IN IT FOR THE
MONEY

Narrative explorations of the great recession

JAMES FINDLATER

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ABSTRACT

This project seeks to explore how formal elements of sequential art can be applied, through practice based research, to the visual communication of complex socio-political events; specifically the events leading up to the global financial crisis of 2008.

The project is foremost a personal exploration of the crisis made possible by the unique combination of tools discerned through research, and is not intended to be a comprehensive analysis of the origins of financial crisis in its entirety.

I believe that a narrative based approach that utilises the unique facilities of sequential art will be well suited to the visual exploration of the complex and convoluted set of events that led up to the crisis. It is hoped that the outcomes will provide a methodological framework for the visual communication of similarly complex socio-political events.

CONTENTS PAGE

INTRODUCTION

1.1 Project Aims

At the centre of this research is the exploration of how elements of sequential art might be used to visually communicate aspects of the financial crisis, and the end result aims to acknowledge and incorporate the innate complexities of this event. The work seeks an audience who would be otherwise alienated by the perceived difficulty of comprehending the intricate specificities of the subject matter. Though the scale and detail of the work will, by necessity, require a degree of engagement from viewers, their comprehension of the work is not necessarily predicated on extensive knowledge of the crisis.

In particular, this project aims to explore how the unique narrative strengths of sequential art can be employed in the visual interpretation of complex events. It is understood that "narrative structures are widely used to make sense of experience, to impose an order on otherwise disjointed life." (King, 1996, p. 74), and that socio-political events on the scale of the global financial crisis, by virtue of their massive impact and significance, are ripe for this interpretive treatment.

The intent is not to 'boil down' or simplify the concepts to a digestible format in the manner of infographics, where the objective is to seek the clearest possible visual explanation of a set of data. Rather, this research seeks to explore how the "modular format of comics fits the information-processing paradigm of contemporary culture" (Legrady, 2000, p. 81), where multiple narrative strands can be simultaneously incorporated

into a larger whole, and narrative elements "play on a network of spatially arranged visual connections between different panels on the same page; on subsequent double spreads; or even on more distant parts of the story" (Mikkonnen, 2010).

The research findings will be demonstrated with an illustrated art work depicting the origins and implications of global financial crisis using sequential art techniques discerned through out the project. Though it is difficult for a single work to conclusivly prove my conjecture, it is intended that the piece will be a significant contribution to my hypothesis that sequential art narratives are ideal communication tools for 'unpacking' complex socio-political events. Primiarly however, the intent of this research is to initiate the formulation of conceptual framework and practice-based methodology that will enlighten new directions for further research and refinements into how sequential art techniques might be applied to the analysis of other complex historical events.

1.2 Why the financial crisis?

I chose the financial crisis as a topic for my thesis for two overarching reasons. The first is because I have a strong personal and political response to this particular event. The great recession, as it is has come to be known, has had direct and ongoing implications for every citizen of every nation hit by the economic stagnation which followed the crisis. Western economies have recently experienced what is largely agreed to be the worst sustained period of negative or sluggish growth since the end of World War Two (Krugman, 2009) (Beatty, 2010). I believe we as citizens have a responsibility to engage with such dramatic and drastic events. For myself this engagement is an interpretive undertaking developed on my own terms, ultimately resulting in this project, where I am able to explore these events according to my own perspective and world view.

My own interest in this event sparked during the acute phase of the crisis in late 2008 following the collapse of Lehman Brothers, one of the largest investment banking firms in the United States., and the ensuing freezing of the international credit market that inaugurated the crisis. My shock and surprise at these events was compounded by my total and complete lack of comprehension which inspired a deep need to understand.

Following global media reports over a couple of years I learned that the origins of the financial crisis were multifarious and in many ways endemic to a 'boom and bust' capitalist framework. It is generally agreed, however, that a massive inflation of the international property market combined with rampant over-leveraging among governments and financial institutions bolstered by the availability of cheap credit, created a "perfect storm" (Tanneeru, 2009) from which the global economy has, at the time of writing, failed to recover.

The second reason for selecting the financial crisis for this project is that the nature of this event itself provided an opportunity to explore sequential art techniques in the service of visual communication. The circumstances that brought about this event are convoluted, arcane and difficult to comprehend outside the lens of partisan politics, where blame tends to be apportioned relative to one's position on a bipolar and mutually exclusive ideological spectrum (Miller & Jackson, 2008). Put simply, events that play out on the scale of the global financial crisis of 2008, tend to lack one single cohesive narrative thread and often defy any attempts to generate one. In summary I believed this topic would challenge me to push my use of sequential art techniques beyond any piece of design that I have made to date.

1.3 Selected precedents

Interpretations of the events that surround the financial crisis, through a variety of mediums, began more or less concurrently with the crisis itself. This has yielded results that can be considered both precedents and useful sources of information regarding the occasionally opaque facts that surround the crisis.

One such early attempt was the NPR produced radio series *This American Life*'s financial crisis special, *The Giant Pool of Money*, a journalistic inquiry that focused on describing in simple terms the "long chain of people that starts with these Wall Street guys and ends with people who stand to lose their houses." (Blumberg, A., Davidson, A., & Glass, I., 2008). The show describes in humorous and engaging terms how "along that chain there were bankers and brokers and investors and homeowners." (Blumberg, A., Davidson, A., & Glass, I., 2008) and how it came to be that these disparate groups became inextricably and calamitously linked. The multi-narrative structure of the show provides something of an audio analogue to the eventual strategy employed in this research, though it is far more linear in its approach.

There have been many subsequent attempts to explore the global financial crisis through visual means, including some notable infographics that attempt to simplify the concepts underpinning the crisis to easily digestible levels. Jonathan Jarvis produced *The Crisis of Credit Visualised* in 2009, a work that spread across motion graphics and infographics and gave succinct descriptions of much of the subject matter that had been dealt with in *The Giant Pool of Money*.

As with *The Giant Pool of Money*, Jarvis' work provided an early entry point for my own engagement with the events that lead up to the crisis of 2008. Fundamentally it is hoped that the outcomes of this research might provide a similar point of engagement for a viewer who encounters it. Though this project is dramatically

FIG 1.1

Part of a series of infographics produced by Jonathan Jarvis under the banner of *The Crisis of Credit Visualised* (2009). These works are populist in their approach, and are easily engaged with.

MORE

FROM WHO?

MORE

INVESTORS

MORE

BANKERS

SAFE
OKAY
RISKY

MORE

HEDGE FUNDS

TRANCHES

CDO

COLLATERALIZED
DEBT OBLIGATION

INVESTMENT
BANKER

LENDER

PRIME
BORROWERS

MORTGAGE

NO DOWN PAYMENT
NO PROOF OF INCOME
INTEREST PAYMENTS ONLY
FREE MONEY

8 MORTGAGE + RISK

Since the lender can make a mortgage loan and then immediately turn around and sell it, and since in the event of a default the owner of the mortgage loan gets a house that is rising in value, there is "little risk" in lowering the standards to qualify for a mortgage (this was also stimulated by the Community Reinvestment Act*).

So, lenders start writing up riskier mortgages. These new mortgages became riskier and riskier to the point where someone could get a mortgage without presenting any documents at all.

9 SUB-PRIME

These new homeowners were often less than creditworthy or could not afford the monthly payments for regular Prime Mortgages. But they did qualify for these riskier, Sub-Prime Mortgages.

SUB-PRIME MORTGAGES would often only require payments on the accrued INTEREST for the first several years of the loan, which made them much lower.

These new mortgages were sold in droves, then packaged as CDOs, sliced up, and sold to investors and speculators.

Everything actually works out great! Everyone involved gets rich!

And I got a house!

SUB-PRIME
BORROWERS

SUB-PRIME
MORTGAGES

7 HUGE DEMAND FOR MORE MORTGAGES

The investors are so happy with their tranches that they ask the banker for more. So the banker asks the lender for more mortgages.

But the problem is that the lender can't find any more folks to buy his mortgage. Everyone who qualifies for a mortgage already has one!

10 DEFAULTS

BUT, eventually the sub-prime mortgage borrowers have to begin repaying the PRINCIPAL on their loans, and their monthly payments skyrocket.

The sub-prime mortgage borrowers begin to DEFAULT.

At first, this is not so bad. the mortgage owners (bankers, investors, etc.) kick out the inhabitants and get some houses that are rising in value.

But, more and more sub-prime mortgages default, to the point where there are so many available houses on the market that they begin to plummet in value.

Now that CDO is no longer a steady stream of money, just a trickle.

DEFAULT

INTEREST +
PRINCIPAL

BUT

11 S#@?! £µ€#!

The banker needs to sell the CDO to the investors to pay back all of the money he borrowed to buy it. But they don't want it, they already own thousands of CDOs that are plunging in value.

Everyone gets paranoid because no one knows who has CDOs or how many. Banks and institutions stop buying or lending anything, and start running out of money...

...and go BANKRUPT.

NO THANKS

CDO

SAFE
OKAY

different in its approach from either precedent discussed here, all of them deal with the events on their own terms and according to their own aesthetic stipulations. *The Giant Pool of Money* uses the traditional structure of a journalistic documentary, with first hand personal accounts edited into a meta-structure that taken as a whole provides a broader narrative on the events. The *Crisis of Credit Visualised* reduces these first-hand perspectives to the level of iconography and strips away the complexity of the events until these are reduced to a linear sequence of events that escalate towards the moment of crisis. My research and my use of sequential art is, in some ways, an attempt to generate a common ground between these two different approaches. Sequential art provides a unique combination and occasional collision of the first-hand, scaled-down personal accounts of documentary journalism with the iconographic, scaled-up visualisations associated with infographics and information design. This is more fully discussed in the following section.

SECTION 2
SEQUENTIAL ART:
Selected conventions and techniques

FIG 2.1

In *Understanding Comics* (1993), Scott McCloud defines sequential art as "juxtaposed pictorial and other images in a deliberate sequence" (1993, pg. 9). This broad definition gives primacy to aesthetics over content, and stretches beyond the common conception of the 'comic' that found popular appeal from the early 20th century onwards. His genealogy encapsulates Egyptian burial engravings, pre-Colombian Mayan manuscripts, the medieval Bayeux Tapestry and indeed any kind of pictorial representation that is built of a sequence of related images. (McCloud, 1993, pp. 10-14).

Much of McCloud's definition is built on the ideas of Will Eisner, one of the first theorists to give the idea of sequential art rigorous academic consideration in *Comics and Sequential Art* (1985). Like McCloud, Eisner prioritises the idea of

the temporal sequence over particulars of subject or theme. He describes how sequential art crystallises "events in the flow of the narrative", breaking up "people and things" into "sequenced segments". (Eisner, 1985, 39)

Both Eisner and McCloud's attempts at creating a consensus definition of this term have not been without dissent. Robert C. Harvey disputes the primacy of "sequence" over sequential art's "verbal/visual blend" in what he describes as essentially a hybrid of cinema and literature. He contends that "in the best examples of the art form, words and pictures blend to achieve a meaning that neither conveys without the other" (2009, p. 25). Daniel Raeburn agrees, describing sequential art as "composed not only of the intersection of words and pictures but also of words that act like pictures and pictures that act like words, with colour and composition shaping the map with their own structure and emotional meaning." (2004, p. 21).

Within the context of this research Scott McCloud's definition is considered sufficient, as further analysis in this area of debate is beyond the scope of the project. In the following sections the terms 'sequential art', 'comics' and 'comic art' are considered to be interchangeable. The aim of this research is not to define the term but rather to utilise the medium for specific purposes. Thierry Groensteen notes that often, attempts to create a settled definition, only realise "certain potentialities of the medium, to the detriment of others that are reduced or excluded" (2009, p. 124). This supports my critical decision to move forward using practice based research methods rather than to engage in "semantic quibbling" (Witek, 2009, p. 149). As Dylan Horrocks notes, this debate tends to "privilege conventions which apparently reflect the supposed 'essence' of the 'form,' and discourages techniques or experiments which transgress the supposed 'borders' between the forms" (Horrocks, 2001), which clearly runs counter to the aims of this research.

Thus a clarified definition will not be sought further than the previous outline. The following discussion is instead an exploration of what might be the particular aspects of sequential art that will be pertinent in the subsequent research and experimentation process. It is acknowledged that the list has been devised specifically to address the hypothesis of this research, and is far from a comprehensive analysis of the form and function of sequential art in its entirety.

2.2 Key conventions of sequential art

2.2.1 Composing in the fourth dimension

The structural elements of sequential art are often closely equated with those that govern cinema. It is often noted that individual shots in a cinematic montage are edited together to move through time in a way that closely resembles the way individual frames of a comic are composed in relationship to each other: "The story unfolds linearly and evolves through the sequence not unlike reading a text or experiencing time-based visual and aural media." (Legrady, p. 81, 2000). Superficially this observation has some merit, though sequential art's dramatically different relationship with time is a key distinction.

Thierry Groensteen considers that the "flexibility afforded to comics with regard to the form of its frames, the 'elasticity' of the drawn panels, highlights the rigidity of the cinematographic apparatus." (2007, p.40). Groensteen's idea of 'elasticity' refers firstly to the freedom a comics artist enjoys to compose each singular panel unbound by the 'rigid' consistency of the cinema frame as it moves through time. Secondly, he alludes to the way that, for a comics reader, time is less linear and more interpretive than in the cinematic model, where "the narrative experience is deeply lodged in the temporal unfolding projection on the screen" (Legrady, p. 90, 2000).

The flexibility and indeed ambiguity of temporal space in sequential art is a key aspect of interest for this project. The completed work aims to exploit the way in which sequential art allows narrative information to flow in a non-linear way that is "relative to the position of the observer" (Eisner, 1985, 26), rather than unfold as a conventional narrative that plays as an uninterrupted sequence. It is hoped that the ability to visually 'cross-reference' across temporal space will be of particular use when dealing with complex, nonlinear events.

FIG 2.2

Chris Ware's almost "algebraic" Quimby mouse strips defy all linear interpretations of time (Raeburn, 2004, p. 24).

&c.

$x.$

A. _____ $y.$

B. _____

A = 1/2 (x + y)
B = 1/2 (x + y)

&c.

?

A.

B.

A.

B.

OR

A.

B.

see above.

$\frac{x}{}$ =

$\boxed{}$ = z.

$x + y + z$ =

$\frac{y}{}$ =
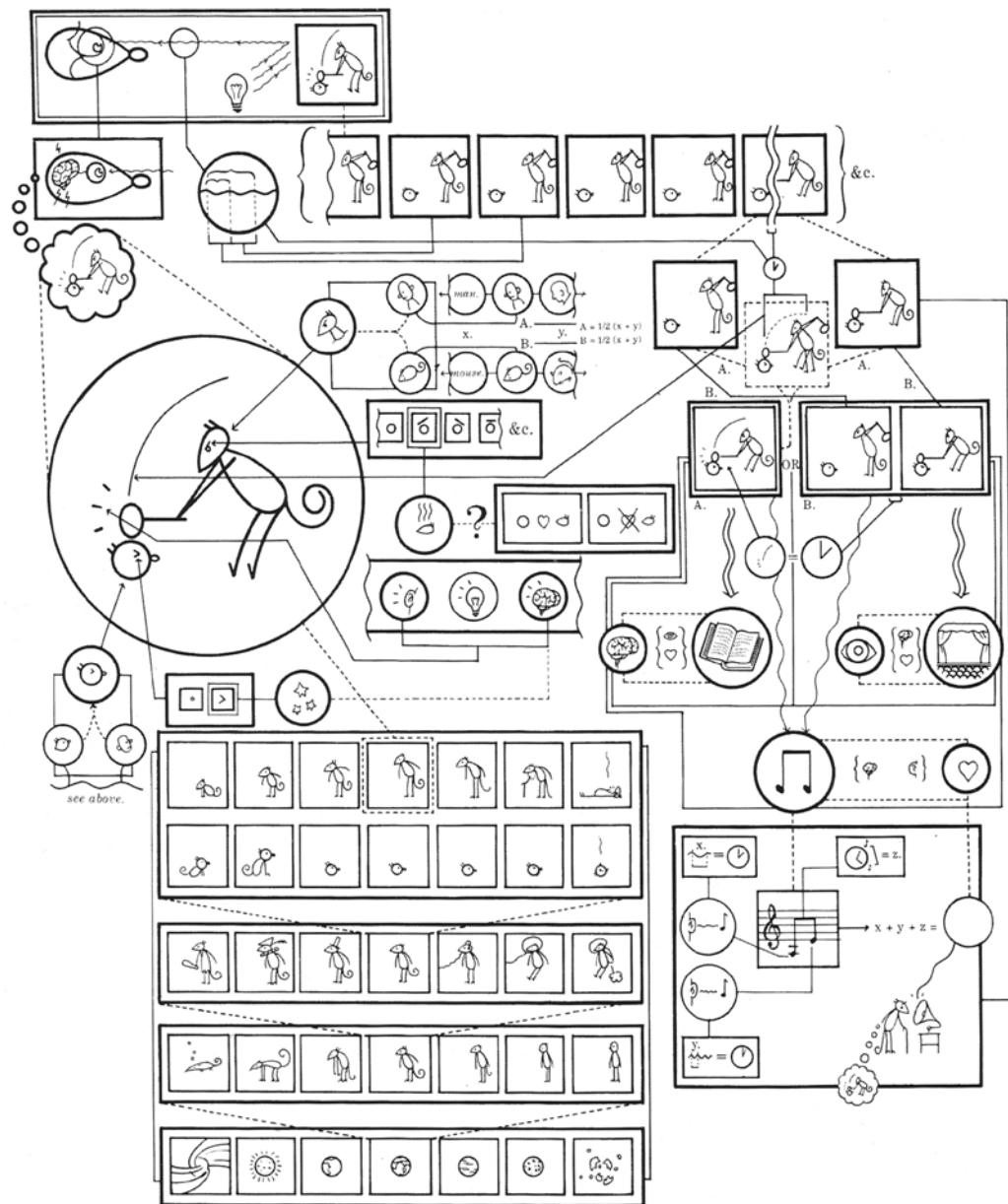
It is certainly true that sequential art is not unique in this aspect. The way the pace of movement through temporal space is determined by the reader in sequential art is a trait shared by prose, though Kai Mikkonen points out a crucial difference; "Comics help us raise questions about the dynamics of narrative time differently from literary narratives because they manipulate the relation between the visual and verbal means of conveying a sense of time" (2010, p. 74). Scott McCloud puts this another way, describing sequential art as 'a way of substituting space for time, of mapping out a temporal progression in 2-D or 3-D space' (Grouth, 1996, p.76). This substitution is of key importance to the structure and interpretation of sequential art, where the temporal is given spatial coordinates that equate it on the same plane as the other dimensions, allowing it to be manipulated on the same terms.

FIG 2.3 LEFT
Scott McCloud explains the "strange relationship" between depicted and perceived time in sequential art (McCloud, 1993, p. 100)

FIG 2.4 RIGHT
Will Eisner's demonstration of the function of closure emphasises the depth of information that can exist between the panels. (Eisner, 1985, p. 47).
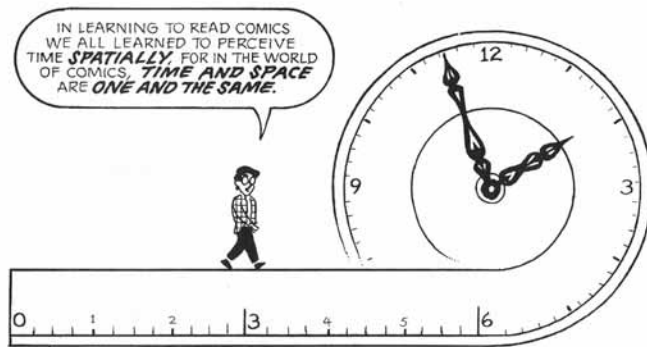
Chris Ware's example in figure 2.2. serves as a useful demonstration of Hatfield's conjecture. Without a clear temporal line of narrative, a fragmented sense of time can be 'played against' spacial considerations convey information that is interpretive rather than accumulative. The reader absorbs information according to their own experience of the work, and less by the artist's dictation. Thus a far greater range of interpretation is possible. It is hoped in the final work that the sum total of these narrative "fragments" that "shatter notions of time and space" (Dony & Van Linthout, 2010, p. 180) create "complex, multi-layered pieces that are only meaningful through active interpretation" (Szcepaniak, 2010, p. 87).

2.2.2 Basic grammar of sequential art

The previous section discussed sequential art's conceptual relationship with time and why it is of interest for this research. This section intends to focus on the practical application of that relationship and how it might possibly be manipulated for the purposes of the research objectives.

The singular panel is the basic unit of grammar for a sequential artist. It serves as a bounding box, "separating or parsing the total statement" (Eisner, 1985, p. 26), and enclosing a "fragment of space-time belonging to the diegesis, to signify the coherence." (Groensteen, 2007, p.40). What the artist chooses to place in the panel "strives to focus the viewer's attention on a particular image by isolating it from the rest of the story, thus urging the viewer to spend more time with it". (Mikkonen, 2010, p. 82).

Its role is moderated by the second unit of measurement in sequential art - the page, which functions as a kind of 'meta-panel' for the the arrangement of graphic elements which runs counter to the attention-drawing qualities of an individual panel, and propels the reader through the work. "Viewers cognitively extract another narrative that runs from one panel to the next; moving the narrative across time as well as space" (Goggin, 2010, p. 13). It is the structure of the meta-panel that allows "the spectator to glide over the image, viewing it as merely part of the narrative continuum." (Mikkonen, 2010, p. 82). Traditionally the scope of the page has been determined by limitations in printing and conventions of reading, though digital technology has expanded the variances of this structure that are available to the author, a development to be discussed in section 2.2.3.

Kai Mikkonen asks "what is it that makes a collection of panel pictures a narrative text, and how is a series of images processed as a story?" (Mikkonen, 2010, p. 74). The grammar that holds this narrative continuum together is the "non-space

FIG 2.5 RIGHT
An example of how closure was manipulated in practice within this project. Timespans are compressed by the non-arbitrary relationship of images to each other. This relationship is 'sutured' by closure.
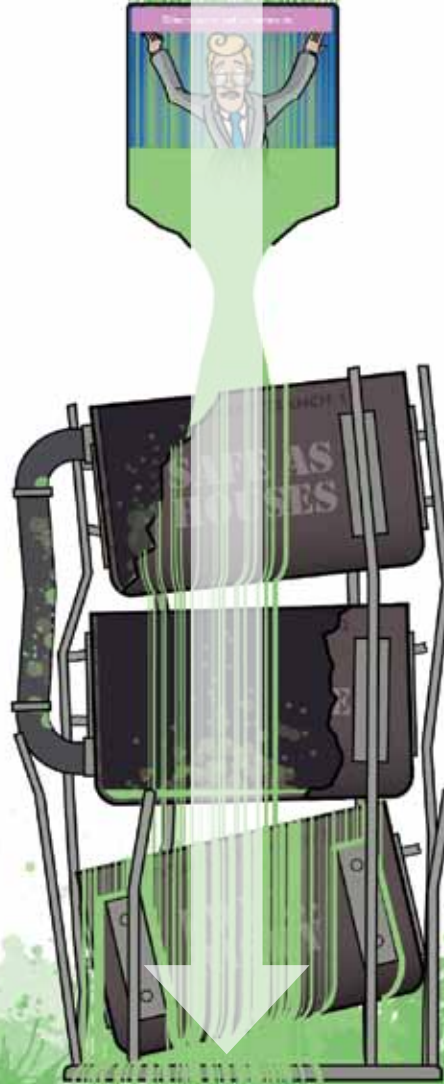
FIG 2.6 OVERLEAF
When devising the narratives for *In it For the Money*, I took Groensteen's concept of global interdependencies to an extreme. In this case I used visual parallalism to visually connect two narratives, and exploiting the 'non-space' between the narratives with yet more information to link them with the spatio-temporal progression.
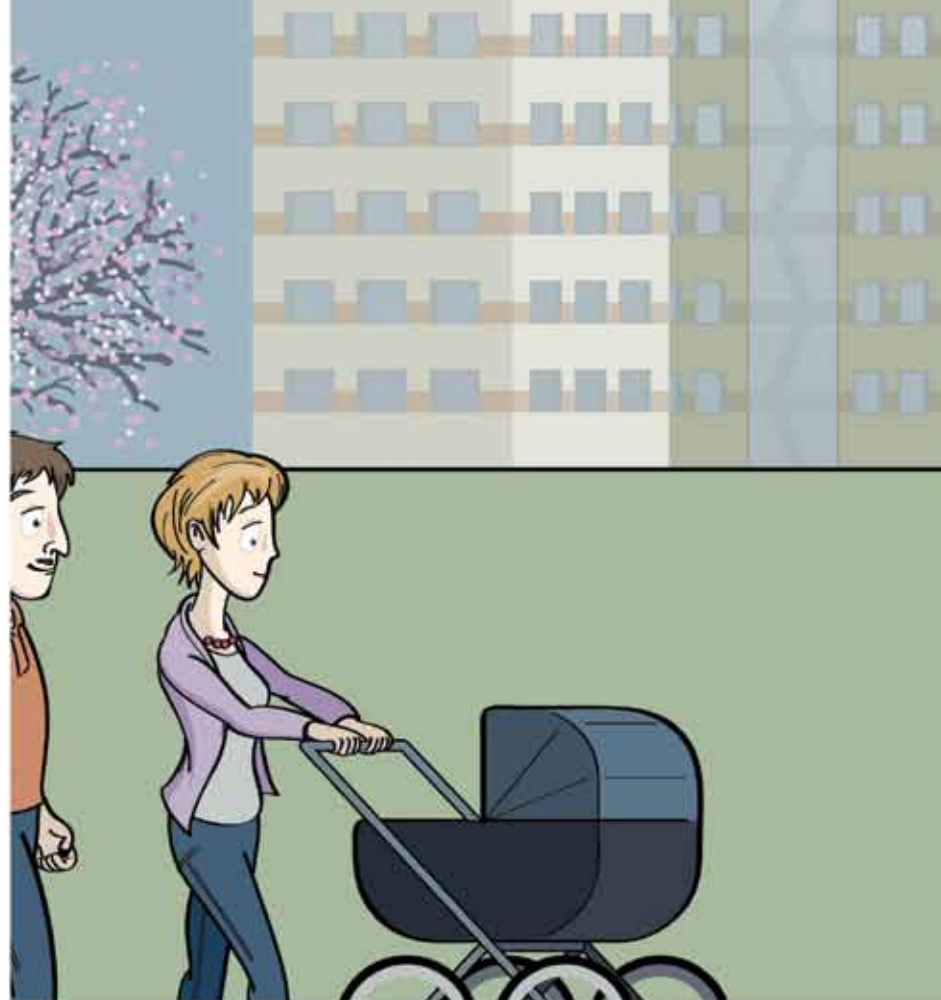
Narrative 1   Non-space   Narrative 2

(the gutter) between the panels" (Eisner, 1985, p.51) known as 'closure'. Closure is "the theoretical space in which the reader performs the suturing operation that ultimately enables the interpretive act, based on the assumption that the relationship between two consecutive images is not an arbitrary one." (Goggin & Hassler-Forest, 2010, p. 1). Figure 2.6 demonstrates explicitly how the content of a narrative can exist in the space that separates the images. In this case each gap represents a large span of time, the sum of which suggests the inexorable march of the modernisation and loss of pastoral values shown within the panels.

Closure provides sequential art's "primary means of simulating time and motion" (McCloud, 1993, p.69). While all communicative mediums require some degree of participation and the engagement of imagination on the part of the audience, comics are particularly dependent on the gestalt principle of considering all visible elements as "interdependent fragments of a global form" (Groensteen, 2007, p. 30). In processing sequential art, the reader tries "on the basis of cues (given in the panels) to form a global image of the complete space." (Lefèvere, 2009, p. 159).

It is Groensteen's description of global interdependencies that is of interest for this research project. The idea of closure as a reader-generated network where connections are established between otherwise disparate events seems a perfect device to employ in the service of the research aims. The final work is envisioned to manipulate and harness this intrinsic function of sequential art to allow the reader to generate the narrative networks necessary to comprehend the scope and complexity of the chosen subject matter.

There's a story behind every song. Hard Rock Cafe

There's a story behind every song. Hard Rock Cafe

2.2.3 The infinite canvas

Unlike the other aspects previously discussed in this chapter the "infinite canvas" (McCloud, 2009) is not a fundamental aspect of sequential art, but is nonetheless, of particular interest for this project. The "infinite canvas" is a theoretical proposition put forward by Scott McCloud, Will Eisner among others, based on the premise that page-by-page print technology no longer governs the production of sequential art. They suggest that the proliferation of high definition screens and mobile devices make the move towards primarily digital formats for comics a near inevitability. This shift has profound implications for the possible compositional structures of sequential art. As David Kunzle notes, "the tight grid of boxes is only a convention, observed to be sure for much of the twentieth century, but now something to be varied, ignored and joked with. " (2009, p. 23)
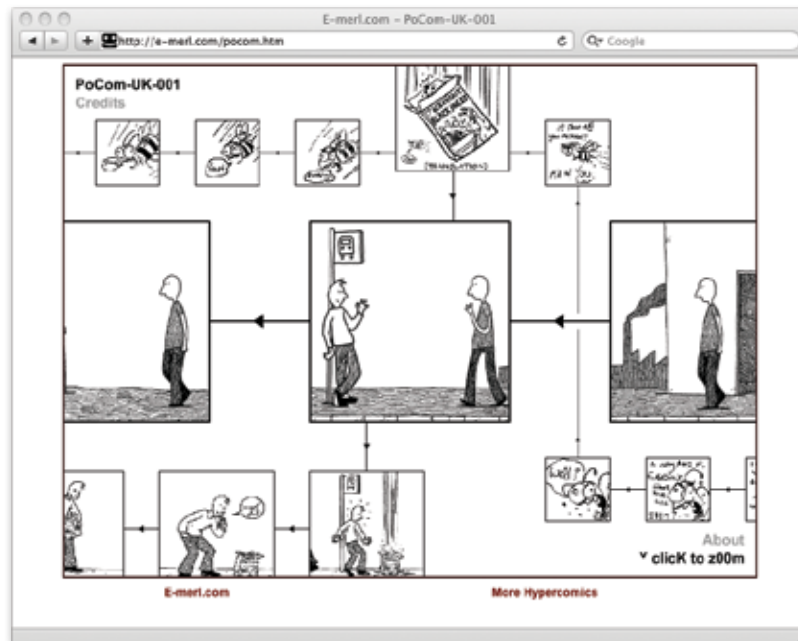
FIGS 2.7 & 2.8 FAR LEFT

Let it Be and *Tears in Heaven* (Rastogi, 2011). Y&R Buenos Aires created a series of poster sized comics that tell the story behind famous pop songs. Though not expressly designed for digital display, the fragmented modulation of the narrative in these works serve to illustrate Legrady's idea of "non-linear interactivity" where "groupings of multiple image/text frames on the page function as structural guides to create meaning." (2000, p. 83)

FIG 2.9 LEFT

Paul Gravett & Brad Brooks initially created *PoCom-UK-001* as a 17 by 2.5 metre exhibition display. A digital navigation system was later built for online display. (Gravett & Brooks, 2003).

As McCloud puts it, the infinite canvas "is a challenge to think big; a series of design strategies based on treating the screen as a window rather than a page." (McCloud, 2009). This enables a canvas of "potentially limitless size which can be moved in any direction" (Eisner, 1985), with an entirely unique set of narrative possibilities.

The ability to alter and adapt the size and scale of the 'meta-panel', the container for all the common vocabulary of sequential art, gives an artist an unprecedented degree of customisation of how the text can then be experienced by the reader. While the established reading rhythm and strict narrative control allowed page by page progression may be sacrificed, "the potential exists to orchestrate relationships and plot development in such a way that the viewer has a choice in the unfolding of the narrative," (Legrady, 2000, p. 80).

In trying to encapsulate something of the global financial crisis into a narrative format, one is faced with a multi-polar perspectives and parallel narratives that intersect only tangentially or in abstract. Consequently employing strategies suggested by the 'infinite canvas' theory would seem to provide a distinct advantage. It permits the author to bypass "the conventional sequential flow in favor of letting the page become an open space in which the frames can be potentially interconnected from all angles, resulting in greater narrative complexity." (Legrady, 2000, p. 85)

2.2.4 The relationship between reader and artist

Even without the greater freedom afforded by the 'infinite canvas', it is certainly true that readers of sequential art "must call upon different reading strategies, or interpretive schema, than they would use in their reading of conventional written text.' (Hatfield, 2009, p. 132). By implication, there exists a unique relationship between the artist and reader of a comic that is worth exploring in pursuit of the research aims of this project.
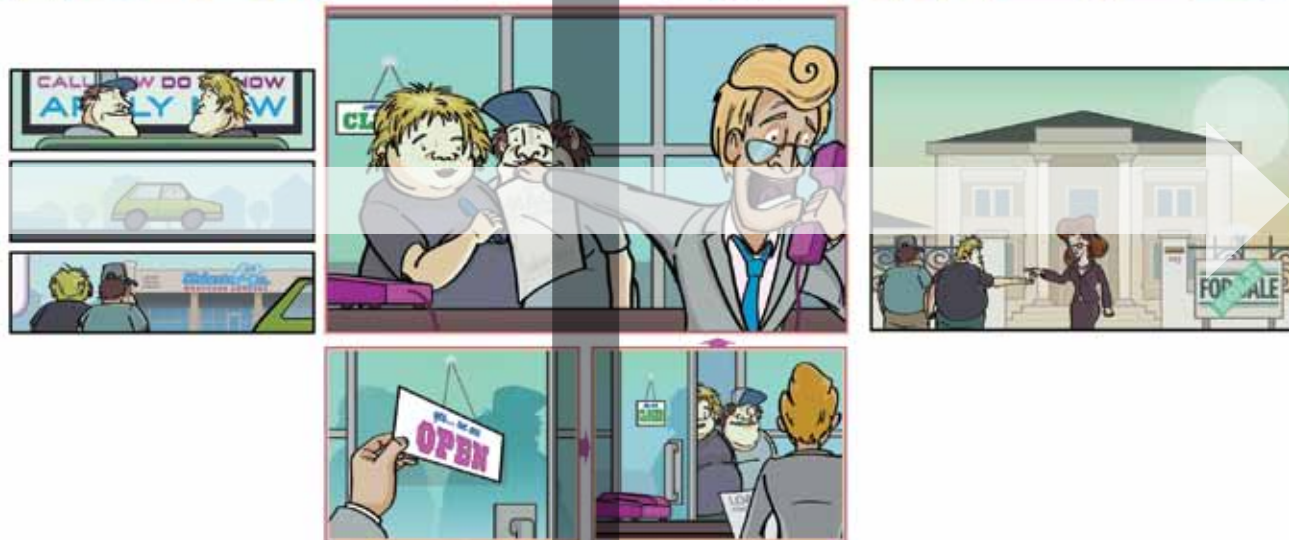
FIG 2.10

The narrative intersections that are facilitated by infinite canvas and the removal of the traditional left-to-right reading sytem allow for multiple perspectives on the same event to literally collide with each other. Figure 2.10 illustrates the mechanics of this complex intersection.

Narrative 1

Narrative 2

Narrative 3

In conversation with Daniel Raeburn, comic artist Chris Ware describes his minimal almost "typographic" style (Raeburn, 2004) as a strategy that aims to break through the "odd wall that blocks the reader's empathy" (Raeburn, 2004, p. 18). Sequential art, particularly the minimalist and reductive style pioneered by Ware and others, functions as a kind of contemporary iconography by virtue of its meticulous construction and reliance on semi-abstraction and symbolism, where "the more the fictional character is simplified, the more the audience engages with the narrative" (Figueiredo, 2011, p. 88). Scott McCloud rationalises this succinctly by pointing out how "we see ourselves in everything. We assign identities and emotions where none exist. And we make the world over in our image" (McCloud, 1993, p. 33).

In this way sequential art is able to establish a relationship where the author can condense large amounts of information into a simplified form for the reader, where "any details that are presented are automatically emphasised, simply because they are not left out" (Berninger, Ecke & Haberkorn, 2010, p. 3). Scott McCloud describes how this network connection forms a partnership between creator and reader in comics that is both "far more intimate and active than cinema" and cuts "straight to the heart without the continual mediation of prose's authorial voice." (2000, pg. 39). It is this lack of mediation that enables a "spirit of play" where "readers may create their own interpretive games within a text - a process of ideation that is infused with a sense of enjoyment and pleasure." (Szcepaniak, 2010, p. 98).

Angela Szcepaniak's idea of a 'spirit of play' present in the reading of sequential art in sequential art is key to the development of a final piece of work that demands such an active engagement from the reader. Creating a narrative space in which the reader can 'play' helps to justify the use of sequential art for dealing with complex multi-layered narratives. Ideally an element of 'play' would help to decrease any sense of intimidation that a mass of visual information might present for the reader.

FIG 2.11

The Hedge Fun(d) section of the final work was intended as a response to the notion of a 'spirit of play' that is facilitated by sequential art. Here the play is made literal, with readers having to negotiate a literal maze in order grasp the complex workings of a hedge fund.

HERE BE

THE INCREDIBLE

HEDGE FUNd

MAZE
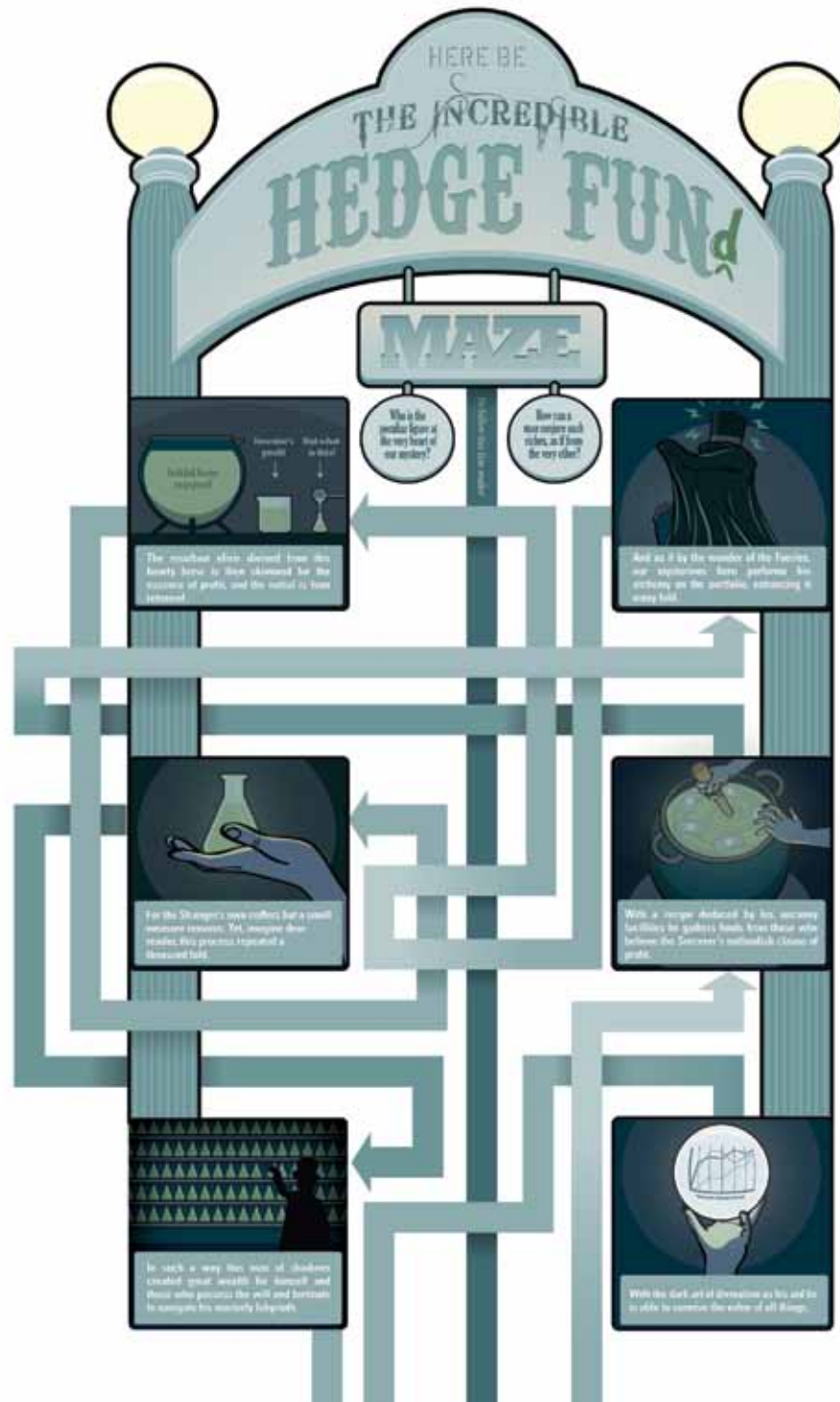
2.2.5 Sequential art as information display

One of the key propositions of this research is that sequential art can function as an alternative to infographics when dealing the visual display of with complex information that is not quantitative nor qualitative but narrative based. This is based on theorists such as David M. Boje's belief that narratives are "the preferred sense-making currency of human relationships" (1991). Nevertheless, when dealing with complex information within a narrative a study of some of the core principles of information design and how they might function within a sequential art would seem beneficial to the conception and execution of this project.

Will Eisner, who pioneered the use of comics in instructional manuals as far back as the 1940s, notes that information delivery tends to be 'sequential in nature' (1985, p. 153) regardless of the format, and that at the same time "art in sequence tends to be expository" (1985, p. 147). Though the outcomes of my research are not intended to be as didactic in method in the way Eisner prescribes, his demonstration of the way explicatory information can be worked into the narrative framework of sequential art are of particular interest. Eisner is not alone in his attempts to outline a relationship between information design and sequential art. Sergio Figueiredo notes that both "comics and information design work to create meaning from fragments of data by organizing the selected pieces of data into an ordered view of the world" (2011, p. 92). In his analysis of sequential art from an information designer's perspective he notes how "comics develop an interactive experience and build a world through information visually that enhances an audience's ability to build shared-knowledge between designer and audience" (Figueiredo, 2011, p. 86).

In *Visual Explanations* (1997), Edward Tufte discusses the idea of "Confections" — visual narratives that function as "miniature theaters of information — a cognitive art that serves to illustrate an argument, make a point, explain a task, show how something works, list possibilities, narrate a story" (1997, p. 138).
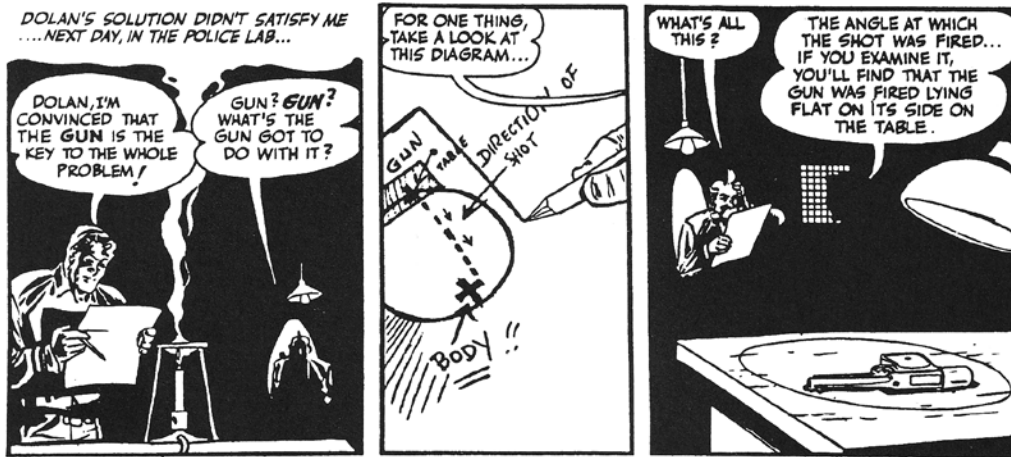
FIG 2.12 LEFT

Three panels from Will Eisner's *Spirit* that blend 'entertainment' and 'instructional' sequential art. The information "needed for reader comprehension is imparted subtly enough that it does not detract from the forward motion of the plot" (Eisner, 1985, p. 148).
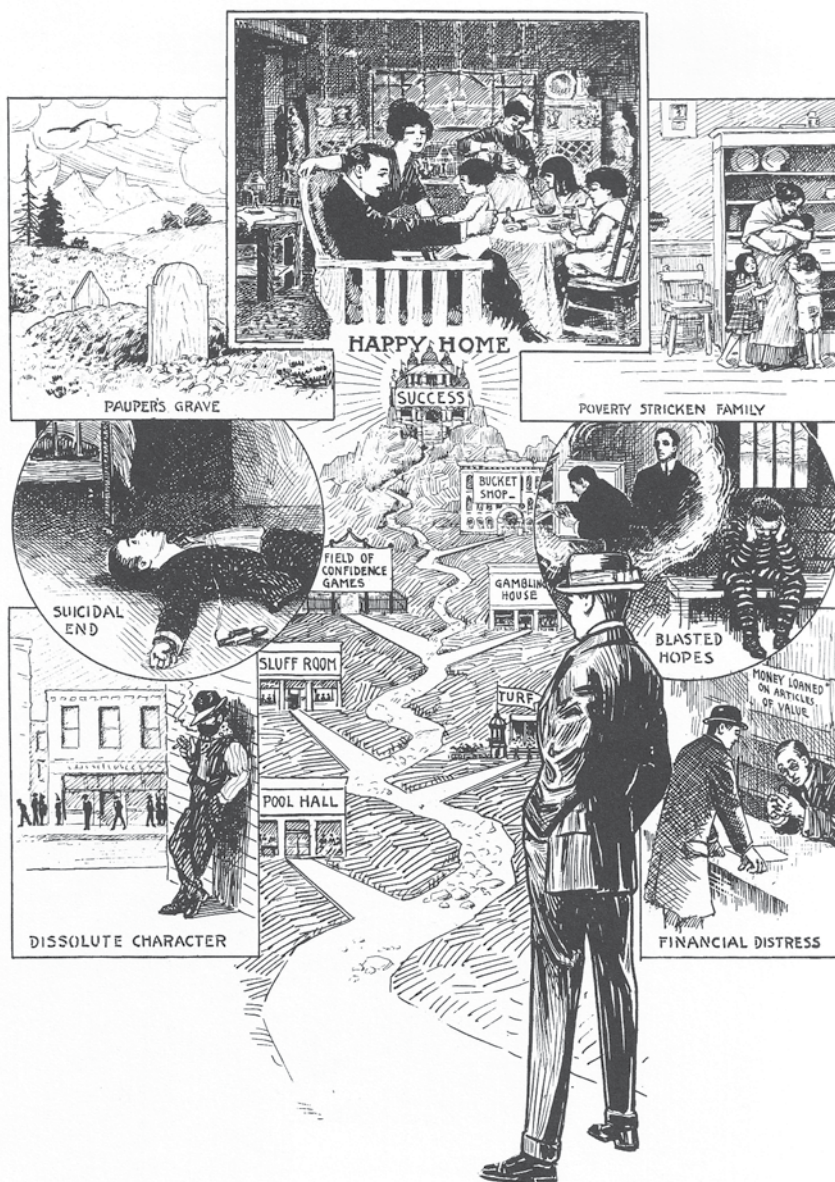
Tufte's confections are not intrinsically sequential in structure, though his description of the gestalt process by which the reader assembles the meaning from the displayed information is clearly comparable to the structural analysis of sequential art discussed in section 2.2.2 . "Confections place selected, diverse images into the narrative context of a coherent argument. And, by virtue of the architecture of their arguments, confections make reading and seeing and thinking identical" (Tufte, 1997, p. 151). There are, according to Tufte and McCloud, many design principles common to both sequential art and information design. While this project clearly posits itself as the former, the similarities previously discussed have been taken into account throughout this research.

FIG 2.13 OVERLEAF LEFT

H.K James' *Traps and Pitfalls to be Avoided in Order to Obtain Success*, "With nine distinct emblematic elements, including a memory within a scenario with the overall scenario, there is a sense of narrative, complexity, and even alternative" (Tufte, 1997, p 143).

FIG 2.14 OVERLEAF RIGHT

This example, lifted from the project, demonstrates a blending of quantitative information display with sequential art techniques.

PAUPER'S GRAVE

HAPPY HOME

SUCCESS

POVERTY STRICKEN FAMILY

SUICIDAL END

FIELD OF CONFIDENCE GAMES

BUCKET SHOP

GAMBLING HOUSE

BLASTED HOPES

MONEY LOANED ON ARTICLES OF VALUE

SLUFF ROOM

TURF

POOL HALL

DISSOLUTE CHARACTER

FINANCIAL DISTRESS

DREAM

REALITY

Rising Cost of Living
Tiny Glimmer of Joy
Savings for the House

BUDGET

HOME SWEET HOME

<$

2.3 Three case studies of artists key to the research process

Following are three case studies of three artists whose work has informed this research project at various stages of its development. The studies are brief and in no way comprehensive bibliographic surveys, and in each case a key text or series is being considered as a representative proxy for the artist's body of work. These texts aim to demonstrate the practical applications of some of the aspects of sequential art discussed in the previous section, as well as demonstrate how these artists have used sequential art to communicate dense amounts of visual information successfully.

The first study considers how Hergé's *Destination Moon* and *Explorers on the Moon* typifies the classical, European style of sequential art. The books are examined with reference to how an artist deals with the basic grammar of sequential art in practical terms, as well as the way in which Hergé is able to condense large volumes of visual information into his relatively compact narratives.

The second case study is an appraisal of how Chris Ware's *Acme Novelty Library* series is able to experiment with that grammar and subvert the reader's expectations of how sequential art can be experienced. Ware's work provides a plethora of examples of stylistic experimentation in sequential art, and clearly warrants further investigation and incorporation into this research project.

The third case study deals with how Art Spiegelman's *In the Shadow of No Towers* uses sequential art to explore the experience of a complex political event from multiple perspectives. Spiegelman explores the structural possibilities of sequential art to relate his experience of September 11 and the ensuing War on Terror. His work is of particular interest not for the subject matter itself, but for the way in which his practice provides a unique perspective on those events, made possible by the formal aspects of sequential art he experiments with.

2.3.1 Case Study #1: Hergé's *Destination Moon* and *Explorers on the Moon*

Hergé's *Adventures of Tintin* series is arguably the best known of the 'bande dessinée' style of mid-century Franco-Belgian comics. The 'clear line' style he pioneered in Tintin's serialised adventures demonstrates a functional and pragmatic approach to sequential art, with an emphasis on clear, fastidiously designed narratives. In the work of Hergé "clarity and legibility are the two fundamentals" and "no frame is extraneous" (Assouline, 2009, pp. 157-158). Scott McCloud describes how "Hergé created a democracy of form in which no shape was less important than any other" (1993, p. 190). Consequently, an analysis of Hergé's work provides a useful opportunity to explore an example of the mechanics of sequential art in an accessible and popular context, separate from the more experimental examples in the following two case studies.

Though much of Hergé's oeuvre could provide relevant examples, the two part moon series was selected for critical analysis of how the Tintin series combines broad physical comedy and character drama in parallel with intricate scientific observation and reportage. Hergé was dismissive of many of the fantastical extremes of science fiction and instead considered his books to be rooted squarely in scientific prediction. In both *Destination Moon* and *Explorers on the Moon* Hergé "presents science as the keystone of space travel—becoming, by metonymy, a celebration of scientific achievement" (Beauvais, 2010, p. 253). However, Pierre Assouline describes how this "dedication to accuracy never overwhelmed his sense of play" (2009, p. 171). It is undoubtedly true that Hergé's work demonstrates how sequential art is able to visualise complex information and ideas within the context of an engaging, character driven story.

Besides this dualistic function within the narrative, Hergé also demonstrates in both books mastery of the basic grammar of sequential art. Though a strict grid system dictates much of the panel layout in the Tintin series, Hergé manipulates the closure

FIG 2.15 OVERLEAF LEFT

In this page from *Explorers on the Moon* (Hergé, 1954, pp. 33), Herge's enthusiasm for scientific accuracy and reproduction of realistic instrumentation and procedures is interspersed with the gags of Chaplinesque physical comedy seen in the final two panels.

FIG 2.16 OVERLEAF RIGHT

A spread from *Destination Moon* (Hergé, 1953, pp. 41-42). Opposite a page compromised mainly of physical comedy, Herge' devotes an entire page to the rocket and an observation of the roles of the attendant scientists and engineers. For Clemintine Beauvais,"The Moon duology became an opportunity to explore the relationship between factual accuracy and artistic inventiveness." (2010, p. 254)

Gentlemen, our plan was to stay on the Moon for a whole lunar day – that's equivalent to fourteen terrestrial days. But our oxygen supplies were intended for four people and one dog, and not for six people, which is our present number. So we shall have to restrict our stay to six days.

We must therefore hasten our work. While Wolff and I set up our observational instruments, Tintin and the Captain will unload the components of our reconnaissance tank and assemble it. Is that agreed? Right then, gentlemen, let's get to work!

EXTRACT FROM THE LOGBOOK BY PROFESSOR CALCULUS

3rd June – 2345 hrs. (S.E.T). Unloading of cargo completed. Wolff and I have started to install the observatory. Closed work at 2200 hrs. Captain Haddock and Tintin have begun assembling the tank.
4th June – 0830 hrs. Operations commenced at 0800 hrs (S.E.T.) Telescope mounted. Camera in position. Theodolite in working order.

Moon to Earth... Calculus calling... The optical instruments and cameras are ready for use. We are beginning our observational work.

Observe away, my friends. You do that! Your discoveries will be vastly interesting ... to us! Ha! ha! ha! ha!

EXTRACT FROM THE LOGBOOK BY PROFESSOR CALCULUS

4th June – 2150 hrs. (S.E.T). Wolff and I spent the day studying cosmic rays, and making astronomical observations. Our findings have been entered progressively in Special Record Books Nos. I and II. The Captain and Tintin have nearly finished assembling the tank.
5th June – 1920 hrs. (S.E.T.) Half an hour ago the Captain and Tintin announced the tank ready for use.

Moon to Earth... Calculus calling... The tank is ready. We're going to make the first trials. Tintin will be in charge. He's just entering the turret.

He has just secured the hatch. Now they are filling the insulated cabin with air. When this is done they can remove their spacesuits; then Tintin will take the controls and the Captain will act as lookout.

Ah, there's Tintin's head showing through the multiplex cockpit cover. He's smiling at me and signalling that everything's in order.

And there's the Captain. Like Tintin, he's signalling to us that all's well. He's wearing his head-phones and ...

Hello, Haddock calling... Ready for departure ... Hello there, Tintin, weigh the anchor!

O.K. ... Off we go!

Good luck!

!

For months, teams of experts have been worked to death... acting the goat, of course!

Come on!... Sit down there and don't argue... We're leaving!

But...

Good morning, Professor. Will you sign the dispatch book, please?

For the love of heaven don't let him go!

Stand aside, microbe!... Let me pass! I'm acting the goat, d'you hear!... I'm acting the goat!

Stop them!... They've no exit permit!

Hello!... Garage here... A jeep driven by Professor Calculus has left without permission... Stop it!

Quick, clear the entrance and close the doors. There's a jeep coming...

Halt!

Hey!... Stop!

?

Make way for the goat!

I often say to myself: one of these days I'll learn to drive! Nowadays everyone should be able to drive a car!

Stop! We're here.

??

?!

Well, what do you think of that? Look what the goat croaked.

41

42

space between the panels to a masterful degree. As demonstrated in figure 2.16, his construction of the relationship between the panels and the 'meta-panel' of the page conveys the gargantuan scale of the rocket in comparison to the character action on the opposite spread. Professor Calculus's implicitly acknowledges the composition of the panels and the presence of the meta-panel with his gesture in the bottom right panel of page 41.

Though Hergé's *Adventures of Tintin* series is less of experimental in its ambition than many of the other works cited in this research, it none the less provides an important example of how a sequential artist can condense great amounts of detail into a relatively efficient and fast paced narrative. The lessons of Hergé's meticulous craft and construction will be carried forth while considering other, more directly applicable precedents that follow.

2.3.2 Case Study #2: Chris Ware's *Acme Novelty Library* series

The precedent of Chris Ware's "outrageously complex" (McCloud, 2000, pg. 34) compositional strategies has played an instrumental role in this development of this research. His ongoing *Acme Novelty Library* compendiums demand "a reading which must meander, drawing visual, verbal and thematic connections between the images and various lexias of the page" (Kannenberg, 2009, p. 312). The series features a variety of narratives, each with its own distinct visual style, though Ware's experiments with the seemingly boundless possibilities of his practice are a constant throughout.

His work has been described as "ideas seen from many angles: a kind of thematic triangulation." (McCloud, 2000, pg. 34). Though the results are often visually dense

and at times difficult to engage with, dedicated readers are rewarded with a unique "impression of tone, atmosphere, and feeling that cannot be quantified in terms of narrative events" (Szcepaniak, 2010, p. 91).

Ware's work is a precedent which helps to qualify the structural and compositional experimentation within this research. It also reinforces the idea that sequential art provides for the reader a unique way of navigating and digesting information that is distinct from both narrative prose and infographics, both of which typically enforce a linear progression through towards comprehension of the concepts dealt with. Angela Szcepaniak describes how Ware's design strategy "compels readers to 'play' more actively in the space", thus negating the assumption that "the reader's involvement is simply to arrive at the end of a piece, harvesting and consuming information conveyed by the artist." (2010, p. 100). *Big Tex*, shown in figure 2.17, demonstrates Szcepaniak's conjecture precisely. Though the possibility of a standard left to right reading remains intact, a greater level of comprehension can be gained through multiple non-linear 'passes' at the material, where knowledge of events in later panels in the sequence has a bearing on the interpretation of earlier ones. Ware's examples have provided a key influence for my experiments with this technique.

Ware's somewhat baroque structural approach to page composition in the *Acme Novelty Library* series is contrasted by the relative minimalism of his illustrative style. The spare, crisp rendering of the graphic elements of the work have clear precedents in the mid-twentieth century work of George Herriman (*Krazy Kat*), Windsor McCay (*Little Nemo in Slumberland*) and Frank King (*Gasoline Alley*). The deliberate naivety of his aesthetic and the nostalgia it evokes via its lineage to the golden age of comics is often punctured by the dark irony and stark emotion of the subject matter. This is a tension that often results in a sense of uneasiness that pervades the narrative voice of the work.

Beyond the influence of his comic predecessor's, Ware claims his graphic sensibility is informed by typographic principles of shape and placement, as Daniel Raeburn notes in conversation with the artist; "just as setting body text in a less ornate typeface makes it more readable, Ware cartooned in a minimal style to make his comics more readable." (Raeburn, 2004, p. 18). In blurring the boundaries between image and word Ware draws attention to Charles Hatfield's theory that "comics, like other hybrid texts, collapse the word/image dichotomy: visible language has the potential to be quite elaborate in appearance, forcing recognition of pictorial and material qualities that can be freighted with meaning" (2009, p. 133). *I'm a Very Generous Person*, shown in figure 2.18, demonstrates a particularly clear example of this technique.

With regards to this research project, Ware's demonstration of the healthy symbiosis between a minimalist inter-panel style and a maximalist page layout in sequential art is extremely important. His example establishes a method for experimentation by removing illustrative flourish where possible and simplifying the intra-panel detail to only what is necessary for clear communication, while maximising the inter-panel layout to high levels of intricacy, generating "multivalent interpretive possibilities" (Kannenberg, 2009, p. 306).

In Ware's work the delicate balance between complexity and minimalism prevents the extremes of either form prevailing. Quite the opposite, it is the tension generated within this conflict that provides a key source of engagement. This idea is of key importance for this research project, as it provides an example of how specific aesthetic choices can allow for complex visual information to remain accessible for an audience.

FIG 2.17 LEFT

Big Tex from *Acme Novelty Library*, Number 7. (Ware, p. 28, 1996). Ware's meticulously structured layout allows fifteen perspectives of time to coalesce into narrative via the mechanism of closure that occurs in the 'non-space' between the panels.

FIG 2.18 OVERLEAF

I'm a Very Generous Person from the *Acme Novelty Library*, *Number 6*. (Ware, 1994, p. 14). Sequential art is by its nature a coalescence of typography, graphic design and illustration, though rarely is that meeting point as acute as it is in Ware's work. "Ware not only reduces pictures to the level of words, he elevates words to the level of picture" (Raeburn, 2004, p. 37).

2.3.3 Case Study #3: Art Spiegelman's *In the Shadow of No Towers*

Art Spiegelman is probably best known for the non-fiction graphic novel *Maus*, which recounted his father's experience in the German death camps of World War II. However, Spiegelman was himself a first-hand witness to events of September 11, 2001 in New York City. The trauma of that experience and its aftermath led Spiegelman to produce a sequential art memoir of the event titled *In the Shadow of No Towers*.

The book is of interest to this research for the way in which it draws on "a popular form once considered solely distracting in order to engage serious political questions" (Chute, 2009, p. 352). Tim Gauthier describes how Spiegelman's "graphic narratives strive to expand our visual recollection, seek to wrest control away from the dominant ideologies, and insert degrees of nuance not found in the images broadcast, as well as the narratives constructed" (2010, p. 371).

In many ways, the visceral first hand experience of a cataclysmic terrorist attack bears little in common with the experience of the financial crisis, which lacked a definable 'ground-zero' and has few eyewitness accounts beyond those offered by bank executives and government officials. Nevertheless, Spiegelman has set an important precedent for the way in which he has mediated his experience of a contemporary political event by rendering "the plurality of feelings and perspectives he went through by means of his original use of the inherently fragmentary comics medium" (Dony & Van Linthout, 2010, p. 182).

The work itself is highly experimental in structure and relies on a level of engagement and at times perseverance on the part of the reader to navigate; "the eclectic style and layout of the book makes any reading difficult, any general understanding of a page at first glance seemingly impossible without affecting its meaning" (Dony & Van Linthout, 2010, p. 182).

However, underneath this seemingly disordered visual clutter and 'stream of consciousness' style of narration lies an "elaborate substructure that contains hidden symmetries, visual analogies, and references that create a coherent whole" (Kuhlman, 2007, p. 856).

With *In the Shadow of No Towers*, Spiegelman has been able to manipulate and at times subvert the established structures of sequential art to generate a unique framework for investigating his subject matter. Spiegelman's structural experiments provide useful evidence for sequential art's capacity to handle complex, multi-layered narratives that tackle large socio-political events.

Though his cross referential approach has at times attracted criticism for the way in which he "dislocates and manipulates other cultural traumas to feed his agenda of criticizing the Bush-Cheney administration." (Cho, 2010, p. 204), *In the Shadow of No Towers* provides an extremely important precedent for the research aims of this project.

METHODOLOGY/METHOD:
Thinking and action

This section consists of three parts. Section 3.1 broadly discusses my research methodology, section 3.2 looks at key design methodologies and section 3.3 gives a critical evaluation of my process as it progressed throughout the year. Where appropriate, this section attempts to link these actions to the design methods discussed in the previous sections. This final section also includes reflections on the key milestones that informed the completed practical work.

3.1 Research methods

This research is an exploration of how the formal tools of sequential art can be utilised to navigate such a complex event. It is hoped that the visual strategies used in this work could also inform other designers aiming to communicate events or theories of a similarly complex nature.

Specifically, my research aimed to explore how formal elements of sequential art can be applied to the visual communication of complex socio-political events, specifically the events leading up to global financial crisis of 2008. My reasons for choosing this event are discussed in section 1. The outcomes, presented visually and discussed in this essay, are the result of a personal process and are therefore subjective in nature.

Research of this nature falls into the category of inductive research, moving from specific observations to broader generalisations. There is no suggestion that all socio-political events should be exclusively communicated through sequential art. It is a given that such events will continue to be described and interpreted across a variety of mediums, regardless of the findings of this research. There is also no intent to prove this is the best way to communicate the complex narratives surrounding the global financial crisis of 2008.

In *Visual Research* (2005) Iain Noble and Russel Bestley say design can be "the exploration of a theme that interests the designer, and the graphic response to that theme which might enlighten and help to describe new visual languages that are applicable to other graphic solutions, is a core part of the research agenda" (2005, p. 100). This relates to Hillary Collins' description of social constructionism theory. She asserts that "in social constructionism the researcher would reflect critically upon received understandings within their own and others experiences and would actively engage in the production of new meaning" (2010, p. 39). This is a process of reflection in action that has been followed through this research.

3.2 Key design methodologies

In the 1960's design methodologies were under intense scrutiny by theorists such as Horst Rittel. Rittel was a designer and a mathematician who questioned the conventional linear models of the design process, where there were believed to be two distinct phases in the process; one of problem definition, primarily requiring analysis and one of problem solution, primarily requiring synthesis. Rittel described the kinds of problems designers face as "problems which are ill-formulated, where

information is confusing, where there are many client decision makers with conflicting values, and where ramifications in the whole system are thoroughly confusing" (in Buchanan, 1992, p.15). Rittel named these kind of problems, 'wicked problems', saying that these problems were indeterminate, meaning they have "no definitive conditions or limits" (Buchanan, 1992, p.16).

Schön says that the complexity of design problems means that "the designer's moves tend, happily or unhappily, to produce consequences other than those intended" (1983, p.79). He adds that when this happens, it is natural for the designer to take on board these new consequences and "shape(s) the situation, in accordance with his initial appreciation of it, the situation 'talks back,' and he responds to the situation's back-talk (1983, p. 79). Schön describes this process as good design practice where the designer 'reflects-in-action' which may redefine the original problem or question and informs the next move. Petra Falin concurs, saying "the process of reflection-in-action is central to skillful design practice" (2007, p. 2) and describes the relationship between thinking and action for a professional designer saying "the knowing is in action and develops through action" (2007, p. 2).

In agreement with Rittel, Stolterman says that design involves "infinite and limitless sources of information, requirements, demands, wants and needs, limitations and opportunities" (2008, p. 57), meaning designers often deal with an "unknown or only partially known situation"(2008, p. 55). He adds that designers have had to develop specific strategies to cope with this type of problem. Stolterman says that in design research this approach is sometimes called a "*designerly* way of thinking and acting" (Cross 2001; Buxton, 2007; Moggridge, 2007 in Stolterman, 2008).

Lawson likens this way of thinking and acting to Rodin's ubiquitous 'Thinker' sculpture, "who sits in solitary meditation, but has in contrast always externalised his thoughts, not only as an end product in the form of a design, but as an integral part

of the process itself in the form of drawings and sketches" (1990, p. 96). Kokotovich & Purcell say that "drawing plays a central role in the design thinking process" (2000, p. 437) and Goel believes that "the ambiguous nature of freehand sketching plays an important role in the creative, explorative, open-ended phases of the process" (1995, p. 452).

Lawson says design uses both divergent and convergent thinking saying that convergent thinking helps to deal with the "logical process" such as testing how ideas fit the constraints of the task at hand and divergent thinking allows for the more "intuitive and imaginative processes", that are more open-ended and involve searching for a number of possible solutions (1990, p. 106).

This section is an attempt to detail the key aspects of the design methodology used in this research. Refection-in-action is the main methodology used. Divergent thinking and iterative sketching is a version of this reflection-in-action, where by the reflection on an idea or activity, in this case drawing, provides the direction of the next stage in the process. I have included, in the section 3.3, examples of the sketches and preliminary designs that I believe demonstrate how this methodology was adhered to in practice.

Unsurprisingly, the initial design work bears little resemblance to that later stages of development, however through the process of reflection I have documented, there is a clear lineage. The following section is also an analysis of how the process of reflection-in-action transpired within specific stages of my research, and how the solutions that inform the final outcome represents a summation of the various iterations that occurred.

3.3 The project, chronologically

As this project transpired from initial experimentation to a final outcome, much of the new lines of inquiry emerged in the manner Schön describes, i.e. following an intended course, reflecting on the outcomes of this and letting this reflection dictate a redefinition of the next moves. The first example of this is described below.

3.3.1 Initial experiments

The initial focus of this project was concerned more with specific questions of narrative construction in sequential art rather than the exploration of the formal and structural elements of sequential art. Though the intention was always to investigate how this medium can be employed to describe complex socio-political events, early iterations involved a close study of how experimentation with genre and style might place the project within a pre-established set of codifications and inter-textual references that would help to contextualise the project within the wider cultural discourse.

I believed that comparative analysis of pre-established visual and narrative conventions would provide a kind of shorthand that would condense background information and enrich the final narrative with a litany of cross-references to other works that approached similar subject matter. As Ben Woo explains, genre represents "the codification of a certain competency - one which shapes the individual objects of its knowledge even as it is itself shaped by the cumulative encounters between audience and text" (2010, p. 170).

In the search for an appropriate starting point to expand upon this idea, I became aware of the literary tradition of the 'Outsider' across all kinds of fiction. This existentialist character stands outside of the conventions of society, providing a perspective for reflection from a position of remove. This essential separation

from the social milieu allows the outsider to "attribute his own meaning to events, interpreting the world through the Outsider's need for clarity, lucidity" (Cabrelli, 2006). Lee Horsley describes how for the Outsider, "the witty, ironic aloofness of their narrative acts to evaluate and contain the moral disorder of the society they investigate" (2010, p. 37). I believed that utilising this archetype in the context of a sequential art narrative would create a clear formal structure with which to examine the socio-political events the the project sought to engage with.
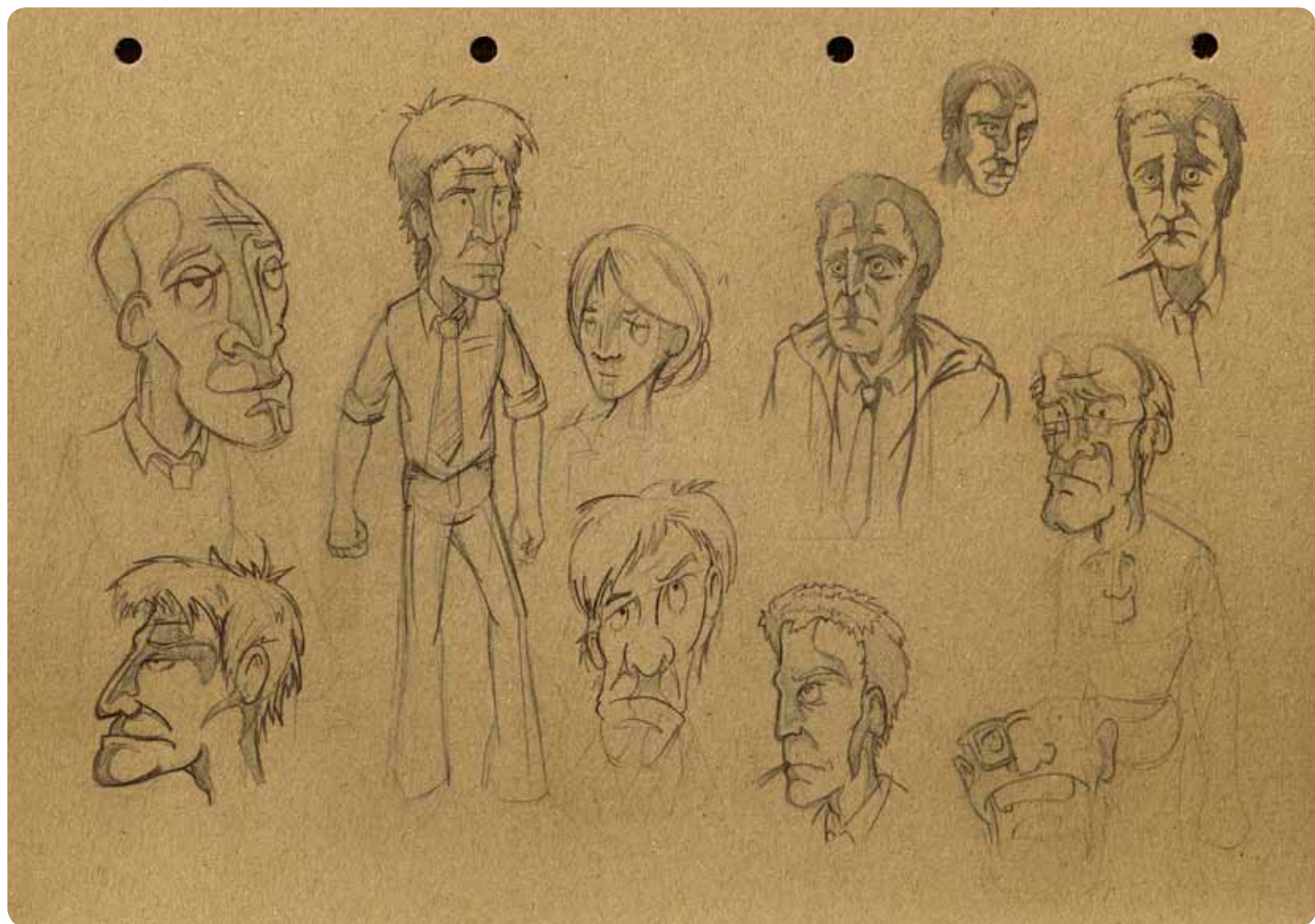
The discovery of the unique role of the Outsider in fiction provided a new focal point for the research. The cinematic tradtion of Noir was identified as one in which the Outsider plays a key role, and became of further interest due to its origins in the aftermath of the economic and political devastation that followed the cataclysm of World War II, a period of moral turbulence with a number of possible parallels to the contemporary socio-political landscape.

Though it is often described as one, Noir is not specifically a genre in the sense that Westerns or Musicals might be. At its essence, Noir is defined less by particular visual tropes or the evocation of a specific era but instead by the depiction of a morally ambiguous "world of dark angles and elongated shadows, where rain glistens on windows and windshields and faces are barred with shadows that suggest some imprisonment of body or soul" (Phillips, 2000, p. 8).

Though visually it has tradtionally tended towards an expressionistic style, it is grounded social realisim and a "faithful representation of contemporary life and its hard-bitten response to socio-political corruption" (Horsley, 2001, p. 229). Historically Noir has been revived and re-appropriated "whenever there is a a deep rift or disruption in values" (Levy, 1999, p. 22). I believed that establishing a thematic connection to this tradition would imbue the project with a deeper historic relevance, as well as provide a foundation point to begin stylistic experiments in the next phase of research.

FIG 3.1

These preliminary sketches show the deliberate creation of multiple alternative versions of the 'outsider' character. This is evidence of divergent thinking in the design process.

Title	Introduction of protagonist	Introduction of antagonist	Femme fatale / figure	Corruption of power systems	Pessimistic economic and sociopolitical circumstance	Treatment of light	Influence of expressionism	Description of surrounding environment	Dominant colour palate
Graphic Novel — **The Sinners** (2010) — Writ. Ed Brubaker / Illstr. Sean Phillips	•	•	•	•	•	•	•	•	•
Graphic Novel — **Do Androids Dream of Electric Sheep** (2009) — Writ. Phillip K. Dick / Illstr. Tony Parker	•	•	•	•	•	•	•	•	•
Graphic Novel — **Jimmy Corrigan: the smartest kid in the world** (2000) — Writ. Chris Ware / Illstr. Chris Ware	•	•	✗	✗	✗	•	•	•	•
Graphic Novel — **Ghost World** (1998) — Writ. Daniel Clowes / Illstr. Daniel Clowes	•	✗	✗	✗	•	•	•	•	•
Graphic Novel — **V for Vendetta** (1989) — Writ. Alan Moore / Illstr. David Lloyd	•	•	✗	•	•	•	•	•	•
Graphic Novel — **Batman: Year One** (1987) — Writ. Frank Miller / Illstr. David Mazzucchelli	•	•	✗	•	•	•	•	•	•
Film — **Taxi Driver** (1976) — Dir. Martin Scorsese / Writ. Paul Schrader	•	•	✗	•	•	•	•	•	•
Film — **The Long Goodbye** (1973) — Dir. Robert Altman / Writ. Leigh Brackett	•	•	•	•	•	•	✗	•	•
Film — **Le Samouraï** (1967) — Dir. Jean-Pierre Melville / Writ. Jean-Pierre Melville	•	•	✗	✗	✗	•	•	•	•
Film — **Touch of Evil** (1958) — Dir. Orson Welles / Writ. Orson Welles	•	•	✗	•	•	•	•	•	•
Film — **Out of the Past** (1947) — Dir. Jacques Tourneur / Writ. Daniel Mainwaring	•	•	•	•	✗	•	•	•	•
Film — **The Maltese Falcon** (1941) — Dir. John Huston / Writ. John Huston	•	•	•	✗	✗	•	•	•	•

The first major practical experiment was the completion of a detail visual analysis of how 12 texts across a variety of media visually expressed the key stylistic and thematic aspects of Noir. The results of this inquiry where entered into a detailed matrix (figure 3.2) that enabled an ordered visual referencing system that was intended to provide a solid foundation for further practical work. The process of completing the analysis generated a plethora of visual and thematic information that coalesced into a range of plot possibilities for the developing narrative.

One such plot involved an allegorical take on the collapse of Alan Hubbard, a story of corruption and loss of faith that could be seen to represent a microcosm of the larger financial crisis. This had a working title of *Meadowlands*, a deliberately benign title that would veil the dark undercurrents that had corrupted the town. I decided this idea was strong enough to develop further and set about establishing stylistic elements influenced by Noir and narrated from the perspective of an 'Outsider' character. Early character sketches of this character are documented in figure 3.4

During these early stages of research I also considered condensing the plot into an allegorical narrative that would 'boil down' the systemic failures (of the crisis) to a more palatable scale. One example of this was developing a narrative based around a suspicious train crash where the Outsider character functioned as an investigator, piecing together the forensics of the disaster, the causes of which would be allegorical to those of the financial crisis. At the same time I considered pushing the narrative towards the abstract, 'boiling down' the narrative to a fable suitable for children's literature. These alternative ideas, generated around the same time show the divergent nature of my thinking during the earlier, more open stages in the process.
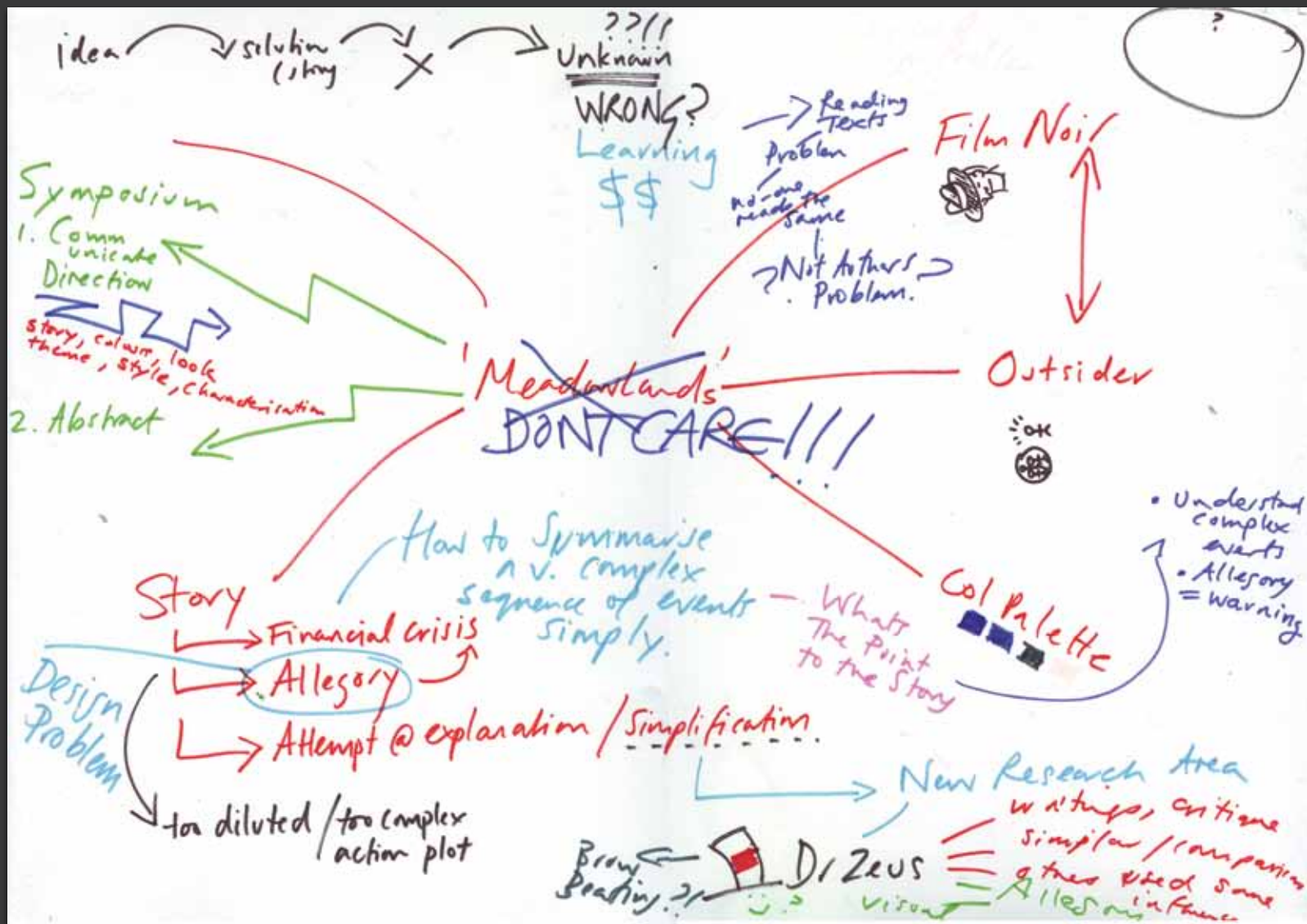
This thinking was captured in a mind map in figure 3.3 which also documents the frustration of coping with the limitless and unknown aspects that Stolterman and Rittel say are an accepted part of solving wicked design problems.

FIG 3.1 PREVIOUS SPREAD

Still images from a variety of films and graphic novels juxtaposed into prearranged categories sought to examine how elements of style and genre functioned on a visual level .Ian Noble and Russel Bestley describe this kind of visual mapping as "the systematic organisation of complex information in a form which may be transported and reinterpreted" (2005, p. 72).

FIG 3.3

This phase of research involved a reappraisal of all previous assumptions, as evidenced by this mind map.

idea → ✓ solution (story) → ✗ → ??!! Unknown

WRONG?
Learning
$$

→ Reading Texts
Problem
no-one reads the same
?Not Authors?
· Problem.

Film Noir

Symposium
1. Communicate Direction
Story, colour, look
theme, style, Characterisation
2. Abstract

'Meadowlands'
DONTCARE!!!

Outsider

OK

· Understand complex events
· Allegory = warning

How to Summarise a v. complex sequence of events simply.

— Whats The Point to the Story

Col Palette

Story
→ Financial crisis
→ Allegory
→ Attempt @ explanation / Simplification

Design Problem

↓ too diluted / too complex action plot

New Research Area
writings, critique
simpler / comparison
others used same
Allegory influence

Brow Beating ?!
Dr Zeus
Vision

After breaking through the frustration and processing the *Meadowlands* idea further, I devised a clear narrative structure and selected some key visual strategies from the visual analysis in figure 3.2. I transplanted the expressionist compositional strategies and muted palettes associated with Noir onto my own drawing style and began to experiment with these strategies through a series of iterative character sketches. The results of these are shown in figures 3.4 to 3.8.

This phase of research produced some interesting outcomes, however after a period of reflection and analysis of the work so far, I felt that to follow through with this approach would not constitute a satisfactory response to the proposition that initiated the project. All though it would have resulted in a satisfactory demonstration of how sequential art can be applied to the narration of socio-political events, this approach largely ignored the structural and formal advantages of sequential art discussed in section 2, such as the ability of the reader to 'play'

MEADOWLANDS

SOMETHING HERE IS CROOKED
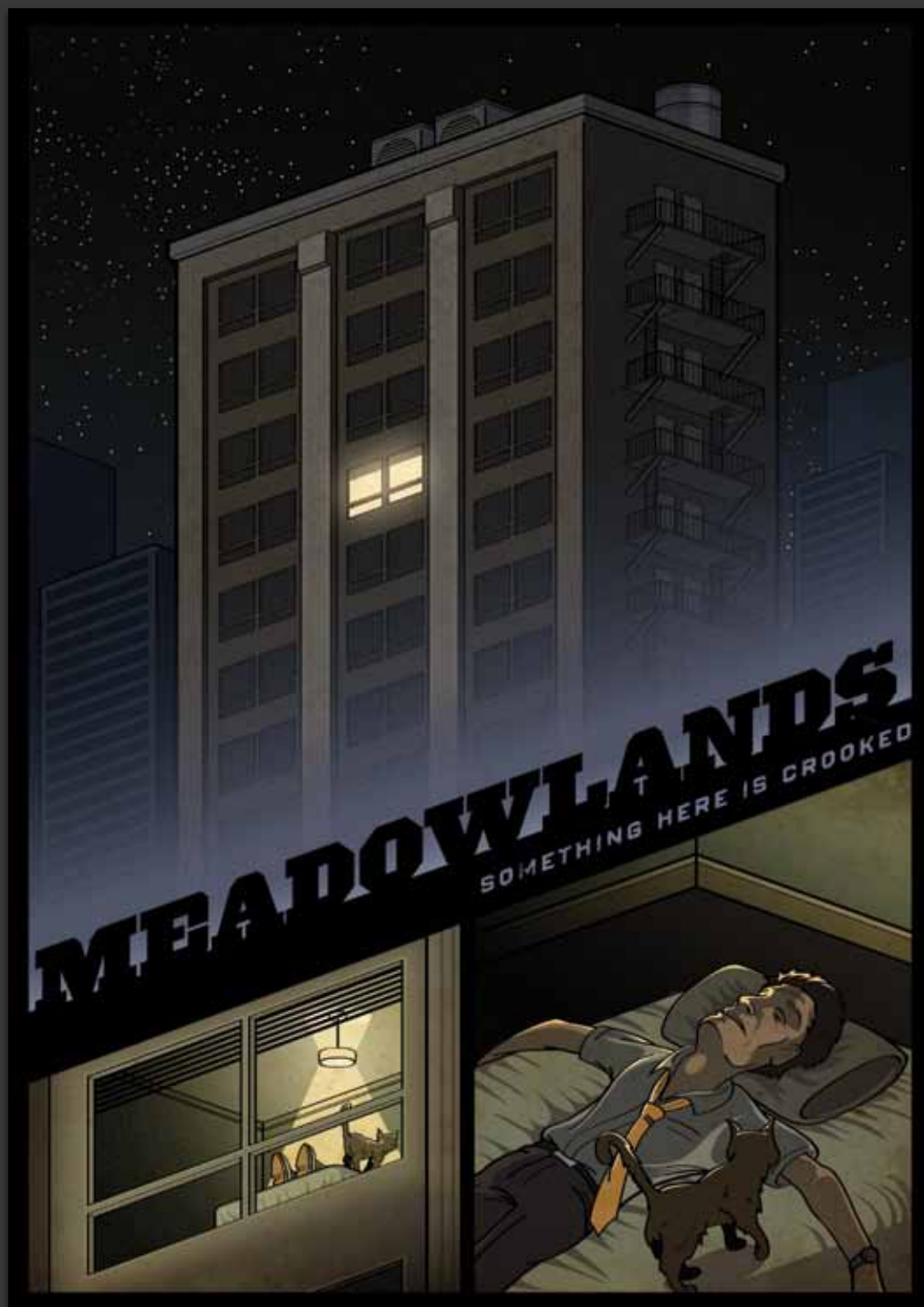
within larger scale sequential art compositions, or the manipulation of temporal space that a more experimental layout would allow.

Ultimately this phase of research was skewered towards a study of aesthetic and style that, even if successful would have been easily replicable in another medium, which would negate any claim for sequential art's unique strength in this undertaking. This enabled me to define my research problem more clearly to focus how the formal and structural elements of sequential art can be used to communicate the complex subject.

This redefinition of the project marked a significant diversion in the process that aimed to select the relevant aspects from the initial work and build this, while allowing for an fresh sequence of experimentation and analysis. I thought that a less specific study of key structural elements of sequential art might yield new strategies for achieving the project aims by identifying the unique strengths of the medium when dealing with this subject matter. Though much of the findings of this phase of research form the bulk of section 2, section 3.2 details how a series of visual strategies converged into a path towards the final research outcomes, and how the influence of these ideas remain present in the resultant work.

3.3.2 New considerations

Though sequential art theory and practice forms the backbone of this research, it became necessary in the intermediate phase of the project to expand the analysis of precedents and possible visual strategies beyond sequential art. I believed, informed by Schön's methodology, that the exploration of other forms visual communication might yield an unexpected and unique synthesis of ideas that would avoid the risk of retracing ground already covered in the first phase of research.

One of the first tasks was to gather precedents of artists whose work involved unique visual strategies for displaying complex socio-political events. Mark Lombardi's drawings, shown in figures 3.9 and 3.10, demonstrates way a of visually rendering the "hidden, labyrinthine structures of real-world power." (Hobbs, 2003, p. 40) by carefully constructing a matrix of interconnected personal relationships that underpin various political and financial scandals.

Lombardi's work became of particular interest to this research for the way it embraces the complexity of its subject matter. His work is not an attempt to
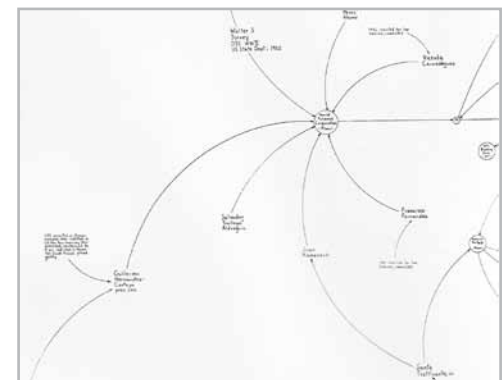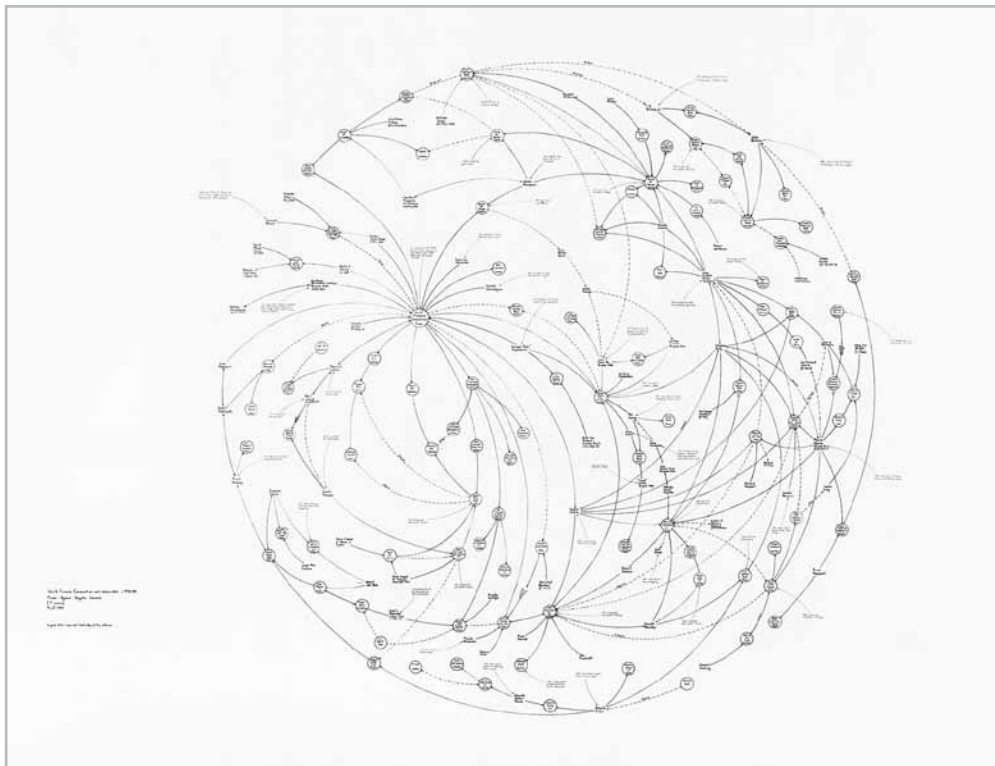
render the simplest visual explanation of socio-political events, as an infographic designer's might be. Instead he makes complexity intrinsic to the structure of the work. "Instead of simply solving crimes, Lombardi's work often intensifies their mystery. It does so by avoiding any central hierarchy in favor of clearly and often marginally connected networks" (Hobbs, 2003, p. 32).

Lombardi's example demonstrates that socio-political events can be explored visually without resorting didactic exposition or attempting to reduce details down to an easily digestible essence. His work, with its alluring, conspiratorial suggestion of "a vile order underlying apparent chaos" (Hobbs, 2003, p. 40), attempts to coax the viewer into their own exploration of the networks it depicts, and in doing so generate their own narrative connections. This is a function recalls the way the expanded meta-panel discussed in section 2.2.3 can enable the reader to 'play' within the 'infinite canvas' of non-linear sequential art. This link provides for this research a bridge that enabled the incorporation of some of Lombardi's 'networked' approach into the final practical work.

Chris Ware's *Rejected Fortune 500 Cover* (2010) grapples with similar subject matter to Lombardi, but with a radically different visual approach and without the heavy reliance on meticulous specificity. Where Lombardi renders financial scandals as a literal network of personal relationships, Ware employs symbolism and visual gags, laid out within a carefully arranged spatial topography that creates several levels of detail with which the work can be engaged. The resulting work sits easily within Edward Tufte's definition of a 'confection', the 'miniature theaters of information' (Tufte, 1997, p.138) discussed in detail in section 2.2.5. Within the work "analogy, metaphor and visual and verbal parallelism" (Tufte, 1997, p. 138) generate a "multiplicity of image events" to form a narrative network that, like in Lombardi's work, comes together to "tell us yet another story." (Tufte, 1997, p. 121).
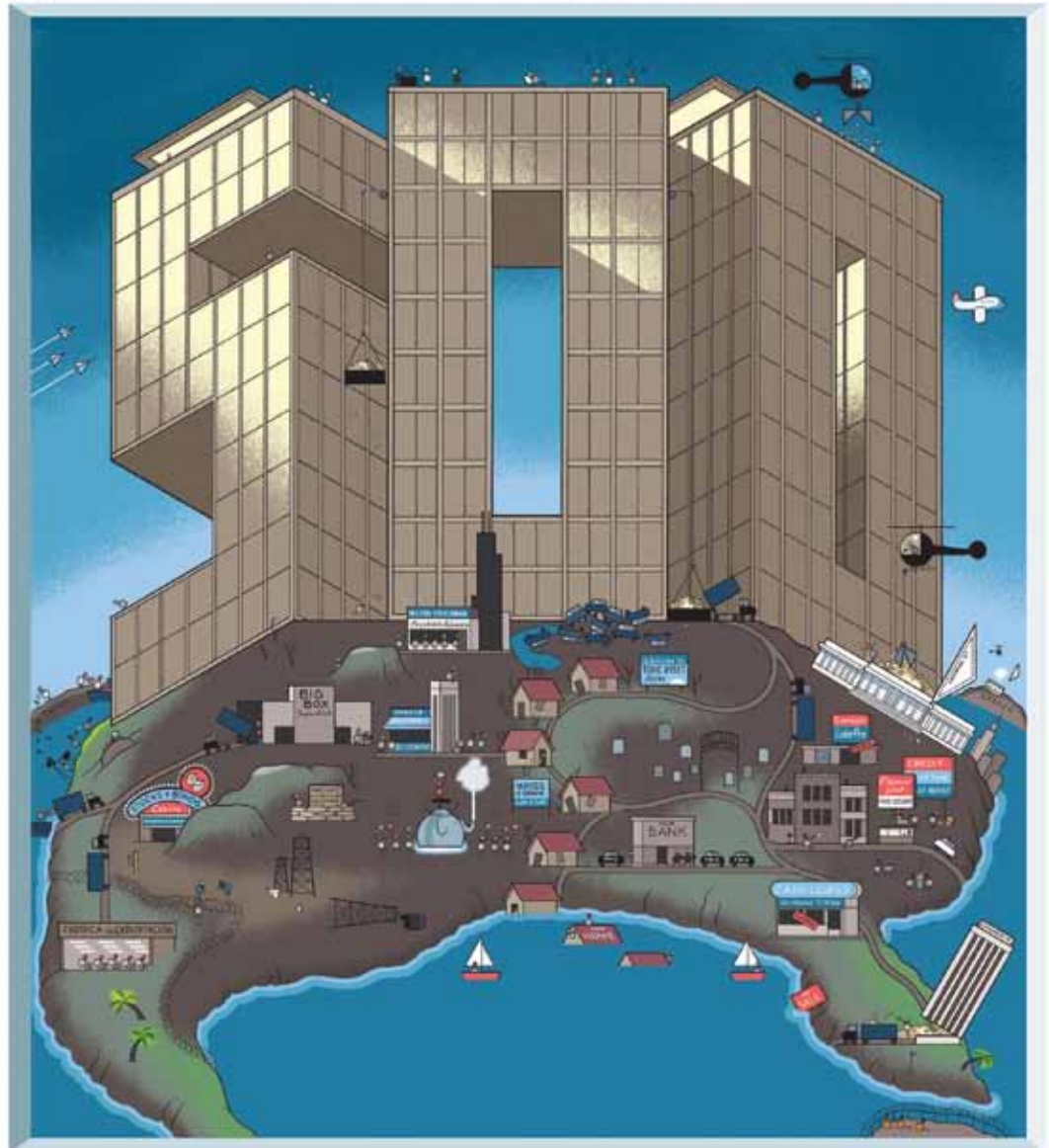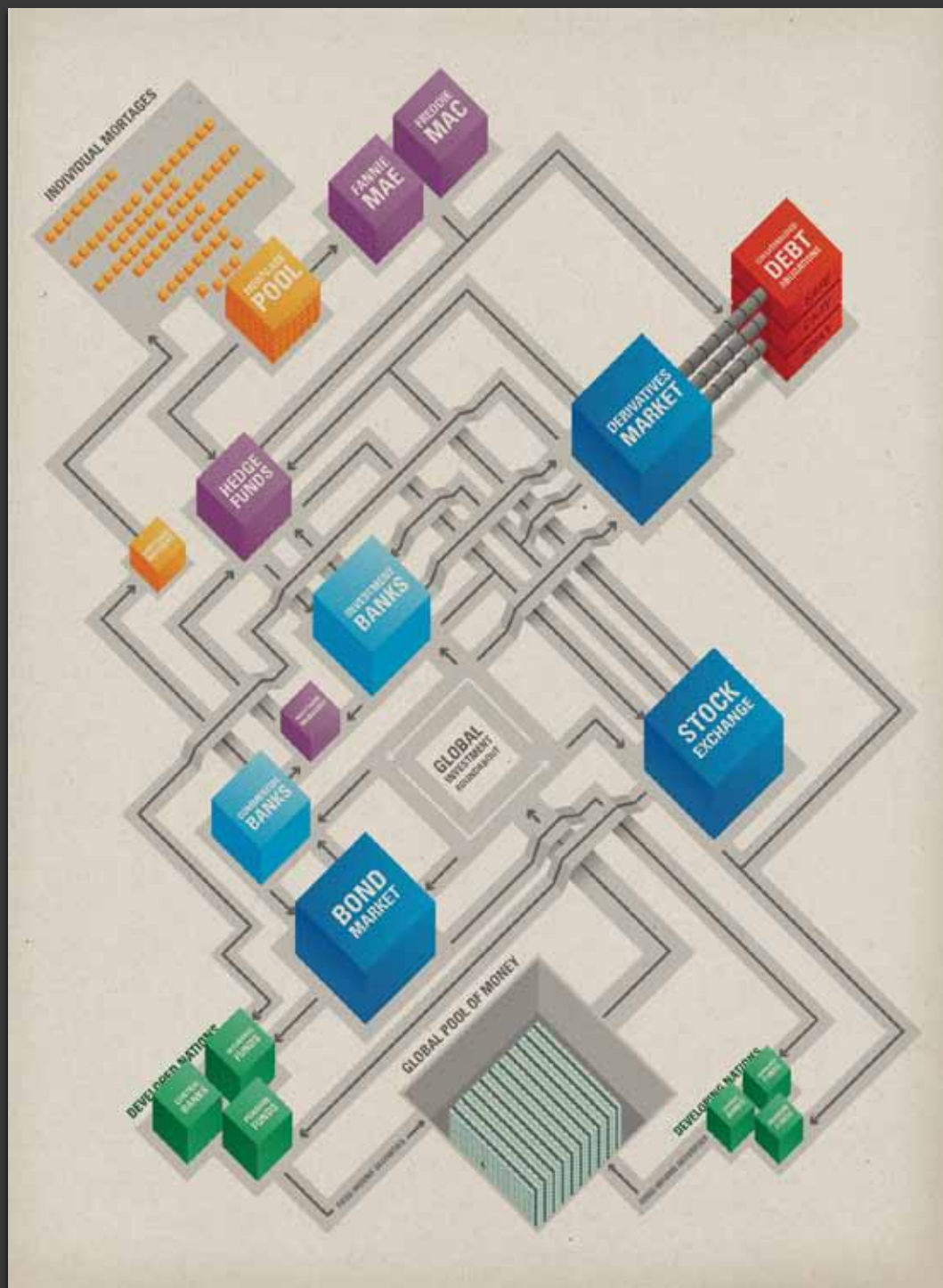
Fortune

Francesco Franchi describes this kind of approach as 'visual cartography' where "topography and architecture can be invested with an elaborate narrative representation." (2011). The confluence of these ideas sparked a series of design experiments that attempted to 'map' the narrative information that had been so difficult to condense to in previous iterations.

More than simply plotting information spatially, this kind of conceptual map making can be seen as a process where "otherwise bewilderingly complex and unwieldy masses of phenomena are carved up into manageable portions through the imposition of various grids... that create the reality they often appear merely to represent" (King, 1996, p. 41).

The map depicted in figure 3.12 provided a blueprint for a method that functioned as a hybrid of Lombardi's networked approach and Ware's use of symbolism. This involved the introduction of basic graphic elements, such as colour, shape and metaphoric allusions to these concepts as roads, pipelines and buildings. The result was a cartographic diagram where the relationship of each aspect to the rest of the system is given prominence, determining a layout that in turn gives spatial coordinates to otherwise abstract or symbolic concepts. This enabled a process where, through the process of iterative drawings displayed in the following section, the outlines of a conceptual landscape began to form as a guide for further research. This landscape, with its geometric rigidity and clear graphic style and provided a literal foundation with which to base a subsequent aesthetic approach. The work that followed this key milestone was an attempt to integrate sequential art back into the research practice, using these findings as a way to bridge the phases of the research.

3.3.3 Final iterations

The final phase of research was an attempt to solidify the directions that the
intermediary phase had suggested. This involved for the first time renderings of how
the final practical component of this project might be constructed. A series of iterative
drawings of the possible layout structures was undertaken in an attempt to solidify
the narrative content of the work, in the belief this process "triggers the emergence
of new ideas or the re-interpretation of existing ideas" (Kokotovich & Purcell, 2000,
p. 444). The first iteration in this process is shown in figure 3.13, and the subsequent
evaluations and refinements in figures 3.14, 3.15 and 3.16.

The four panels that make up this composition were the first attempt to apply this
working method within a sequential art frame work, as the one image was repeated in
sequence across the four panels, each depicting a developing stage of the financial

FIG 3.14

Further experiments with colour and tone, as well as compositional refinements.

crisis. The intention of these graduated sequential images was to highlight the systemic failures through the use of "parallelism", which aid the viewer to connect the complex visual "connections are built among images by position, orientation, overlap, synchronization, and similarities in content. Parallelism grows from a common viewpoint that relates like to like" (Tufte, 1997, p. 82).

This panel structure provided a founding kernel with which the more arcane and complex sequential art narratives could be built around, enabling for the viewer a clear point of reference within a layout that became increasingly complex as development continued. This structure, with the disproportionate scale of the core panels to the rest of the work, was intended to facilitate a hierarchy of detail that engage the viewer and draw them in to the lower levels of narrative that circulate around the main structure.
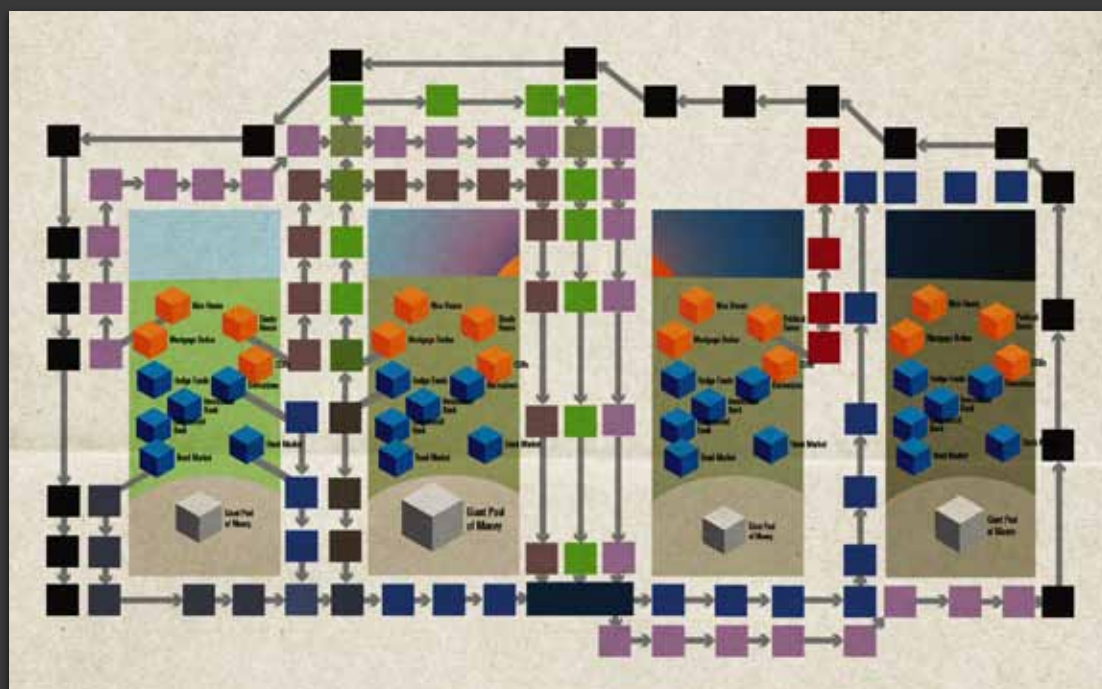
This point in the project was defined by a synthesis of many of design strategies that had been accumulated through the research process. With a basic conceptual structure in place, I was able to refer back as far as the comparative analysis experiments (figure 3.2) for aesthetic reference points, as well as elaborate on the initial character work shown in figures 3.4 through to 3.6. The narrative and compositional strategies discerned from the precedents discussed in section 2.3 were similarly useful, and many began to find their way into the individual strands that make up the work. Figure 3.17 shows a demonstrative lineage from the focus on the stylistic trappings of Noir earlier in the project.

In a broader sense, the depiction of simultaneous narratives playing out within an expanded 'meta-panel' was a response and a solution to the problems encountered in the first phase of research, where problems had occurred when trying to condense the dense, multi-polar narrative of the financial crisis. It is certainly true that a more traditional narrative, with further development might have achieved this. However, this strategy circumvents the problem entirely, allowing for a unique kind of narrative structure made possible by the application of the unique strengths of sequential art.

FIG 3.15 FAR LEFT TOP

The callout boxes, representing strands of narrative breaking away from the central anchoring images, were intended to represent different perspectives on the financial crisis. All though each was meant to function as a stand alone story, they would collide across time and space where appropriate

FIG 3.16 FAR LEFT BOTTOM

Layout refinements and placement served as vague guidelines, though much of the final structural and aesthetic decisions were not finalised until after the final versions had begun.

FIG 3.17 ABOVE LEFT

As discussed in section 3.3.1, corruption, power and moral failure are intrinsic to the noir genre. The influence of this study is still apparent in this section of the work in particular.

These narratives and their tangential but crucial relationship to each other were made manifest in the final composition. Beleaguered homeowners and investment bankers, existing in seemingly disparate worlds from one another would suddenly and catastrophically collide with one another in the spatio-temporal frame work of sequential art, giving literal representation to the driving forces behind the financial crisis.

FIGS 3.18 & 3.19

These two narrative strands were intended to demonstrate two opposed perspectives on borrowers caught up in the sub-prime mortgage boom. Favourable accounts would see the protagonists as aspirational victims of predatory loan brokers, while a more critical perspective on the same set of circumstances would say these characters are living beyond their means and greedily borrowing more money than they could ever pay back

IN IT FOR THE MONEY

A KEY

SECTION 4
CONCLUSION

In keeping with the stated design methodology, the process of exploring the ways in which sequential art can assist in the communication of the complex narratives of the financial crisis created a design outcome that was, at the onset of this project, completely unanticipated. I believe however, that the results of this process have proved the conjecture that sequential art possesses unique capabilities in dealing with the visual depiction of complex socio-political events.

I have, in section 2, provided specific examples from my own practice as to how various structural aspects of sequential art have manifested in the exhibited work. However, the following conclusion will summarise how sequential art and the design strategies I have used provide unique methods for visually communicating complex socio-political events. I will also attempt to place the work in a broader context, analysing how it functions as a 'prototype' response to the conjecture that initiated this research. The effect of context, exhibition setting and how the work is perceived and received by a potential audience will also be discussed. Lastly, I will elucidate on how further avenues of research could use the methodology developed during this work in order to further explore and refine the lessons learned from this research.

Fundamentally, this project is the search for an alternative medium for the visual depiction of cultural and historical events. These kind of events, even one as relatively recent as the 2008 financial crisis, do not lack for explanatory resources but the result of this research shows that visual strategies for narrative information display give a unique perspective with which to view such large scale, complicated socio-political events.

FIG 4.1

The work at the completion point of this research project.

69

There is, inherrent to this method, a certain critique of an infographic approach; one that would seek to streamline the information to the point where avenues for interpretation become limited and largely dictated by the author. This work essentially inverts that conceit, willfully barraging the viewer with visual information and hopefully instilling the realisation that more information is required than a singular text can provide, providing a unique depeiction of the scale of complexity in these kind of events. It is the function of the design, and the language that has been devloped out of sequential art, to entice the viewers into this experience.

The exhibited design is a sprawling 'confection' of ideas that attempts to create a cohesive spatial network of narratives from the disparate and occasionally contradictory perspectives on the origins of the financial crisis. Within it, multiple perspectives of the same event vie for space and attention across the temporal space generated by the conventions of sequential art. It is conventions such as the deliberate sequencing of images mediated by the closure between them that intuitively provides the key to engagement with the work. Likewise sequential art's unique relationship with temporal sequencing, discussed in section 2.2.1, allows for an excellent method of narrative delivery, where the viewer is able to cross reference temporal events that exist simultaneously on the same spatial plane. This is an intrinsic distinction from other visual narrative mediums such as cinema.

I believe that sequential art strategies allow for this density of detail and narrative complexity where other visual communication forms, such as infographics would not. Clearly this is an asset when attempting to convey socio-political events which defy cohesive and reductive descriptions. It is certainly true that within the finished work there exists a great deal of redundancy in many of the details and concepts explored, something I would posit as a necessary bi-product of such a multi-polar approach to narrative.

FIG 4.12

The work as it appeared in the 2012 Massey University Masters degree graduate exhibition "M".

Several key concepts are explored multiple times from various perspectives, such as the make-up of a collaterised debt obligation, or the way in which predatory and reckless lending generated dangerous levels of debt. This multi-perspective construction of the narrative has also had the effect of somewhat diluting the capacity for strong editorial statements as to causation and culpability for the events depicted; in this work explanations tend to have a strong counter point offering a different argument. While in many ways this makes the authorial voice difficult to maintain, it also serves as another example of how this experiment has provided a counterpoint to more typical 'unilateral' visual information displays. This would be a worthy point to consider in further research.

Underpinning the composition is a carefully considered hierarchy of detail. The highest level provides a holistic 'God's eye' view of the financial system via the three large connecting panels that document the subsequent collapse of that system. The obvious shift in colour and tone across these panels, signifying a metaphorical shift

from day to night, is meant to function as a shorthand that defines the tone for the rest of the work. This provides a possible path of entry for the viewer as they begin to engage with the narrative.

The ability to visually juxtapose micro and macro narratives within a relatively contained space, while retaining cohesiveness is aided by sequential art's particular dependence on the gestalt principle with which a reader instinctively decodes visual narratives. As discussed in section 2.2.2, viewers of sequential art participate in 'unpacking' individual images from within the meta-panel to generate the broader narrative, providing a unique method for navigating visual complexity.

Though it is realised in print and situated on a wall, this work is intended as neither a poster or a large and over-wrought infographic designed to convey information in the most efficient way. Its broader genealogy would lie somewhere closer to a large-scale mural that demands sustained or multiple encounters. It is certainly true that higher level of engagement is needed to appreciate the lower levels of the detail hierarchy. The structure of the work has been designed so that the events depicted on the larger images entice the viewer towards the individual story strands that coalesce to form the whole narrative, literally and metaphorically 'filling the gaps' of the story.

This has been aided by the application of the 'infinite canvas' theory in the creation of this work, discussed in section 2.2.3. This experimental system of sequential narrative construction ensues the strict left to right progression typically seen in western sequential art and creates a 'hyperlinked' visual narrative, where the viewer is free to choose where and how far to delve into the individual stories and make their own, non-linear journey between these strands. This again is fundamentally unique to sequential art and would not be possible in other narrative mediums such as cinema or literature.

FIG 4.3

This digital mock up suggests new ways of contextualising the work with site specific placements. This possible solution would aim to co-opt a space normally reserved for advertising and similarly abrupt visual commuinication forms. A resultant case of 'mistaken identity' on the part of the viewer might result in unexpected encounters with the work.

Of course, the exhibition that marks the end of this project is considered neither the only, nor the ideal, way to contextualise the 'meta-panel' that frames the the work. It is one of a myriad of display options, some of which could be explored in further research.

This work is not designed to be considered as a conclusive answer to the fundamental propositions of this research. Instead it is posited as a prototype that proves the viability of the methodology that has been developed from my own practice led-enquiries. The methodology itself still requires development and the next phase of research would seek to analyse the specific functions of this prototype to see how they might be refined and streamlined in future projects. An in-depth analysis of the specific context in which this work was placed would also be an avenue for further study. This would include placing the work in differing settings and examining the effects on the viewer's interpretation of the work. These ideas are discussed in more detail in the proceeding section.

4.2 Further avenues of research

The scope of this project posed limits on other possible areas of research and development and other possible methodologies. As though much has been gained from the practice-based, self-reflective methodology used, it would also be of interest to investigate this work through the use of focus groups and site-specific installations. This would have enabled research into how the work is received and interpreted by the viewers and have allowed various 'tests' of sequential art tools and techniques in order to measure their impact on comprehension.

FIG 4.4
Devices like Apple's iPad, with its intrinsic touch-based scalability would seem a natural platform for work that requires such differentiation in scale and detail. Further more, web-connected portable devices provide well established distributive networks for stand-alone media such as that produced in this project

This could possibly involve an investigation into how the work is received in a gallery setting as opposed to a street level installation, and how this kind of work can be made more physically accessible for those who wish to engage with it. It is possible that re-imagining the work at a smaller, less imposing scale, or breaking it down to digestible sections that a viewer can disseminate at their own discretion, would be viable way forward in the presentation of this work.

As stated, this work was not designed with the accessibility of a poster. Though in places, and particularly in its installed setting, it speaks the language of large-scale advertising. This was done deliberately and with a degree of subversion. Nevertheless it would be of interest to measure reaction to the work in an 'ambient' setting as depicted in figure 2.3. While placing the work in this kind of public setting would not lessen the degree of engagement asked of a viewer, a site- specific context may perhaps provide new insights into the 'meta-closure' of 'the meta-panel'. It is envisioned that placing the work in the kind of sprawling suburban setting depicted on its triptych panels would dramatically shift the context and reception of the work. Or indeed, perhaps in a corporate context that would facilitate members of the banking industry to confront stereotypical renderings of themselves, and essentially 'pick a side' in the ensuing narrative interplay.

Of course the digital distribution and reproduction of this kind of work would open up a far wider audience than a physical display, as well as allowing viewers to engage and re-engage with the work on their own terms and in their own time. This would have also overcome the prohibitive costs involved in reproduction of work of this scale and if it was not for limits in my own technical knowledge and the time restrictions of this project, a digital production would most likely have played a part in the final realisation of this work.It is anticipated that the shift to digital, and the increase in user-interactivity that entails, would not be a mere transplant of the existing work. Rather, it would result in a radical rethinking of how one engages

with the work and how the narrative possibilities might be further extended by the introduction of inter-textual links and dynamic content that is altered by the user's interaction. In the same way that a site specific placement would help to define the 'meta-closure' of the work, placing it on the web with an expansive and well considered framing system would recontexutalise the work and provide new insights into the function of the work.

Also, a digital solution, with the ability to zoom in and out easily would also provide solutions to the difficulties of excessive information density within the work. These ideas could be explored either in the adaptation of the existing work or the development of further work, and would doubtless lead to worthwhile results.

Finally, as stated at the outset of this research, it is hoped that the visual communication strategies used in this project may be used to influence how other historical events, of similar complexity to the financial crisis, are communicated. Contemporary socio-political events such as the European debt crisis or the Arab spring could possibly provide even more complex and consequential case studies that would be suitable for further analysis. Further research would doubtless shift the focus to other points in history that demand similar complex and multi-polar explorations, using this work as a foundational starting point for further development of specific sequential art techniques.

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List of supplementary images

The following images have been supplied independent of this essay as high resolution files to enable closer reading and analysis.

I.   **JFINInitFortheMoney.jpg**

II. **JFINComparativeAnalysis.pdf**

III. **JFINMeadowlandsPage1.png**

IV. **JFINMeadowlandsPage2.png**

V.   **JFINSquareMapExperiment.png**

VI. **JFINMapLayoutExperiments.png**

VII. **JFINMapyLayourExperiments2.png**

LIES

CREDIT DEFAULT SWAP
CASINO

BANK

STOCK MARKET

PANIC