some ways, this might be considered even more restrictive than a traditional artwork might be, since interactive works impose severe conditions on the participant designed to regulate behaviour, relying heavily on a willing acquiescence. Consider how an artist might feel if a participant refused to play the game and destroyed the artwork. Would this count as purposeful art/dialogue/interaction?

Ascott recognises that *La Plissure du Texte* and similar works are at the boundary between art and games; he notes that, 'nowadays, art is moving towards a situation in which the game is never won, but remains perpetually in a state of play' (2003, p.111). He draws a distinction between traditional artists who 'dominated the play' ensuring the 'spectator was positioned to lose'. By this Ascott is referring, presumably, to realist art and literature, where the artist was in complete control of his work, and the spectator merely responded to it. His own works are, I believe, much less radical than he professes and I think that authorial intention is only marginally impaired in Ascott's works; no doubt, at the time of their inception, they might have seemed exceptionally different from what had gone before, especially as the overtly gaming aspects of his pieces mark them as being novel curiosities. In fact, it may well be that the ludic aspects of his work were seen as the dominant feature. However, a distinguishing characteristic that delineates art from games might be the intentionality of the originator of the work. All those involved in Ascott's *La Plissure du Texte* project were conceptual artists, and would have been aware of Duchamp's call to 'create a new thought' about everyday objects to transform them into 'art' (Duchamp, 2003). Ascott can claim that *La Plissure du Texte* conforms to Duchamp's definition of art because of the conscious thought and activity given to the production of the work. On the other hand, the prescriptive nature of the work is a feature of all games. In this piece, which could be seen as an example of both the online game *and* a conventional narrative, participants must obey the rules and carry out their function within the strict parameters set by Ascott.

5.3. Some closing thoughts: On content, meaning and dialogue

Ascott often uses the terms 'content' and 'meaning' interchangeably, and it is true, that in, everyday usage, the two are often seen as equivalents. However, I think the difference between them needs greater consideration than Ascott has given, especially as he is so preoccupied with providing opportunities for spectators to construct different 'sets of meanings' as they interact with his work, either in the gallery or 'telematically'. I will illustrate the difference between the two by recounting a personal experience of the difference as I understand it.

As a child, I shared a bedroom with my younger sister. At the far end of the room, was a large storage chest, which had three large, deep drawers at the bottom, and two smaller ones at the top. Though we shared the lower drawers, we each had our own top drawer, mine being on the left. In that drawer, I kept all the most valuable items I had which I thought I wanted to rescue should the house catch fire or be subject to some other terrible event. The items in the drawer would change from time to time, but there was a hard core of special things that had particular significance for me. My drawer contained, among other things:

- *A Child's Story of the Nativity* (Book by Louise Raymond)
- *Well Played Juliana!* (Book by Irene Mossop)
- A Collection of *Rupert* Annuals
- A sandalwood box with paper inscription in which I kept:
- A gold ring set with two small diamonds and a garnet
- A Kaleidoscope
- A pink scarf

It is significant, I think, to note that I still have all of these items except the last two, the loss of which I bitterly regret.

These are the contents of my drawer, and anyone looking in could see these at a glance and might perhaps, speculate correctly why they were all collected together. It is at this point that a further explanation becomes necessary in order to make proper sense of this collection. All these objects are invested with

meaning because of the associations they have for me, and only for me; particular places, times and people. The book on the Nativity I keep now because it is beautifully illustrated and has gold on every page and was a sumptuous Christmas gift from my mother; *Well played Juliana!* was written in the Twenties and was set in a lacrosse-playing boarding school where the rich girls wore pink satin pyjamas and had toasted crumpets for tea; it is a tale of schoolgirl fortitude in the face of adversity and showed me a world completely beyond my own experience; I picked it up at a jumble sale and have read it dozens of times; the *Rupert* books were visually entrancing and I longed to escape into the wondrous landscape of Nutwood, to roam free with Rupert, Bill and Algy. The natty couplets that accompanied each picture were an added bonus. The little box was scented, though its contents were long gone; the ring was my grandmother's. The scarf is now lost. It was gloriously pink and glossy - made of shiny and dull squares produced, as I know now, by a Jacquard loom. The kaleidoscope fascinated me, and one day, in a fit of scientific curiosity, I took it apart only to discover that its magic was produced by mundane components – dull shards of plastic, a couple of poor quality mirrors and cheap tin tubing. My father gave me both these items on the only day he ever took me out as a child on my own, on the day my mother went off to attend a dying relative, I think. My father was awkward and shy at being with his six year old and quite at a loss at how to deal with me because, in those days, in our parochial and working class society, looking after children was definitely women's work.

What the drawer contained might be described as a set of 'semiotic resources' out of which meaning has been constructed. Theo van Leeuwen defines semiotic resources as, 'the actions and artefacts we use to communicate' (2005, p.1). Ascott intends that the artefacts that he produces, such as his *Change* paintings and the table and chair in *Plastic Transactions*, are used to communicate with his interactees. As they then prompt a response in the interactees, I believe that they qualify as semiotic resources. Hence, there is an extension of the definition that van Leeuwen applies mainly to graphic and musical resources. For me, my drawer delivers an intensely personal and profound sense of place, time and memory. For someone else, a different set of values and meanings will no doubt arise from the same set of objects. Rearranging the contents might well change the significance of each; in my own case, when I view each item, either singly, in groups or collectively it instantly refreshes and restores all the memories and experiences I attach to them.

Yet, as the years have passed, the way I think about these various objects has changed, and accretions of meanings are piled one upon another so that I may choose between the rich diversity of possibilities that are presented.

I return now to consider the 'content' of *Faith*, *Inanimate Alice* and *The Shower* in the light of this distinction and discussion. I differ from Ascott's confusing concept since I mean specific objects out of which the work is produced and which are invested with meaning *at the point of departure of the work itself*. All of these works have content (semiotic resources) which communicate meaning using a variety of modalities. *Faith* delivers its message largely through the textual mode, through linguistic signs, though these are enhanced by the use of colour, animation and sound effects. *Inanimate Alice* consists of many images loaded with significance, heavily supported by the presence of the modalities of sound and colour to qualify the imagery; both of these works are open to semiotic study and analysis of their contents to reveal the many meanings they carry. *The Shower*, as a metatext, investigates the meaning potential of the sequence of signs that make up the original work, through the revelation of the relationships between them. The advantage of the digital medium is that it can facilitate change easily and effectively, either with or without user intervention. In doing so, the mechanism of change alters the relationships between the contents of the piece (analogous to rearranging the objects in my drawer) so that the viewer sees a different construct, a different set of meanings construed from the same set of objects. It is at this point that the user's own interpretive powers are invoked to produce a very personal reading of the contents. Meaning is thus individually constructed from the contents that the work presents.

Ascott claims too, that the interactive nature of his work, and by implication, the interactive works I have described and many others, induces a dialogue with its users, or between the artist and the recipient. As he says, 'The modern artist [...] is primarily motivated to initiate a dialogue, to set feelings and ideas in motion, to enrich the artistic experience with feedback from the spectator's response' (Ascott, 2003, p.111). Work produced with this in mind intends not only to mediate communication but to initiate a response which in turn modifies both the work and, ultimately, the behaviour of the recipient. Whilst this is very possibly true, I

cannot accept this as a true form of dialogue. Dialogue is, primarily, a two way process and secondly, it takes place between people rather than between people and objects. Ascott's application of the term 'dialogue' is loose and imprecise and is, I believe, misplaced given the academic nature of his writing. The confusion that arises from Ascott's colloquial usage of the term is similar to the misapprehension of the term 'interactivity' as previously discussed; both terms have popular appeal in describing activities that take place in the digital environment, and both terms are misunderstood or misapplied.

The supposedly interactive works that I have investigated, offer only quasi-interactivity, set within a framework that is controlled and constrained by the exercise of authorial control. Similarly, and at best, only a quasi-dialogue is initiated, though this might possibly convince the user that a real dialogue is occurring. This is best illustrated by referring to the development, in the mid-sixties, of a computer programme named ELIZA which responded to typed-in statements by providing seemingly coherent and intelligent replies. As Murray notes, 'The resulting persona, Eliza, was that of a Rogerian therapist, the kind of clinician who echoes back the concerns of the patient without interpretation' (Murray, 1997, p.69). Murray notes too that Eliza was extremely convincing and persuasive, and that, 'Eliza's simple textual utterances were experienced as coming from a being who was present at that moment' (Murray, 1997, p.71). The ELIZA project was the brainchild of Joseph Weizenbaum, Professor of computing science at MIT, who soon became concerned about the ease with which even those who knew that they were speaking with a machine began to regard Eliza as being 'real' and sentient. He was so disconcerted by the effect that Eliza had on the interactees that he wrote a book, 'warning of the dangers of attributing human thought to machines' (Murray, 1997, p.71).

The quasi-dialogue that those who used the ELIZA programme experienced demonstrates the eagerness with which individuals are willing to ascribe human characteristics to inanimate objects. Although these events took place nearly fifty years ago, they illustrate how susceptible humans are to even the illusion of a true dialogue. When interacting with *Inanimate Alice* or *The Shower*, it is all too easy, at least to begin with, to imagine that, as users, we have a high degree of control over the activities that take place on screen. Moreover, that we not only interact with them, but engage in a dialogue, either with the work itself or the

characters represented. It is only through a conscious examination of the text that the illusion is dispelled. The process of disassembly restores the appreciation of the fact that the pieces we interact with do respond to us, but only in ways that are pre-planned by their creators, even if those responses appear random. The processes that are initiated by the programming, and the 'content' that is accessed, rearranged and displayed using the various modes of pictures, music and text and so on, are configured to produce many potential meanings; meanings which it is up to the user to discover or develop.

Chapter 6: CONCLUSION

6.1. Introduction

This study set out to investigate the singular nature of a number of interactive multimedia texts that populate the Internet. The complexity of these texts, and their potential for user interaction to change the nature of the text itself, is challenging; so much so that it requires the development of a new literacy to understand them fully. I have indicated a number of ways of approaching these texts, and have considered carefully some of the themes and issues that have arisen as a result of applying these distinct methodologies of reading. The importance of these issues is reflected in the structure of the thesis, which begins with detailed analyses of four texts, each representative of different approaches to the production of multimedia work. It concludes with a more general consideration of some of the implications such texts have for both writers/artists and their readers/viewers³⁷.

In the following summary, I outline and describe the overall structure of the thesis, referring to the texts I have analysed in support of my argument for the development of new multimedia literacy that is capable of rendering such texts fully meaningful. I begin with an explication of how the title of my thesis encapsulates the problematical nature of texts to be found in cyberspace. I continue by summarising my analytical work on this selection of Internet based texts, drawing attention to a range of issues that have arisen during this course of study. Two of these issues are especially noteworthy: firstly, the nature of the relationship between users and authors in accessing Internet texts as this relationship differs significantly from that experienced by readers of more conventional texts. Secondly, the way in which the electronic text delivers representation,

³⁷I regard these terms as functional equivalents: artist/authors/writers/creators etc. to describe anyone *making* work for Internet distribution. In the real world there is a clear relationship between the descriptor used to indicate the maker of the work, and the work produced. For example, 'poets' make 'poetry', 'artists' make 'art'. However, the multimedia options available to makers of digital texts mean that the work often consists of several modes of communication acting together. Hence, no single term is quite adequate to describe either the maker or, often, the outcome. This situation is exacerbated by the need to include other terms that describe functions specific to the digital environment which, equally, can be used to describe creative activity: programmer, operator. The exact choice of which term to use where is governed, largely, by the nature of the text under analysis, but even here several different descriptors may be used in close proximity to one another. Similarly, I use the term 'reader' here to account for all types of *recipients*: user, spectator, listener, viewer, interectee et al.

specifically the way in which a form, in this case fine art painting that exists in the real world, can be imitated in and transformed by the digital environment. I conclude by considering in more detail what a multimedia literacy might be, and I close by drawing together the themes of this thesis.

6.2. Affecting Modalities: configuring meaning in cyberspace

6.2.1. Affecting Modalities

The title given to this thesis identifies not only a specific environment, but a range of activities and effects that are products of that unique environment. It also indicates the ways in which these texts are accessed and developed. I use the phrase 'affecting modalities' to mean two things: firstly the ways in which different electronic media work together to affect their users, and, secondly, how one electronic modality might be affected by the presence of another. Similarly, 'configuring meaning in cyberspace' refers both to the difficulties encountered by *users* in confronting highly developed and labile work unique to the Internet, and, secondly, to the problems of the manufacture of meaning with which the *creators* of such work must also grapple.

The term 'modalities' is used principally to describe the ways and methods different modes or media work together, because this is a pronounced characteristic of the works I have analysed. These richly varied and diverse products present complex combinations of graphic imagery (often animated), cinematography, music, sound and text. However, I also recognise this term as it is employed by Kress and van Leeuwen in their studies of imagery, as a means of referring to the "truth value" or 'credibility of [...] statements about the world' (1996, p.160). Although I have briefly used this term in this way, this issue forms only a small part of my own analysis. I am concerned less with discourse of this nature than with the investigation of the intense responses, and the reasons for these responses, that working in the digital environment induces.

The deliberate ambiguity indicated by the term 'modalities' is matched by another: when used with the descriptor 'affecting', it summarises the potential of a mixed or multimedia approach to stir the emotions or to induce a range of other responses. An obvious example of this might be a static picture of a snow scene.

When set to jolly Christmas music, for instance, the scene would be seasonally uplifting; if the soundtrack were sombre, though, the image would take on a more melancholy appearance or may even suggest impending doom. It is the relationship between these two modes working together that produces differing emotional and intellectual responses in the viewer, rather than any actual change in the nature of either the image or the music itself. Multimedia digital texts expressly facilitate change, the various modalities being able to alter and vary. What results is a fluctuating and modified text, with the inevitable consequence that the viewer's responses will also fluctuate.

In addition, although the digital medium is relatively new and presents artists, writers and musicians with many opportunities for the development of new types of work, this work is necessarily grounded in the traditions of Western art (for Western artists). No artist, regardless of how radical and innovative they may be, can dispense with the history that has produced them. In their work, it is by referencing what has gone before, by establishing itself in the familiar that the text can allow the process of meaning-making to begin.

6.2.2. Cyberspace: virtual realities

The key to the difference of these texts is the nature of 'cyberspace'. The term 'Internet' specifically refers to the gigantic global system of linked computers that allow person to person communication; this definition is subsumed into the more general and notional term 'cyberspace', which has now entered into everyday parlance. Although it was coined for his 1982 short story *Burning Chrome* (Gibson, 1995, p.195), the novelist William Gibson has recently disavowed the term in a newspaper feature (Jones, 2011), describing it as being 'essentially hollow'. Nevertheless, over the years, the term has acquired wide cultural currency: what it suggests is an imaginary or mythical realm without physical substance where electronic information exists and is exchanged. Conceptually, it is easier to imagine a place where such texts might truly exist, even if that place itself has no real existence, than to wrestle with ideas of subatomic electron particles forming meaningful messages. I use the term 'cyberspace' for this very reason: it is a catchall expression that avoids the difficulties of an exact description of something that lies beyond the comprehension of those of us who

are not physicists, yet it indicates the virtual nature of all the texts I examined. It suggests their imaginative and artistic possibilities and qualities in a way that the mundane phrase 'Internet texts' does not.

'Configuring meaning' is essentially an intellectual and imaginative process, prompted by remembrances of and comparisons with, a user's own range of experiences. This is true for both the artist developing the text *and* the user responding to it; these processes take place in the mind, and since the mind too has no real, physical existence but also generates 'virtual' realities, then I perceive a correlation between this and the term 'cyberspace' as I have used it, to describe the territories where meaning is configured.

6.3. Summary of the Analytical Work: methods used and problems encountered

Four texts were examined; the first three (*Faith*, *Inanimate Alice: Hometown* and *The Shower*) were analysed closely in order to investigate how Internet texts are capable of rendering meaning. The fourth, *Blue Han*, was used to test some claims made by Clauss about the nature of representation in digital texts, claims that only surfaced while I was analysing *The Shower* and which I could not ignore, for to do so would be to neglect a significant factor that impinges on the construction of meaning. A résumé of Chapter 5 is included since it is here that I begin to consider some of the broader issues relating to the creation of, and interaction with, other forms of Internet texts.

I summarise this analytical work below, identifying the characteristics of each text and methodologies used. I note particular problems arising, and the conclusions I have drawn as a result of my analytical work. A variety of theoretical models and practices were used to do the analyses, and I have indicated the most important of these.

1) Text analysed: *Faith* (Kendall, 2002)

Characteristics of the text:

- *Faith* is a kinetic poem (a study of opposition) which demonstrates a combination of animation, sound and coloured text.
- Superficially, it has the general appearance of conventional verse but relies on multimedia effects to emphasise particular ideas.

- Readers access the next part of the text by simulated page turning via the mouse or trackpad interface³⁸ (the only intervention allowed the reader).

Analytic method used:

- Kress and van Leeuwen's theories (1996; 2001) relating to visual semiotic analysis are applied to the compositional features.
- A Barthesian analysis of textual, aural and visual elements (1977; 2000) with recourse to art theory and history, is used as required.

Problems identified/addressed:

- Even a relatively static text like *Faith* requires a range of interpretive strategies to uncover meaning because of the way that sound, music and colour affect the text.

Conclusions arrived at:

- Despite the difficulties that the multimedia approach presents, simple, digital texts like *Faith* can be analysed and understood.

2) Text analysed: *Inanimate Alice: Hometown* (Pullinger, 2012)

Characteristics of the text:

- *Hometown* is a single episode from a much longer narrative.
- It exhibits high production values with sophisticated graphics and effective music.
- Essentially, it is a simple first person linear, textual narrative with some limited interactive interludes. These take the form of very simple games and puzzles.
- Although conceived as an entertainment aimed at 14 year olds, it has taken on a pedagogical function; this is not expressed in the text directly but by supporting teaching and learning packs. These are independent of the *Hometown* text.

Analytic method used:

- A narratological approach using Genette's theories (1980) is used to anchor the text.
- Kress and van Leeuwen's theories of visual semiotic analysis are applied to the compositional features.
- This is supplemented by a Barthesian analysis of textual and visual elements.
- References to art theory and history are extensively made.

Problems identified/addressed:

- Increased degrees of interactivity and the complexity of the multimodal text make meaningful analysis difficult. The application of an external analytical framework presents one way of anchoring the text in order to perform a detailed analysis of some elements.
- Close analysis of the text enables a description of how user intervention in the form of mouse action is managed within the text. The frequency and degree of user interaction is assessed in a simple way.
- Although this is a first person narrative, the user intervention that the mouse allows is confusing, since it seems to be the user, acting as Alice, who determines some actions. There seems to be a

³⁸ The use of the mouse, keyboard and joystick to enter data or to action change is in the process of being superseded by many other forms of user interface. Many devices now interface more directly with the user via touch screens, voice receivers, pointers and track-pads. However, for ease, I retain the term 'mouse', though I use it generically to encompass all possible interface methods.

blurring of the boundaries between reader and the character Alice, not possible in other, non-interactive texts.

Conclusions arrived at:

- *Hometown* is susceptible to analysis, and the meaning can be identified within of each of the modes of communication working together: text, visual imagery, music and sound. It requires a much broader range of reading and interpretive skills to appreciate fully this complex text.
- This high degree of competence expected in the reader is at odds with the bolted-on pedagogical function suggested by the teaching and learning packs, some of which are directed at teaching basic computer literacy – literacy that the majority of pupils nowadays already have.
- Whilst the graphic and musical elements are highly sophisticated, the story line is undeveloped.
- The level of interactivity is low. Advancement through the text can only occur when the interactive games embedded in the text have been successfully tackled. The user contribution to the text is determined entirely by the author and kept within the overall linear narrative.

3) Text analysed: *The Shower* (Claus, 2005)

Characteristics of the text:

- *The Shower* is a metatext of the famous shower scene from Hitchcock's film *Psycho* and is, therefore, highly cinematic.
- The base text is altered and manipulated in numerous ways. Sequences and discrete images are variously and randomly displayed. They are out of order and with overlapping imagery.
- The resultant text is highly recursive, indeterminate and unending (unless the user chooses to exit the work).
- It has an episodic feel, which is indicated by a watery dissolution of the base text before a new and different sequence begins.
- The text has the appearance of being 'projected' onto a rectangular shape which might be construed as a tile, a cinema screen or canvas.
- The surface texture of the altered cinematic episodes assumes the characteristics of water colour painting.
- It has a new and unusual musical accompaniment.
- The user is offered only quasi-interaction with the text via the mouse, which frustrates the user in any attempt to interact with, or to take control of the text; the piece is programmed in such a way as to allow a 'silent running' if no interaction from the user takes place.

Analytic method used:

- It was necessary to devise a new methodology (Kress and v Leeuwen were not appropriate in this instance) to analyse the visual elements.
- The complexity of the work required a variety of other approaches in order to analyse this text including:
 1. French film theory
 2. Art history (Dada, Surrealism and the use of indeterminacy)
 3. Textual openness
 4. Some formal music analysis
 5. Barthesian semiotic analyses

Problems addressed:

- The difficulty of capturing the fluid and constantly changing text.
- The difficulty of using one medium to analyse another.
- The nature of indeterminacy, as expressed by the programming and user interaction.

- The disruption of narrative and its effects on the text and the reader.
- Clauss's exposé of the scene allows for an extensive re-examination of spectator position.
- The function of *The Shower* as both homage and critique.
- The role that music has to play in qualifying the text.

Further problems/areas identified:

- Clauss's role as an experimental artist (especially his use of the found object and application of chance operations).
- He claims his work is 'painting.' Such a claim materially affects any user perception of the work. Can these claims be substantiated?
- He also claims his work is both interactive and collaborative. In the light of user experience, is this true?

Conclusions arrived at:

- *The Shower* is indeterminate.
- It references many other works/ideas/artists and recognition of these allusions are the basis of my analysis.
- It exists as an invitation prompting reconsideration of the original scene, and so has a hermeneutic function.
- In order to test Clauss's claims about painting a more direct and simpler work needs examination.
- The nature of online collaboration and interactivity and the consequence this has with regard to any transfer of authorial control requires further investigation.

4) Text analysed: *Blue Han* (Clauss, 2005)

Characteristics of the text:

Blue Han shares many of the characteristics of *The Shower*:

- *Blue Han* is cinematic.
- It is a multiscreen work; originally an art gallery installation.
- It is indeterminate and recursive.
- It exhibits the same quasi-interactivity seen in *The Shower*.
- The surface presentation is intended to simulate the texture of paint.

Analytic method used:

- The internal meaning of the work not analysed as such. However, by visually referencing similar, but painted works, Clauss attempts to suggest that *Blue Han* is similarly constructed, the surface resembling paint.
- Kemp's ideas (Kemp, 1998, p.185) about the 'conditioning of reception' are applied, together with Gombrich's notions of 'guided projection' and the 'imitative faculty' (2002, p.155), to substantiate Clauss's claims.
- Kuspit's theory (Kuspit, 2011) about painting as code is considered. This suggests that, in later works from the Impressionists and Pointillists onwards, paint was applied as an 'overt code' (in the form of distinctive marks or dots) which foregrounded the activity of painting and the material of paint itself, rather than simply as a substance to create representation. Kuspit recognises the potential of the pixel as having a similar power and function as dots of paint. He extends his identification of codes in painting (and other forms of representation) to include the use of the pixel (individual, electronic 'dots' of information) in digital works to create images. I identify how this relates to *Blue Han*.
- Consideration of the nature of interactivity in Clauss's works by reference to Rafaeli's definition (Rafaeli, 1988, p.118).

Problems addressed:

- A brief consideration of the nature and materiality of digital texts.
- Issues of interactivity and quasi-interactivity.
- How conditions of reception affect the viewing experience.
- How paint and pixels function as codes.
- How codes mimic movement.
- How the illusion of paint via pixels is achieved.

Conclusions arrived at:

- Pixels can, in representing paint, be considered in some of the ways that paint is considered.
- There is a mismatch between Clauss's desire to conceal the digital nature of his work and the modernist call to expose the surface.

5) Texts referred to: various multimedia and interactive texts, all of which make some claims to be considered as serious artworks, including *Flight Paths* (Pullinger, 2009), *Graph Theory* (Freeman, 2011), *Tonematrix* (Michelle, 2011), *Twinthesis* (Harman, 2011).

Characteristics of the text:

- These texts were chosen to demonstrate different forms of interactivity (sometimes between an individual reader and the text, sometimes as collaborative, social projects).
- These texts demonstrate the range of authorial control allowed by the different forms of interaction.
- Meaning is communicated in these texts through the semiotic resources available to the recipient.

Analytic method used:

- Ascott's theoretical work and his 'behaviourist vision' (Ascott, 2003, p.108-153) are used to test assumptions made about interactivity and the problems of dispersed authorship.

Problems identified:

- Some works are difficult to categorise, being at the boundary between art works and games.
- There is a tension between the author of the text and his recipient when the creator wants to retain control of the text yet also wants to allow full or partial interaction.
- Finding discrete works that are open to user interaction and collaboration while maintaining their status as identifiable art works is difficult.

Conclusions arrived at:

A comparison of more fully interactive works with the four studied in depth shows:

- Authorial control within Internet texts is highly prized by practicing artists.
- Interactivity is strictly controlled by the artist/creator who offers only quasi-interactivity and dialogue. True collaboration is non-existent in the works I studied in depth.
- Where there is a loss of singular authorial control, which allows interactivity and dialogue, the resultant text tends towards incoherence or gaming³⁹ rather than art works.

³⁹ Any definition of a 'game' is likely to include certain features: structured playing, rules, goals, challenge and interaction. In contrast, a 'work of art' is described as 'a product that gives aesthetic pleasure and that can be judged separately from any utilitarian considerations' (Dictionary.com, 2012). These very brief (and inadequate) outlines draw the distinction between the two sufficiently to illustrate the extremity of the range of possible outcomes.

Having shown that it is indeed possible to uncover meaning in online texts through the exercise of various skills, I am increasingly conscious of two other recurring areas of contention. The first of these concerns the common assumptions and claims made about the nature of Internet art projects, with regard to user collaboration and interaction and the exercise of authorial control. Although reference to this issue is made throughout the thesis, I draw special attention to it in Chapter 5.

The second is the extent to which to which the digital medium can make aesthetic representations (in this instance, painting). This is investigated by the examination of the fourth text, *Blue Han*.

I summarise my thoughts and findings on these two key topics below.

6.4. Authorial control versus user interactivity

It is easy to assume that the works I have studied will be interactive simply because of their appearance on Internet websites, and two of the authors, Pullinger (Pullinger and Joseph, 2007) and Clauss (in a newspaper article by Molina, 2004), make substantial claims that this is the case. My close examination of their work suggests that this is not so and that their comments are made without a full appreciation of what interactivity actually is (see page 98).

I have referred to the issue and nature of interactivity and the effects this has on both authors and readers throughout my work, but I summarise my observations here under five distinct headings:

1) The effects of Internet access on the author/reader relationship.

The World Wide Web is a way of using the Internet which enables complete access to countless texts of all kinds. The accessibility of such online texts affects the relationship between artist and viewer, and viewer and the work of art, significantly, in three different ways:

- a. The text is always available: unlike the public gallery or the concert hall where works are exhibited or performed, the Internet text is available at all times, at the convenience of the private viewer. No special privileges are granted to the Internet text: it is simply one amongst very many websites. A painting in a gallery is, in contrast, specially privileged by its situation, and this privilege extends to its creator.

- b. The environmental conditions of experiencing the Internet text might be said to be hostile: the specific conditions of the gallery (or a church, or on a rich owner's wall) that induce a respectful response are missing. This disadvantages the author, since the 'aura' of the work (Benjamin, 1999) is necessarily diminished.
- c. The text lacks physical presence, which affects reception: accessing art works on line is more akin to the activity of book reading, in that the work is not only infinitely reproducible, but can be picked up and put down at any time, as it were. The written text, in book form, has a physical presence, and is approached with certain expectations about how it might be handled, read and interpreted. In contrast, the online text lacks the uniformity and tactile qualities that the printed book has and this loss of physical substance results in a diminution of its power to impress itself upon its reader as a coherent object. Similarly, other types of online work are disadvantaged: for example, digital paintings lack the scale and haptic qualities of paintings created from canvas and pigment.

2) Authorial control within the text: restrictive practices versus interaction

The Internet facilitates the process of interaction, which users now expect; therefore artists and writers working in the online environment increasingly recognise the need to include interactive components in their work. Interaction is effected at the most basic level by using hyperlinks to move from one part of the text to another, or to another text, usually by clicking the mouse. This is a fundamental part of World Wide Web usage, but it is not difficult, and increasingly common, for a Web page to react to other kinds of mouse movement or trackpad manipulation. The degree and nature of this inclusion has consequences for both the author and the reader in the texts I have studied. I outline these below:

- a. In *Faith* interaction is slight, being reduced to a simple page turning activity. The reader is forced to progress through the text in one direction only.
- b. *Hometown* offers the reader slightly more choice than *Faith*. Interaction is enabled in two ways:
 - i. Progression through the text is linear, the mouse acting to turn pages. However, at the conclusion of each episode users have the option to return to any part of the text that has already been accessed. This allows them to retrace their steps and, for instance, to play a game again.
 - ii. At one or two points in the narrative, readers are allowed to choose from multiple options, thus changing the narrative order of the base text. Despite this, all options need to be pursued, and the same end point is always reached after all routes through the text have been explored.
- c. *The Shower* and *Blue Han* function differently. When the text is activated, the interactive effect of the mouse is seen, but this is quickly rescinded in favour of random effects generated by the programme that runs the piece. Ultimately, the user has no effective control over the work at all. Clicking the mouse often does cause the piece to react, but the user is not able to predict events and hence, cannot knowingly influence the process of the text.

3) Personal interactions and interpretations

While a text may change in response to the use of the hyperlink and associated mouse action, nevertheless the same skills that any reader, spectator, or listener might bring to bear on a conventional text are necessary. Once the text is active readers can call upon their own competencies, to comprehend the text itself. All four texts studied allow for this, and my own personal interpretations form the basis of my analytical work. There are, however, several factors peculiar to the online environment to which I have already referred, and these can affect how a reader construes meaning in multimedia, online texts. I summarise these, briefly, below:

- a. The hyperlinked text creates a sudden *change of direction* which can have the effect of wrong-footing the reader by throwing up new permutations of the text for meaning-construction. This is most evident in *The Shower*, although this is probably as much a result of the randomness programmed into the work as of user choice. In both cases, lack of coherence can result.
- b. The multimedia nature of many digital texts can cause *sensory overload*, so that only the dominant mode of expression is understood at a first reading. For example, in *Hometown* the visual dominates, but the musical backing is indispensable in qualifying the imagery, and the written text structures the narrative.
- c. The *rate of change* can disrupt comprehension of these texts. This is evident in *The Shower*, where image after image is presented very quickly.

4) Collaborative texts: the relinquishment of control?

While authorial control is highly evident in all four texts I have analysed, some of the other works, looked at briefly in Chapter 5, display the opposite tendency. Here, the open-ended nature of texts allows free user access, sometimes with the opportunity to collaborate with other Internet users in ways not possible in the texts that make up my main sample. However, this freedom affects the coherence and meaning of the work. While texts like *The Shower* and *Hometown* are clearly the product of a named creator, and as such encapsulate distinctive and meaningful ideas and narratives, the same cannot be said of those texts whose originator is lost in a plethora of overlaid texts.

In general, however, artists rarely yield any of their authorial power at all, since to do so would mean a loss of the individual style and content that marks and identifies their work. It is problematic for artists to

engage in any degree of open-ended interactivity where their work is subjected to uncontrolled intervention by others.

5) Web 1.0 v Web 2.0: effect on texts and readers

Although it is not touched on directly in the thesis, it is worth noting that texts like *The Shower* and *Hometown*, both created quite recently and within the era of Web 2.0,⁴⁰ fail to exhibit any of the attributes that working in this environment facilitates. The striking feature of Web 2.0 is that it is 'a medium for human communication' (Fuchs, 2008, p.127). The use of the mouse and keyboard to enter information and interact with online texts as part of the communication process between dispersed users, is now ubiquitous, to such an extent that it has become an unremarkable feature. However, there is an unresolved tension between the commonly stated altruistic desires of the artists to collaborate with their viewers, the egotistical need of artists to retain and express their own personae through their output and the growing expectations of users. Users now expect to be able to make practical interventions into art works because the Web 2.0 environment licenses and normalises interactive activities like blogging, emailing and social networking, as well as the option to contribute to the production of collaborative texts such as 'Wiki' websites.

All four of the texts I studied in detail more properly belong to the era of Web 1.0, despite their production in the post-Web 1.0 era. Web 1.0, as Fuchs succinctly summarises, was one of 'text-based websites' which allowed 'everyone to publish his information online' (Fuchs, 2008, p.125) as long as they had the necessary technical competence and resources. Although the relatively early websites he refers to contained texts that had some communicative features, these were limited. Fuchs sums up Web 1.0 as being 'a system of cognition' or a 'tool for thought' (Fuchs, 2008, pp. 125 and 128). Because of their lack of true collaborative interaction on the part of users, all of the works I have analysed conform to this rather outdated concept of online communication.

⁴⁰ The increased technological sophistication of the Internet has considerably enlarged the opportunity for users to interact with one another through social networks. This facility, for which the expression Web 2.0 was coined (DiNucci, 1999) has also developed user expectations about the nature of digital texts accessed in this way.

6.4.1. Summary: authorial control versus interactivity.

All of the texts studied exhibit some or all of these characteristics which are incorporated into the text by the author, who seeks to retain control over their work in order to preserve his or her artistic persona and personal style. The resultant text is highly authoritarian and restrictive, and the recipient has little opportunity to control or influence it in any way. The restriction of the use of the mouse and hyperlink is tyrannical either in the way order is imposed on the text by compelling the reader to act in prescribed ways, or by denying the user any real power to control change in the text at all. However, all of the texts studied are, like any other text, susceptible to personal interpretation beyond the control or intended meaning that the creator intends. In fact, the best online texts are engaging in that they offer readers a richly embroidered fabric of information on which to work, bringing to bear their own interests, experiences and understanding to extract maximum meaning from them. If the works studied can be said to be collaborative and interactive, it is mostly in this sense: that even when an online author retains physical control of the text (deliberately ignoring, for the most part, the potential for active and affective intrusions by the Internet user) it is always the reader that determines the final content and meaning of the work.

6.5. Painting as a form of aesthetic representation: illusion, projection and codes

Clauss makes frequent claims that he is a painter who has moved from canvas to computer screen, where he now carries on his painting activities, albeit in digital form (Adams, 2002; Molina, 2004). Despite the modernity of the medium in which he now works, Clauss is, essentially, a representational artist and, in order to situate his digital paintings, I briefly trace some of the developments of Western painting across several centuries to explain the processes of its powers of representation. In representational painting, a series of marks, deposited as pigment on a canvas or equivalent surface, are arranged to make an identifiable imitation of real or imagined objects. For a painter to be able to do this and for a viewer to be able to read the meaning of these marks, certain conditions need to be met. Chief amongst these is the presence of the 'imitative faculty' that Gombrich describes (2002, p.155), which enables viewers to recognise shapes and

forms that exist in the real world they are when transferred and transcribed into the graphic medium. The imitative faculty, which is seen, principally, as an inherent capability that all humans share, is supported by a second notion, that of 'guided projection' (2002, p.155). This term is used to describe how pictorial illusion is created, in representational works, by the artist by providing a set of visual clues, which the viewer then interprets. The collaborative act that takes place between artist and spectator is essentially an associative one, where past experiences, memories and knowledge allow the viewer to make meaningful sense of what the artist has shown in the painted image.

I explain too that later forms of painting, from the Impressionist period onwards, tends to deconstruct mimetic representation by revealing, explicitly, the marks or 'code' that make up the painterly surface. This is in contrast to earlier works where artists strove to efface the surface of the painting in order to present the painted scene as an extension of the real world (even when it depicted the imaginary). The purpose of this is to minimise the potential of the surface of the work to impede the process of spectator identification with the objects and actions represented in the painting. Later, the Impressionists and subsequent non-representational artists drew attention to the surface of the work itself. They did this by revealing and emphasising the different ways in which paint can be applied and by refusing to disguise the brush marks. Kuspit (2011) asserts that these marks, now separated and often enlarged, reveal the 'code' for making representations that previous generations of artists strove to disguise. He further identifies that these marks, acting as a 'code', demonstrate that painting becomes the means the artist uses to create a set of conditions whereby the viewer can experience a similar set of responses and sensations that were induced in the artist previously, rather than simply a facsimile of the world or a likeness of a person or thing.

6.5.1. Painting: an expanded definition

The primacy awarded to the marks, or 'code' that make up the surface of later works indicates a fundamental shift in the direction of painting, since the representation of objects (real or imaginary) was relegated to being an incidental consequence of the code itself, rather than the principal purpose of the work. By revealing the marks or codes that make up paintings, artists examine the precise nature of painting

and representation itself. It is useful here to define a little more carefully what the term 'painting' might possibly mean. Whilst there is general understanding that paintings are made from a liquid acting as a carrier of various pigments, which is then applied to a receiving surface (wood, canvas, and so on), it is also true that (especially since the turn of the twentieth century) this definition has been constantly under attack. Following the revolutionary approach of the Impressionists and other artists in beginning to deconstruct traditional views about the nature of painting, many experiments were conducted that have expanded the concept of what painting might be. For example, as early as 1911 Picasso and Braque began to develop collage painting, mixing sand and other foreign substances with the medium of paint (Greenberg, 1961, pp.70-83). Other developments, including the Dadaist technique of photomontage and the construction of assemblages⁴¹, often extended the work beyond the two dimensional flat expanse of the canvas, attempted to bridge the gap between painting and sculpture. For Clauss, the move towards a digital form of painting is the natural extension of the experimental work of artists who have preceded him and to whom he owes allegiance.

6.5.2. Paint to pixel: digital representations

I make a comparison between the painted code (made from dots or marks of paint) that characterises the increasingly non-representational work of the Impressionists and later painters and the electronically-produced equivalent of paint, the pixel, used by digital artists like Clauss. I demonstrate that the pixel functions like a code since it is 'a tiny dot of light that is the basic unit from which images on a computer or television screen are made' (Encarta, 2012). When used *en masse*, it exhibits (at least) a similar power to paint in making convincing representations, despite the relative novelty of the environment which propagates it. Specifically, however, I identify that the purpose of each of these codes is different. The Impressionists highlighted *the act of making representations* by foregrounding the code rather than being concerned to create convincing illusions. In contrast, in Clauss's work, pixels operating as the code for representation are so

⁴¹ 'Assemblage is a technique or method similar to montage— constructing a work from various bits and pieces— while Assemblage Art describes the end results of that process. This form of art marked a departure from traditional artforms. Objects were made from various materials and items of junk; they were mixed-media works or composites and thus they transgressed the purity of medium aesthetic and blurred the difference between painting and sculpture.' (Walker, 2010)

small and unobtrusive that the presence of individual pixels is indiscernible. Despite his avant-garde aspirations, the invisibility of the pixelated code suggests that Clauss' work has more affinity with the work of pre-Impressionist masters in that he, too, seeks to produce illusory representations.

Specifically, I have shown that in his digital paintings, like *Blue Han*, Clauss uses the pixel to suggest the material form of paint. Although the individual pixel has no textual qualities, being only a dot of light, the combination of differently coloured pixels can offer an illusory representation of the surface of paint, in the same way that paint itself can be used to mimic texture, light and shade and so on. The code of paint is replaced by the code made of pixels. The pixel in this sense has a similar power to make representations to that of paint itself.

I note too, that while the code for painting has been used to deliver representations of movement, it does this with only limited success. The static form of painting using pigment is antipathetic to such a proposition, but the flexibility of the pixel in the digital text allows not only of a show of painterly surfaces, but the display of movement. It is this notion, that paintings can be made mobile, which is one of the most alienating factors that prohibit the ready acceptance of pixels as paint.

6.5.3. Painting versus digital representations: reception

The examination of *Blue Han* tests Clauss's claim that his work is a form of painting. The determination of whether or not his claims can be substantiated is important because the reception of a painting is likely to be greatly different from that afforded to a digital, electronic text alone; this has implications for the configuration and construction of meaning to be found in such works. By claiming that he produces painting, Clauss hopes to invest his works with a certain *gravitas* so that they are afforded the respect and dignity a conventional painting would generate, and which his installation and other galleried work already attracts. Since activities on the Internet are often viewed as trivial and fleeting, and are moreover hindered by relatively hostile viewing conditions, Clauss, as a thoughtful and dedicated artist, promotes his work as painting in order to attract critical attention and consideration.

6.5.4. Painting: a question of vocabulary?

Clauss is also extremely familiar with, and regards himself as a member of, the French avant-garde and his interviews and writings suggest that he is well-versed in the history of art movements of the last century, with which he generally aligns himself. He describes himself as a painter and his multimedia works as paintings because painting is an activity which has occupied him for most of his adult life, and most certainly before the inception of the Internet, the World Wide Web and the potential of the digital text. In fact, the advent of a new electronic medium in which to explore the possibilities of representation is problematic for all digital artists, in that the vocabulary currently used to describe the complex range of art activities that take place there, is insufficient. A whole host of portmanteau terms is used to describe multimedia art activities – transmedia, Internet art, digital painting, telematic art, tradigital art, hypertext fiction, net-poetry, cyberculture art, artmedia, generative music, new media art – to name but a few.

Ultimately, a new vocabulary to describe the experimental activities of artists will evolve, which will form part of a new literacy that will need to be developed in order to begin to appreciate and understand fully the complex multimedia work facilitated by the Web. Until then, artists and users are restricted to the present vocabulary, a vocabulary which is centred on the description of more traditional art forms, and which is now applied to a range of activities beyond the conventional. For this reason, Clauss uses the term ‘painting’ to describe his experimental digital artworks, since no sufficient vocabulary presently exists that will accurately describe what he does. However, he is sincere in his protestations that his work is painting. To the extent that the pixel acts as a code that makes representations, then his work does qualify as painting.

6.6. Developing a Multimedia literacy

A ‘medium’ is simply a means of conveying information (often for aesthetic purposes), and the term can refer to all the ways in which this is possible. ‘Multimedia’ describes how a variety of different media can be used together for this purpose. In the plastic arts, for example, it refers to the use of painting, card, plastics and metals and so on. When used in the context of the Internet, it describes the combined use of two or more of the following: spoken and written text, graphics, film, and music. The computers that are linked by

the Internet become steadily more and more powerful; this enables advances in human interface design that make it increasingly easy for non-experts to make and distribute interactive, multimedia texts in ways hardly imaginable just a generation ago. Moving and static imagery can be easily combined with the spoken word, music and written text to produce fluid works, often with broad appeal. These new texts are vastly more complex and sensory than anything that has preceded them, presenting meaning through many different avenues at once, and to a degree not previously experienced by readers. In addition, the possibility of user interaction distributes the act of creation amongst a community of users, allowing endless mutation of the original work.

It is in the light of these observations that I recognise the requirement for the development of a diverse set of responses in order to detect the meaning of these works. Working together, and often rapidly changing, the various modes from which texts are constructed make new demands on any would-be readers who have to use their interpretive powers in a similarly diverse fashion. They must incorporate into their responses to the mobile and variable text a variety of ‘reading’ techniques, and must be able to switch between them rapidly in order to make sense of what is presented. This difficulty is aggravated by the fact that the digital text has embedded in it the potential to interrogate the users themselves through the interactive processes it allows. By demanding of the reader the need for a response in order to activate the next part of the text, sometimes in unpredictable ways, the text itself is necessarily altered. In short, it seems that the user’s response is not only incorporated into the text but is itself part of the process by which the text is exposed. It is for all of these reasons that it is necessary to develop new ways of approaching these complicated texts in order to extract the meanings they contain. It is the beginning of the development of a suitable multimedia literacy that this thesis describes.

6.6.1. Affecting Modalities: configuring meaning in cyberspace.

To develop this literacy, and to respond to some of questions about what form it might take, I have examined in detail four varied texts, available via the Internet. Throughout the course of my investigative work, I have illustrated a number of different critical approaches, some of which are grounded in the work of

other theorists whose ideas and methods have allowed a rational and structured consideration of texts which can prove difficult to anchor. At other times, it has been necessary to be inventive, because the text itself is not susceptible to easy analysis by existing methodologies. This is particularly true of Nicolas Clauss' work, which cannot conform easily or directly to any externally applied system of analysis. In devising my own approach to this piece I am conscious of its limitations, and so have resorted to an extensive range of other analytical procedures in order to substantiate meaning within what is a unusually subtle and oblique work.

However, it is the sheer complexity of texts like *Inanimate Alice* and *The Shower* that gives rise to the issues I have already identified. While concerns about authorial control and user interaction or the nature of representation might seem to fall outside the question of what constitutes a multimedia literacy, I claim that such issues are essential to a full comprehension of these texts. If meaning is to be configured by the recipient, it cannot be done without a full appreciation of the medium that promulgates interactivity and the consequences this has for the peculiar relationship between creator and reader in Internet texts. Equally, if an artist claims to 'paint' on a computer, or asserts that his work is the result of an active collaboration between himself and his spectator, his claims must surely be tested. It cannot be taken as given that the means of access which mediates the relationship between authors and readers is unimportant, or that authors' assertions about the nature of their work are necessarily true, for to do so neglects some fundamental questions about commonly held suppositions. Close analysis of my chosen texts has prompted me to recognise the existence of these specific questions relating to generally preconceived ideas about Internet interactivity, its function as a supposedly democratising force, and the power of digital texts to deliver convincing mimetic representations. Knowledge of these matters through an appreciation of how artists and writers retain control over their texts, or how they represent the world in them, is bound to affect and inform the ways in which we relate to texts of this nature. These are crucial issues, which are relevant, not only to the specific texts to which I refer, but also to the development of a more generally applicable multimedia literacy. My extensive analyses are, therefore, I suggest, highly revelatory.

Appendix 1: Glossary

Glossary: A brief explanation of some of the terms used in the main text. All definitions are by Kress and van Leeuwen and are taken from several of their works (see bibliography).

Please note the following:

The symbol * marks the terminology used by Kress and van Leeuwen which describes various photographic shots, although undoubtedly it might be possible to use the same terminology for other types of pictures and drawings.

The symbol ** against Kress and van Leeuwen’s description of the *point of view* assumed and demonstrated in photographic images needs expanding to include the multiple possibilities of the *experiencing-I-Me-We* role(s) afforded by the interactive nature of the *Hometown* narrative.

REALISATIONS	DEFINITIONS	CHAPTER	BOOK
Affordance	...Affordances (Gibson) are potential uses of a given object, stemming from the perceivable properties of the object. Because perception is selective, depending on the needs and interests of the perceivers, different perceivers will notice different affordances.	Glossary of key terms	2005, p.273
Analytical processes	...relate participants in terms of a part-whole structure. They involve two kinds of participants: one <i>Carrier</i> (the whole) and any number of <i>Possessive Attributes</i> (the parts).	Conceptual representations	1996, p.89
Carrier	...participants which fit together to make up a larger whole [...] the ‘Carrier’ represents the whole.	Narrative representations	1996, p.49
Classificational processes	...relate participants to each other in terms of a ‘kind of’ relation, a taxonomy.	Conceptual representations	1996, p.81

REALISATIONS	DEFINITIONS	CHAPTER	BOOK
Covert taxonomy	...A set of participants (Subordinates) is distributed symmetrically across the picture space, at equal distance from one another, equal in size and oriented towards the vertical and horizontal axes in the same way.	Conceptual representations	1996, p.89
Detached	Low angle*	Representation and interaction	1996, p.154
Disengaged	...Possessive Attributes are either <i>connected</i> [...] or <i>disengaged</i> , by a layout of the Possessive Attributes which separates them, yet clearly shows how they fit together.	Conceptual representations	1996, pp.99-100
Given	The left element in a polarised composition or the left polarised element in a centred composition. This element is not identical or near identical to the corresponding right element.	The meaning of composition	1996, p.224
Goal	... the participant [...] to whom the action is done, or at whom the action is aimed	Narrative Representations	1996, p.62
Ideal	The top element in a polarised composition or the top polarised element in a centred composition, This element is not identical or near-identical to the corresponding bottom element.	The meaning of composition	1996, p.224
Impersonal	Long shot*	Representation and interaction	1996, p.154
Intimate/personal	Close shot*	Representation and interaction	1996, p.154
Involvement	Frontal angle*	Representation and interaction	1996, p.154
New	The right element in a polarised composition or the right polarised element in a centred composition. This element is not identical or near-identical to the corresponding left element.	The meaning of composition	1996, p.224

REALISATIONS	DEFINITIONS	CHAPTER	BOOK
Non-transactional participant/ Actor	...When diagrams have only one participant, this participant will always be the Actor. The resulting structure we call non-transactional. The action In a non-transactional structure has no 'Goal', is not 'done to' or 'aimed at' anyone or anything.	Narrative representations	1996, p.61
Overt taxonomy	...Overt taxonomies have levels, and participants at the same level are represented as being, in some sense, 'of the same kind'.	Conceptual representations	1996, p.83
Participant (interactive and represented)	...the former are participants in the act of communication – who speak or listen or write and read, make images or view them; the latter are the participants who are the subject of communication, that is, the people, places, and things (including abstract' things') represented in and by the speech or writing or image, the participants about whom or which we are speaking or writing or producing images.	Narrative representations	1996. p.46
Phenomenon	The participant (verbal or non-verbal) enclosed by the thought bubble.	Narrative representations	1996, p.75
Point of view**	... the text narrativizes the point of view and imposes a fictional viewer between the represented and the interactive participants.	Representation and interaction	1996, p.149
Polarised	There is no element in the centre of the composition.	The meaning of composition	1996, p.224
Possessive attribute	...and a number of other participants, the 'Possessive Attributes' represent the 'parts' [...] that make up the whole.	Narrative representations	1996, p.49
Reactor	The active participant in a reaction process is the participant whose look creates the eyeline.	Narrative representations	1996, p.74
Real	The bottom element in a polarised composition or the bottom polarised element in a centred composition, This element is not identical or near-identical to the corresponding top element.	The meaning of composition	1996, p.224

REALISATIONS	DEFINITIONS	CHAPTER	BOOK
Represented participant power	Low angle	Representation and interaction	1996, p.154
Saliency	The degree to which an element draws attention to itself, due to its size, its place in the foreground or its overlapping of other elements, its colour, its tonal values, its sharpness of definition, and other features.	The meaning of composition	1996, p.225
Senser	The participant from whom the 'thought bubble' vector emanates.	Narrative representations	1996, p.75
Setting	The setting of a process is recognizable because participants in the foreground overlap and partially obscure it; because it is often drawn or painted in less detail, or, in the case of photography, has a softer focus; and because of contrasts in colour saturation and overall darkness or lightness between foreground and background.	Narrative representations	1996, p.75
Symbolic suggestive processes	A)...Symbolic processes are what a participant <i>means</i> or <i>is</i> . B) ... symbolic Suggestive Processes have only one participant, the Carrier [...] in this kind of image details tend to be de-emphasised in favour of what could be called 'mood' or 'atmosphere'.	Conceptual representations	1996, p.108 p.110
Vector	...In pictures, these vectors are formed by depicted elements that form an oblique line, often a quite strong, diagonal line [...] the vectors may be formed by bodies or limbs or tools 'in action', but there are many ways to turn represented elements into diagonal lines of action.	Narrative representations	1996, p.75

Appendix 2: Endorsements

Extract from electronic mail: Robert Kendall to me regarding my analysis of *Faith*:

Robert Kendall
[redacted]

to: Valerie Trim [redacted]

date: 6 April 2009 00:31

subject: Your Analysis

Val,

I was extremely impressed and gratified by your analysis. It's certainly the best discussion I've read of my work, and one of the most thoughtful and thorough analyses of any e-lit work that I've encountered for a while. Too often e-lit criticism serves as little more than a springboard for abstract theoretical discussion that does little to illuminate the actual work at hand. You've made good practical use of your theoretical framework in the service of a remarkably detailed and scrupulous close reading. It's very rewarding for a writer, slogging away in his isolation, to know that someone actually appreciates the details he's spent such long hours honing and polishing. I'm honored to be the focus of your study.

[...]

Thanks again for showing this to me.

--Rob

Extract from electronic mail: Ian Harper to me regarding my analysis of Hometown :

Ian Harper

Wednesday, 26 August, 2009 3:25:44 PM

To: V TRIM [redacted]

Hi Val,

I have had another read of your text - the Inanimate Alice section – and want to offer a few comments.

Firstly, what stands out for me is that it is a very readable piece.

I think if you were to strip out the analysis [...] it would make for a great descriptive feature/article/ case study that teachers would want to get their hands on. Your explanation of how the story has been handled is first class. I feel sure that many teachers would welcome such interpretation in informing them of exactly what is going on and why it is meaningful for them in their work. It digs into many of the hidden depths of the series which can be easily overlooked during even a detailed viewing. Your quick aside in looking at your personal experience in the classroom - the choice of colours and the girls vs boys reaction - is spot on. We have very similar reports from elsewhere.

Taking this a step further - this seems to be what you and Dale could collaborate on. It moves on from Jess's "what works" to Dale's "how it works" in the classroom. It is complementary to both the episodes and Education Packs providing much stimulus and guidance. I could imagine a similar piece for each episode.

[...]

...Across the board, entertainment aspects of education are becoming vital in ensuring quality delivery. Kids, wonderfully entertained with high-production values on their home screens are [will] not be attracted to poor quality educational materials, so much so that I believe ent and edu are growing ever closer together. No longer will it be the kiss of death to put the title 'educational' on an entertainment product.

[...]

I hope this helps a little.

My best,

Ian

Ian Harper - Producer,
The Bradfield Company Ltd

[redacted]
[redacted]
[redacted]
[redacted]

Bibliography

Primary Texts:

- Kendall, R. (2002) **Faith**. [Online]. Available from: http://collection.eliterature.org/1/works/kendall_faith.htm [Accessed from 01/01 2009].
- Pullinger, K. & Joseph, C. (2007) **Inanimate Alice - Episode 4: Hometown**. [Online]. Available from: <http://www.inanimatealice.com/episode4/> [Accessed 2/17/2012 2012].
- Clauss, N. (2005a) **The Shower**. [Online]. Available from: <http://www.flyingpuppet.com/shock/shower.htm> [Accessed 1/1 2010].
- Clauss, N. (2005b) **Blue Han**. [Online]. Available from: <http://www.flyingpuppet.com/shock/bluehan.htm> [Accessed 2/5/2012 2012].
- Shanken, E.A. (ed.) (2003) **Roy Ascott: Telematic Embrace**. Berkeley and Los Angeles, USA: University of California Press.

Secondary Texts:

- Multimedia authoring**. (2010) [Online]. Available from: http://www.adobe.com/products/director/multimedia_authoring_software/ [Accessed 03/23 2010].
- Oulipo**. (2009) [Online]. Available from: <http://en.wikipedia.org/wiki/Oulipo> [Accessed 06/10 2009].
- ReadWriteThink**. (2009) [Online]. Available from: <http://www.readwritethink.org/> [Accessed 01/01 2009].
- Internet World Stats**. (2008) [Online]. Available from: <http://www.Internetworldstats.com/stats.htm> [Accessed 01/28 2009].
- iStori.es**. (2007) [Online]. Available from: <http://istori.es/> [Accessed 01/01 2009].
- Electronic Literature Collection Volume 1**. (2006) [Online]. Available from: <http://collection.eliterature.org/1/> [Accessed 02/14 2009].
- Blue Lacuna: An Interactive Novel - Download** [Online]. Available from: <http://www.lacunastory.com/download.html> [Accessed 11/24/2011 2011].
- DADA: Database of Digital Art**. [Online]. Available from: <http://dada.compart-bremen.de/> [Accessed 2/24/2012 2012].

DARPA'S Mission. [Online]. Available from: <http://www.darpa.mil/mission.html> [Accessed 01/02 2009].

Dictionary.com. [Online]. Available from: <http://dictionary.reference.com/> [Accessed 04/14 2012].

Encarta Free Online Dictionary, Thesaurus and Encyclopedia. [Online]. Available from: <http://www.thefreedictionary.com/sorites> [Accessed 2/22/2012 2012].

Fischinger - Statement About Painting. [Online]. Available from: <http://www.oskarfischinger.org/Fisch1951Painting.htm> [Accessed 8/15/2011 2011].

flying puppet - nicolas clauss [Online]. Available from: <http://www.flyingpuppet.com/> [Accessed 2/26/2012 2012].

Gallican Psalter with Canticles, Litany, and Office of the Dead. (2008) [Online]. Available from: <http://www.leavesofgold.org/gallery/psalters/psalter06.html> [Accessed 02/12 2009].

Happily Ever Afters Interactive Novels, Inspirational Stories, free ebooks, free game, free romance, online fiction. [Online]. Available from: <http://happily-ever-afters.net/> [Accessed 11/24/2011 2011].

IAAA, Institute of Artificial Art Amsterdam. [Online]. Available from: <http://iaaa.nl/> [Accessed 2/24/2012 2012].

Ivan Pavlov (1849-1936) [Online]. Available from: <http://www.ivanpavlov.com/> [Accessed 12/5/2011 2011].

Jean-Jacques Birgé [Online]. Available from: <http://www.drame.org/2/index.php> [Accessed 1/27/2011 2011].

Psycho Poster. (1960) <http://alonefancryinginthewilderness.wordpress.com/category/psycho/> edn.,

Radical Art [Online]. Available from: <http://radicalart.info/> [Accessed 2/24/2012 2012].

Adams, R. (2002) **Nicolas Clauss: Flying Puppet 1**. [Online]. Available from: <http://tracearchive.ntu.ac.uk/review/index.cfm?article=31> [Accessed 06/12 2012].

Adorno, T. and Jephcott, E. (1996 (1976)) **Mahler: A Musical Physiognomy**. Chicago, USA: University of Chicago Press.

Anfam, D.A. Beal, M. and Bowes, W. (1987) **Techniques of the Great Masters of Art**. Secaucus, N.J. USA.: Chartwell Books.

Arp, J.(. (1916-1917) **Untitled (Collage with Squares Arranged according to the Laws of Chance)**. http://www.moma.org/collection/object.php?object_id=37013 edn, MoMA.

Ascott, R. (1971) **Plastic Transactions**. [Online]. Available from: <http://www.spacestudios.org.uk/whats-on/exhibitions/roy-ascott-the-syncretic-sense> [Accessed 2/24/2012 2012].

- Ascott, R. (1959) **Change Painting**. [Online]. Available from: <http://www.syncretica.net/syncretic.php> [Accessed 2/24/2012 2012].
- Ascott, R. (1983) **La Plissure du Texte**. [Online]. Available from: <http://alien.mur.at/rax/ARTEX/PLISSURE/plissure.html> [Accessed 11/7/2011 2011].
- Ascott, R. (2003) "Behaviourist Art and the Cybernetic Vision" In Shanken, E.A. (ed.) pp. 109-156.
- Ascott, R. (2003) "The Construction of Change" In Shanken, E.A. (ed.). pp. 97-107.
- Ascott, R. (2003) "Is there Love in the Telematic Embrace?" In Shanken, E.A. (ed.). pp. 232-246.
- Ascott, R. (1968) The Cybernetic Stance: My Process and Purpose. **Leonardo**, 1 (2): pp. 105-112.
- Audiokinetic, X. **Audiokinetic | Wwise Solution Overview**. [Online]. Available from: <http://www.audiokinetic.com/en/products/wwise/solution-overview> [Accessed 2/5/2012 2012].
- Bacon, F. (1969) **Three Studies of Lucian Freud**. <http://piratesandrevolutionaries.blogspot.com/2010/02/rhythmic-geometric-55-triptych-three.html> edn,
- Balla, G. (1912) **Dynamism of a Dog on a Leash**. [Online]. Available from: <http://www.artchive.com/artchive/B/balla/dogleash.jpg.html> [Accessed 2/24/2012 2012].
- Balla, G. (1912) **Girl running on a Balcony**. <http://www.webexhibits.org/colorart/futurism.html> edn,.
- Baldick, C. (2001) **The Concise Oxford Dictionary of Literary Terms**. Oxford, UK: Oxford University Press.
- Barthes, R. (1994) **The Semiotic Challenge**. Berkeley and Los Angeles, California, USA: University of California Press.
- Barthes, R. (2000) **Mythologies**. London, UK: Vintage.
- Barthes, R. (1977) **Image Music Text**. London, UK: Fontana Press.
- Barthes, R. (1973) **The Pleasure of the Text**. New York: Hill and Wang.
- Barthes, R. (1970) **Writing Degree Zero and Elements of Sociology**. Boston, USA: Beacon Press.
- Baxandall, M. (1995) **Shadows and Enlightenment**. New Haven & London: Yale University Press.
- Bellour, R. (2001) **The Analysis of Film**. Bloomington, USA: Indiana University Press.
- Bellour, R. (2001) "System of a Fragment" In **The Analysis of Film** Bloomington, USA: Indiana University Press. pp. 29-67.
- Bellour, R. (2001) "The Unattainable Text" In **The Analysis of Film** Bloomington, USA: Indiana University Press. pp. 21-27.
- Benjamin, W. (1999) "The Work of Art in the Age of Mechanical Reproduction" In Adrent, H. (ed.) **Illuminations** London, Great Britain: Pimlico. pp. 211-244.
- Bergson, H. (1946) **Creative Evolution: Chapter 1: The Evolution of Life -- Mechanism and Teleology** http://www.brocku.ca/MeadProject/Bergson/Bergson_1911a/Bergson_1911_01.html#1 ed. Vol. 2011.
- Berners-Lee, T. (1991) **Email News Group correspondence**. [Online]. Available from: <http://tinyurl.com/ym45zu> [Accessed 01/27 2009].
- Betancourt, M. (2007) **The State of the Art: Synchronous Form in Visual Music**. [Online]. Available from: http://www.offscreen.com/Sound_Issue/betancourt_synchronous.pdf [Accessed 01/01 2011].
- Birgé, J. & Clauss, N. **Somnambules**. [Online]. Available from: <http://www.somnambules.net/> [Accessed 2/22/2012 2012].
- Birgé, J. (2010) **Personal Communication: Email letter to V. Trim**.
- Borges, L.J. (1941) **The Garden of Forking Paths**. [Online]. Available from: <http://www.english.ucsb.edu/faculty/rraley/courses/engl165/scanners/garden1.htm> [Accessed 11/27/2011 2011].
- Brown, R. (2004) "Hermann, Hitchcock, and the Music of the Irrational" In Kolker, R.P. (ed.) **Alfred Hitchcock's Psycho** New York, USA: Oxford University Press. pp. 102-117.
- Carra, C. (1913) **The Red Horseman**. [Online]. Available from: <http://arteest.org/futurism.htm> [Accessed 2/24/2012 2012].
- Carroll, L. (1883) **Poeta fit, non nascitur** In: **Rhyme? and Reason?** [Online]. Available from: <http://www.archive.org/stream/rhymeandreasonb00holigoog#page/n140/mode/1up> [Accessed 04/07 2010].
- Carter, T. **Word-Painting**. [Online]. Available from: <http://www.oxfordmusiconline.com> [Accessed 03/03 2009].
- Casetti, F. (1998) **Inside the Gaze: The Fiction Film and Its Spectator**. Bloomington, USA: Indiana University.
- Clauss, N. (2010) **Personal Communication: Email letter to V. Trim regarding the programming of The Shower**.
- Clauss, N. (2001) **Legato**. [Online]. Available from: <http://www.flyingpuppet.com/shock/legato.htm> [Accessed 04/14 2010].
- Clauss, N. **Dervish Flowers** [Online]. Available from: <http://www.flyingpuppet.com/shock/dervish.htm> [Accessed 2/22/2012 2012].

Clauss, N. **La Liberta del Popolo - 04-2010** [Online]. Available from: <http://www.flyingpuppet.com/shock/liberta.htm> [Accessed 2/22/2012 2012].

Clauss, N. **MMIX / All Together - nicolas clauss - 2009** [Online]. Available from: <http://www.flyingpuppet.com/shock/2009/alltogether.htm> [Accessed 2/22/2012 2012].

Clauss, N. **MMIX / Home - nicolas clauss - 2009** [Online]. Available from: <http://www.flyingpuppet.com/shock/2009/home.htm> [Accessed 2/22/2012 2012].

Clauss, N. **Modified - nicolas clauss - 09-2008** [Online]. Available from: <http://www.flyingpuppet.com/shock/modified.htm> [Accessed 2/22/2012 2012].

Clauss, N. **MMIX / Mouches - nicolas clauss - 2009** [Online]. Available from: <http://www.flyingpuppet.com/shock/2009/mouches.htm> [Accessed 2/22/2012 2012].

Clauss, N. **Peinture morte - nicolas clauss - 12.2003** [Online]. Available from: <http://www.flyingpuppet.com/shock/peinture/peinture.htm> [Accessed 2/22/2012 2012].

Clauss, N. **Side effects - 01-2008** [Online]. Available from: <http://www.flyingpuppet.com/shock/sideeffects.htm> [Accessed 2/22/2012 2012].

Clauss, N. **White Rituals - nicolas clauss - 01-2007** [Online]. Available from: <http://www.flyingpuppet.com/shock/rituals.htm> [Accessed 2/22/2012 2012].

Clauss, N. (2001) **Legato**. [Online]. Available from: <http://www.flyingpuppet.com/shock/legato.htm> [Accessed 04/14 2010].

Consenstein, P. (1995). Memory and Oulipian Constraints. **Postmodern Culture** [Online], 6 (1): 09/03/2009. Available from: <http://muse.jhu.edu>. [Accessed 09/03/2009].

Dack, J. (2005) **The 'Open ' form - Literature and Music** [Online]. Available from: <http://www.scambi.mdx.ac.uk/Documents/Symposium%20Paper.pdf> [Accessed 01/01 2011].

Dayan, D. (1974) The Tutor Code of Classical Cinema. **Film Quarterly**, 28 (1): 22-31.

Deibert, R.J. (1997) **Parchment, Printing, and Hypermedia**. New York, United States of America: Columbia University Press.

Deleuze, G. (2003) **Francis Bacon: The Logic of Sensation**. London, UK: Continuum.

Deleuze, G. (1990) **The Logic of Sense**. London, UK: Colombia University Press.

Deleuze, G. (1983) **Cinema 1: The Movement Image**. Paperback 1992 ed. London, UK: The Athlone Press.

DiNucci, D. (1999) **Fragmented Futures**. [Online]. Available from: http://www.darcy.com/fragmented_future.pdf [Accessed 08/10 2012].

Duchamp, M. (2003) "The Richard Mutt Case" *In* Harrison, C. and Wood, P. (eds.). pp. 252.

Durnat, R. (2002) **A Hard Look at 'Psycho'**. Trowbridge, UK: British Film Institute.

Eco, U. (1989) **The Open Work**. Cambridge, Massachusetts: Harvard University Press.

Eco, U. (1986) **Art and Beauty in the Middle Ages**. New Haven and London: Yale University Press.

Eco, U. (1979) **The Role of the Reader : Explorations in the Semiotics of Texts**. Bloomington: Indiana University Press.

Eisenstein, S. (1968) "Form and Content: Practice" *In* **The Film Sense** London, UK: Faber. pp. 123-168.

Eisenstein, S. (1939) **Alexander Nevsky**. Mosfilm, Soviet Union.

Ernst, M. (1976) **Une Semaine de Bonte**. New York, USA: Dover Publications.

Fischinger, O. (1947) **Motion Painting No.1**. [Online]. [Accessed 01/02 2012].

Foucault, M. (1983) **This Is Not a Pipe**. Berkeley and Los Angeles, USA: University of California Press.

Freeman, J. **Graph Theory** [Online]. Available from: <http://turbulence.org/Works/graphtheory/> [Accessed 11/27/2011 2011].

Fuchs, C. (2008) **Internet and Society: Social Theory in the Information Age**. New York: Routledge.

Gage, J. (2006) **Colour in Art**. London, UK: Thames & Hudson Ltd.

Genette, G. (1980) **Narrative Discourse: An Essay in Method**. New York, USA: Cornell University Press.

Gibson, J.J. (1979) **The Ecological Approach to Visual Perception**. Boston, USA: Houghton Mifflin.

Gibson, W. (1995) **Burning Chrome**. London, UK: HarperCollins.

Gigerenzer, G. (2001) **Digital Computer: Impact on the Social Sciences**. [Online]. Available from: <http://library.mpib-berlin.mpg.de/ft/gg/GG> Digital 2001.pdf. [Accessed 01/27 2009].

Gombrich, E.H. (2002) **Art and Illusion: A study in the psychology of pictorial representation**. Sixth ed. London. UK: Phaidon Press Ltd.

Greenberg, C. (1961) "Collage" *In* **Art and Culture: Critical Essays** Boston, USA: Beacon Press. pp. 70-83.

Greenberg, C. (2003) "Modernist Painting" *In* Harrison, C. and Wood, P. (eds.). pp. 773-779.

- Guggenheim Museum (2012) **Collection Online: Process art**. [Online]. Available from: [http://www.guggenheim.org/new-york/collections/collection-online/show-full/movement/?search=Process art](http://www.guggenheim.org/new-york/collections/collection-online/show-full/movement/?search=Process%20art) [Accessed 11/13/2011 2011].
- Halliday, M.A.K. (2004) "Three Aspects of Children's Language Development: Learning Language, Learning through Language, Learning about Language" In Webster, J. (ed.) **The Collected Works**. London: Continuum International Publishing Group. pp. 308-326.
- Harman, S. (2011) **Twinthesis : Twitter Powered Synthesis Sam Harman**, .
- Harper, I. (2009) **Personal Communication: Email letter to V. Trim**.
- Harris, B.R. (2006) Visual information literacy via visual means: three heuristics. **References Services Review**, 34 (2): 231-221.
- Harrison, C. and Wood, P. (eds.) (2003) **Art in Theory, 1900-2000: An Anthology of Changing Ideas**. New Edition ed. Padstow, UK: Blackwell Publishing.
- Hayles, N.K. (2008) **Electronic Literature: New Horizons for the Literary**. Notre Dame, Indiana, USA: University of Notre Dame.
- Hayles, N.K. (2007) **Electronic Literature: What is it?** [Online]. Available from: <http://eliterature.org/pad/elp.html> [Accessed 10/27/2011 2011].
- Hayles, N.K., Montfort, N., Rettberg, S. et al. (2008) **The Electronic Literature Organisation**. [Online]. Available from: <http://newhorizonz.eliterature.org> [Accessed 12/25 2008].
- Herman, D., Jahn, M. and Ryan, M. (eds.) (2005) **Routledge Encyclopedia of Narrative Theory**. Abingdon, Oxford, UK: Routledge.
- Herrmann, B. (1960) **Shower Scene Score**. <http://www.hitchcockwiki.com/blog/?cat=96> edn,.
- Hitchcock, A. & Herrmann, B. (1960) **The Famous Shower Scene From "Psycho" - YouTube** [Online]. Available from: <http://www.youtube.com/watch?v=8VP5jEAP3K4> [Accessed 2/24/2012 2012].
- Hoogerbrugge, H. **HOTEL - an interactive tale by Han Hoogerbrugge** [Online]. Available from: <http://hotel.submarinechannel.com/splash.html> [Accessed 2/24/2012 2012].
- Hoogerbrugge, H. **Modern Living / Neurotica series** [Online]. Available from: <http://ml.hoogerbrugge.com/> [Accessed 2/24/2012 2012].
- Hitchcock, A. (1960) **Psycho**. Universal Pictures, USA.
- Iser, W. (2006) **How to do Theory (How to Study Literature)**. Oxford, UK: Blackwell Publishing.
- Iser, W. (2000) "The Reading Process: a phenomenological approach" In Lodge, D. and Wood, N. (eds.) **Modern Criticism and Theory** Second Edition ed. Malaysia: Pearson Education Limited. pp. 189-204.
- Iser, W. (1978) "Readers and the Concept of the Implied Reader" In **The Act of Reading: A Theory of Aesthetic Response** Baltimore, USA: John Hopkins University Press. pp. 27-38.
- Jackson, S. (1995) **Patchwork Girl**. Watertown, Massachusetts, USA: Eastgate Systems.
- Jahn, M. (2005) **Narratology: A Guide to the Theory of Narrative**. [Online]. Available from: <http://www.uni-koeln.de/~ame02/pppn.htm> [Accessed 04/02 2009].
- Jewitt, C. and Oyama, R. (2001) "Visual meaning: a social semiotic approach" In van Leeuwen, T. and Jewitt, C. (eds.) **Handbook of Visual analyses** London, UK: Sage Publications.
- Jones, T. (2011) **Review of: Distrust That Particular Flavor by William Gibson**. Guardian Newspaper, UK.
- Joyce, M. (1987,1990) **afternoon: a story**. Watertown, Massachusetts, USA: Eastgate Systems.
- Kemp, W. (1998) "The Work of Art and Its Beholder: The Methodology of the Aesthetic of Reception" In Cheetham, M., A Holly, M., A and Moxley, K. (eds.) **The Subjects of Art History** Cambridge, UK: Cambridge University Press. pp. 180-194.
- Kendall, R. (2009) **Personal communication: Email letter to V C Trim regarding Faith**.
- Kendall, R. (2004) **Word Circuits**. [Online]. Available from: <http://wordcircuits.com/index.html> [Accessed 01/01 2009].
- Kirschenbaum, M. (2008) **Mechanisms: New Media and the Forensic Imagination**. USA: MIT,.
- Kirschenbaum, M. (2005) **Every Contact Leaves a Trace: Computers Forensics and Electronic Textuality**. [Online]. Available from: <http://otal.umd.edu/~mgk/blog/LeavesATrace.pdf> [Accessed 10/27 2011].
- Kolker, R.P. (ed.) (2004) **Alfred Hitchcock's Psycho**. New York, USA: Oxford University Press.
- Kress, G. and van Leeuwen, T. (2001) **Multimodal Discourse**. London, UK: Hodder Arnold.
- Kress, G. and van Leeuwen, T. (1996) **Reading Visual Images: The Grammar of Visual Design**. Abingdon, UK: Routledge.
- Kuspit, D. **artnet® Magazine - Features - The Matrix of Sensations by Donald Kuspit**. [Online]. Available from: <http://www.artnet.com/magazineus/features/kuspit/kuspit8-5-05.asp> [Accessed 8/1/2011 2011].
- Kutner, C.J. (2006) **Beyond the Golden Age: Film Noir Since the '50s**. [Online]. Available from: <http://www.brightlightsfilm.com/54/noirgolden.php> [Accessed 1/12 2011].
- La Provence (2007) **Nicolas Clauss, créateur d'art interactif, rencontre les jeunes**. [Online]. Available from: <http://www.nicolasclauss.com/presse/pr114.htm> [Accessed 3/29/2011 2011].

- Labov, W. (1972) **Language in the Inner City: Studies in Black English Vernacular**. Philadelphia, USA: University of Pennsylvania.
- Latour, B. (1999) **Pandora's Hope: Essays on the Reality of Science Studies**. Cambridge, Massachusetts USA: Harvard University Press.
- Lawlor, L. & Moulard, V. (2011) **Henri Bergson (Stanford Encyclopedia of Philosophy)** [Online]. Available from: <http://plato.stanford.edu/entries/bergson/#5> [Accessed 2/5/2012 2012].
- Leggat, R. (2011) **A History of Photography : DELAROCHE, Paul**. [Online]. Available from: <http://www.mpritchard.com/photohistory/history/delaroch.htm> [Accessed 2/20/2012 2012].
- Leiner, B.M., Cerf, V.G., Clark, D.D. et al. (2003) **Internet Society: Origins of the Internet**. [Online]. Available from: <http://www.isoc.org/Internet/history/brief.shtml#Origins> [Accessed 01/20 2009].
- Lévi Strauss, C. (1962) "The Science of the Concrete" *In The Savage Mind* USA: University of Chicago Press. pp. 1-44.
- Licklider, J.C.R. (1990) **The Computer as a Communication Device**. [Online]. Available from: <ftp://gatekeeper.research.compaq.com/pub/DEC/SRC/research-reports/SRC-061.pdf> [Accessed 01/21 2009].
- Licklider, J.C.R. (1990) **Man-Computer Symbiosis**. [Online]. Available from: <ftp://gatekeeper.research.compaq.com/pub/DEC/SRC/research-reports/SRC-061.pdf> [Accessed 01/21 2009].
- Machin, D. (2010) **Analysing Popular Music**. London, UK: Sage.
- Maes, N. (1665) **The Eavesdropper** http://commons.wikimedia.org/wiki/File:Nicolaes_Maes_-_Eavesdropper_with_a_Scolding_Woman_-_WGA13817.jpg edn, .
- Magrini, J. (2007) **On the system of the "Suture" in cinema**. [Online]. Available from: http://www.othercinema.com/otherzine/index.php?issueid=15&article_id=33 [Accessed 01/10 2010].
- Magritte, R. (1928-1929) **La Trahison des Images**. [Online]. Available from: <http://en.wikipedia.org/wiki/File:MagrittePipe.jpg> [Accessed 01/02 2012].
- McClary, S. (1991) **Feminine Endings**. Minneapolis, USA: University of Minnesota Press.
- McLuhan, M. (1964, 1994) **Understanding Media: The Extensions of Man**. USA: MIT.
- Metz, C. (1974) **Film Language: ha semiotics of the cinema**. New York, USA: Oxford University Press.
- Michelle, A. (2011) **Tonematrix**. [Online]. Available from: <http://lab.andre-michelle.com/tonematrix> [Accessed 01/12 2011].
- Molina, A. (2004) **When 0 and 1 create life : Nicolas Clauss and Han Hoogerbrugge**. [Online]. Available from: <http://www.nicolasclauss.com/presse/pr68.htm>. [Accessed 02/22 2010].
- Moulthrop, S. (1995) **Victory Garden**. Watertown, Massachusetts, USA: Eastgate Systems.
- Mulvey, L. (1989) **Visual and Other Pleasures**. London, UK: Macmillan Academic and Professional Ltd.
- Murray, J., H. (1997) **Hamlet on the Holodeck**. New York, USA: The Free Press.
- Nake, F., Cordes, H. and Grabowski, S. (2010) **compArt DaDA: the Database Digital Art**. [Online]. Available from: <http://dada.compart-bremen.de/> [Accessed 04/14 2010].
- Nattiez, J. (1990) **Music and Discourse**. Oxford. UK: Princeton University Press.
- NCTE (2005) **NCTE Position Statement on Multi Modal Literacies**. [Online]. Available from: <http://www.ncte.org/positions/statements/multimodalliteracies> [Accessed 03/31 2009].
- Office For National Statistics (2008) **Consumer durables**. [Online]. Available from: <http://www.statistics.gov.uk/cci/nugget.asp?id=868> [Accessed 01/26 2009].
- Oulipo**. (2009) [Online]. Available from: <http://en.wikipedia.org/wiki/Oulipo> [Accessed 06/10 2009].
- Oudart, J. ((1969)1977) Dossier Suture: Cinema and Suture. **Screen**, 18 (4): 35-47.
- Panofsky, E. (1970) **Meaning in the Visual Arts**. Harmondsworth, England: Penguin Books.
- Philadelphia Museum of Art (2008) **Leaves of Gold**. [Online]. Available from: <http://www.leavesofgold.org/gallery/psalters/psalter06.html> [Accessed 02/12 2009].
- Pousseur, H. (2006) **Scambi**. [Online]. Available from: <http://www.scambi.mdx.ac.uk/listenScambi.html> [Accessed 01/01 2011].
- Pullinger, K. & Joseph, C. (2007) **Inanimate Alice**. [Online]. Available from: <http://www.inanimatealice.com/> [Accessed 04/30 2009].
- Pullinger, K. & Joseph, C. (2009) **Flight Paths**. [Online]. Available from: <http://www.flightpaths.net/> [Accessed 01/01 2009].
- Rafaeli, S. (1988) "Interactivity: From new media to communication" *In* Hawkins, R.P. Wiemann, J.M. and Pingree, S. (eds.) **Sage Annual Review of Communication Research: Advancing Communication Science** Beverly Hill, California, USA: Sage. pp. 110-134.
- Rebello, S. (1990) **Alfred Hitchcock and the making of Psycho**. London, UK: Mandarin Paperbacks.
- Rimmon-Kenan, S. (1983) **Narrative Fiction: Contemporary Poetics**. London, UK: Methuen.
- Ryan, M. (2006) **Avatars of Story**. USA: University of Minnesota.

- Saussure, F.d. (1915) **Course in General Linguistics**. New York, USA: Philosophical Library.
- Scha, R. (2009) **Radical Art**. [Online]. Available from: <http://radicalart.info/> [Accessed 04/14 2010].
- Scha, R. (2006) **Chance Art**. [Online]. Available from: <http://radicalart.info/AlgorithmicArt/chance/index.html> [Accessed 04/14 2010].
- Scha, R. **Institute of Artificial Art Amsterdam**. [Online]. Available from: <http://iaaa.nl/> [Accessed 04/14 2010].
- Shklovsky, V. (1917) **Art as Technique**. [Online]. Available from: <http://www.vahidnab.com/defam.htm> [Accessed 2/22/2011 2011].
- Simi, G. (2007) **Interactive pictures by Nicolas Clauss**. [Online]. Available from: <http://www.digicult.it/digimag/article.asp?id=743> [Accessed 11/22/2010 2010].
- Skinner, B.F. **B.F. Skinner Foundation - A Brief Survey of Operant Behavior** [Online]. Available from: <http://www.bfskinner.org/BFSkinner/SurveyOperantBehavior.html> [Accessed 12/5/2011 2011].
- Smith, Daniel and Protevi, John (2008) "**Gilles Deleuze**". [Online]. Available from: <http://plato.stanford.edu/archives/fall2008/entries/deleuze/> [Accessed 01/02/2010 2010].
- Smith, D. & Protevi, J. (2008) **Gilles Deleuze**. [Online]. Available from: <http://plato.stanford.edu/archives/fall2008/entries/deleuze> [Accessed 02/02 2010].
- Thurlow, Crispin Lengel, L. and Tomic Alice (2004) **Computer Mediated Communication**. London, UK: Sage Publications.
- Toles, G. (2004) "'If thine eye offend thee...' *Psycho* and the Art of Infection" In Kolker, R.P. (ed.) **Alfred Hitchcock's Psycho** New York, USA: Oxford University Press. pp. 120-145.
- Trim, V.C. (2009) **A Genealogy and Development of Social Semiotics: A Literature Review**. Literature Review edn. University of Birmingham.
- Truffaut, J. (1985) **Hitchcock**. New York, USA: Touchstone.
- Tzara, T. **Dada Manifesto (1920)**. [Online]. Available from: http://www.391.org/manifestos/19201212tristantzara_dmonflabl.htm [Accessed 04/07 2010].
- Tzara, T. (1922) "Lecture on Dada (1922)" In Motherwell, R. (ed.) **The Dada Painters and Poets: An Anthology** Second (1979) ed. USA: Winterborn Art books. pp. 246-251.
- UN DMI** [Online]. Available from: <http://www.drame.org/1/2Dmi/DMI.html> [Accessed 1/27/2011 2011].
- van Leeuwen, T. (2005) **Introducing Social Semiotics**. Oxford, UK: Routledge.
- van Leeuwen, T. (1999) **Speech, Music, Sound**. London, UK: Macmillan Press Ltd.
- van Leeuwen, T. and Jewitt, C. (eds.) (2001) **Handbook of Visual Analysis**. London, UK: Sage Publications.
- Varese, E. (1998) "The Liberation of Sound" In Schwarz, E. and Childs, B. (eds.) **Contemporary Composers on Contemporary Music** Expanded Edition ed. New York, USA: Da Capo Press. pp. 196-208.
- Waldrop, M. (2008) **DARPA and the Internet Revolution**. [Online]. Available from: http://www.darpa.mil/Docs/Internet_Development_200807180909255.pdf [Accessed 01/20 2009].
- Walker, J.A. (2010) **Assemblage Art**. [Online]. Available from: <http://www.artdesigncafe.com/Assemblage-Art> [Accessed 08/13 2012].
- Wells, A.S. (2001) **Psycho**. London, UK: York Press.
- Wiener, N. (1948) **Cybernetics: or Control and Communication in the Animal and the Machine**. USA: MIT.
- Wikipedia contributors **Black box (disambiguation)** [Online]. Available from: http://en.wikipedia.org/wiki/Black_Box [Accessed 08/04 2012]. 2012].
- Willats, J. (1997) "Functions of Representational Systems: Flattening the Picture Surface" In **Art and Representation: New Principles in the Analysis of Pictures** Princeton, New Jersey, USA: Princeton University Press. pp. 221-247.
- Winkler, D. Kamins, S. and DeVoto, J. (1994) **HyperTalk 2.2: The Book**. Second Edition ed. New York, USA: Random House.
- Žižek, S. (2001) **The Fright of Real Tears**. London, UK: British Film Institute.

Sources consulted but not cited

- Adorno, T. and Gillespie, S. (1993) Music, Language & Composition. **Musical Quarterly**, 77 401-414.
- Berger, J. (1972) **Ways of Seeing**. London, UK: BBC and Penguin Books.
- Bignell, J. (2002) **Media Semiotics: An introduction**. 2nd ed. Manchester: Manchester University Press.
- Bird, J., Curtis, B., Mash, M. et al. (eds.) (1996) **The BLOCK Reader in visual culture**. London, UK: Routledge.
- Biriotti, M. and Miller, N. (eds.) (1993) **What is an Author?** Manchester, UK: Manchester University Press.
- Brief History of the Internet | Internet Society** [Online]. Available from: <http://www.Internetsociety.org/Internet/Internet-51/history-Internet/brief-history-Internet> [Accessed 1/3/2012 2012].

- Crow, D. (2003) **Visible Signs: an introduction to semiotics**. Lausanne, Switzerland: AVA Publishing.
- Eisenstein, S. (1949) **Film Form**. 1980th ed. New York, USA: Harcourt Brace Janovich, Inc.
- Everman, W., D. (1988) **Who Says This?** Carbondale, United States of America: Southern Illinois Press.
- Fludernik, M. (2003) Scene Shift, Metalepsis, and the Metaleptic Mode. **Style**, 37 382-400,444.
- Flynt, H. (1963) **Essay: Concept Art**. [Online]. Available from: <http://www.henryflynt.org/aesthetics/conart.html> [Accessed 2/22/2011 2011].
- Gage, J. (1997) **Colour and Meaning**. London, UK: Thames & Hudson Ltd.
- Gage, J. (1993) **Colour and Culture**. London, UK: Thames & Hudson Ltd.
- Graubart, M. (2004) Fallacies and Confusions. **The Musical Times**, 145 (1888): 19-24.
- Greenberg, C. (2003) "Avant-Garde and Kitsch" In Harrison, C. and Wood, P. (eds.). pp. 539-549.
- Hall, S. (ed.) (1997) **Representation: Cultural Representations and Signifying Practices**. London, UK: Sage Publications Ltd.
- Hartley, M. (1921) "The Importance of Being Dada" In **Adventures in the arts : informal chapters on painters, vaudeville and poets** <http://www.archive.org/details/adventuresinarts00hartuoft> ed. pp. 247-254.
- Hinchcliffe, D. (2006) **All We Got Was Web1.0, When Tim Berners-Lee Actually Gave Us Web2.0**. [Online]. Available from: <http://tinyurl.com/ypnata> [Accessed 01/22 2009].
- Kolker, R.P. (1977) The open texts of Nicholas Roeg. **Sight & Sound**, XLVI (2): 82-84, 113.
- Kosuth, J. (2003) "Art after Philosophy" In Harrison, C. and Wood, P. (eds.) **Art in Theory, 1900-2000: An Anthology of Changing Ideas** New Edition ed. Padstow, UK: Blackwell Publishing. pp. 852-860.
- Kress, G. (2003) **Literacy in the New Media Age**. London, UK: Routledge.
- Lawes, R. (2002) **De-mystifying Semiotics: Some Key Questions Answered**. [Online]. Available from: http://www.lawes-consulting.com/files/demystifying_semiotics.pdf. [Accessed 03/03 2009].
- Lewitt, S. (1996) "Paragraphs on Conceptual Art" In Stiles, K. and Selz, P. (eds.) Berkeley and Los Angeles, California, USA: University of California Press. pp. 822-827.
- Lodge, D. and Wood, N. (eds.) (2000) **Modern Criticism and Theory**. Second Edition ed. Malaysia: Pearson Education Limited.
- (2008). Sky of Blue, sea of green: a semiotic reading of the film *Yellow Submarine*. **Popular Music** [Online], 27 (01): 13/06/2009. Available from: <http://journals.cambridge.org>. [Accessed 13/06/2009].
- Mathews, H. and Brotchie, A. (eds.) (1998) **Oulipo Compendium**. London, UK: Atlas Press
- McClary, S. (2000) **Conventional Wisdom: The Content of Musical Form**. London, UK: University of California Press, Ltd.
- Monaco, J. (2000) **How to Read a Film**. Oxford, UK: Oxford University Press.
- Novak, M. **Trans Terra Form** [Online]. Available from: <http://www.krcf.org/krcfhome/PRINT/nonlocated/nlonline/nonMarcos.html> [Accessed 10/27/2011 2011].
- Office For National Statistics (2008) **Consumer durables**. [Online]. Available from: <http://www.statistics.gov.uk/cci/nugget.asp?id=868> [Accessed 01/26 2009].
- O'Toole, M. (2011) **The Language of Displayed Art**. Second ed. Abingdon, Oxfordshire, UK: Routledge.
- Picabia, F. (2007) **I am a Beautiful Monster: Poetry, Prose and Provocation**. USA: The MIT Press.
- Tzara, T. (2003) "Dada Manifesto 1918" In Harrison, C. and Wood, P. (eds.) **Art in Theory, 1900-2000: An Anthology of Changing Ideas** New Edition ed. Padstow, UK: Blackwell Publishing. pp. 252-257.
- The knife attack in slow motion**. [Online]. Available from: <http://hitchcock.dreamhosters.com/hitch/misc/shower1/> [Accessed 11/19/2010 2010].
- Ryan, M. (2001) **Narrative as Virtual Reality**. Baltimore, USA: The John Hopkins University Press.
- Stallabrass, J. (2003) **Internet Art: The Online Clash of Culture and Commerce**. London, UK: Tate Publishing.
- Thurlow. Crispin Lengel, L. and Tomic Alice (2004) **Computer Mediated Communication**. London, UK: Sage Publications.
- Wardrip-Fruin, N. and Harrigan, P. (2004) **First Person: New Media as Story, Performance, and Game**. Cambridge, Massachusetts and London.