GRAPHIC FILM

A new genre of moving image.

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0511393

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"The floating world is the realm of the graphic designer. Ever more powerful computer technologies have expanded the scope of the floating world, giving them a great deal more freedom. Instead of cutting and pasting, they now assemble; rather than working with images they have prepared for the page, they can scan and manipulate whatever they want. . . Information sprawls within the confines of the graphic designer's frame, but it does so in a way that the designer can control with absolute power. . . Now that information is free to flow everywhere, graphic designers must invent compositions that no longer depend on physical structure" (Betsky and Adigard, 2000, unpaginated).

CONTENTS

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements.

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Abstract

Over the past three years I have engaged in a search for a form of moving image that would serve as a medium to contain, express and communicate my concerns and ideas. My initial investigations led me to motion graphics but as my understanding of moving image broadened I came to the conclusion that the models I was examining did not fit this genre, they are something new and do not have a definition.

There are conflicting ideas about what the term motion graphics means. For the purpose of clarity, I adopted Matt Frantz's definition as a start point: "designed, non-narrative, non-figurative based visuals that change over time." Motion graphics is often considered a component of a larger moving image work or a filler element between two larger works. For example, the opening moments of a film or television programme, or a swirling abstract that forms a background for an interstitial between programmes. I require a description of a moving image type of that can be used as a guide to making work.

Research into the field of moving image work made by designers was conducted with grounded theory employed as the principle methodology. This research has revealed a moving image type that I refer to as "graphic film". During the past year I have identified its key characteristics. I have explored and tested the boundaries of this new genre by constructing graphic film and comparing it to previously defined forms of moving image. The outcome of this project is a comprehensive description of what graphic film is and its ten primary characteristics. This project can serve as a guide for other graphic designers who wish to make work of this type.

Introduction

This investigation is motivated by a desire to locate a medium which is effective and affordable to generate in order to serve as a conveyor of ideas which interest and excite me.

This project is a response to a need arising from my own graphic design practice. I require a mode of design that will facilitate self initiated work that can be made without a client. Initially I assumed that this mode may be part of what is commonly referred to as 'motion graphics'. However, when I posed the question "What is motion graphics?" and began investigate, I found that the genre of motion graphics was too broad. Essentially it has become a catch-all for any on-screen graphic design with a temporal element. My investigation uncovered examples of works that appeared to be self initiated and were similar to the those I was interested in making.

My hypothesis is that this work is a distinct genre called 'graphic film' and that graphic film has emerged from the field of motion graphics (itself a sub-genre of moving image)[1]. I will argue that graphic film has become distinct because it is not commercially motivated. In the absence of the client the designer can explore and develop visual languages unhindered and without compromise.

I began my project using a Hermeneutic approach, interpreting and reading examples of motion graphics and how they convey the message they contain. In order to do this I collected highly graphic examples of moving image work.

In order to test this hypothesis, I embarked upon a study of moving image forms which have significant input from a graphic designer. At the outset of this project I was not an expert in this field. I selected a research methodology accordingly.

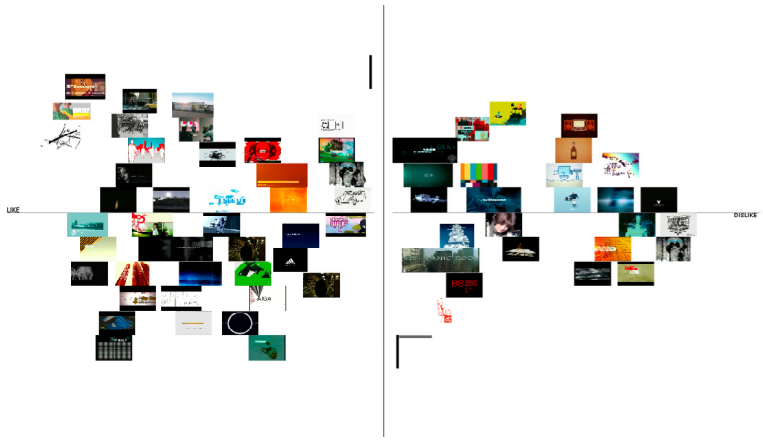


FIG:01 Early coded samples c.2005

A collection of moving image works arranged on an axis of preference. This early sampling alerted me to the diversity of the field of motion graphics.

1 The term 'graphic film' has been used previously in different contexts - for example, see Soar and Hall (2000, p.2).

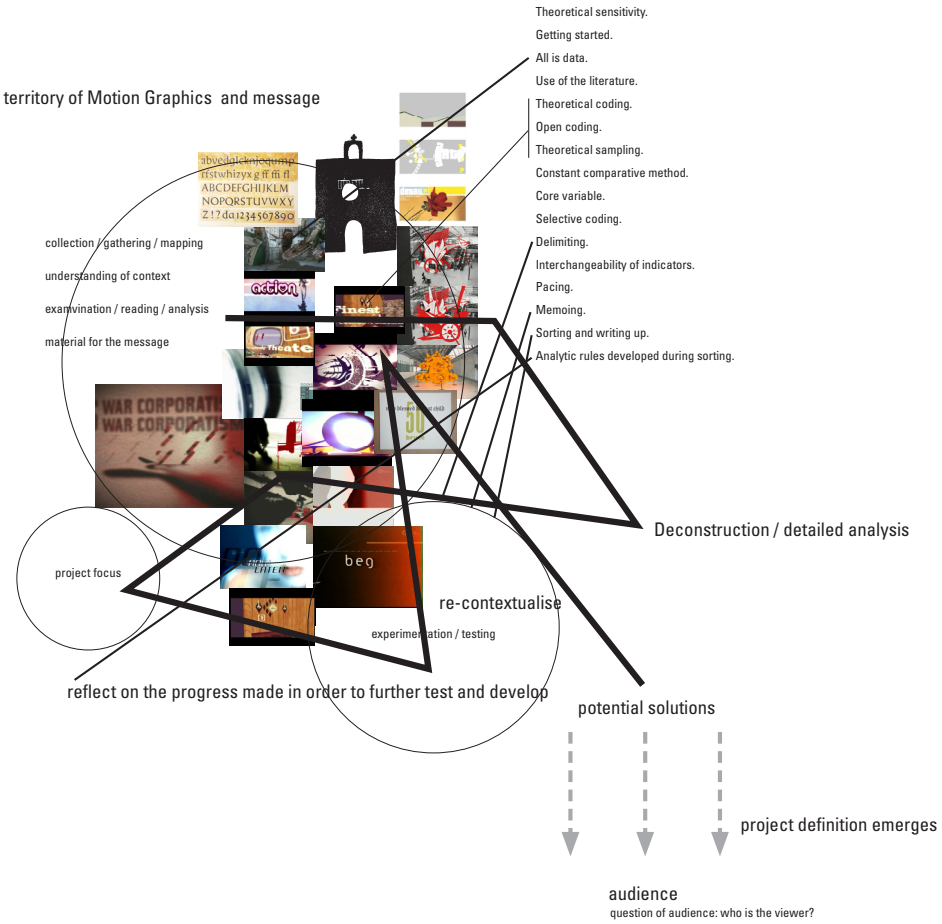


FIG:02. Diagram of Methodology

A diagram illustrating my research methodologies over the course of the project.

In my studio I began to form a practice that has evolved and developed through experimentation and play. As my understanding of the visual languages and techniques of motion graphics deepened through reflective practices I started to make and review my own work. At this point Grounded Theory emerged as the most useful methodology with which to progress my project. This involved collecting, analysing and coding data. A continuous aspect of my research method was the study of a large number of existing examples of motion graphics.

Briefly, graphic film can be described as short moving image work that is predominantly unsponsored, inexpensive, self initiated, and non-interactive. Rather than being driven by promotional motives, the purpose is to communicate the designer's message. During my research I have found examples of socio-political commentary and entertaining banter. A work can be recognised as graphic film when certain characteristics are present.

This exegesis forms the written component of my Masters project. It is divided into two sections. In Section 001 I will overview and outline the findings of my research in order to provide the reader with a context for graphic film. In Section 002 I will discuss the specific characteristics of graphic film.

I will first investigate the notion of genre, with the intention of clearly identifying 'graphic film' as a distinct genre type. Genres are loose frameworks that enable audiences and producers of literary, artistic and film artefacts to identify and recognise certain types and forms. This common understanding enables choices to be made in the production and selection of these artefacts. My argument is that graphic film is now a stand alone genre that has developed from the broad moving image arena of motion graphics.

Secondly, I will discuss the use of the term 'motion graphics', analysing existing definitions. I consider these definitions to be overly generic. The field referred to as motion graphics has become so large and amorphous that the term lacks clarity and specificity. I will propose a narrower definition, and also a new name for motion graphics - designed moving image.

My exegesis will then examine the history of designed moving image practice which led to the emergence of graphic film and the involvement of graphic designers in the evolution of this distinct genre. My discussion will centre on the evolution of particular technologies. I will describe how, as these technologies became more capable and available to graphic designers, the designer's role in the field of moving image became more experimental.

Lastly, I identify the ways in which graphic film has evolved to serve as a means of authorship for the designer. By 'authorship' I mean the making of work with the purpose of presenting one's own opinions, ideas and agenda. This sub section will describe a change in the graphic design profession, with reference to example practitioners who represent a new approach to studio practice.

Section 002 of my exegesis will serve as a taxonomy or guide. Ten key characteristics of graphic film are described using examples taken from a range of practitioners. I have mapped their relationships in terms of their relative dependency to one another and their evolution as a result of these dependencies. The descriptions include discussion of the probable origins of these characteristics with references to technologies and the approaches taken to moving image work by graphic designers. Incorporated within these descriptions are references to my own practice and experimentation. My intention is to provide the reader the means with which to identify, understand and create graphic film.

Section 001

GENRE

Bernard Dick describes genre as "a literary form with certain conventions and patterns that, through repetition have become so familiar that readers expect similar elements in works of the same type" (Dick, 1998, p.182). Genre forms within the literary landscape are well accepted. There is an expectation of what an audience is preparing to engage with when books, films, music, etc. are described as romance, action or pop. The selection of a literary form is often based on what genre the work has been described as by others. This choice is not just made by the audience. Authors of work are often associated with certain genres, presumably because they enjoy making that type of work or that they find that genre serves them well as a framework within which to operate. For example a science fiction film may be better suited as a framework within which to discuss the consequences of a current day issue than a drama set in the present.

It is often easier to identify and locate a genre than it is to describe or define it. In their article entitled *What do we mean by motion graphics?* Peter Soar and Matt Hall located graphic film: "Go to the website of studios such as Psyop, MK12, PES or Shynola and you will find a smattering of short films that are not quite commercials or music videos but creative efforts, often studio-initiated, that may or may not end up promoting something" (2001, p.2). However, they accept these "short films" as part of the ever flexible term motion graphics even while attempting to clarify what they clearly see as being a different activity. This confirms that there is a broader need for a new genre to be formed so that this type of work can be located by other designers wishing to make work in this manner.

Genres seek both to explain individual examples of work, and to group them with others of a general class or type[2]. It is accepted that genres overlap one another, that their boundaries are fluid and change as new examples of work are made[3]. There are different theoretical approaches to genre classification and use[4]. The most obvious use is as an economic strategy. This involves organising production to insure that an audience can identify a work that they wish to consume while the publisher can satisfy certain markets and in so doing reduce the often considerable risks involved with production. Another approach is to view genres as a system of expectation and understanding. This is a cognitive view of genre where the audience enters into a dialogue with the text. Jim Collins uses the term "sophisticated hyper-consciousness" (Collins, 1993, p.126) to describe the audience condition in this two way process, where the audience's knowledge of literary forms is necessary for their understanding of the text they are reading or watching[5]. Larry and Andy Wachowski's film *The Matrix* (1999) is

2 For further dicussion Nelmes, J. (2003, p.15). *An introduction to film studies*. London ; New York, Routledge.
3 "Most scholars now agree that no genre can be described in a single hard and fast way" (Bordwell, 2001, p.109)
4 ibid
5 I am using the word 'text' in this instance to describe a book, film, television program or other work.

an example of this. The film makers construct numerous eclectic scenes that would be far less enjoyable if not for the media literacy processed by contemporary cinema audiences. Designers make extensive use of this idea of sophisticated hyper-consciousness.

I have employed a visual taxonomy in order to classify graphic film. This is an empirical methodology that clusters work by identifying pattern, iconography and structure resulting in a list of characteristics that can be used both by a maker and the viewer to recognise the new form.

The method developed from my examination of a collection of moving image works[6]. I found a number of identifiable examples that contained a designed component - television indents, advertisements, music video, film and television titles. However, one type was distinct, recognisable yet unnamed.

Graphic film emerged from the assembled examples during the selective coding phase of my research. It first came to the fore as the only type of motion graphics that was not always motivated by a sponsor or client. This was surprising given that after the initial outlay for software and hardware (Adobe After Effects and a powerful computer) moving image work can be produced at near to no cost. This differs hugely from self initiating a print project, and even a web site requires an outlay to register a site name and secure hosting. Soar and Hall confirm that this lack of a commercial motive does set graphic film apart: "Most motion graphics being produced today are the direct result of the promotional imperative – a confluence of profit-centred look-at-me chutzpah"[7] (Soar and Hall, 2001, p.1)[8]. This new moving image type, graphic film, appears to be a method of generating self authored work.

Graphic films, like other genres, share a distinct set of recognisable characteristics. In Section 002 of this exegesis I will explain what these characteristics are and cite existing examples with references to my practical experimentation, in order to further clarify how they have emerged and how they are used to form a complete and new genre.

MOTION GRAPHICS

The term 'motion graphics' has been in existence since 1960 when computer film maker John Whitney dubbed his fledgling company Motion Graphics[9]. Over time the term has been stretched to include such a vast and steadily growing melange of imagery that

6 See Appendix A
7 Soar, M. and Hall, P. (2001, p.2) *Images over time*. Eye Volume, DOI:
8 I would substitute the words "motion graphics" in Soar and Hall's article for "designed moving image". I will discuss for reasons in the next section 'Motion Graphics'.
9 Manovich, L. (2006, unpaginated) After Effects, or Velvet Revolution in Modern Culture. PART 02.

locating a useful definition for the uninitiated has become very difficult.

In *On Screen in Time*, Goux and Houff describe the genre of motion graphics as:

> ...an element of any screen-based media: in-store promotional videos, Hollywood film titles, self-promotional demo reels, music video installations and gallery screenings (Goux and Houff, 2003, back cover).

Goux and Houff are saying that motion graphic work does not stand alone but is dependent on a greater entity which gives it meaning and purpose. I propose that motion graphics is considered by Goux and Houff to be a 'component' because graphic elements have historically been composited within a sequence of captured images in post production, and therefore thought of as being added to a larger entity. But with today's technology where the graphic and digital often dominate what has been captured on camera, it is not possible to break a motion graphics component out from the work without destroying the whole work.

This continuing notion that motion graphics is part of a greater work, that it requires a framework within some other moving image artefact (a narrative motion picture or music video for example), led me to Matt Woolman's text book *Design for Motion* searching for a rationale for this dependency.

> Motion-graphics design is not a single discipline. It is a convergence of animation, illustration, graphic design, narrative filmmaking, sculpture, and architecture, to name only a few. The word 'graphic' is important: this includes formal content that has a graphic emphasis such as symbols, icons and illustrated 2-D and 3-D objects, often synthesised with live action (Woolman, 2004, p.6).

Woolman explains the necessary use of the word 'graphic' within the genre definition and explains the technical versatility required of these small teams of practitioners to create their work. He proposes, however, that rather than a single form or type, motion graphics is in fact an eclectic blend of the visual arts united in motion. Lev Manovich (2006) would appear to agree, up to a point. He calls this eclecticism "deep remixability",[10] commenting "For what gets remixed is not only of the content of different media, but their fundamental techniques, working methods, and ways of representation and expression."[11] This does not, however, clarify what motion graphics is for. What is its purpose as a form of communication and what are its limits?

10 Manovich, L. (2006, unpaginated) After Effects, or Velvet Revolution in Modern Culture. PART 02.
11 Ibid.

Another definition, postulated by Steve Curren in *Motion Graphics; Graphic Design for Broadcast and Film*, is that motion graphics can be considered not part of a work or an eclectic mix of techniques and methods, but a communications solution:

> Motion graphics is a term used to describe a broad range of solutions that graphic design professionals employ for creating a dramatic and effective communication design for film, television, and the internet. It combines talents such as design, film making, writing, animation, information architecture and sound design into a profession (Curren, 2001, p.14).

These definitions, though accurate descriptions of what we see, are so broad that they are not helpful. I require a genre description that will give me a structure within which to make work. The definitions located only serve to say that the multi-skilled graphic designer creates this type of moving image. Manovich acknowledges this issue in his essay *After Effects, or Velvet Revolution in Modern Culture. Part 1.* "Today (2006) the term 'motion graphics' is often used to refer to all moving image sequences which are dominated by typography and/or design and embedded in larger forms" (2006). Manovich is saying that motion graphics is a term used to describe a very wide range of activity but not to describe a specific genre of moving image. The indiscriminate 'all' in the quote above is the problem.

More usefully, Frantz defines motion graphics as "designed non-narrative, non-figurative based visuals that change over time" (Frantz, 2003, p.2). I prefer this definition to all others that I have located. Because Frantz's definition is precise and describes clear characteristics, I can use it to locate and identify examples of work within my collection of moving image[12]. The problem with it, however, is that with its precision it excludes much that is currently considered motion graphics. I suggest that what Goux and Houff, Curren, and Woolman are describing now is in fact 'designed moving image' and that motion graphics is, as Frantz suggests, a sub-genre.

I am not the first to suggest a renaming of the term. In their article for *Eye*, Soar and Hall point out that "The available definitions of motion graphics are many and varied, and the term itself seems to be losing ground to 'motion' and 'motion design'" (Soar, 2001, p.2). These new terms appear to acknowledge that graphics as a term has become confused and unhelpful as a definition. However, these terms (motion and motion design) seem too open to interpretation and would not be understood out of context.
What has been established by this investigation is that graphic designers are the principle creators of graphic film.

12 It can therefore be used to code samples from my collected data and be used as a reference point in a map of my collection. Refer to Appendix A.

THE HISTORY OF PRACTICE

The emergence of graphic film has taken place over a relatively short period of time. It has occurred as a response to technological and cultural changes within the graphic design profession. In this section I will identify and outline these key changes and explain how they created the conditions for graphic film to emerge.

The first question that needs to be addressed is how did graphic designers come to work within the field of moving images? Of the types of designed moving image that I have located, it is probably titling that graphic designers have had the longest involvement with.

In the early 1950s the new moving image industry of television required individuals trained in combining images, type, and other graphic elements within the picture frame to construct messages with which to capture their audience's attention. Graphic designers like Pablo Ferro and Saul Bass began working with moving images as a result of this demand. The motion picture industry responded to the success of television and during the 1950s film titling became a major area of creative activity. Bass's title sequence for Preminger's *The Man with a Golden Arm* (1955) created huge interest among the cinema audiences of the day, with Bass attaching a micro narrative to the opening moments of the film. A self taught animator, Ferro's title graphics for Stanley Kubrick's film *Dr Strangelove* in 1964 became the single most important work of its type to emerge from this early era. With super-rapid editing and scratchy text these graphics are still relevant as a model for contemporary work today.

The optical technology available to make motion graphics during the 60s and 70s was expensive and difficult to use, so it remained a largely exclusive and specialised area of graphic design practice. During the 1980s the microcomputer emerged and with it, software capable of generating broadcast quality image sequences. It enabled small studios to produce motion graphics for television and the cinema screen. Production was still difficult, however, and extremely slow. Specialised hardware/software combined solutions emerged. The Quantel Paintbox cost 160,000 USD[13] when it was first released in 1981. High end online[14] compositing suites of this type remain the exclusive property of network television channels and Hollywood production houses focussed on special effects and high impact fast turn advertisements. Autodesk's Flame online suite cost as much as 1000 USD an hour to use at a postproduction facility. It was not until 1993 that a small software company called CoSA (The Company of Science and Art) released the product that was to become After Effects. After Effects can be run effectively on a desktop computer, and could be described as Photoshop with

13 Peter Hall and Andrea Codrington (2000, p.6).

14 Online editing systems can perform compositing work at full resolution, full frame rate and play back in real time. In other moving images can be composited together as they will be viewed without the need to render out preview sequences.

FIG:03. Stills from *The Man with the Golden Arm*:

title credits, Saul Bass, 1955.
There is an early "Construction deconstruction" type appearing in this early work.
Refer to Section 002.

keyframes. The ability to create complex moving image work was now within reach of a huge number of graphic designers and a new period of media experimentation began.

Lev Manovich describes the activity during the period 1993-1998. "After Effects became a petri-dish where computer animation, live cinematography, graphic design, 2D animation and typography started to interact together, creating new hybrids" (2006 unpaginated) Manovich's metaphor of a petri-dish is accurate on several levels. The work being made in After Effects by graphic designers during the period was highly experimental. Small samples of traditional modes of practice were being allowed to grow beyond their existing boundaries. With the addition of a temporal component an illustration could be made to 'paint' onto the screen and in so doing was transformed into something new.

The moving image experimentation and development was occurring at the same time as the version 3.0 browsers emerged. The world wide web began to attract huge interest as the vast majority of design academic attention focussed on the new 'online' media form. The changes to our visual language being made within moving image were largely ignored. These changes were principally from an overtly perfect glossy image of reality to an image that was far less than perfect[15]. The advertising industry in particular presented the consumer with an artificial, over-refined look in the late 1970s and 1980s. This began to change in the 1980s but it was not complete until the widespread availability of consumer digital video cameras in the early 1990s. The resulting pixel grit returned a surface to moving image[16]. The consumer can now record their own, unsanitised realty.

With the focus on the world wide web phenomenon, lack of critical acknowledgment of individual moving image hybrid forms occurred. I believe this to be the reason why the term motion graphics has continued to prevail when distinctive new hybrid forms are emerging from the melange. More useful definitions of these new types need to be formulated so they may be understood. It is one of these new forms, or genres, that I have called 'graphic film'.

GRAPHIC FILM: A MEANS OF AUTHORSHIP

I have explained how developments in technology opened new opportunities for the graphic design profession. I discussed how, through the use of these technologies, designers have changed the

15 Referred to as "Hyperreality" by the French philosopher Baudrillard (1983) *Simulations*. New York: Semiotext(e).

16 The far from 'clean' image captured by these early devices became more real as it was what they saw when capturing their own realities. See Goldman and Papson (1994) *Advertising in the Age of Hypersignification* for further discussion.

visual languages that western culture employs to communicate. In this next section I will explain how the profession of graphic design has itself been altered through these developments and how this alteration has given rise to graphic film.

In the previous section entitled Genre I described how one of the attributes that drew my attention to graphic film was the clear lack of a 'sponsor' and how the examples I have identified appeared to be a means of authorship - the designers are making these works to convey their own messages, not those of a client.

The idea of the graphic designer as an author of content is a recent phenomenon[17]. Before the 1990s the designer was seen as a professional whose role it was to take the client's message and to express it as effectively as possible. However, at the start of the 1990s a new breed of designer was entering the profession. These new designers did not leave education institutions in search of an apprenticeship with an established firm. During the 1980s they had witnessed a rapid rise in the public awareness of design and the growth of design's sense of its own importance. Poynor notes how this affected the publications that these new designers were reading: "Enthusiastic profiles became commonplace, paying as much attention to the designers personalities as their designs, and many books appeared celebrating the individual bodies of work" (Poyner, 2003, p.120). Many new designers aspired to be publicly recognised. Joining a firm meant an individual designer and their work would remain publicly anonymous, so they set up their own studios with themselves as the principal creatives. In doing so they invented a new studio paradigm, in which the designer generated their own content.

Without an established client base these new designers had no work in the traditional sense. They had no messages to package and therefore no means of generating a portfolio with which to attract work. These new 1990s studios had to become authors of their own content in order to get noticed.

British creatives and graphic designers Tomato and Fuel became identified with an authorial approach to design (Poyner, 2003). With their use of technology and their desire to author artefacts they paved the way for this new model of the graphic designer as an author of their own content.

Tomato and Fuel began operating outside of the mainstream design studio model. Curren described their attitude as a "...guerilla

17 There is some considerable debate surrounding the notion of authorship as it relates to design. The reader may interested to follow this line of inquiry: Beginning with Roland Barthes essay *The Death of the Author* 1968 which rejects the notion of authorship. Then Bruce Mau citing Walter Benjamin's 1934 essay *The Author as Producer* saying in his book *Life Style* that he wished to occupy the role as 'producer as author'. Then in 1998 Ellen Lupton asks whether the designer as an author is useful in contemporary practice. See *The Designer as Producer. The education of a graphic designer*. S. Heller. Most of this debate is philosophical in nature and centres around writing or criticism as a means of authorship. In my practice I am interested in making designed artefacts that are self initiated. That is to say projects that do not require a client or another party to provide the question, problem or content.

spirit (that) differed markedly from the broadcast design establishment" (2001, p.34). By striving to be different and experimental in their work these new studios began to draw attention to themselves. They were the first generation of designers to be trained to design with the computer as their primary tool. Tomato, Fuel and their peers used the computer's capability to mix digital images and graphic components and thus moved design practice into multimedia outcomes. Given the monetary cost of computer software and hardware at this time, these young designers were taking considerable risk.

Tomato formed in 1991 with the view that process was the most import part of design practice. "We are all on a journey; all work is about experience and the mapping of that experience and for us at Tomato it is where we go to compare these maps, in effect we bring a map (or maps) from one territory and overlay one upon another to see what happens this is how our individual work evolves and this is how we work together" (Barker, 1996, unpaginated).

Tomato do not refer to themselves as graphic designers. They simply refer to their activity as 'work'. They allow the boundaries of what they do to blur together, or 'overlay' as John Warwicker one of the founding members puts it. His partners, Karl Hyde and Rick Smith, belong to the electronic music group Underworld. It is this inter-media and technological capability within the team that allowed Tomato (and motivated them, in the case of music videos) to move into moving image based work where 'process' could be seen to occur. Most importantly within this co-operative of multi disciplinarians, they actively generate self initiated projects as well as creating work for clients, such as PepsiCo. They do not distinguish between client work and the work which the studio produces without a client. I understand and admire Tomato's type of approach, where the designer sees themselves as a collaborator or co-author of the work with the client. In my own practice however, I am looking to operate as a sole author of work. For this reason I am rejecting Tomato's method of practice as a model for my own. I wish to maintain a distinction between my own projects and those that are commissioned by clients.

Fuel (formed in London in 1991) and founder Seth Epstein set up a highly innovative work flow that did not use a high end post production facility. Instead Fuel instigated a Macintosh-only production. They proved the theory that high quality moving image work could be produced using Adobe After Effects running on a desktop computer. While having a similarly laid back and loose working environment, they differed from Tomato in two respects. They referred to themselves as designers with a clear focus on designed moving image work, and they felt that there was a difference between those projects that were internally generated and those that involved an external client. They believe that

compromises surrounding content in work made for clients need not be made in work for themselves. This sentiment is in alignment with my own experience and practice. It is therefore Fuel's approach (and that of other like minded designers) to self initiated work that I have chosen to adopt.

The success of the authorial model of practice encouraged others to emulate and extend it. By the late 90s After Effects was a mature product capable of emulating many of the previously high-end only effects and techniques while the graphic design profession largely accepted itself as a content generator. A new professional culture and technological situation had been reached. There was both the capability and the demand for a new moving image genre. Though other creatives are currently making examples of graphic film, it was the situation of the graphic design profession in the late 1990s that was the catalyst for the appearance of this new moving image form. By 2000 the conditions for the emergence of graphic film had been reached.

By early 2001 graphic film was recognisable as a form. MK12's *4D Softcore Sweater Porn* (2001) and Johnny Hardstaff's *Future of Gaming* (2001) demonstrated the new genre's potential. Graphic film emerged to serve as a means for designers to communicate their own messages, concerns and ideas that they found exciting or considered to be interesting. Simon Robson's *Barry Says* (2003) is a clear demonstration of this. Using graphic film Robson articulates Barry McNamara's lecture about the United States military industrial complex.

I have addressed the advantages of graphic film as a relativity inexpensive medium but I suggest that it is the control over what the audience views and how they view that makes graphic film such an exciting frame for a graphic designer to operate within. In an ideal viewing environment the graphic film maker can direct the viewer via the point of view about the constructed digital information world[18] [19]. The viewer can be paused over an area of the environment that is of particularly important to its maker. This control is very difficult to achieve in another medium. A poster can be by-passed even when displayed in a gallery. When it is examined, it will be viewed as a whole, the small moments within it can be missed despite the intense energy poured into perfecting them by the designer. In contrast, the process of making graphic design can be revealed in a graphic film without compromising the artefact (film) itself. It is from this desire to control and reveal process that observable characteristics of graphic film have formed.

In the next section of this exegesis I will describe the ten key characteristics of graphic film, thus enabling a shared sense[20] of what it is to a larger number of designers and viewers. With these

18 A movie theatre or similar space where the viewers physical environment is controlled, where an etiquette is observed towards the film and the viewer does not have the ability to control the delivery of the film; ie: the viewer does not have a remote control in their hand.
19 Point of view replaces the camera as in a purely digital construct there is no camera.
20 Bordwell and Thompson in their book *Film Art an Introduction* (2001) describe industries of cultures recognition of a genre as a shared sense that certain films seem resemble one another.

characteristics isolated and explained graphic film will be opened up as an identifiable genre extracted from the broader and I believe flawed genre of motion graphics.

Section 002

In this section I will present the ten primary characteristics of graphic film. Through examples taken from the work of key practitioners and my own practical experimentation, I will establish how each of these characteristics contributes to the construction of graphic film. I will discuss their evolution with references to technology and the graphic designers that make them.

These characteristics form a "defining criteria[1]". If a particular example of designed moving image meets the criteria it can therefore be included within the genre. They also form an instruction manual or rule book that designers new to the field can use as a guide for their own examples.

The criteria amounts to a visual taxonomy based upon iconography with attention paid to stylistic, formal and thematic elements that can be seen occurring within the frame. In other words, I am isolating and describing recurring forms, styles and motifs that have been observed in a range of examples. These characteristics extend beyond individual works and in so doing construct a genre that can direct both the making of new examples and enable viewers to locate them (Nelmes, 2003).

The characteristics that follow are arranged first as a process map which illustrates the relationships between them in order of evolution on the 'X' axis. For example the characteristic 'unmade' requires first that graphic films are created in what would be traditionally considered a post production environment ie Adobe After Effects. The proximity of related characteristics in the 'Y' axis indicates their relative dependencies, ie. designers make graphic film so all characteristics are informed by them.

The characteristics of graphic film interrelate with one another. While the map is read from the top down and left to right depicting one characteristic giving rise to another, this process is not linear. There is a feedback effect where a characteristic further along in the chain influences those above and behind it.

1 Refer to *An Introduction to Film Studies* edited by Jill Nelmes (2003, p.156).

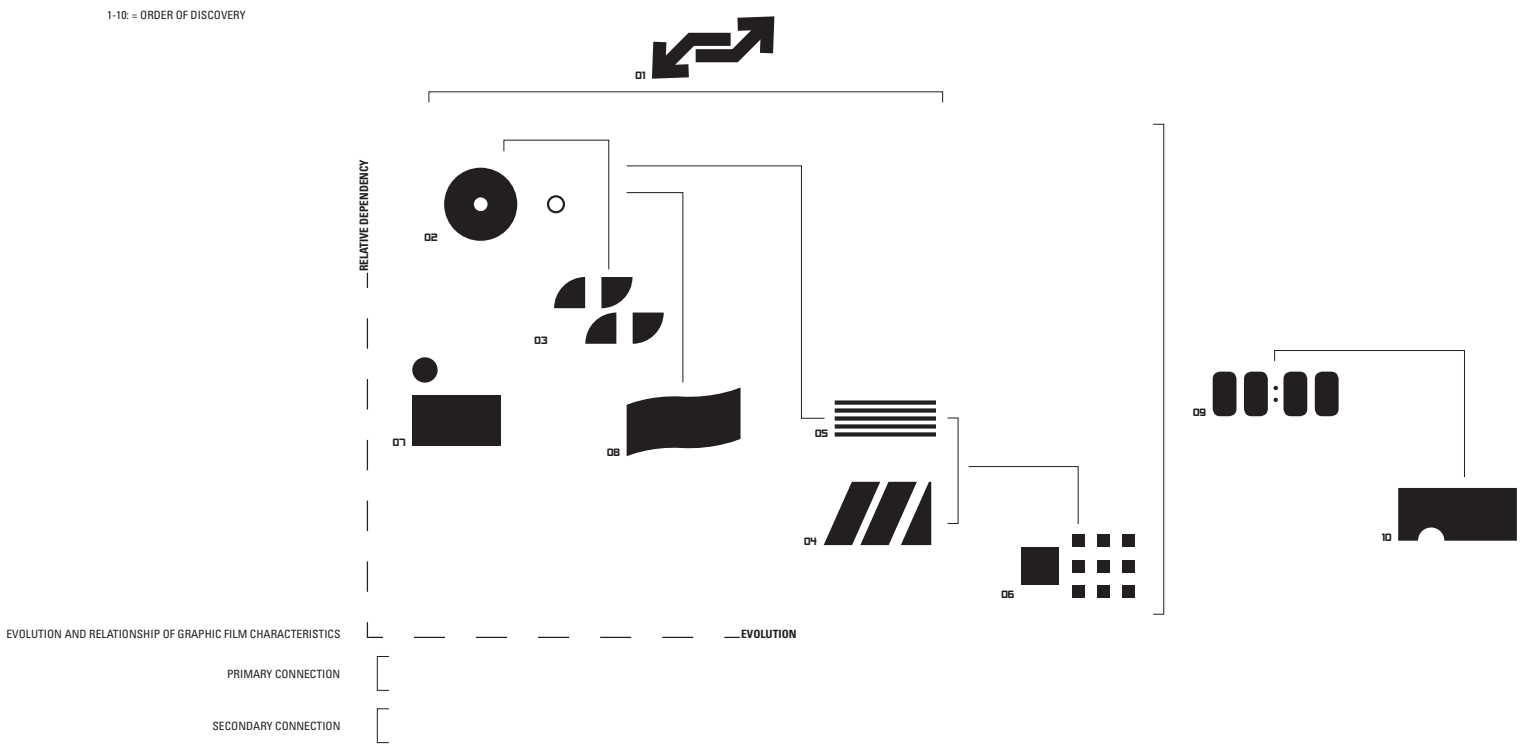


FIG:04. Characteristics Relationships

The above diagram illustrates the order that characteristics have been identified along the 'X' axis. The relative dependencies are shown in the 'Y' axis. Characteristics with a greater 'Y' value cause those with lower 'Y' values to occur. Primary and secondary dependency links are also shown.

INFORMATION AESTHETIC

Graphic design has traditionally been concerned with presenting information in the clearest and most accessible way and this concern has for the large part remained unchanged. However, the introduction of the Macintosh computer into the design studio during the 1980s allowed designers to work with information as real data. The 'Mac' was an entirely new tool and brought with it a new way of working. Designers were no longer just representing information, they were manipulating it in a digital environment directly. From the outset the limits of early computers were accepted and these limits led to a new 'techno'[1] aesthetic. This aesthetic developed from its early brash beginnings into a more subtle form, one that by the mid 1990s spoke of the cultural condition of its time rather than expressing just the digitalness of how it was made. The flow of information and how it changes from node to node became the conceptual underpinnings of an information aesthetic[2].

The content within an example of graphic film is bound together by an aesthetic of graphic information, 'information graphics' (Harris, 1999). Charts, graphs and maps overlay and cross reference each other, often in a manner that makes it impossible for an audience to read - incomprehensible in fact, an overload of information. As viewers we do not care that we cannot take it all in at a glance because we are accustomed to this digital massive media electronic onslaught in our everyday lives. It is part of the modern or perhaps post-modern experience.

Sheffield based design firm The Designers Republic (commonly referred to as DR; founded in 1986) utilised icons, shapes, title blocks, parallel lines, and symbols to form layered complex data fields. They were at the forefront of the shift from 1980s brash to the information aesthetic. Heavily influenced by Japanese tech-fantasy, DR showed designers brought up on a visual diet of computers and video games how to assemble a pseudo world out of these new visual languages.

This confusing mass of data could be seen as a expression of what the contemporary designer deals with on a daily basis. Clients request that huge volumes of data are made legible, the corporate report being the most common example. Vast amounts of accounting and production statistics are arranged into appropriate forms of information graphics intended to inform shareholders what their company is doing.

My project revealed that graphic film employs this information as a setting. It is the texture of a world. We shift and move through it, without 'reading' but recognising it as a larger system that explains where we are, the type of world we are located within. This is not unlike other forms of curatored media that designers create or are

1 See *No More Rules Graphic Design and Postmodernism*. Poyner, R. (2003, p.96).
2 In general terms, a node is a specific location in a communication network (Oxford American Dictionary, 2005).

FIG:05. *Sixteentwenty* by Danny Yount (2005).

In this graphic film the viewer is given the freedom to interpret the top heavy poles clustered with machinery. Are they electrical conduits, telecommunication towers or some other transmission node?
The information aesthetic is open to interpretation because the viewer is familiar with the notion that icons and other signs are context sensitive. When a graphic film presents the viewer with a constructed world they have to imagine and build the context for themselves.

involved with. Magazines, books, web sites and video games all form contained environments held together by designed structures. Graphic film, however, allows the designer to build both the structure and the content.

At a first watching the audience finds the content of a graphic film devoid of easily recognisable messages, but with repeated viewings meaning emerges. This mimics the experience of travelling to a new urban centre. At this new place the underlying systems, although explained through signs and other information graphics, remain difficult to navigate. With repeated visits an understanding of these systems develops. The following examples of graphic film demonstrate the information aesthetic and how it describes a condition of information overload where cryptic symbols intended to clarify in fact conceal messages.

In his self promotional film tilted *Sixteentwenty* (c.2005), Danny Yount makes an observation about human networks, both physical and electronic. Bits of information flow from right to left amongst fields of network hardware, clear cut and situated in planar space.

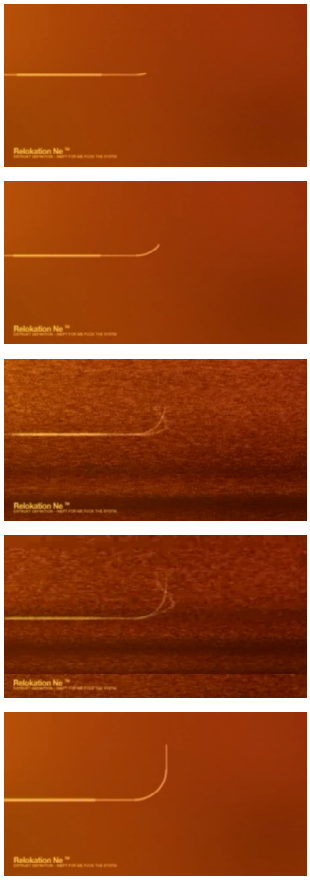


FIG:06. *Relokation Ne* by Dstrukt (date unknown).

A special effects filter is applied to this film in order to give a static effect.

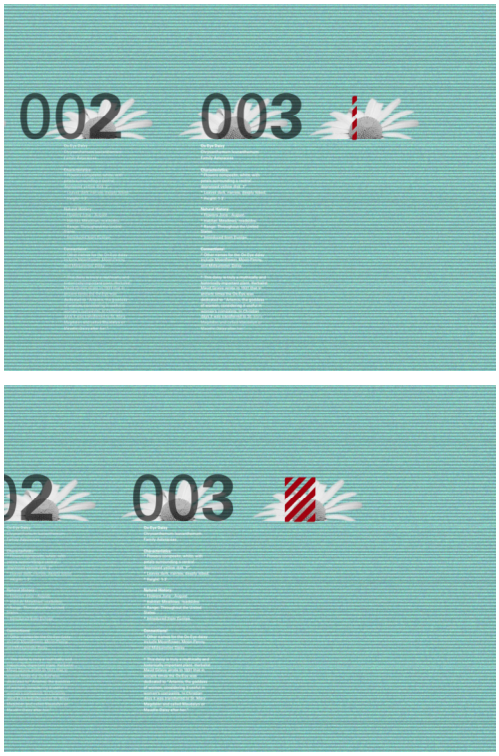


FIG:07. *Process* by Adam Sheffield (2007).

I have experimented with similar effects in my own work applied over text and imagery in order to enhance the instability of a moment.

In a similar reference to communication Dstrukt, a "motion graphics outfit" (Dstrukt Web Site, 2007), go so far as to add moments of static noise to their film *Relokation Ne* (date unknown) as though the transmission of information to the audience was being somehow interfered with. The reference is to broadcasts from the NASA lunar landings or media reports from war zones far away, affected by the disruption of communication by electromagnetic interference.

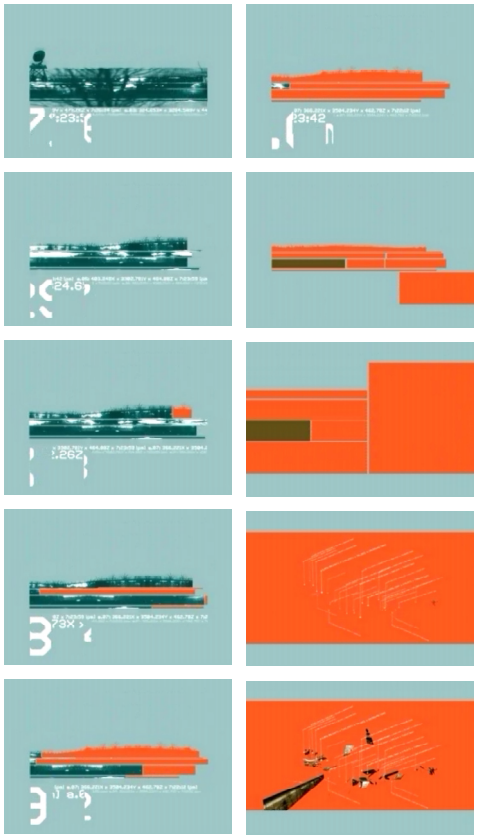


FIG:08. *Infinity* by MK12 (2001).

Information aesthetic is demonstrated in this film through the use of a bar graph or gauge indicating danger levels. Labels are added to the fragments of the constructed disaster site. They are angled in 3D space in order to imply scientific accuracy and credibility.

The presence of information aesthetic is deployed in a less direct form in MK12's *Infinity* (2001). The film opens with an unmade[3] landscape divided into foreground, middle and background. These fields glide past, the movement evoking a sense of time and distance passing. To emphasise or perhaps quantify this a head up display (HUD) of cropped numbers take count in OCR-A.[4]The HUD is reminiscent of many point of view video games, particularly those that involve the piloting of futuristic vehicles through fictional worlds full of conflict and destruction. This landscape scene is literally replaced by a bar graph made of solid dangerous orange, alluding to the radioactive wasteland we are on our way to investigate. On arrival the fragments of the scene are labelled in a manner similar to a crime scene. There is too much detail or information and the text is far too small to actually read. We recognise it as a labelled diagram of artefacts located in space and are fascinated.

FIG:09. Head up display.

(HUD) from two popular first person video games *Descent* and *Mechwarrior.* The use of an HUD-like view point evokes a sensation of exploring an environment with the aid of an overlay of data.

3 See Section 002 part 002 'Unmade' for further discussion
4 OCR Optical Character Recognition, a type face designed to be read (digitised) by computers after being scanned from a paper source (Frutiger, 1968).

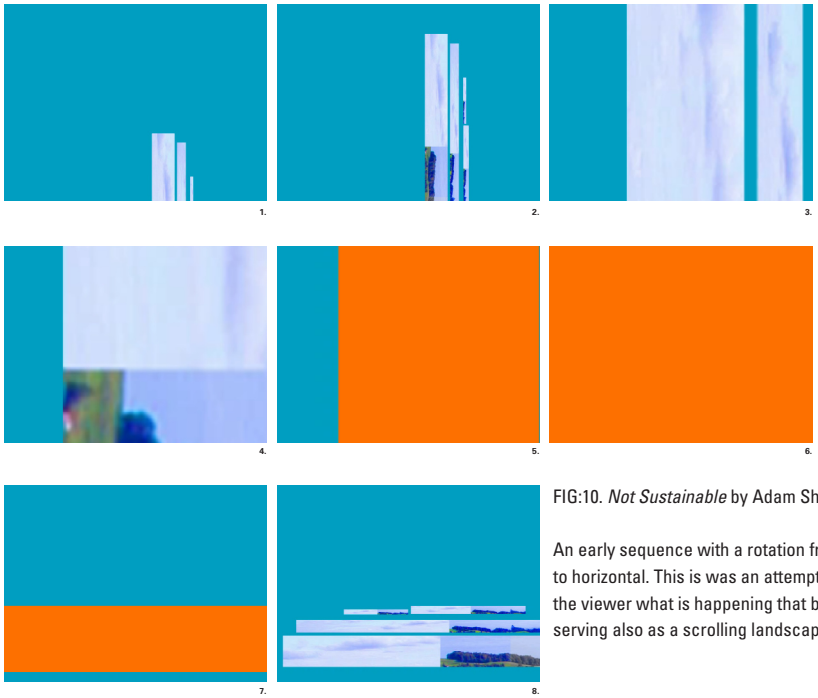


FIG:10. *Not Sustainable* by Adam Sheffield (2006).

An early sequence with a rotation from vertical to horizontal. This is was an attempt to reveal to the viewer what is happening that bar graphs are serving also as a scrolling landscape.

FIG:11. *Not Sustainable* by Adam Sheffield (2006).

In an examination of the methods of MK12 I have experimented with a masked image continuously looping and slowly changing colour with each loop. The effect was successful but extremely complex from a technical stand point and so time consuming to set up.

In my experimentation with information aesthetic I have found that the most successful approach is to adopt an information system that is aligned to the topic or message that is contained within a film. For example in one of my early films *Not Sustainable* (2006) I used images scrolling sideways to indicate the dangerous build up of chemical contaminants in soils.

It is this deluge of information texture that holds an audience interested in a film. The viewer desires to understand the premise in the way a user might skim read the instruction manual of a complex electronic device. The aesthetic of information is exactly that - an aesthetic freed from the burden of communicating information.

Summary:

- Graphic film uses information overload or an illustration of digital media electronic onslaught as an aesthetic.
- Layered, complex 'data' fields are present.
- The viewers attention is retained via a deluge of information texture.
- Graphic film = designed structure + content.

CAPTURED FOOTAGE

I have discussed in Section 001 how graphic film emerged as an affordable means of producing self initiated work. The exclusion of large amounts of captured footage is a step in achieving this. Captured footage for the purposes of this argument is the real world recorded. Traditional film making, even when scaled down to include short films, is a costly exercise.

Graphic films are made using software originally written for the post-production manipulation and editing of captured footage. This places the creative process behind the camera lense in a post-production environment, not in front. More traditional moving image genres construct their worlds upon a set or in a 'real' environment. This traditional manner of constructing a world requires a large budget, a team of people and strict time frames. Graphic films are made with the materials and tools that can be found in the graphic design studio, they can be made by individuals, and they can be worked on between sponsored work. In order to investigate this notion I have made work over the last three years with only the resources that I can afford to own. I have not used facilities that would be considered 'high-end' or out sourced any work.

Many of the examples of designer made moving image hybrids I have examined show graphic elements merging with or overlaying captured footage. These often form a part of a greater work. For example, film or television programme title sequences designed to play in front of the main narrative construct. Music videos and advertising often contain a dominant captured footage element which is layered with graphics. Captured footage in these genres always dominates (captured footage contains the message). A test of this characteristic is to imagine the captured elements removed and to decide whether a film's message is still clear.

This method can be used to classify the music video *Common Go* (2005) by MK12. The video is a point of view shot looking out of the side window of a train. The landscape glides steadily by from left to right, a technique that MK12 have employed before in the previously examined *Infinity* (2001). Here the captured footage is largely unaltered. As the vocals begin the lyrics are composited into the captured scene. The white text appears to paint on in the middle ground between the horizon and the glass of the train's window.

Imaginary Forces designed the title graphics for director Mark Pellington's *Arlington Rd* (1999). The sequence has many trade mark Kyle Cooper (director at Imaginary Forces) aspects. In particular the heavy treatment of captured footage, much of which is so altered that it has been transformed into graphic elements. The titles finish, however, fading into the world of the film. In this piece the grungy type would become only shaky labels without the presence of the captured moving images.

FIG:12. *Infinity* by MK12 (2001).

Captured footage clearly dominates the graphic elements in this work of designed moving image.

FIG:13. *Arlington Rd* by Imaginary Forces (1999).

The captured footage in this work contains the principle narrative excluding it from the graphic film genre.

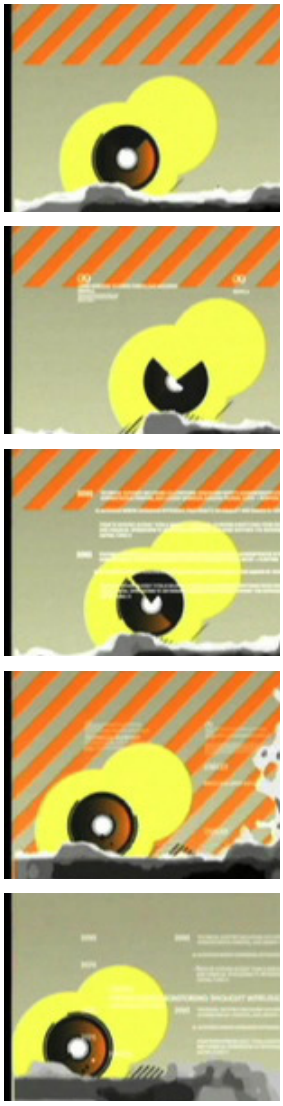


FIG:14. *Brazil Inspired* by Stat.ind (date unknown).

Though there a number of short moments when captured footage dominates the screen it is never the element which contains the narrative. The 'story' is contained within the graphics.
Brazil Inspired is an example of graphic film.

These works, while examples of designed moving image, are clearly not examples of graphic film. They are dominated by and dependent on the footage to generate the environments in which the graphic elements exist, for example the countryside rolling past, the rapidly edited shots from *Arlington Rd* (1999).

While analysing this characteristic it has been noted that it does not exclude figurative elements from being present provided that they meet other criteria[1]. Stat.ind's graphic film *Brazil Inspired* (date unknown) is an example that contains captured footage but the

1 See 'Unmade' and 'Narrative Outside Frame'.

FIG:15. Photograph: *Daisy*

This photograph of a daisy, taken by myself, is used as an element in *Process* (2007; right).
The daisy was clear-cut from the background and replicated and transformed in Adobe Photoshop before being animated in Adobe After Effects. It is a rare inclusion of captured footage in my work.
The image was captured on a FinePix F610 digital camera.

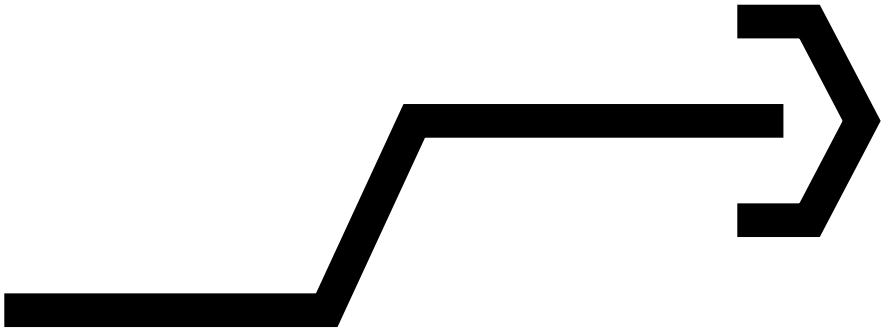


FIG:16. Graphic element:

Digitally constructed element for *Process* (2007).

footage operates as a texture not as a means of explaining what is occurring.

In order to test this characteristic I have limited my experimentation to the inclusion of still images. I have not used any recorded image sequences (video or movies), preferring to build most elements digitally from scratch[2]. In my own work this has been successful allowing an emphasis to be placed on a non-figurative approach.

Summary

- Graphic films can be made in the graphic design studio – they do not make use of stages or sets.
- Graphic films are made with postproduction tools. The creative process begins and ends 'behind' the camera.
- Figurative elements can be present in graphic film, but they alone do not convey the narrative.

2 Capturing all images at low resolutions on a pocket digital camera.

UNMADE

'Unmade' is a term I have used to describe the treatment of captured elements within graphic film. Captured elements include any imagery that has been recorded from a real environment. Video footage and photographs are the most common examples of this type of activity. A captured element is very rarely left in its 'raw' state. It is usually altered and inevitably this alteration is performed digitally. Typically the alterations made enhance the sense of a constructed world or environment.

As described previously in this chapter[1] captured imagery is minimal within graphic film. The graphic film maker is producing moving image work largely with the tools present within the design studio environment, the computer and inexpensive input/output devices, flatbed scanners, digital cameras, and ink jet printers. Though these mid priced (design studio quality) devices have become far more capable over the last few years (2002-2007) they still fall far short of the capability of high end specialised systems that are in use by film and television studios. Unmaking captured elements and applying treatments to them removes the technical short comings of the device. During the initial digital revolution of graphic design (1985-1990) software builders focussed on tools to improve the quality of analogue imagery that had be digitised. Sharpening and colour correction tools received the greatest attention. Vast numbers of books were written describing elaborate methods to achieve more 'life like results'. From the designers, who were being now trained in the new digital production workflows, there emerged an acceptance of the degraded image and appreciation it for its digital nature. This new breed of designer is far less inclined to hide the fact that an image is digital.

The graphic film maker unmakes captured footage for two reasons. One is purely pragmatic, to disguise the limitations of a low cost capture device[2]. The other is because these fragments of reality can be altered to fit the constructed world the designer is building.

The unmaking of a captured element is usually carried out by increasing colour casts, under or over saturating the tonal values of the image, or employing special effects filters, some as simple as blurs, others extremely complex in the results they can achieve. The goal is most often to extenuate the digital origins of the image by enhancing noise and degradation[3]. In Viagrafik's *The Zoo* (2005) the captured footage is a time-lapse sequence shot from a high position looking down into a train station. The travellers come and go in waves of activity while a planar time piece unfurls from a slot in the floor. The high contrast murky grey footage suggests that we are watching security camera footage that has recorded an event that the travellers did not see as they rushed past in their haste.

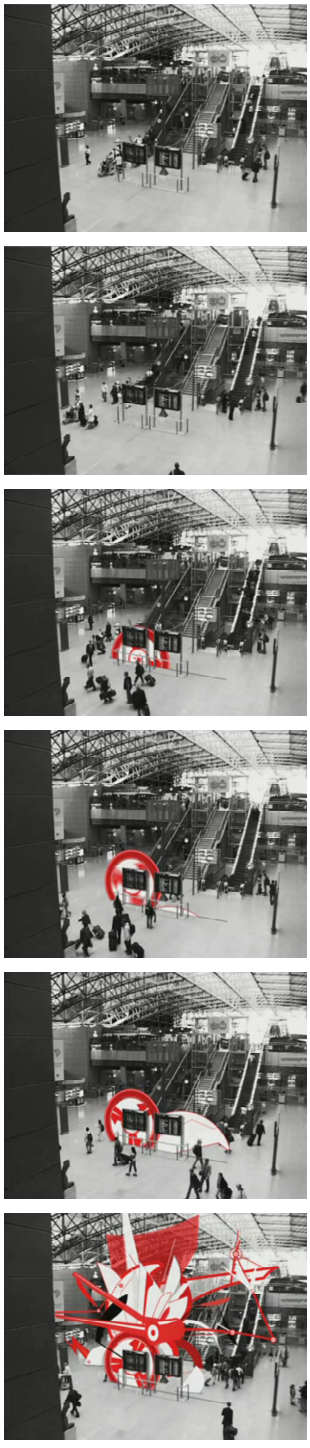


FIG:17. *The Zoo* by Viagrafik (2005).

The original camera footage in this graphic film was almost certainly recorded in colour and then later removed in After Effects. This deliberate 'lowering' of the quality of captured footage is common in graphic film.

1 See Section 002 subsection 'Captured Footage'.

2 Experimentation with my own consumer level digital camera has proved this hypothesis. With a video capture resolution of 640 x 480 sequences captured with it are required to be stretched to fill a full 768 x 576 PAL D1 standard. When stretched the image is interpolated and heavily blurred.

3 When capturing still images my camera and scanner are accurate. In order to achieve results observed in work like Stat.ind's *Brazil Inspired* I have had to apply a noise generating effect.

This murk elevates the attention we give the graphically constructed time piece. The viewer realises that we are witnessing events that have already occurred over a much longer time frame. The crisp robotic time piece is what is important, not the anonymous travellers who appear and disappear at its base.

In their book *Moving Type; Designing for Time and Space,* Woolman and Bellantoni write "Sequential structure can be type, image or audio dominant. The dominant element is the carrier of the message"(2000, p.56). In a graphic film it is aways the graphic elements (line, symbol, shape and type) that dominate or contain the greater part of the message. When captured footage is unmade it becomes a graphic element and is fitted within the designers constructed world.

Summary:

- The alteration of captured elements results in them being 'unmade'. Everything is altered, treated, in some way changed.
- Computer, scanner, digital camera, and ink-jet printer are the tools used to input and output captured elements. They are available in the studio in the design studio. No special equipment is required.
- The dominant element in graphic film is always the graphic.
- Heavy treatment of captured footage can transform it into graphic elements.

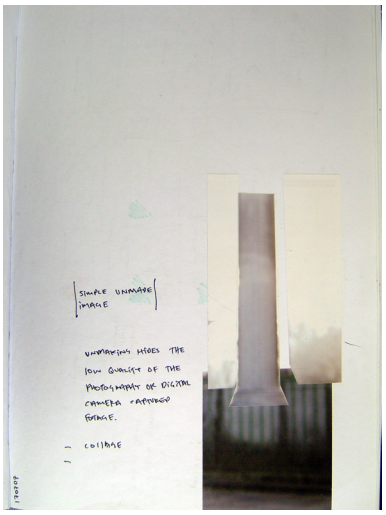


FIG:18. Experiments: *Unmade* and *Threshold* (2006).

Above are two experiments:
Top: digital
Bottom: analogue.

Their purpose was to locate the minimum amount a still image has to be altered to qualify as 'unmade'.

These experiments did not reach a conclusive outcome. This is because context is vital. How and why a captured element is altered is as important as how much it is altered.

SHIFT

In terms of editing, graphic films do not contain cuts. The designer instead moves the viewer from one scene or moment of action to another via a 'shift'.

A cut as it is understood in the traditional motion picture (the largest sub genre of moving image) is when a single shot or clip of captured footage is joined to another in order to form a continuous sequence of images. This occurs because of the camera. Action is constructed outside of the camera and then recorded by it. Because this process does not occur in real-time for the audience in the way a stage performance does, the film maker can take the action a number of times, then later (off the set) view the shots taken and edit them together. Editing is considered to be one of the most important aspects of film making. The Russian film maker Vsevolod Puldovkin describes editing: "Editing is the basic creative force, by power of which the soulless photographs are engineered into living cinematographic form" (Puldovkin, 1960). Editing in this sense of the word does not need to occur in graphic film production.

Given that graphic films contain very little captured footage and are constructed in a post production environment that supports planar 3D space there is no reason to cut between image sequences. The camera (or more accurately, the simulated camera) is not constrained by any physical laws and there is no 'film' to edit together. With these physical restraints removed graphic designers are able to utilise other devices to move from one point in space and time to another. I refer to these moves in temporal and positional space as 'shifts'.

The graphic film *Invisible Identity* (date unknown) by Syndrome Studios demonstrates shift almost as a continual moment from the beginning to end of the film. An inhouse project, the film illustrates the plight of the homeless and their loss of identity. During the passage from 42secs through to 44secs the point of view steps back from a man's profile revealing a tilted close up of his gaping mouth. The sharp lurches in time are like hurried footsteps - the point of view retreating, the broken teeth are the enduring image in this moment. Syndrome ask us if the poor dental record will serve as a identifier should this mans body be found. The man's profile blurs and fades, and the point of view slides to the right of frame. At 50secs to 53secs textured mark is unmasked. The blurred profile fades entirely as the point of view moves to witness another bowed head being revealed. The shift is continuous and unbroken, with the point of view moving through the constructed world occupied only by the menacing black mark and the homeless men.

Unlike a cut a shift does not jump to a place or a time with the a change of camera. The point of view remains on, there is no need to ever turn the camera off. To reach a point in space or time the viewer must travel there. The shift references visual languages that

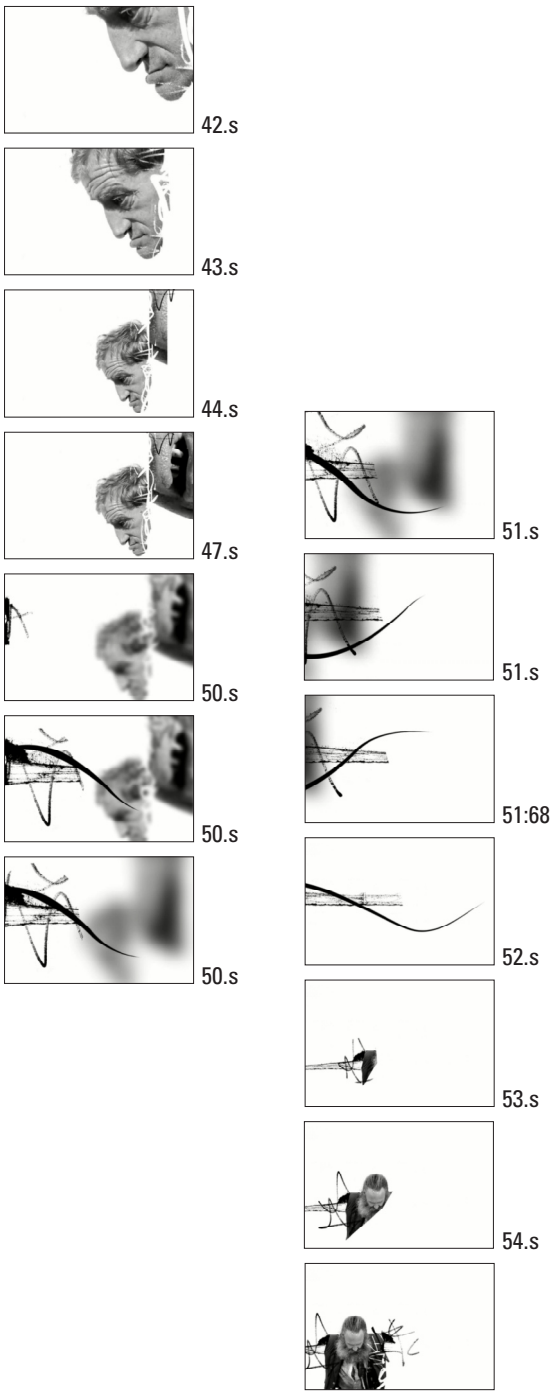


FIG:19. *Invisible Identity* by Syndrome Studios (date unknown).

The point of view (camera) is moved through 3D planar space. The graphic elements are already positioned when the point of view frames them. They are revealed by an animated mask.

FIG:20. A very early shift experiment: *Soils* by Adam Sheffield (2005).

This early shift experiment taught me that some considerable planning was necessary before beginning to manipulate cameras in After Effect's 3D planar space. Long redraw delays occur on my relatively low powered computer.

FIG:21. Shift planning from analogue notebook (2007) *Process*.

It has been my experience that even very rough planning will greatly shorten the time required to achieve desired results.

have matured in video games and online worlds. The camera or point of view shifts through the constructed planar space occasionally focusing on a particular element accompanying it as other elements construct and deconstruct about it along its journey. This is a clear reference to third person video games, *Tomb Raider* and *World of Warcraft* being famous examples. A follow camera trails behind the character the player is controlling, framing both the character and the results of the player's actions in the game world.

The speed of the shift and the focus of the point of view vary depending on the intent of the designer or type of film being made. In *Invisible Identity* (date unknown) the pace of the shift is slow and smooth generating contemplative mood. Contrast that with my own work *Process* (2007), where I shift the point of view to the rhythm of the narrators voice. When he is excited by what he is talking about the point of view moves more rapidly than when he hesitates.

The shift also emulates the designer's experience of moving inside a digital project using the ubiquitous hand tool grabbing and 'moving' the digital material that is being worked on. There is of course no actual physical material to move or re-frame. The 'grab' move to a new area of focus and 'work' in this area is an every day experience for a digital designer[1]. Shifting is turning a page to a new part of the construct. The erratic rhythm of some graphic films feel to the viewer like browsing a magazine. The page turns, blurring one page to the next but often we can read both at the same time as one *becomes* the next.

The shift does however deny some visual languages to the graphic film maker. There are many moving image conventions that require cutting from one sequence to the another, for example rapid cutting from close up to a distance shot. Or the use of transitions between one image sequence another like a cross fade, dissolve or a gradient wipe[2]. The shift is a result of creation in post and planar space. It causes scene construction and deconstruction.

FIG:22. Irma Bloom examines the turning page.

From in *Dutch Resource : collaborative exercises in graphic design* (Elliman, P. and M. Kopsa, 2005, p.162-163). This image show the 'shift' occurring in print.

Summary:

- A 'cut' joins single shots or clips together in the traditional motion picture. Graphic films are digitally constructed and have no 'film' to cut together.

- Graphic film uses 'shifts' instead – moves in temporal and positional space

- Shifts do not jump to a place or time; point of view shifts through the planar space and is always active.

- Shifting is turning a page to a new part of the construct, a follow camera in a video game and the hand tool in a graphic design application e.g.: Adobe Photoshop.

1 The revealing of the design process is important notion in graphic film. No other artefact allows the designer to reveal so much of how they make their work within the work. The navigation and movement around a layout (it self a digital construct) is part of the designers everyday experience.

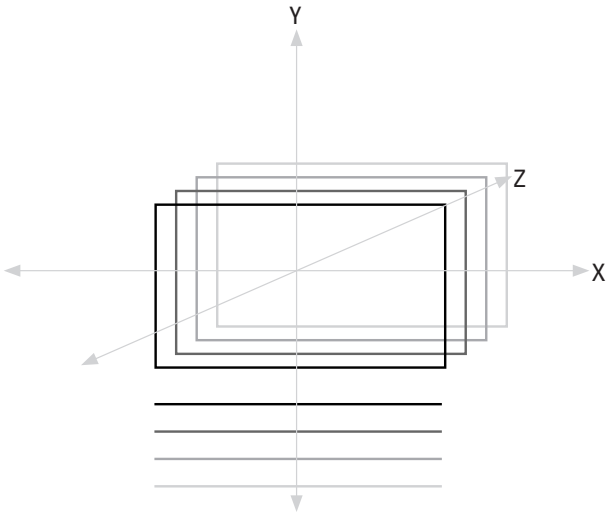
2 For a more detailed list see Apple's Final Cut Pro user manual Chapter 8: the section entitled *Video Transitions that come with Final cut Pro*.

PLANAR SPACE

Graphic film elements reference a planar spatial system in a manner that can be detected by the viewer.

Images can be broken down into 'ground' relationships, foreground, middle-ground and back-ground. This way of examining and describing images is referred to as the figure-ground relationship. In a graphic film ground relationships are not collapsed together as they are in a figurative image, a landscape photograph or painting. They are always distinct and always visible.

In his book *Motion Design: Moving Graphics for Television, Music Video, Cinema and Digital Interfaces*, Matt Woolman defines the plane: "As a line moves in a direction other than its own inherent direction its path maps out a plane" (2004, p.19). Graphic films reference planes both graphically and spatially as one of their fundamental building blocks. The reasons for this are both technical and conceptual.



Planes stacked in space.

Lev Manovich cites Adobe After Effects as the software environment in which hybrid new media forms are formed. After Effects supports a 'z' depth or perceivable space between graphic elements. The After Effects help manual describes the programme's 3D capability thus - "After Effects 3D layers are two-dimensional rectangles that you can move and rotate in three dimensions" (Adobe, 2007). The analogy is a stack of paper floating in zero gravity (see diagram, top right). The individual sheets display different graphical forms and are free to behave independently of one another, ie: they are not bound together. After Effects layers (sheets) cannot construct complex 3D forms, for example a sphere, though an image of a sphere could be placed on a 2D layer.

The printed page turns, the story unfolds. Printed material moves from page layout to page layout and the action unfolds on a totally flat physical surface, a plane. Depth on a page is an illusion built with scale, position, and transparency. The surface is a barrier in a printed work of graphic design. It is not physically possible for the graphic elements to move past the viewer. In a time based medium, however, the real surface (the screen replaces the page) is not the highest point in space, the point of view is. A point of view can be "shifted" and therefore the barrier of the surface overcome. Spatial depth is a real and measurable compositional device. This freedom allows graphic elements to be above or below each other in the Z plane (see diagram bottom right).

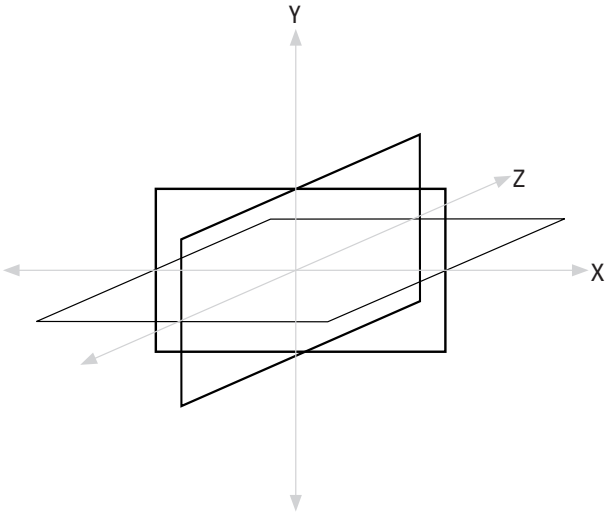


FIG:23. Planar space in Adobe After Effects.

The above diagram illustrates how Adobe After Effects references 3D space from a planar aspect.

Within After Effects the point of view can be altered revealing overlaying elements to be individual components of a larger construct. Elements that overlap each other do not have to simulate layers as they do on the printed page.

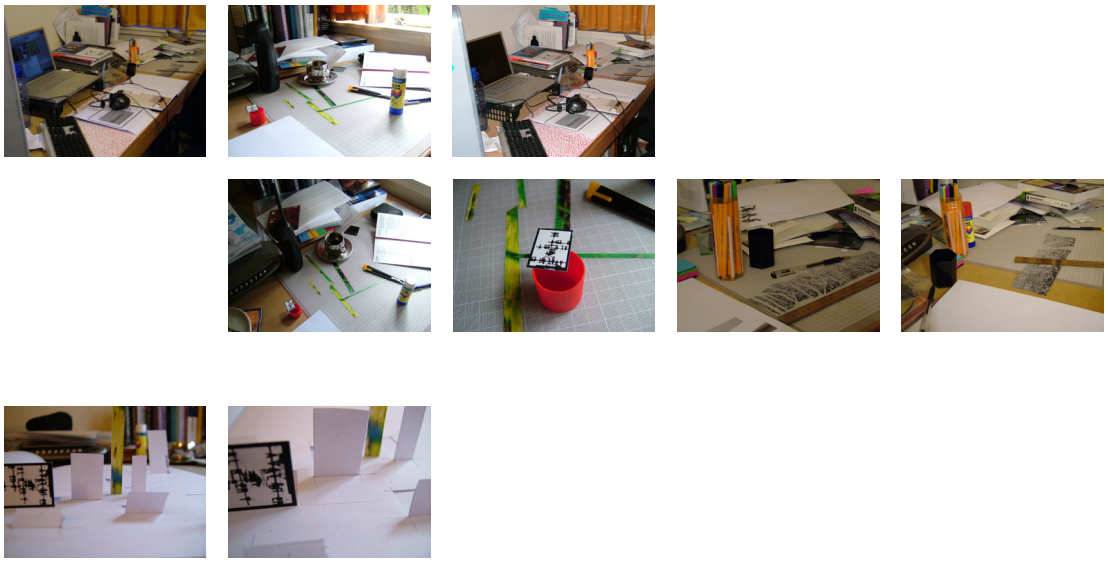


FIG:24. Planar experimentation.

A very early planar space experiment *Analogue Diary* (2005).
The above experiment was conducted using a digital camera recording video at different zoom settings. I physically moved the camera through, over and around the paper 'pop-ups' to gain a greater understanding of how camera depth of field affected viewer perception in planar space.

The empty space between elements is not hidden or framed off. The constructed world is in full view, like standing off stage viewing the painted backdrops from the wings or being able to walk around a film set, looking at it from an angle that reveals its fakeness. The designers' acceptance of their own world's fakeness is important as reveals the graphic film as a construct, not a recorded reality or a digital simulation of reality.

FIG:25. Preliminary experimentation for *Process* (2007).

A series of investigations into composition in planar space in order to determine the spatial positioning of the daisy elements for *Process*

FIG:26. *Anomaly* by Precusor (date unknown).

Transparent 'pages' held apart in a measurable 3D space.

Precursor reveal the characteristic 'planar space' in a very dramatic way in their work *Anomaly* (2003), a graphic film that explores and studies NASA space shuttle flights. The levels of data are arranged in planar space, a near infinite volume in which the point of view shifts and focusses on discreet parts of the amassed data.

Graphic film may contain 3D objects. These objects are not captured imagery but digitally modelled. They refer to planar space as their co-ordinate system. They remain on a distinct plan while within the constructed world. 3D characters (characters of any kind - see 'Narrative Outside Frame') are very rare in graphic film, and their inclusion is often a quirky juxtaposition within the otherwise 'flat' construct. MK12 use this device in their fantastically non- sensical film *4D Softcore Sweater Porn* (2001), a film which pays homage to the aesthetics of 1960s knitting patterns In this example, the 3D character is a toy monkey, a hard plastic form juxtaposed amongst the soft planes of the suburban construct. It is an unnerving object, out of place and more than a little unsettling.

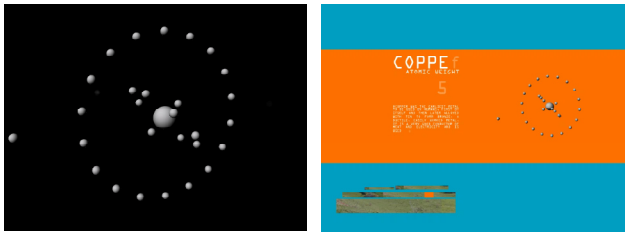


FIG:27. 3D model in planar space: *Sustainable* (2006).

After Effects 3D does not support objects with a 'Z' depth. This means that in order to change the perspective or angle of view on a real 3D object it must completed in the 3D application (Maya in my case) before rendering and then composited into the After Effects construct.
On the left is a full 3D polygon model of a copper atom made in Maya. This model was rendered and placed into Adobe After Effects in 3D space (right). In the final film the atom model appears to float on the same plane as the text.

It would be easy to mistakenly refer to planar space as layers. This however would create confusion. Many graphic design related software packages use layer systems to organises graphic elements and create effects by mixing or blending them together. While Adobe Photoshop is perhaps the most famous example, After Effects, Apple Final Cut and Autodesk's Maya all utilise a layer system in various ways for different reasons. Planar space as it is seen in graphic film is a graphic compositional method, not an organisation system within a software package.

Summary:

- Depth on a printed page is an illusion; spatial depth is a real and measurable compositional device in a graphic film.

- The constructed world is in full view, like walking around a film set looking at it from an angle that reveals its fakeness or artificial nature.

- Planar spaces should not be confused with layers.

CONSTRUCTION DECONSTRUCTION

A graphic film is comprised of digital graphic elements that are revealed the to viewer over a period of time.

Unlike traditional forms of moving image in a graphic film elements are formed in full view of the audience. They are not just shown to us - we see them constructed. Animated masks and elements that move together or apart are the most commonly used method of achieving this. These elements combine to form a legible graphical construct. A page of a magazine or a website could also be described in the same way but are usually referred to as layouts. I have for this reason adopted the term 'layout' to describe 'scenes' in graphic film.

Graphic film allows the designer to reveal the making of the 'layout'. The viewer is allowed to watch as the layout is constructed for the next part of the film's diegesis to be played amongst. When the action is complete, the viewer watches as the scene is de-constructed. An analogy would be to have the curtain raised between scenes during a play. The audience could the watch as the stage set was altered in preparation for the actors to return to the stage. In a graphic film the process of its making is not concealed from the viewer, rather it is an integral component of the viewers experience of a graphic film.

Graphic films exist in a planar space without gravity or any other real world physical constraints. As a result the layout's elements can be revealed at any speed, can be framed from any direction, and can change or be reformed into any other type of graphical construct.

A dramatic example of this characteristic can be observed in Clemens Kogler's *Le Grand Content* (2007). On his website he describes the film saying that it "examines the omnipresent Powerpoint-culture in search for its philosophical potential" (Kogler, 2007). In the sequence illustrated (right) Kogler constructs a cause and effect diagram from arrows, then from the circles they form builds a Venn diagram. He then seamlessly constructs an equation, then de-constructs the result into another Venn diagram. Kogler uses construction deconstruction to explain how the same statistical information can be presented in a variety of different ways. These presentation changes radically alter the way we interpret and comprehend the data. Kogler is exposing the power of information design to influence decision making.

Another masterly example of construction deconstruction can be observed in Simon Robson's *Barry Says* (2003). Robson depicts the open hand of democracy being shattered, de-constructed by a bullet. The splatters of blood are labelled and re-constructed into the faces of the political figures that Barry McNamara accuses of war corporatism by a perforated black plane. Robson uses construction to reveal these shadowy figures with blood red against black then through deconstruction by removing the black hides them The labelled men are then crucified against a field of red.

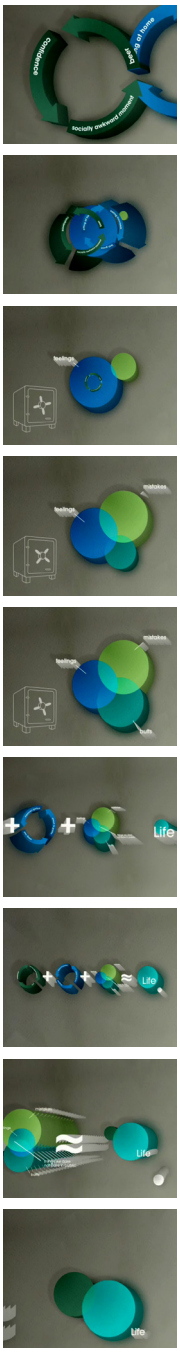


FIG:28. *Le Grand Content* by Clemens Kogler (2007).

The power of the graphic designer to change the way we read statistical information is explored through the use of construction deconstruction.

FIG:29. *Barry Says* by Simon Robson (2003).

Through construction deconstruction shadowy conspirators are revealed and as quickly hidden.

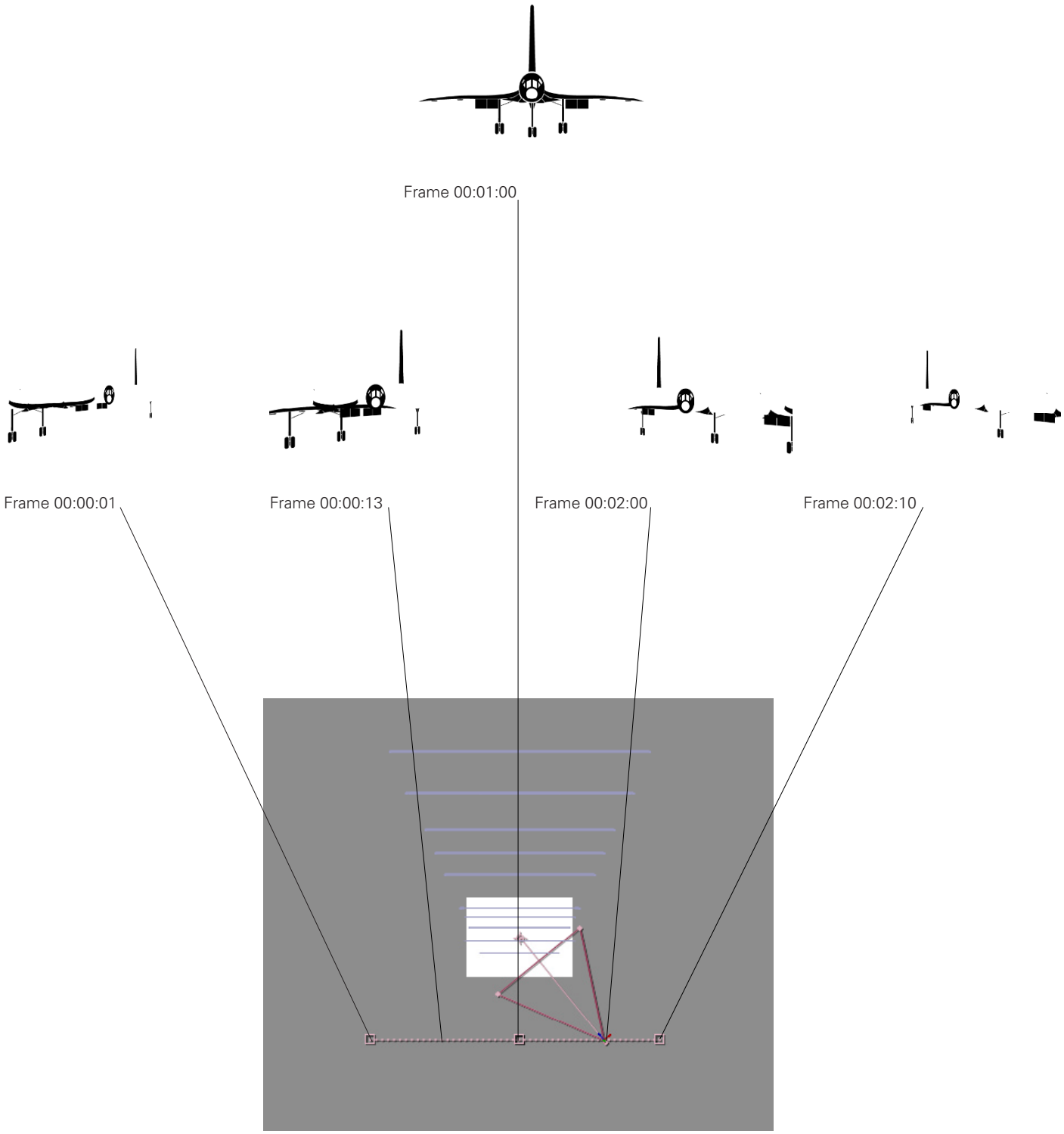


FIG:30. Experiments: *Examination of Construction deconstruction. Concord* (2006).

The above experiment was designed to experience the role of camera movement in planar space with respect to construction deconstruction. A vector image was separated into a number of different layers in Adobe After Effects and placed into 3D space. The individual elements where scaled, so that when viewed from front on, the image appeared to be on a single plane. A wide angle camera was tracked from left to right with the cameras focus point orientated to the centre of the group of elements. The results are as shown in the five reference frames above. I was surprised that the final visually unsettling result could be achieved with such a simple camera animation when the examples I have studied at first appear to be so complex.

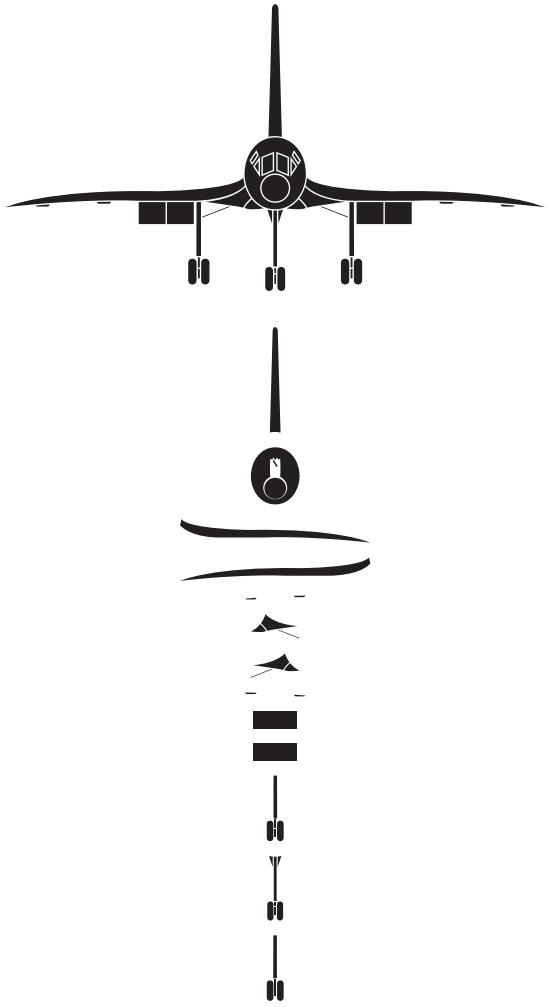


FIG:31. *Concord:* Shown as separated elements (2006).

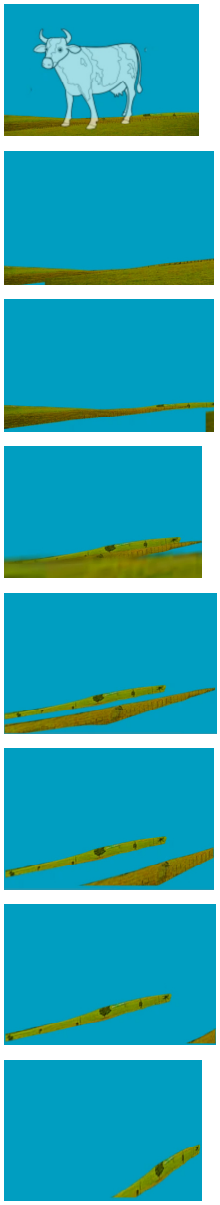


FIG:32. Experimentation *Concord* applied: Screen shots from a section of *Sustainable* (2006).

Construction deconstruction: Very similar technique used in this series of screen shots where discovered in the *Concord* experiments.

Construction deconstruction gives the graphic film maker the power to shock, amuse, or surprise the viewer as they are shown the contents of the designer's constructed world. Constructing and then de-constructing reveals the design process to a viewer. Process therefore becomes a vital component for the viewer - it is a key component in reading the narrative.

Summary:

- The term 'layout' is used to describe 'scenes' because the viewer is shown elements 'appearing' in the frame.
- The setting of the stage is visible to the viewer before during and after the action takes place.
- Construction deconstruction gives the graphic film maker the ability to reveal the creative process.

NARRATIVE OUTSIDE FRAME

Graphic film is not a form(s) of narrative entertainment in the way a traditional film, movie or television programme is. It borrows many narrative devices from these older, more established forms of moving image but combines them with many others from often very different media. Narrative in graphic film is not conveyed to the viewer by characters interacting within the frame. A story or message is not acted out. Elements do not speak to each other or form emotive relationships. There is no character development or anthropomorphising of the principle graphic elements line, text planes or shapes. This sets it apart from many types of animated or cartoon moving image examples where non-figurative forms are given life and character through movement and voice.

The diegesis of graphic film are presented using techniques employed by documentary makers. The viewer has the sense they are being informed about a topic in a manner which is truthful, sincere, real, that it is something they should take seriously even when it is clearly opinion or merely fun. "The documentary film asks us to assume that it presents trustworthy information" (Bordwell, 2001, p.111), by overloading the viewer with graphical such as information diagrams, text and tables which appear important, look so serious and business-like yet are impossible to read or comprehend.

There are several examples of graphic film where a narrator's voice is present. In Simon Robson's *Barry Says* (2003) the viewer hears the voice of Barry McNamara delivering his theory on the United States of America foreign policy and how it is "waging a war on terror or more accurately a campaign against U.S domination, others prefer to call it the beginnings of a third world war". His tone is like that of a lecturer standing in front of an audience delivering a well rehearsed argument. It is an example of rhetorical form "in which the filmmaker presents a persuasive argument. The goal in such a film is to persuade the audience to adopt an opinion about the subject matter" (Bordwell, 2001, p.112).

FIG:33. Transcript from *Process* by Adam Sheffield (2007).

I have made a number of recordings of conversations and other unrehearsed soliloquies to construct graphic films around. These recordings have been made in the field using an iPod microphone. The voice in *Process* is Zeb Reynolds recorded in a class room at UNITEC: "...but if you take if take the outcome away from the process then you' but it you take the process away from the outcome then the outcome falls over then there's no you can't get to the outcome there's no process to lead you there and while things while kind of ideas are being processed and pushed you know there's kinda this great kind of potential for ah for kind'a for lateral thinking or kinda this kinda space..."

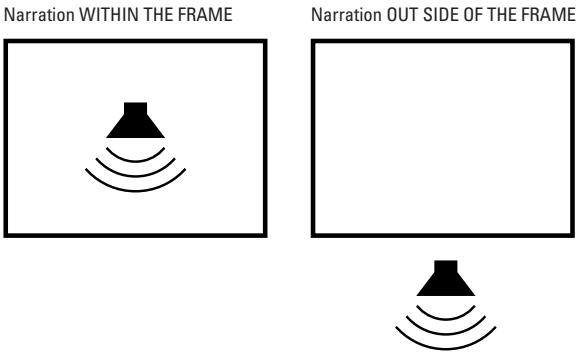


FIG:34. Above: A diagram describing *Voice off.*

The narrator of *Brazil Inspired Macho Box* (2003) by MK12 is another layer removed from the film's viewer. This film is essentially an illustrated phone call. It is as though the viewer is listening to a talk back radio show and the conversation of the caller is generating visual responses in the mind of the film maker. "...well ahh machismo is part of the culture and in Brazil its its not just you know a man male behaviour ahh its actually its a whole behaviour that is in the culture..." The narrator is absent, so that we hear the reply to a question but not the question or the questioner. Upon reaching the end of *Brazil Inspired Macho Box* the viewer is left not wondering what the greater film was about, but what question could have prompted this reply.

The familiar forms give the viewer access to larger work. Despite the short duration of the graphic film these familiar modes and devices give the viewer a frame in which to locate what they are watching.

FIG:35. Transcript from *Brazil Inspired Macho Box* by MK12 (2003).

The narrative comes from outside of the frame as a talk back phone caller: "...well ahh machismo is part of the culture and in Brazil its its not just you know a man male behaviour ahh its actually its a whole behaviour that is in the culture..."

What is quickly obvious in both these works is that the narrator is outside the picture frame and is not visible to the viewer. This mode of narrative is referred to by Mary Ann Doane as 'voice off.' "He/she is just over there just beyond the frame-line" in a space which exists but which the camera does not choose to show" (Rosen, 1986). Film Noir is an example of moving image that employs a voice off narrative that is distinct, retaining identifiable characteristics, yet varies from example to example. Similarly a graphic film designer using a voice off device is able to extend the world they have constructed beyond the frame. They are able to make something truly significant.

Narration present within a graphic film is not, however, a commentary of the events occurring on screen. It is the graphic elements which reflect and are often driven by the audio narrative as both *Brazil Inspired Macho Box* (2003) and *Barry Says* (2003) illustrate. Another important aspect of this relationship is that the audio and visual components of graphic film do not always remain in sync. The streams of narrative often diverge and converge acting in harmony or creating tension. The rhythm of a graphic film changes in a manner more akin to a contemporary comic book than typical narrative film. The diagram top right shows a comic book spread illustrated by Ashly Wood. The reader's eye is directed from frame to frame. The characters are in conversation about an event which occurred in the past. This past plot component is illustrated in the image upon which the 'now' frames are floating over.

Summary:

- Graphic film borrows traditional narrative devices from the documentary genre of moving image and combines it with devices from other media. In particular video games and graphic novels.
- Some graphic films employ a narrator's voice through a "voice off" technique placing the narrator in another space outside of the frame.
- Audio narrative tends to drive the graphic elements, not provide a commentary of events.

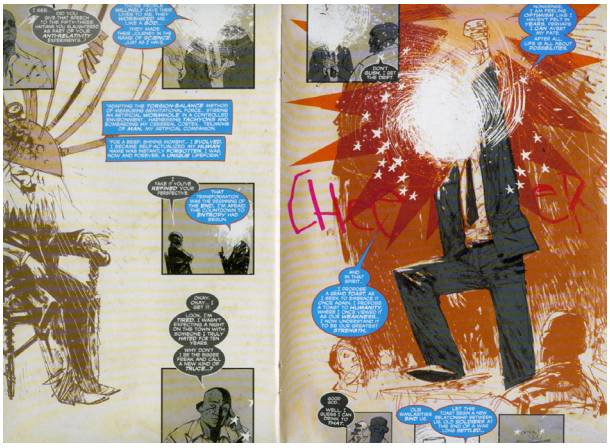


FIG:36. Ashly Woods *Automatic Kafka issue 07 page: 21-22*

Demonstrates how several narrative streams can exist within the same frame.

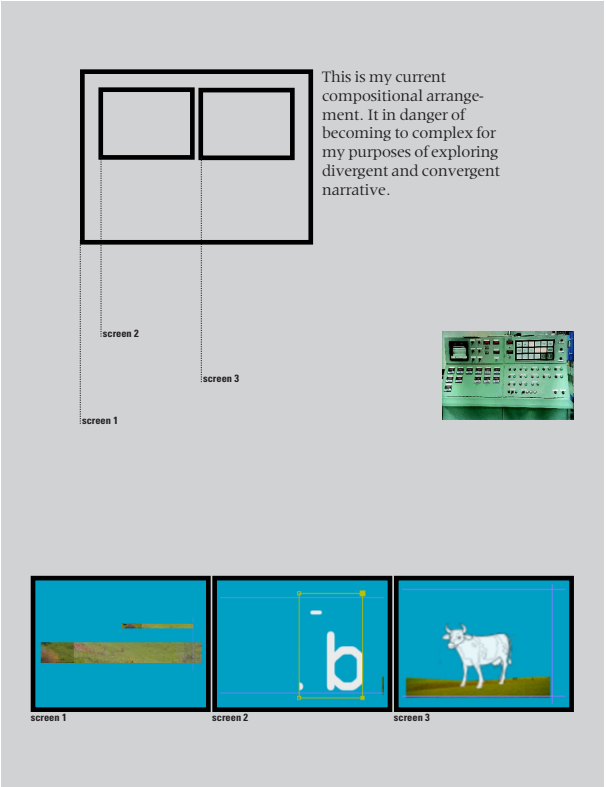


FIG:37. Digital notebook work: 2006.

Notes analysing the results of experimentation with multiple narrative streams within a single frame.

THE BACKGROUND IS A PAGE

Graphic films are digital constructs, photons, illusions. They do not exist in a tangible environment, one that has physical limits, physical boundaries. Yet graphic films do not appear to be set in a void of empty space. There is an end, a limit, to the 'space'. Graphic films are set on a 'page' and when projected onto an invisible cinema screen (unlike a traditional film) the viewer is aware of the page's presence. The page serves to contain and support. It is the substrate with which the graphic film, a construct, is held together.

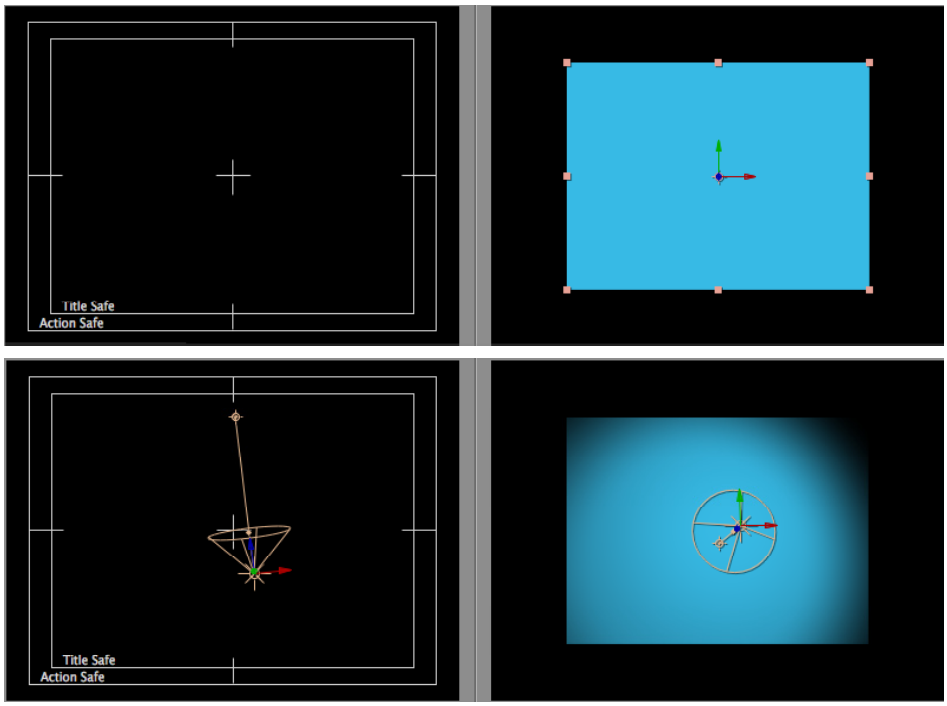


FIG:38. Recent experiment: Solid 3D lit surfaces (2006)

Top: a solid surface in After Effects 3D space without lightening.
Bottom: a solid surface in After Effects 3D space with lightening

In the bottom lit example the lighting fades out towards the edges of the plane. This technique is an emulation of Simon Robson's (see right) and allows some considerable flexibility in my work. Backgrounds can be made in a manner similar to a photographic backdrop. By composing a pre-rendered page (backdrop) I can achieve the effect of a finite space with little increase in final render times.

An example that helps to explain this characteristic can be seen in the film by Qube Konstuckt *Utopia Mk 1* (date unknown). The film is about the planning and building of a floating utopian habitat where the Qube Konstrukt studio can be located. The film makes heavy use of 'retro' imagery sourced from old 'how to' manuals. These images are collaged together, blending existing and fictional technologies. The viewer watches as these machines are designed and assembled. The image elements float above an aged notebook page, framed as an old projection in some briefing room in which the viewer sits like a second world war pilot receiving mission instructions. Qube Konstruct's use of the page as a background is very much a literal illustration. I am not arguing that all graphic films have such an obvious depiction of this characteristic. It is the concept of a page rather than an actual page that is important.

A less obvious example but much more typical is *Brazil Inspired* (date unknown) by Stat.ind. This film discusses Western consumer culture by using an overwhelming noise of eroded readouts, graphs, and other information aesthetic components constructed over a surface. The surface has a subtle green-yellow texture, darker at the top of the frame than at the bottom. Like *Utopia Mk 1* (date unknown) it invokes a sense of nostalgia but it does not illustrate a page surface. The background is a substitution for the horizon or sky, we are aware of its presence as we are aware of a paper page and like a paper page it does not dominate. It suggests that the constructed environment has limits. If this characteristic was removed and replaced by a black empty space then the setting or location of graphic elements would be infinite.

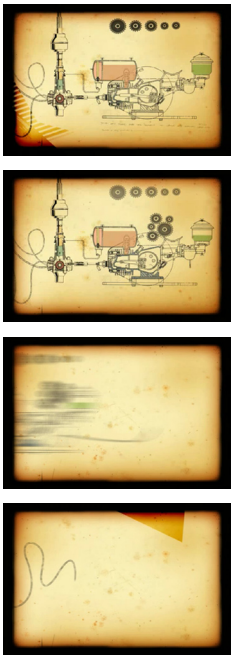


FIG:39. *Utopia Mk1* by Qube Konstrukt (date unknown).

The background as a page is illustrated to the point of changing it into another graphic element.
3D lighting plays a key part in generating the illusion of a background surface or material.

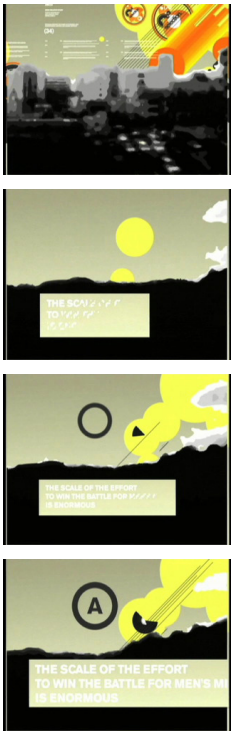


FIG:40. *Brazil Inspired* by Stat.ind (date unknown).

The page as a skyline.

Summary

- The background behaves like a substrate forming a limit to the film's otherwise formless and endless planar space.

- The colour and texture of the background can vary with the intent of the film.

DURATION

All things are relative. While graphic film is short when compared to a full length feature film, it is long when compared to a 15 sec ad spot screening on prime time or a nine second indent between programmes on broadcast television. Perhaps a comparison can be made to popular music, where the mode of delivery and audience form conditions that influence duration in a manner akin to graphic film. In his definition of popular music, Bill Lamb remarks that "Most often the songs are between 2 1/2 minutes and 5 1/2 minutes in length" (Lamb, 2005). During the gathering of examples and the notation of this collected data I found that this is true of graphic film. There are of course exceptions - Johnny Hardstaff's works for Sony Playstation 2 stretch out to over eight minutes. Exceptions are the rule with any definition, and Lamb notes the "Beatles' "Hey Jude" was an epic 7 minutes in length" (2005). Hardstaff's work serves to locate the edge of graphic film.

The reason for the length of popular music is based in technology. The genre of 'Pop' music emerged shortly after World War 2. Duration was limited to the amount of audio that could be recorded onto analogue vinyl disks. The most convenient format for radio play was the 7inch disk commonly know as the 7inch single. It had a maximum storage capacity of 4-5 minutes of audio (depending on manufacturer) and it was this technological restriction that has set a standard that has lasted until today (Ballou, 1987). Similarly technology has played a part in forming the duration of graphic film.

Graphic film owes its existence to an emergence of inexpensive powerful technology. But technology has limits and while its limits are always expanding, any given designer is restricted to working with what they have available at a given time for a given project. Moving image design is limited by the state of the available technology and the amount of time available to make it in. Graphic film is extremely complex from a computational point of view. The making of them requires and generates a very large amount of data. All of which has to be processed and stored. Like most creative activity that generate an artefact, a number of development works need to be made before the full and final work is realised. A second of graphic film can require an hour or more of work to produce and each second occupies digital real estate on the designer's hard drive.

The time to render a graphic film is a factor of the complexity of each frame and the total number of frames in the film. The final rendered file size of a graphic film is highly dependent on its length in individual frames, the pixel dimensions of the frame and the type of compression system used. To add another level of complexity the greater the compression (more compression lowers final file size) the longer the render time. This means that the longer a graphic film is, the longer it takes to render the final film and the time spent rendering test sequences.

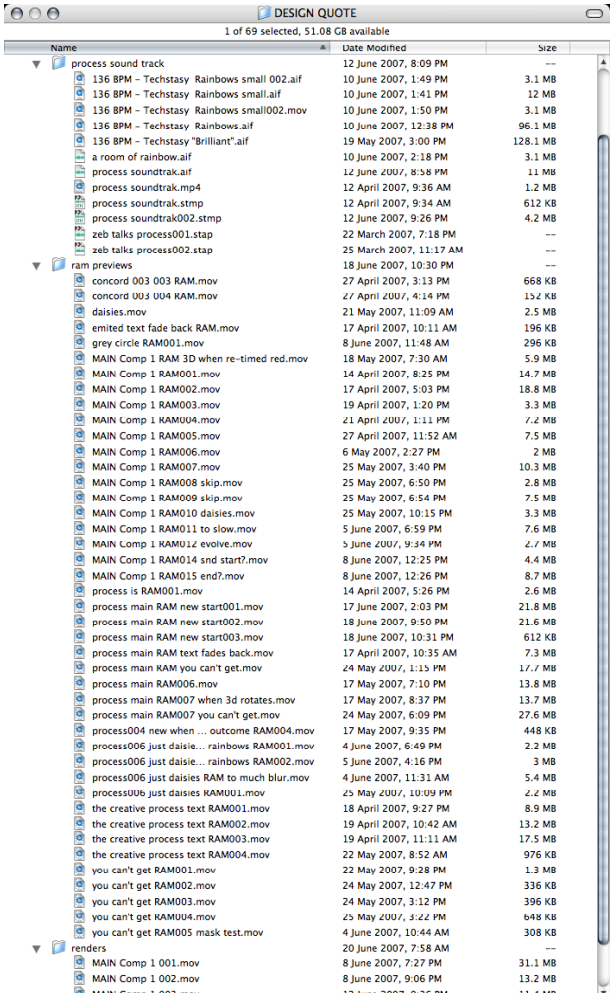


FIG:41. A view of some of the test files required to make one minute of graphic film

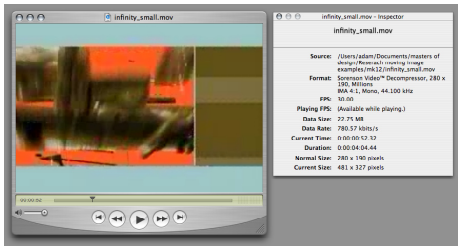


FIG:42. Left: A screen grab illustrating MK12's *Infinity* (2001) in Apple QuickTime.
Right: The information window from QuickTime pro, in this case describing format and resultant file size.

The information presented from QuickTime was a component of the coding phase of my initial investigation into moving image. This type of notation raised many technical questions early in my project, for example "What is Sorenson video compression?" "How does it affect duration?"

Graphic films, while being far less expensive to produce than a live action film, are labour intensive works to make. The longer the duration therefore the longer the production time. Often the film work is being fitted in between sponsored projects in a studio's down time. The making of a long piece could take many months to complete and the excitement for the project can be difficult to sustain.

Typically the message contained in a graphic film can be conveyed in a short time, though the message is often deliberately ambiguous. In my own experience this requires the viewer to return to watch a piece a number of times, seeing and understanding more with each viewing, thus extending the length of time spent watching the film. This ambiguity occurs more often with films that do not have a voice off narrative stream (see 'Narrative Outside Frame') but rely purely on the graphic elements to convey the film's message. Mk 12's *Infinity* (2001), a film in which a team of scientists travel to explore a landscape corrupted by discarded radioactive waste, is such an example. The sound track is bare and driven by the narrative stream from the often obtuse and complex graphics. At just over four minutes long it is perhaps the most watched film in my collection and I have spent some time exploring the graphic techniques used to create it in order to use such an approach in my own practice.

The previous points illustrate why graphic film is shorter than most moving image types. The vast majority of designed moving image, however, is seldom longer than thirty seconds in duration. Most graphic designers specialising in moving image are producing work for broadcast television and the length of the work produced is governed by how much time the client is buying. Television New Zealand describes their advertising pricing structure on their web site: "Our pricing is based on 30-second national rates while a 15-second commercial, for example, is 60% of the 30-second rate". Four minutes is eight times the length of a standard television

commercial. Relativity speaking, this is a long piece of work for a designer to make, perhaps indulgently long.

The most far reaching distribution system for graphic films is the Internet. Downloads from designers sites make up the majority of my collection of designed moving image types. If a film has a long duration then to keep the Quicktime file to a size that can be reasonably downloaded the frame dimension must be reduced or quality lost through greater compression.

So to reiterate, the duration of a film effects the production time and produces a larger finished file size. Graphic film is rarely made for profit so all these cost must be borne by the designer, the long the film the greater the expense.

Summary

•Graphic film is short film.

•There are exceptions, as there are in song writing.

•It is less expensive to make than live action but production times are longer and labour more intensive.

File Name	Duration	File Size	Width	Heigh
agenda_suicide.mov	00:03:59	36.6 MB	400	300
artwork_00006.mov alias	00:03:58	11.8 MB	360	288
common_go.mov	00:03:56	26.5 MB	400	300
gantzgraf_BbandHi.mov	00:03:54	21 MB	294	220
Franz_Ferdinandsm.mov	00:03:53	106.4 MB	360	288
carson.mov	00:03:50	29 MB	480	360
finaledit.mov	00:03:48	21.1 MB	512	288
james.mov	00:03:43	23.5 MB	480	358
Goldfrapp - Strict Machine.mov	00:03:40	36 MB	240	180
Goldfrapp - Strict Machine.mpg	00:03:40	69.1 MB	480	360
Plaid Itsu.mov	00:03:39	12.4 MB	300	240
domatrek poster.mov	00:03:37	11.6 MB	284	240
stubbingsreel2005.mov	00:03:36	42.8 MB	480	360
Ligaya.mov	00:03:34	35.7 MB	320	240
The White Stripes - The Hardest B...	00:03:34	35.7 MB	320	240
BleipMore.mov	00:03:32	9.8 MB	300	240
BasementJaxx.mov	00:03:31	12.5 MB	300	240
ANAMORPH.MOV	00:03:28	70.4 MB	320	213
ANAMORPH.MOV	00:03:28	70.4 MB	320	213
summer_666_web.mov	00:03:23	23.9 MB	480	360
s_os_reel_06.mov	00:03:18	29.6 MB	480	288
TAKEtheLEADsm.mov	00:03:16	14.4 MB	384	288
vertigo.mov	00:03:12	20.4 MB	320	240
meshreel-800kbit Reel002.mov	00:03:09	23.6 MB	320	240
meshreel-800kbit.mov	00:03:09	23.6 MB	320	240
forest_320.mov	00:03:09	10.3 MB	320	180
red hot car.mov	00:03:05	68.5 MB	360	288
MK12_show_reel.mov	00:03:05	18.4 MB	280	190
Sometimes.mov	00:03:02	15.3 MB	300	240
BleipNo.mov	00:02:58	14.3 MB	300	240
overload.mov	00:02:50	19.1 MB	400	300
avengers Title Sequence.mov	00:02:47	10.9 MB	400	200
gbv_back_to_the_lake_makingo...	00:02:45	31.4 MB	400	300
gbv_back_to_the_lake_makingo...	00:02:45	31.4 MB	400	300
gbv_back_to_the_lake.mov	00:02:45	22.1 MB	400	300
PunkMotherfucker_Mateuniverse....	00:02:45	71 MB	360	175
"One Step Beyond" Shilo / USA.mov	00:02:44	157.4 MB	640	480
"One Step Beyond" Shilo / USA.mov	00:02:44	157.4 MB	640	480
barry.mov	00:02:40	24.9 MB	360	288
nonotnow.mov	00:02:38	26.5 MB	400	300
sphere imaginaryforces.mov	00:02:36	16.7 MB	352	264
afternoon_onthe_moon.mov	00:02:34	7.7 MB	250	187
HHH_MK12_MID[1].mov	00:02:34	26.5 MB	360	270
bd4d_relocation.mov	00:02:33	18.2 MB	400	215
bd4d_relocation.mov	00:02:33	18.2 MB	400	215
BLADE_TRINITY_ET imaginaryforc...	00:02:32	8.4 MB	320	240
BLADE_TRINITY_ET imaginaryforc...	00:02:32	8.4 MB	320	240
1976_v4.mov	00:02:30	34.1 MB	360	285
BRAZIL_S.MOV	00:02:29	11.3 MB	280	190
north by northwest.mov	00:02:25	12.9 MB	320	240
fox.mov	00:02:23	32.5 MB	400	300
16blocks trailer_hi.mov	00:02:23	27 MB	480	204
inspiration_web.mov	00:02:17	19.2 MB	360	242
BeautyKit.mov	00:02:16	4.3 MB	300	240
stf_endtitles.mov	00:02:16	19.6 MB	400	300
Arlington Rd Title Sequence.mov	00:02:14	8.1 MB	400	148

FIG:43. The above diagram shows a directory of QuickTime movie files from my research. The files are ordered by duration. The relationship between duration, frame dimension and the resulting file size can be seen.

AUDIENCE

Seeing the audience or the viewer of graphic film in the finished work as a recognisable characteristic may seem a difficult claim to make. It is in fact that we cannot see the influence of the audience in a film which makes it a characteristic. Graphic films are not at this point in their evolution influenced by audience expectation in the way other moving image genres are.

I have established that graphic film is made by graphic designers who for the most part are making graphic film for the fun of it. In other words it has largely been a non-commercial activity. Without a client or a sponsor the designer has the rare freedom to make work in any way they wish and enjoy the total creativity that they have over the final piece of work. The question that needs to be addressed is then who beyond their maker and their close associates sees the final film?

FIG:44. Apple QuickTime interface with all the control it offers the viewer.

Typically moving image production is motivated by some form of profit or at least some form of profit is in the result. The medium is traditionally too expensive to do for "nothing". The massive investments of time money and expertise involved in the production of a Hollywood feature film mean that the audience is often in the fore front of the studios mind. Movies, says James Monaco, are "like popcorn to be consumed" (2000) and so are made for specific audiences to their specific tastes point where test audiences are consulted and films are re-edited, endings changed, and on the odd occasion completely re-shot on the basis of audience reaction or potential reaction. Famously the Stanley Kubrick film *Eyes Wide Shut* (1999) contained more nudity in the European cinema release than in the North American version.

The true purpose for moving image made for television is to attract an audience for advertising. Shows are rated by the number of viewers who watch them and the price of a television show or programme is set accordingly. Advertising itself, either in the cinema or on the television is targeted towards an audience (demographic) in order to sell.

It is not until we consider experimental or art films that we begin to experience moving image work that is not influence directly by commercial forces. However, in order for the makers of these types to get their work seen by an audience, they often target particular high profile festivals. Due to the number of entries festivals inevitably have selection criteria, which the experimental film maker who is looking to raise their profile will surely be mindful of when planning their work in the established world of art film.

Recently graphic film makers have been submitting their films to a number of festivals which have a focus on designed moving image, such as *resfest*[1] and *onedotzero*[2]. However for the moment it would appear that the demand for suitable content is greater than the work being produced.

1 http://www.resfest.ca/index.html
2 http://www.onedotzero.com/home.php

Graphic film is only just beginning to be seen outside of these specialist festivals. Many moving image practitioners are introducing their sponsors to the techniques used in graphic film as a new hybrid mode of message delivery. Graphic film is starting to be seen at conferences as stage openers, trade show back drops and now television advertising[3]. Yet at this point in its evolution graphic film is most commonly distributed (or more accurately, downloaded) from its makers web sites. I have throughout this exegesis referred to the 'viewer' singular, not audience plural and this is why. Downloaded examples of graphic film are most often watched by a single viewer on their personal computer. This makes the experience a personal one. This is probably not the maker's ideal manner of presentation but the viewer has much more power over how they can watch the film through the use of the Quicktime interface than the designer.

What does this say then about the nature of the audience of graphic film? Due to time frame constraints I have not surveyed a large test audience for my own practical investigations into this genre. This next passage is based on small number of discussions with peers so must be considered largely conjecture on my part. The most common watcher or viewer appears to be part of the community of graphic designers making moving image. They are therefore an informed viewer with an understanding of the process within the work, share an acceptance of the digital environment and hence understand the hybrid nature and form of graphic film. It would appear that a quirk of the graphic film viewer is the desire to collect examples of graphic film. Many of my peers have substantial collections of designed moving image that they use as reference and inspiration for their own work that they are now filtering for graphic film[4].

I acknowledge that the examination of audience is worthy of considerably more study. My key point is that we do not know who the audience of graphic film is it is not specifically targeted at a particular segment of the community.

Summary

- Graphic films are not commercially motivated and are therefore viewed outside of traditional presentation contexts like cinemas and television.

- Graphic film makers are submitting their work for inclusion and viewing at moving image festivals.

- The most common means of graphic film distribution is to download from the makers web site and then to watch the film on the viewer's own computer.

3 I am aware also that it is being used by Video Jockeys (VJs) and other audio visual artists like the British team D-fuse but I have been unable to discuss this use with a practitioner to gain a better understanding. So for the moment this area of use will remain peripheral line of enquiry.

4 Graphic designers are notorious collectors, hoarding action figures, designer toys, and expensive sneakers.

Exhibition

My exhibition entitled 'Characteristics of Graphic Film' opened on Monday the 26th of November 2007 at AUT University's St Pauls' St Gallery.

The primary intent was to display my Masters project to the examiners and the wider public. I approached the show trying to illustrate that the project was not about the creation of an artefact but the creation of a means with which to construct a particular type of artefact: the design of a recipe rather than the dish itself. The secondary intent of the exhibition was to reveal to the viewer how this recipe was discovered and to give this recipe to viewers who might wish to investigate the possibilities of graphic film for themselves.

The project was laid out against the wall chronologically from left to right. A printed diagram describing the research methodologies used in the project and how they were combined was presented above the project title. This was to allow viewers engaged in similar projects access to my research techniques, the most important of which was the dynamic mapping tool[1]. It was included in the exhibition as both an interactive map running on an iMac and as a static A2 sized poster illustrating which moving image examples qualified as Graphic Film according to the characteristics identified in my research.

The characteristics themselves were arranged in order of discovery. They began from the interactive version of the map on the left and spanned the length of the exhibition wall, passing beneath the looping moving image investigations. In this manner their origins were revealed as empirically observed points of differentiation in the research. To how through my practical experimentation they have been finalised into separate characteristics.

I used a high definition projector to present my practical experimentation as a loop. The loop begins with a countdown of the ten characteristics then plays my first complete piece of work, *Sustainable* 2006. *Sustainable* is essentially a composite of experiments set to a sound track. These experiments are derived from the moving image examples located and then coded within my research. To illustrate this method of investigation *Sustainable* plays twice. During the second play through the key examples that stimulated the bulk of the experimentation play simultaneously in the same frame. The second piece of work, entitled *Process,* was completed in late 2007. It is an attempt to make a graphic film using an early beta set of the characteristics in order to test them. As such it was not intended as a stand alone work, rather as a prototype in which certain ideas could be observed in combination. Over laid on *Process* during its second playing I revealed the use of the characteristics, isolating areas of the frame and placing the characteristics icons at the bottom of the screen.

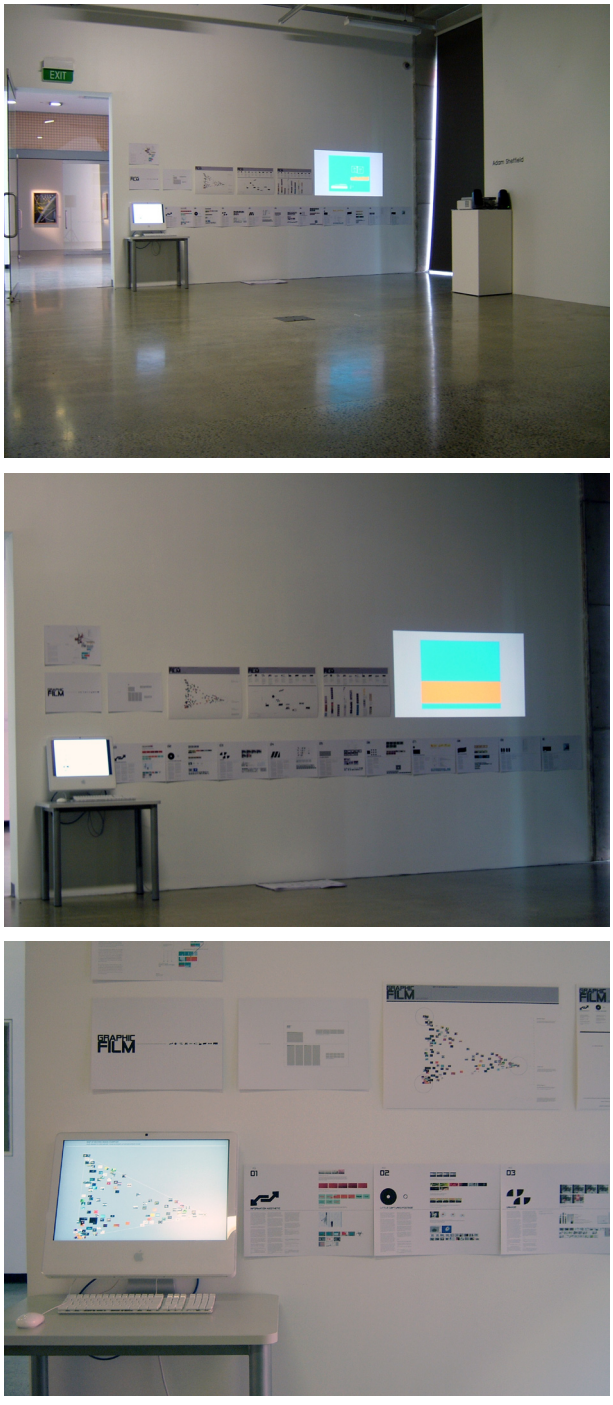


FIG:45. Exhibition of the characteristics of graphic Film.

Monday 26th of November until Wednesday 5th of December 2007.

1 See appendix.

On the floor centred along the wall I placed one hundred copies of an A2 poster that described the inter-relationships of the ten characteristics of graphic film[2]. It was intended that viewers would take one with them from the show to use as a guide to make their own graphic films. Of the one hundred only twenty two where removed from the exhibition. There could be any number of reasons for this low interest. Conjecture as to why so few where picked up could be the start of a future project studying the audience of graphic film.

The exhibition was criticised by the examiners as being too dense, with the amount of information presented being difficult to access. I had considered this and had included an A3 panel that described to the viewer how to read the exhibition but I now concede that this just added to the volume of data on the wall.

2 See page 18.

Conclusion

The aim of this project was to investigate and identify a distinct genre of moving image. This genre, 'graphic film', will serve as a mode of design to convey a broad range of ideas and concerns that arise within my studio practice.

The hypothesis guiding my research stated that graphic film had emerged from the nebulous genre of motion graphics, and that it could be considered unique because it is made for the designer's own purposes. In order to test my hypothesis I investigated four key lines of inquiry:

-the notion of genre
-the existing definitions of motion graphics
-the history of designed moving image practice
-the emergence of graphic film as a form of authorship.

My investigation has led me to two key findings, the first relating to the term 'motion graphics' and the second concerning the emergence of graphic film as a distinct genre.

In order for a genre to be useful for the classification and identification of a type of work (in the case of this project, moving image work) the genre must be accepted and understood by both the producer and the audience. I began the project in the belief that motion graphics was a genre, and that therefore it was clearly understood by those who make it and those who watch it. My investigations, however, have revealed that while the term motion graphics was initially useful it has since become a 'catch all' for a wide variety of distinct moving image types. It is therefore confusing and unhelpful.

'Motion graphics' as a definition became convoluted due to the exponential expansion in the field, by way of changes in technology. These changes occurred both in the production of moving image work and in the way this work is consumed. I therefore conclude that in order for motion graphics to avoid becoming obsolete as a term through over application, its definition must be refined (as Matt Frantz suggests) to mean "designed non-narrative, non-figurative based visuals that change over time" (Frantz, 2003, p.2). Motion graphics is therefore just one example of designed moving image.

My second key finding is that graphic film is also a distinct example of designed moving image. It has emerged in order to facilitate the communication of the designer's message. Graphic films are flexible enough to be used for a wide range of different ideas and concerns. This is due to the expansive visual languages that they can employ. Because they require little or no physical material to construct, they can be replicated for distribution with no further monetary cost. The practical component of my research explores and experiments with these possibilities.

The final component of the exegesis is a taxonomy or guide to graphic film. This takes the form of a list of the ten key characteristics accompanied by descriptions, example from a number of practitioners and the results of my own experimentation and work. The intention for writing this guide was to enable others with the knowledge with which to identify, understand and create graphic film. From this position of understanding I hope others can advance the genre further. This guide is still experimental. It will require more rigorous validation in order to establish as to whether it has succeeded in this aim. These tests are likely to form the basis for a future project, one I will begin by distributing "Graphic Film: A Guide" at the up coming post graduate exhibition 2007.

In conclusion, I find that the hypothesis posited at the beginning of this research project is indeed correct. Graphic film is a stand alone genre that has emerged from the wider field of designed moving image in order to facilitate non-commercial, designer initiated work.

APPENDIX

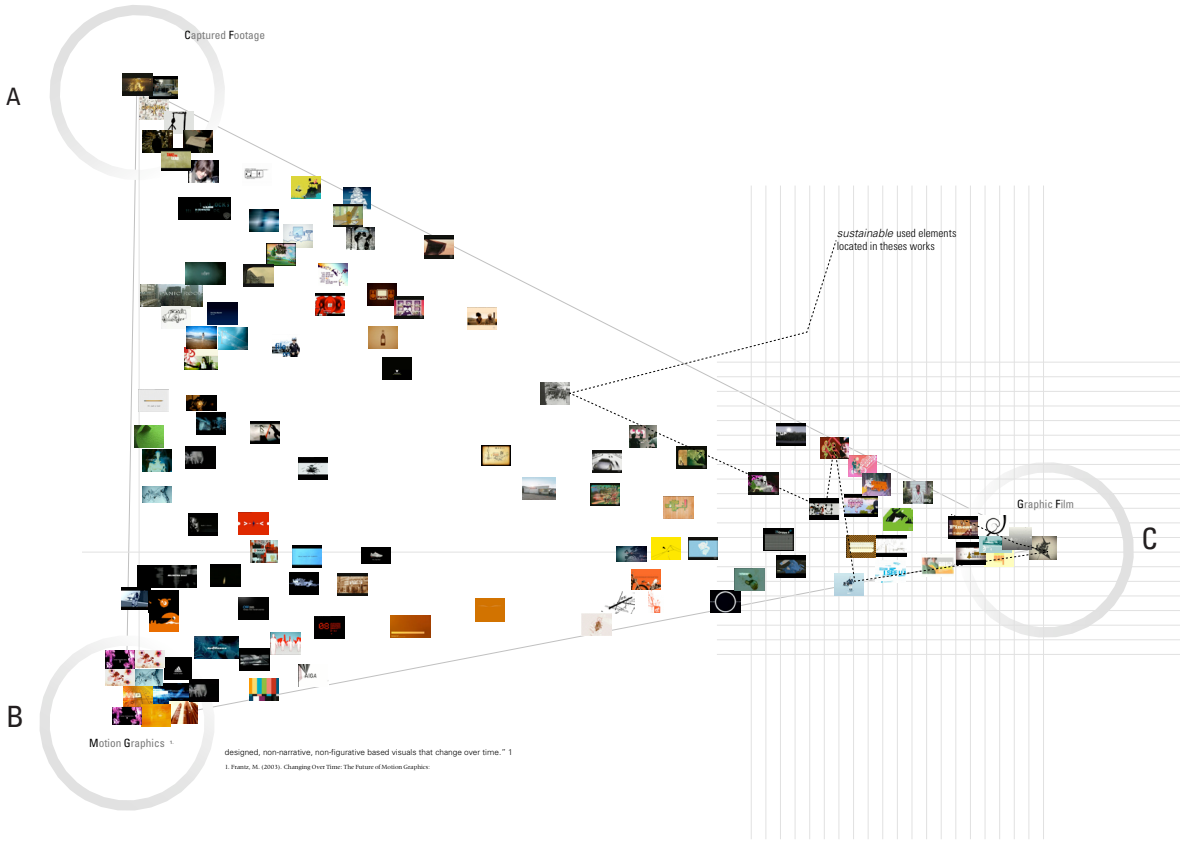


FIG:46. Dynamic Mapping Tool

Illustrated above is a mapping tool based on Axial coding a method of relating like texts[1]. I developed it to allow simultaneous viewing of multiple gathered examples of moving image work and allow their relationships to be organised on a 2D surface. It took some experimentation with available software before a method was discovered. My projects methodology had changed from Hermeneutic. I was now using Grounded Theory.

Grounded theory is a methodology that develops a theory inductively from amassed data. This means that the resulting theory will fit one data set perfectly (Borgatti, 1996).

The open coding of the 'A' and 'B' areas (identifying, naming, categorizing and describing them) revealed to me why empirically I had rejected these types as models.

A= Several genres are present in this area. Title graphics, music video, television and cinema advertising. In this area work contains a large amount of captured footage. The presence of captured footage is problematic for a designer looking to produce work with constrained budgets. Capturing moving image

1 Axial coding is the process of relating codes (categories and properties) to each other, via a combination of inductive and deductive thinking. To simplify this process, rather than look for any and all kind of relations, grounded theorists emphasize causal relationships, and fit things into a basic frame of generic relationships. (Borgatti, 2006).

or live action (filming or videoing) of a high quality requires a crew of experts, potentially actors and in many cases crew to deal with logistics. Grant funding for design is difficult to obtain so a sponsor is required for such activity, someone who has financial capital with which to begin design projects. This is not without precedent. For example, Sony Playstation have sponsored Jan Harstaff's PS2 films.

B= Area of work that contains examples which match Matt Frantz's definition of motion graphics. Advertisements, television indents, and corporate branding are the most common genres exhibiting the non-narrative component of his definition. The density of examples that fit within his definition rapidly drop off as figurative material appear. In this way I have reduced what is 'motion graphics' from being all the examples found (if Woolman's definition was used) down to a very specific type of work or genre of moving image.

C= Graphic film. These are the examples of work that I aspire to make. There are fewer examples and the scope of existing material is narrower than the other two polar types is. This is indicated by the map's shape. Clearly this is the area from which material will be selectively[2] coded in greater detail[3].

2 Selective coding is the process of choosing one category to be the core category, and relating all other categories to that category. The essential idea is to develop a single storyline around which all everything else is draped. (Borgatti, 2006).

3 See Section 002 *Characteristics*.

REFERENCE LIST

Adobe. (2007). "Adobe After Effects Help." 7.0. Retrieved 19.08.2007, 2007.

Baker, S. and Tomato (Firm) (1996). *Process : a Tomato project*. London, Thames and Hudson.

Ballou, G. (1987). *Handbook for sound engineers The new audio cyclopedia.* Carmel, Ind, Sams.

Baudrillard, J. (1983). *Simulations*. New York City, N.Y., U.S.A., Semiotext(e) Inc.

Bellantoni, M. W. a. J. (2000). *Moving Type Designing for Time and Space.* East Sussex, RotoVision.

Betsky, A. and E. Adigard (2000). *Architecture must burn : manifestos for the future of architecture.* London, Thames & Hudson.

Bordwell, D. and K. Thompson (2001). *Film Art an Introduction.* New York, McGraw-Hill.

Borgatti, S. (2006). "Introduction to Grounded Theory." Retrieved 10.07.07, 2007, from http://www.analytictech.com/mb870/introtoGT.htm.

Collins, J. (1994). *Architectures of Excess: Cultural Life in the Information Age.* London, Routledge.

Curren, S. (2001). *Motion Graphics Graphic Design for Broadcast and Film.* Massachusetts, Rockport Publishers.

Dick, B. F. (1998). *Anatomy of Film.* New York, St. Martin's Press.

Elliman, P. and M. Kopsa (2005). *Dutch Resource : collaborative exercises in graphic design.* Amsterdam, Valiz.

Frantz, M. (2003). "Changing Over Time: The Future of Motion Graphics." Website download.

Goldman, R. and S. Papson (1994) *Advertising in the Age of Hypersignification*. Volume, 32 DOI:

Goux, M. and J. A. Houff (2003). *On Screen In Time: transitions in motion graphic design for film television and new media.* East Sussex, RotoVision.

Peter Hall and Andrea Codrington Text and Julie Hirschfeld and Stephanie Barth Compilers (2000). *Pause: 59 Minutes of Motion Graphics*. London, Laurence King Publishing.

Hardstaff, J. (2001). *The Future of Gaming*. UK.

Harris, R. L. (1999). *Information Graphics: A Comprehensive Illustrated Reference.* Oxford, Oxford University Press.

Heller, S. (1998). The education of a graphic designer. New York, Allworth Press [in association with the] School of Visual Arts.

Kogler, C. (2007). "http://www.clemenskogler.net/." Retrieved 18.08.2007, 2007.

Lamb, B. (2005, 26.08.07). "What is Pop Music." Retrieved 26.08, 2007, from http://top40.about.com/od/popmusic101/a/popmusic.htm.

Manovich, L. (2006) "After Effects, or Velvet Revolution." PART 02. Volume, 11 DOI:

Manovich, L. (2006) "After Effects, or Velvet Revolution in Modern Culture." PART 01. Volume, 21 DOI: Effects, of Velvet Revolution. PART 2.

Mau, B. (2005). *Life Style*, Phaidon Press.

MK12. (2000). "MK12.com." Retrieved 2007, 2007, from www.mk12.com.

MK12 (2001). *Seater Porn*. U.S.A.

Monaco, J. (2000). *How to Read a Film*. New York, Oxford University Press.

Nelmes, J. (2003). *An introduction to film studies*. London; New York, Routledge.

Poyner, R. (2003). *No More Rules Graphic Design and Postmodernism*. New Haven, Yale University Press.

Puldovkin, V. I. (1960). *Film Technique and Film Acting*. New York, Grove.

Robson, S. (2003). *Barry Says*. United Kingdom.

Rosen, P, Ed. (1986). *Narative Apparatus: A Film Theory Reader*. New York, Columbia University Press.

Soar, M. and Hall, P. (2001) "Images over time." Eye Volume, DOI:

Woolman, M. (2004). *Motion Design: Moving Graphics for Television, Music Video, Cinema and Digital Interfaces*. RotoVision.

ILLUSTRATION LIST

GRAPHIC
FILM