

**School of Humanities
CUSP Institute**

**Hitching a Ride Towards Sustainability: How Sustainability is
Working its Way into Mainstream Local Government. A Study in
Film/Digital Media.**

Linda Anne Blagg

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Doctor of Philosophy
of
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To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature: 

Date: 13th June 2014

Abstract:

Cities are an environmental time bomb consuming up to 80% of global material and energy supplies and producing 75% of carbon emissions. The addition of 3 billion more city-dwellers by 2050 will mean we have no chance of limiting climate change. Sustainable cities and urban lives are critical. Media has a social responsibility to educate the community about what a sustainable city means.

I have come to these issues as a filmmaker, questioning documentary and its potential to communicate sustainability in action. I live in Fremantle, a port city in Western Australia. In 2009 when a sustainability academic was elected Fremantle's first green Mayor, it provided a rare opportunity to document a sustainability story unfolding in the present about a subject currently trending world wide, that city mayors are the key change agents for sustainability.

This thesis is in the form of a digital documentary and an exegesis to answer two research questions:

1. How does a green mayor and his council shape a city's economic development to create an expanding and sustainable future for their city?
2. How does an interactive digital production make a significant contribution to digital storytelling and enable the sustainability journey to be better communicated?

These questions are inextricably linked; the response to the first question is communicated through the response to the second. To make a digital documentary I adapted the Prezi – a 'cloud-based' storytelling tool – to link 67 short YouTube films tracing the mayor's journey over two and a half years to communicate his narrative as a 'roadmap'. By utilising digital media as a research tool through cinematic presentation (character and conflict), reflexivity (the role of 'voice' in cinematic presentation), and the Prezi's open architecture (which allows the structure, organisation and management of knowledge), this thesis explores digital media's capacity to narrate history and change, especially the local politics of sustainability.

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List of Abbreviations

ABS: Australian Bureau of Statistics

AFTVRS: Australian Film Television and Radio School

ALP: Australian Labor Party

AUC: Apple University Consortium

CIIC: Creative Industries Innovation Centre

CUSP: Curtin University Sustainability Policy

DAP: Development Assessment Panel

DAC: Design Advisory Committee

DVD: Digital Video Disc

CCSSWG: City Centre Strategic Sites Working Group

GFC: Global Financial Crisis

GHG: Greenhouse Gas

ICLEI: International Council for Local Environmental Initiatives

ICT: Information and Communication Technologies

ISAF: International Sailing Federation

LGS: Local Governments for Sustainability

NFB: National Film Board of Canada

TFS: The Fremantle Society

TFN: The Fremantle Network

UN: United Nations

VHS: Video Home System

WBCSD: World Business Council of Sustainable Development

ZUI: Zooming User Interface

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Lastly I would like to acknowledge Brad Pettitt without whom this project would never have happened.

CHAPTER 1

**INTRODUCTION: POLITICS AND
POTENTIAL IN A DIGITAL WORLD**

1.1 Politics and Potential in a Digital World

This practice-based thesis is primarily in the form of a Creative Production through a Prezi: *Hitching a Ride on Fremantle's Journey towards Sustainability: A Digital Media Presentation*, <http://prezi.com/ffhanmcfrzdr/>.¹ The link needs to be copied into one's browser to access the presentation. The digital media production is complemented by an exegesis, which covers the terrain of both questions of sustainability and digitality, while also reflecting upon the processes of production of all the elements of practice and of the Prezi in its own right.

Practice-led research is active learning while undergoing an experience. It implicitly critiques an epistemology of knowledge as 'product'. As filmmakers and academic authors Mhando and Petkovic assert: "A transformation is presently taking place within the Humanities programs world-wide, from discipline-based programs (history, geography, anthropology, etc.) to practice-based programs such as screen production, games design, sound, theatre and drama, radio, journalism, web communication and similar practice-based programs (Mhando and Petkovic, 2014). This study sees itself as part of that transformation.

This thesis is a Creative Production in the form of a digital story/narrative about cities and sustainability located within the interplay between Social Science and Arts. It inserts practice into research both through its engagement with a mayor and his city, and through its core research output, the production of a digital documentary. The construction of a story/narrative is the central research activity rather than something simply observed. The Creative Production brings together digital media and the story of a new green mayor as a new kind of documentary about a new kind of politics. The exegesis establishes the key concepts foundational to this work to

¹ Prezi is an educational "cloud-based presentation software and storytelling tool for presenting ideas on a virtual canvas" (Prezi.com, 2014).

show how digital media (in the realm of documentary) can be utilised as a research tool and its potential to narrate history and sustainability.

Two landmark concepts are brought together through this thesis – digitality and sustainability and cities:

Landmark Concept 1: Digitality

Digitality refers to the condition of living in a digital culture. In 1995 the prescient ‘multimedia guru’ Nicholas Negroponte wrote in his book *Being Digital*, “like a force of nature, the digital age cannot be denied or stopped” (Negroponte, 1995, p. 229). His prophecy came true. In the early 2000s the digital revolution, generally referred to as Web 2.0,² enabled global accessibility to digitised content (text, graphics, audio, video) that could be transmitted over the Internet or computer networks. That content is increasing exponentially; a study carried out by Intel in 2013 revealed that every minute users of the Internet upload 30 hours of video to YouTube, send 204 million emails, and view 20 million photos. According to the study, by 2015 the number of network devices (computers, tablets, and mobile phones connected to the Internet) will be twice the global population ([Intel Study](#), 2013). Negroponte’s prediction has come to pass; today we live in a “digital age”.

While ‘digitality’ is the cultural context most of us live within and a field of knowledge production, ‘digital media’ is the research tool and means of production of this thesis. There is no denying the impact of digital media in our lives is creating an explosion of new ideas and new ways of telling our stories. At an international X Media Lab held in Perth in 2011, ‘interactive storyteller’ Marshall Vandruff commented, “We are still at the early stage of this fusion between storytelling and digitality” (Vandruff, 2011). Digital storytelling tends to be experimental, personal, contemporary and untamed. This is an exciting innovative space to be in – an opportunity to take risks, and to question the way documentaries are made, as we are doing through this thesis.

² Web 2.0 was the name given to new technological advances in the early 2000s that allowed innovations like Facebook (launched towards the end of 2004), and YouTube (launched in November 2005).

Landmark concept 2: Sustainability and Cities

The human species has, for the first time ever, become an urban species.³ Cities can be seen as an environmental time bomb since they currently consume up to 80% of global material and energy supplies and are responsible for 75% of carbon emissions also known as greenhouse gases (GHGs), leading to dangerous climate change. (Bakker, 2014). We are now in unknown territory. The city is central to issues of sustainability. To have a sustainable Earth, sustainable cities and urban lives are imperative. A consensus amongst ‘sustainability and city’ practitioners and academics is to see ‘green density’⁴ as an answer to this crisis.

A keen observer of the urban scene will find it difficult to discern any evidence of leadership towards sustainability on a national or state scale in most Western countries. However, locally it is a different story – ‘pockets of change’ can be increasingly glimpsed in cities across the world. It is as if humans are slowly waking up from a collective ‘Rip van Winkle’ dream, returning to the city and changing things on the ground and occasionally, like world-famous New York Mayor Michael Bloomberg, attracting the attention of mainstream media. City mayors are increasingly trending as the key change agents for a sustainable Earth. Benjamin Barber makes a compelling case for this in his 2013 book *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities*. Political leadership to achieve sustainability is coming from mayors rather than national leaders; mayors have the capacity to make changes on the ground while national governments are often too large and gridlocked by ideology and partisanship to move too far from ‘business as usual’. Barber’s view was reiterated in a recent article in The Guardian, *Strong City Mayors Advance the Green Agenda*, giving examples of how cities in the UK and around the world are going green while supporting economic growth “demonstrating the importance of having strong, committed leaders pushing this agenda” (Nohrova, 2014). The role of media is a core component of the condition of cities and sustainability in its role as a ‘social voice’ and educator. It is intended this digital story about an Australian mayor leading his city towards sustainability through

³ Presently, over one-half the world’s population lives in cities. The United Nations estimates that by 2050, 70% of the world’s population, a projected ten billion, will be urban (UN 2010).

⁴ ‘Green density’ refers to an assessment of the negative consequences of urban sprawl and the multibenefits of density on sustainability (Newman, 2014). In this thesis ‘green density’ generally refers to medium-density, mixed-use, green built form that includes public spaces.

‘green redevelopment’ will contribute to the discussion around ‘cities and sustainability’, not as a traditional written discourse but as a creative production discourse.

This interdisciplinary thesis brings together ‘Digitality’ and ‘Sustainability and Cities’ through reflexive, practice-based methodology with research output in the form of an interactive digital presentation.

The exegesis has been designed to complement the Prezi through:

- Establishing the history of sustainability and cities as processual, integrative and emergent.
- Establishing the methodology of this research study as processual, social and emergent.
- Linking digital media with sustainability through the Prezi with examples of how others have done this.
- Showing how digital media has been utilised as a research tool through an analysis of the Prezi to show its capacity to narrate history and sustainability.

1.2 Digitality and Sustainability: My Research Motivation

This digital investigation into cities and sustainability was a serendipitous opportunity that could not be ignored. The story began in September 2009 in the run up to the mayoral election in the port city of Fremantle in Western Australia – a place where the population had remained static or had declined for 35 years.⁵ In terms of ‘sustainability and cities’ Fremantle is an example of what happens when a key sustainability pillar – the economy – is neglected. Of the six candidates running for mayor three described themselves as ‘green’. One of those green candidates was Dr. Brad Pettitt, Dean of Sustainability at Murdoch University and one of twelve elected councillors for the City of Fremantle. His narrative was essentially to grow Fremantle’s resident and worker population through green redevelopment. At the time I was based at Curtin University Sustainability Policy (CUSP) Institute in the heart of Fremantle’s heritage precinct. My role was making short ‘sustainability case

⁵ Fremantle population in 1971 – 26,036; in 2006 – 24,835 (ABS, 1971; ABS, 2006).

study' films for YouTube commissioned by CUSP Director, Professor Peter Newman.⁶ Newman, who had taught Pettitt and had later become a colleague and friend of his, recognised that here was a rare opportunity to document sustainability unfolding in the present.⁷ Newman strongly encouraged me to document the 'inside story' of Pettitt's first 4-year term "to show how a talented young politician tries to implement one of the 21st Century's most complex difficult and essential tasks, to make sustainability happen in a city"⁸ (P. Newman, personal communication, September 30, 2009). This was mainly achieved through a series of filmed conversations between Pettitt and Newman.

I was working with CUSP in the first place because I wanted to be part of the change, and to use my lifetime of filmmaking skills in the service of something meaningful and useful. Up to that point I had made both fiction and documentary films, but always in relatively controlled circumstances. To film a story happening in the present was to a large extent relinquishing control. It felt like jumping off a cliff but I was keen to experiment in the digital realm so in the end I said yes.

1.3 Developing the Research Proposition

I had already met Pettitt when Newman made his proposal; I had been commissioned to make a YouTube film, *A Different Way of Thinking* (Blagg, 2009a), as part of Pettitt's electoral campaign to become mayor. Pettitt was a good subject for documentary – unguarded, transparent, passionate and idealistic. He was articulate about sustainability in terms of 'the big picture', he stuttered when he was actively thinking, excited, 'in the moment'. Pettitt was also keen to be part of the research project because he wanted Fremantle to be seen as a model, "If we can't be a model for a sustainable city then who can!" (Blagg, 2009a). As strategic head of the City of Fremantle, Pettitt would drive the Fremantle narrative. As mayor he had 4 years to make a difference. Newman, on the basis of 35 years as a Fremantle resident and activist, introduced a dramatic theme with the concept of 'green vs. green', based on

⁶ Newman firmly believes sustainability needs specific and concrete case studies to become meaningful, uploading these films to YouTube made them free and universally accessible.

⁷ Our filmed case studies were always stories about events that had happened in the past.

⁸Newman came up with this idea a month before Pettitt got elected.

his experience with ‘green anti-development’ attitudes which ran deep in Fremantle. As traveller and writer and through his work with IPCC, Newman saw this conflict playing out globally and thus the way the new mayor and his council dealt with it would be relevant at a global level. He too became an integral part of the research process in his role as guide and mentor to both Pettitt and myself.

The underlying proposition was finding the best way to communicate sustainability in action. My approach would be to make a series of YouTube films that would trace Pettitt’s journey and to find a way to link them together to depict a kind of ‘roadmap’. Since I was theorising through media representation I needed to foreground myself in the study. I came up with the idea of taking on the role of ‘hitchhiker’ – that way I could ‘hitch’ with Pettitt the driver and let him show me the way. I would be up close and personal to see everything at first hand and I was free to get off the ride and make my own detours once I had a grasp of what was happening.

I knew it was ambitious, I knew I didn’t know what was going to happen, or how I was going to make a roadmap, but whatever happened there would still be lessons to be learned, for myself and Pettitt, and hopefully I would be there to record them.

1.4 Research Questions

As a result of my reflective process, I designed this thesis to respond to the two research questions described below:

Research Question 1:

How can a green mayor and his council shape a city’s economic development to create an expanding and sustainable future for their city?

Research Question 2:

How can the Prezi make a significant contribution to digital storytelling and enable the sustainability journey to be better communicated?

In a sense these two questions are inextricably linked, the response to the first question is communicated through the response to the second. This thesis is primarily a study about the digital media process by which sustainability/change is recorded and Fremantle's journey is the means by which this is investigated.

The overall aim of this project is to question digital media and its capacity to narrate history and change. Given the desire to develop Fremantle in a sustainable manner, can a new green mayor and his councillors increase Fremantle's population and jobs base in an environmentally responsible and socially equitable way to create a more diverse and vibrant community in spite of opposition? By dramatising (performing) Fremantle's story through the Prezi, can we develop new knowledge and understanding of how cities work towards sustainability, and at the same time, leave a trace of that history? Furthermore, can the Prezi contribute towards new knowledge of the documentary form? Through the course of the study, these questions evolved and became more specific.

1.5 Thesis Structure

The thesis is divided into two parts:

Part 1 A Creative Production in the form of an online Prezi

Part 2 An Exegesis to accompany the Creative Production

1.5.1 Part 1: The Creative Production

The Creative Production utilises Prezi software to make a 'roadmap' tracing Fremantle's journey towards sustainability. It can only be accessed online (rather than through a DVD) because the story is principally told through a series of 67 YouTube films. The films add up to a total viewing time of approximately 10 h. 45 min. The Prezi narrative begins in September 2009 with Brad Pettitt's mayoral candidacy, and ends in February 2012 with a unanimous decision by council to pass a controversial scheme amendment, Fremantle's first transformational move towards green density – a period that covers nearly two and a half years. A Post Script was added in July 2013, shortly before the end of the mayor's first 4-year term.

1.5.2 Part 2: Exegesis Structure

This exegesis is divided into five chapters:

Chapter 1 Introduction: Politics and Potential in a Digital World

Chapter 1 introduces the research, the research questions, the structure of the exegesis and motivations for the research.

Chapter 2 The Sustainability Process in Urban Local Government as Enabled Through Leadership

Chapter 2 establishes the imperative need for sustainability in our cities through ‘green density’ although some academics and communities disagree. The history of sustainability is established as integrative, inclusive and evolving. However there are challenges in capturing and depicting a complex emergent process. Sustainability enabled through local government was established through the UN’s Agenda 21 in 1992, but the relative inaction since then strongly suggests sustainability requires political leadership and education. Mayors and their councils are found to often lack the necessary political courage to initiate change and the concept of sustainability is often misunderstood resulting in a gap between sustainability rhetoric and changes on the ground, although increasingly there are glimpses of green urbanism to be found all over the world. This gap indicates a need for demonstrations of political leadership to show how sustainability policy can be implemented at local government level. The processual nature of sustainability is emphasised to establish the metaphor of ‘journey’ to communicate sustainability.

Chapter 3 To Establish an Epistemological Foundation for Action Research Mode of this Inquiry through Narrative Analysis and the Role of ‘Voice’ in Cinematic Presentation

Chapter 3 lays the groundwork for the epistemology and methodology of this study through narrative analysis in sociohistorical inquiry and the role of ‘voice’ in cinematic presentation. Narrative is the social making of meaning, part of the epistemological paradigm that draws on the importance of story and storytelling. Through documentary theory a film can be ‘read’ as a text with a ‘voice’. A text can be seen as a mediator of knowledge. Through reflexivity and self-reference, the author/narrator’s power and influence can be made transparent. The history of

documentary reveals its heritage as filling gaps in knowledge out of epistophilia, a desire for knowledge. Documentary also has a heritage of using cinematic presentation to engage the viewer and motivate her or him to action. A history of digitality is established to show the profusion of new stories and new ways of telling them in the 'digital age'. Documentary filmmaking can be considered 'action research' since it involves processual active learning, rather than an end product, while undergoing an experience. Since sustainability is a complex adaptive process, then demonstrations of sustainability utilising a process-oriented methodology will show this most clearly. The metaphor of the 'road movie' helps to communicate this idea. This study is contextualised through three examples of linking sustainability and digitality, including this study's use of the Prezi.

Chapter 4 The Prezi: Hitching a Ride on Fremantle's Journey towards Sustainability: A Digital Media Presentation

This chapter establishes the parameters of the research study before going on to show how to use the Prezi. The Prezi can be utilised to create an active learning experience for the user as she or he navigates the 'roadmap' depicting Fremantle's journey. The Prezi with its open architecture allows the structure, organisation and management of knowledge. These structural elements are analysed utilising digital media through cinematic presentation, reflexivity, and the Prezi as a whole. These research tools reveal Fremantle's journey, driven by the mayor, as contextualised, adaptive, emergent and ultimately successful. The Prezi's processual and open-ended narrative reflects the processual open-ended nature of sustainability with the filmmaker as mediator between the two fields. This chapter concludes by responding to the original research questions, that by presenting 'sustainability and cities' utilising digital media, Fremantle's narrative is communicated powerfully, efficiently and effectively to others wanting to join the sustainability story.

Chapter 5 Conclusion: Engagement, Recording and Communities

This chapter completes the learning cycle by offering my reflections of what I have learned through this practice-led study, and how action research has impacted on the main actors, including myself, as well as the community of Fremantle. I also offer the possibility that the Prezi, through its adaptation as a contextualised 'roadmap', can be considered a contribution to Australia's Innovation Agenda. The chapter

concludes with the original proposition, finding the best way to communicate sustainability in action, and drawing appropriate conclusions. This is followed by recommendations for further research into the application and dissemination of the adapted Prezi product.

1.5.3 Appendix

A list of films in their order of appearance in the Prezi is contained in an Appendix. It is a useful reference guide to have when entering the Prezi because it gives each film's length, subject matter, where it was filmed, and date it was filmed.

1.5.4 References

This section includes a full bibliography of all source material referred to in the exegesis. Referencing uses the American Psychological Association 6th Edition method of referencing (APA 6th). However there is an issue regards APA's requirement for the "last update date" when referencing YouTube films. All of the YouTube films referenced in the exegesis and embedded within the Prezi were amended⁹ and re-uploaded in 2014 thus all "last update dates" would show dates in April or May 2014 and would confuse the chronology of the order in which they were filmed. For this reason I have referenced Blagg YouTube films with the year they were originally published.

1.6 Issues not Addressed by this Research

This research has been cross disciplinary and generalist in character with many knowledge domains referred to but mostly dealt with in a cursory manner due to being beyond the scope of this research. These knowledge domains include ethnography, leadership, politics, cultural studies, management and organization, and complexity theory.

⁹ All 67 of the Prezi films were made into smaller files to ensure the user does not have to wait for films to open. For this reason they are also lower in quality when viewed 'full screen'.

CHAPTER 2

**THE SUSTAINABILITY PROCESS IN
URBAN LOCAL GOVERNMENT AS
ENABLED THROUGH LEADERSHIP**

Cities can be seen as an environmental time bomb. They currently consume up to 80% of global material and energy supplies and produce around 75% of carbon emissions. With current energy intensive modes of urban development, the addition of 3 billion more city-dwellers by 2050 will mean we have no chance of limiting climate change.

Bakker, 2014.

The fate of the world is in its cities; the fate of Australian cities is in our hands.

Neuman, 2012.

2.1 Introduction: The City is Central to Imperatives of Sustainability

It is generally accepted that cities are the major cause of increasing emissions contributing to climate change. With increased population, as Bakker warns in the opening quote, we are clearly entering into unknown territory. Currently, due to the low-density design of its cities, Australia has one of the largest per capita carbon and ecological footprints in the world (Garnaut, 2008; Global Footprint Network, 2010). Rauland and Newman argue that “the current design of Australian cities based on large houses in low density, dispersed suburbs, which are highly car dependent is extremely resource and emission intensive and ultimately unsustainable” (Rauland & Newman, 2011, p. 1). At the same time, city populations are rapidly growing and resources are diminishing. The biggest imperative for cities and sustainability in Australia arises from population increases predicted by the Australian Bureau of Statistics (ABS) to more than double by 2050 (Bolleter, 2013). In Perth our built form will need to more than double to accommodate this increase, but we only have 37 years to achieve what took our forebears 200 years. Moreover, these changes will occur in a carbon-constrained world of rapidly diminishing resources, climate change and, particularly since the Global Financial Crisis (GFC), financial uncertainty.

Meanwhile, following current state government policy,¹⁰ Perth, with the lowest proportion of planned ‘infill’ development¹¹ compared to the rest of the nation,¹² builds mostly on ‘greenfield’¹³ sites, eating into Perth’s Swan Coastal Plain, one of the world’s biodiversity hotspots, of which 70% has already been cleared. With the ABS’s projected population increases, an extra 480 km² of suburbia will need to be found – presumably in what remains of Perth’s coastal plain (Bolleter, 2013).

This story is repeated across Australia and much of the rest of the urbanised world. Aside from the tragic loss of biodiversity, the true cost of urban sprawl also includes automobile dependence (in the context of peak oil), and the cost of social and physical infrastructure required to build on greenfields.¹⁴ Building on greenfield sites also means the loss of productive farmland, further constraining our future as ‘food miles’¹⁵ become more costly and vulnerable because of peak oil. Many specialists argue convincingly that we cannot afford unsustainable development like low-density city sprawl that increases CO₂, destroys biodiversity, and makes cities vulnerable to peak oil and global debt. Rauland and Newman (2011) propose a city model based around the concept of “decentralised management of resources” through “new precinct-level low-carbon technologies”,¹⁶ which are dependent on “sufficient density”. The authors conclude, “if this can be achieved, then this new model for dense, green centres can be a key factor in reducing Australia’s per capita carbon footprint” (Rauland & Newman, 2011 p. 6). Urban consolidation arguably reduces the city’s carbon footprint, however there are sustainability academics and communities who disagree. This argument will be examined in section 2.3 since it plays a major role in the implementation of green density both in Fremantle, the city investigated in this research study, as well as globally.

¹⁰ In Australia there is no overall federal control over city planning, only funding and working with the states through COAG (Council of Australian Governments) that sets urban agendas as part of its remit. There is a current agenda to make Australian cities more efficient and sustainable by greater consolidation (State of Australian Cities, 2013).

¹¹ ‘Infill’ refers to urban environments.

¹² A total of 47% compared to 70% in Sydney (Bolleter, 2013).

¹³ ‘Greenfield’ refers to undeveloped land.

¹⁴ An Australian study found the cost of infrastructure amounted to approximately \$85,000 per dwelling built on the urban fringe (Trubka *et al.*, 2010).

¹⁵ A ‘food mile’ is a unit of measurement for every mile over which a foodstuff is transported from producer to consumer.

¹⁶ Relating to trigeneration, water management and waste treatment.

This introduction has established the imperative need for cities to change, that cities are central to issues of sustainability, and that urban consolidation through ‘dense green centres’ is arguably how cities need to respond. Section 2.2 states the aims of this chapter and outlines its structure.

2.2 Aims of this Chapter

The aim of this thesis is to establish the role of digital media and the position of film as a social ‘voice’ in sharing knowledge and exploring how we know what we know. It asks how digital media can be utilised as a process of research, and ultimately, its capacity to narrate history and sustainability.

This specific chapter does specifically establish the issues around cities and sustainability:

1. through the argument around dense green cities as a response to the changes sustainability demands;
2. through the history and nature of sustainability as integrated and evolving to establish and foreground the processual nature of sustainability; and
3. through urban local government as enabled through leadership.

Section 2.3 investigates the argument that while ‘green density’ can be seen as a ‘sustainability multiplier’ in reducing emissions and making cities better places to live, there is opposition and a growing divide within sustainability discourse about what might constitute a sustainable city. This study therefore affords a closer look at the processes of sustainability in a city.

The following section 2.4 defines sustainability through a brief examination of its history to understand how it might resolve divisive issues such as density.

Sustainability is shown to be essentially process-driven and integrative through its inclusive participatory nature. The section goes on to examine the complex, dynamic, and adaptive nature of sustainability and the challenge of depicting what is often invisible in a sustainability narrative.

Section 2.5 explores sustainability as a journey foregrounding its depiction as a ‘roadmap’ in the Creative Production. In response to the critique that the sustainability journey has no specific destination and serves to justify incremental rather than radical change, this section argues that its inclusive participatory nature necessarily makes the sustainability journey slow and incremental. However the steps towards sustainability are mostly towards an articulated vision and driven by strategic planning.

Section 2.6 focuses on local government, the mechanism by which sustainability in cities is mostly enabled through its localised decision-making and closeness to the people, as established by the UN’s Agenda 21 (1992). However mayors and their councils are found to often lack the necessary political will to initiate change and the concept of sustainability is often misunderstood resulting in a gap between sustainability rhetoric and changes on the ground, although increasingly there are glimpses of green urbanism to be found all over the world. This gap indicates a need for demonstrations of sustainability to show how sustainability policy can be implemented at local government level.

Section 2.7 argues that for a city to transform visions into concrete actions good governance is required. Governance guides planning and strategy and is enabled through leadership. Leadership skills in local government are critical in driving processes of change and scaling impediments to sustainability. A mayor needs to communicate a compelling narrative to break through the massive inertia of entrenched opinion and status quo reflected in mainstream media.

Section 2.8 links sustainability and cities with digitality through network interconnectivity. Cities that utilise global and local networks are more likely to become sustainable, that is economically, environmentally and socially successful – all at the same time.

The final section summarises the main points to conclude that a new narrative about a new way of thinking is necessary to help cities implement sustainability.

2.3 The Density Argument

The density conflict is described by Elizabeth Farrelly, architecture academic, journalist and proponent of ‘green density’, as the “green war of the future”. Her piece in *The Sydney Morning Herald* is based on Fremantle, the city that is the subject of this study. Farrelly described Fremantle’s anti-density push as “the nimbyism of the future”¹⁷ pitting “traditional green think” against “urbanists” to “split green from green” (Farrelly, 2012). Other ‘green vs. green’ stories are also emerging arising out of conflict between neighbourhood activists and advocates for sustainability and cities.¹⁸ Newman refers to this division as ‘the green risk takers’ and the ‘green conservatives’ (Newman, 2005). This cultural divide shapes the politics of Fremantle and according to Newman, is rapidly becoming the key contestation in many global political issues such as climate change, peak oil, and the politics surrounding issues of urban sprawl vs. urban regeneration in almost every corner of the globe (Newman *et al.*, 2009).

Density is a response to low-density cities, which are extremely resource and emission intensive. To make a business case for density it is necessary to measure what a city consumes. Greenhouse gas (GHG) emissions can be measured and communicated by a ‘carbon footprint’.¹⁹ This form of measurement is based on a model developed in the 1990s known as an ‘ecological footprint’.²⁰ This model was understood through the image of the multiple planets needed if everyone on Earth were to consume as much as the person calculating their ecological footprint. In a 2013 Barcelona study the authors contend it is important to understand a city in this way “in order to ascertain which urban model exerts a lower global environment impact in order to guide land planning and urban development towards achieving

¹⁷ Nimbyism comes from Not In My Backyard (Nimby).

¹⁸ See *Green vs. Green* (2012) by Seattle journalist Roger Valdez who claims “Seattle would have more environmentally friendly buildings if environmentalists got out of the way”.

¹⁹ In the context of a city, the term “carbon footprint” is defined in a practicable way by Wright, Kemp and Williams writing in the journal *Carbon Management* (2011) as “a measure of the total amount of carbon dioxide (CO₂) and methane (CH₄) emissions of a defined population ... considering all relevant sources, sinks and storage within the spatial and temporal boundary of the population”.

²⁰ The term ‘ecological footprint’ was developed by Canadians, Bill Rees and Mathis Wackernagel in the early 1990s. It measures the space needed to provide the resources and absorb the waste that comes with our model of life for one year (Wackernagel, 1994).

more sustainable cities” (Muniz *et al.*, 2013, p 1). The scholarly literature and discourse in this rapidly expanding field of carbon expertise in cities is leading the way in reducing GHG emissions through precinct planning and built form. British engineer Allan Jones, who works in localised energy production using ‘tri-generation’ technology,²¹ began working with local authorities in Woking (outside London) in the early 1990s. Within 14 years Woking’s CO₂ emissions had been reduced by 78% and it was no longer connected to the main electricity grid. Jones’ success led to work with the City of London as leader of the London Climate Change Agency aiming to achieve 60% cuts in carbon emissions by 2025. In 2009 Jones began working with the City of Sydney, Australia’s first carbon-neutral city,²² to deliver a green infrastructure plan to reduce Sydney’s CO₂ emissions by 70% by 2030 (Newby, 2008; Doogue, 2008).²³

Sustainability in cities is not just about scientific and technological innovations; it also encompasses social justice issues in creating a better life for everyone, not only the rich. A city needs a diversity of housing and jobs, accessible public transit and friendly public spaces if it is to be enjoyed by all. Including nature in cities is increasingly playing a part, as biophilic academic Tim Beatley points out, there are compelling reasons why green urban density is the answer to cities and their regions becoming more sustainable (Beatley, 2011). Newman summarises a sustainable city as one that ‘improves its liveability’²⁴ while ‘reducing its footprint’ (Blagg, 2011a).

²¹ ‘Trigeneration’ refers to electricity produced by small local power plants that produce both heating and cooling, fuelled by natural gas or biofuel at a fraction of the cost of traditionally generated energy.

²² The City of Fremantle was the second city in Australia to be declared carbon neutral.

²³ Allan Jones was invited to Fremantle by Prof Peter Newman, director of the CUSP Institute, and met Mayor Brad Pettitt in April 2011 at an event filmed for this research study.

²⁴ Newman and Kenworthy define ‘liveability’ as “about the human need for social amenity, health and wellbeing and includes both individual and community wellbeing” (Newman & Kenworthy, 1999). Liveability in terms of ranking the world’s most liveable cities is arguably quantified by various agencies including Economist Intelligence Unit’s Livability Ranking and Overview (Economist, 2013), Mercer’s Quality of Living survey (Mercer, 2014), and Monocle’s most Livable City survey (Monocle, 2013). They include criteria such as safety, connectivity, urban design, public transport and so on.

Curtin University Sustainability Policy (CUSP) Institute
Research on Density

Part of the journey into sustainability undertaken by the City of Fremantle related to its close relationship with CUSP, particularly with Peter Newman and his research students. Their work is therefore a major influence on the project, and on me as part of CUSP. Newman sees density as a ‘sustainability multiplier’ through the synergies that happen when density and liveability are brought together (Newman, 2014). His team includes: Roman Trubka, whose thesis *Agglomeration Economies in Australian Cities: Productivity benefits of increasing urban density and accessibility* (2011), sees proximity as generating knowledge exchange and economic benefits; Anne Matan, whose thesis *Rediscovering urban design through walkability: An assessment of the contribution of Jan Gehl* (2011), sees density and walkability improving health and wellbeing: “In our present low density cities, people live more and more isolated lives leading to environmental and health problems, as well as social and economic ones ... Yet streets have been the heart of cities throughout the history of urban development”; Vanessa Rauland, whose thesis *Decarbonising Cities: Certifying Carbon Reduction in Urban Development* (2013), sees density and reduction of carbon footprint going hand in hand with amenity and quality of life; Colin Beattie is investigating density and energy through localised low-carbon technologies (Beattie & Newman, 2011); Cole Hendrigan is investigating the potential for integrated mixed-use medium-density built form clustered around transit nodes in a regional plan for Perth; Jana Soderlund is investigating ‘biophilic’ cities through bringing nature into cities, particularly dense cities, through introducing biophilic elements to streets and buildings in order to improve social and physical wellbeing, the reduction of carbon emissions and the restoration of biodiversity. Density is seen as the core issue driving most sustainability issues in cities.

Box 2.1: A sample of CUSP Institute research on density

However, arguments and concerns about density emerge from both the community and academia. At a 2012 Sydney conference, ‘Governing City Futures’, Queensland sustainability academic Jago Dodson and others expressed dissatisfaction with the

prevailing sustainability notion of increasing housing density in cities. They believed that it was necessary to focus on the suburbs where most Australians prefer to live, including Dodson himself. Dodson also rejected research that claimed density reduced GHG emissions²⁵ and asserted there was no objective scientific evidence to say housing density increases liveability (Dodson, 2011b). The argument about housing density in Australia is a fraught one. Michael Neuman, a keynote speaker at the 2012 conference on City Futures, suggested the word ‘density’ not be used in discussion because it invited emotional reactions. The authors of the Barcelona 2013 paper referred to earlier conclude: “studies connecting relationship between urban form and ecological footprint are still recent and scarce” (Muniz *et al.*, 2013, p. 1). Newman and Kenworthy (1989, 1999) suggest that the relationship has been clear for many decades.

Sustainability in cities, especially when it comes to housing densities in cities, is always likely to be a debate that is fraught. It is a challenge involving cultural and political values. It is therefore important to establish sustainability as processual and adaptive in order to foreground its depiction as a journey in the Creative Production of this thesis.

2.4 History of Sustainability and Cities: Resolving the ‘Green vs. Green’

[Sustainability is defined as:] Meeting the needs of current and future generations through integration of environmental protection, social advancement and economic prosperity.

Government of Western Australia, 2003.

It can be argued sustainability was born in 1962 when Rachel Carson’s *Silent Spring* was published. Her ability to write about the interconnectedness between nature and human use of pesticides marked the beginning of the modern environmental

²⁵ According to Dodson’s research, not only do the inner-city middle-class have a higher rate of consumption (second house, overseas travel) than those who live in the suburbs, but there is “robust scientific evidence high-rise are the worse performers [in emitting GHG]” (Dodson, 2011b).

movement. The next major ecological figure to catch the mainstream media's attention was Paul Ehrlich whose book, *The Population Bomb* published in 1968, argued how the population explosion would "destroy the planet".²⁶ The global sustainability model grew from the need to resolve the tension between ecologists (who saw most development as essentially negative), and those working for social justice (especially in low- and middle-income countries), who saw development as crucial to meeting human needs. At the 1987 United Nations World Commission on Environment and Development 'sustainable development' was defined as: "Development that meets the needs of current generations without jeopardising the needs of future generations" (United Nations, 1987).²⁷ Fifteen years later, at the UN World Summit on Sustainable Development in Johannesburg, the words 'sustainable development' were replaced by 'sustainability' (United Nations, 2002). This was a significant decision; 'sustainability' had come to mean the integration of the needs of environment, economy and social justice. At that time Peter Newman and his research students were preparing a 'State Sustainability Strategy' for the state government of Western Australia,²⁸ actively seeking out sustainability stories to find out what sustainability meant because the meanings were not clear (Newman, 2005). The strategy was published in 2003. Its definition of sustainability, based on the global sustainability model, opens this section. The strategy included the following excerpts (Government of Western Australia, 2003):

The sustainability agenda has emerged from people's deep desire to preserve and protect the best in their environment (the human, built, and natural environment) and at the same time recognition of the need for change.

Sustainability helps us to define the changes we want from development: leadership from government; the vast and largely untapped potential of business to contribute; the desire of

²⁶ A thesis he still holds today.

²⁷ This was known as the Brundtland report, 'Our Common Future', commissioned by the United Nations.

²⁸ This was the world's first 'whole-of-government' state sustainability strategy.

communities to provide better places and have a strong sense of who they are and what they want to protect.

These excerpts clearly show values lie at the heart of sustainability and that it is a cultural/political movement. From the strategy emerged a sustainability framework that became the basis for planning legislation and local government legislation and is embedded in a lot of what government now does (Newman, 2005).

Mainstreamed sustainability, as “an integration of environmental protection, social advancement and economic prosperity” (WA State Sustainability Strategy, 2003), can be depicted as three overlapping circles, see Figure 2.1 below.



Image 2.1 The Interlinking Circles model of sustainability.

Source: Newman and Blagg, 2009a.

Here I need to clarify my position. I understand that two of these circles are human-made and that everything lies within the Earth – represented by ‘environment’. The more ecologically correct view of sustainability is seen in the nested concept shown in Figure 2.2 below and favoured by many in the environmental movement:

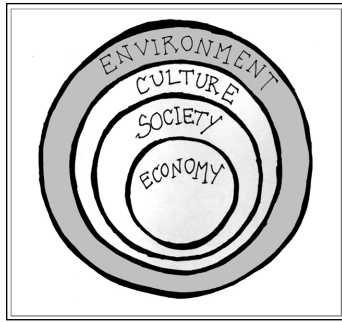


Figure 2.1: The Concentric Circles model of sustainability.

Source: Lowe (1994), cited by Sarkissian, 2009, p. 23.

However, this is part of the issue underlying the conflict outlined in section 2.3 and the need for a sustainability journey as it does not try to integrate the circles, it does not suggest any kind of process for determining how a city can address these issues. It is important to be able to conceptualise all three fields as interconnecting and overlapping, not as separate. Fundamental to understanding the interlinking circle's model of sustainability is an understanding of the different sectoral dimensions involved: the market, the community and the government. This study focuses on the place where those three sectors overlap: people in the same room grappling with change, on a journey together. As mayor of Fremantle, Brad Pettitt sees this concept as the most important part of sustainability (Blagg, 2009a):

Sustainability is so important because it makes those connections – not just between the economy and community and environment, but also between the local and the global. Those interconnections are where the long-term solutions are going to be.²⁹

To achieve the integration of economy, society and environment, sustainability needs to be inclusive and participatory – bringing to the table a range of 'actors' in

²⁹ A year into the study, during an informal chat, Brad told me that the most important thing to know about sustainability was getting those elements of economy, community and environment all happening at the same time at the beginning of every project – a bit like juggling three balls in the air (B. Pettitt, personal communication, October 2010).

dialogue – in the interests of finding common ground and building partnerships. This inclusive collaborative approach is the ethical dimension of sustainability.³⁰

In his teaching on the concept of sustainability, Newman refers to The World Business Council of Sustainable Development (WBCSD)³¹ and their way of seeing sustainability. Unlike ‘GEOPOLITY’ (massive state intervention based on government experts), and ‘FROG’ (First Raise Our Growth, or leave it to the market based on financial experts), sustainability is more like ‘JAZZ’ – “an experiment with ad hoc alliances and innovative forms” (WBCSD, 2000, cited by Newman & Blagg, 2009b). According to Newman, like performing jazz, different sectors can lead at different times: the market has power based on its ability to respond rapidly with new goods and services; government has power based on regulation and infrastructure; and community has power based on its values and visions. While the first two sectors tend to be short-term, the values of the community are long-term and need to set the long-term direction. Newman goes on to elaborate (Newman and Blagg, 2009b):

It’s an approach that brings together government, market and community through partnerships and synergies; it’s not easy, you have to work at it, you have a general direction of where you’re going but all kinds of innovations can be brought into it. People can lead at different times in surprising ways but everyone is essentially working together.

Newman claims that out of this creative approach, ‘magic’ happens (Newman, 2006). Sustainability practitioners are always looking for ways to expand the area where the three sectors overlap to maximise the potentiality of synergies leading to innovation and wins for everyone.

Two other ways of describing the kind of processes that cities must go through in order to grapple seriously with the sustainability agenda are the related concepts of ‘flow’ and ‘emergence’ from complexity theory. In his 2012 Utzon lecture,

³⁰ In one of the sustainability case studies I filmed, *The Green Building Story* (2009), Darren Bilborough, Director of Sustainability at a global engineering organisation, asserted that by applying two of the elements (economy and community) the environment automatically gained. His case study proved him right (Blagg, 2009).

³¹ www.wbcd.com.

sustainability and cities academic Michael Neuman described sustainability as “flow” through “open systems” connecting with each other to create a “networked urbanism” (Neuman, 2012).³² Over the course of time, through the process of entropy,³³ ‘flow’ organises itself to become ‘form’. Taylor *et al.* also refer to the idea of ‘flow’ self-organising to become ‘form’ when they write about sustainability as, “achieving order through uncontrolled interactions between multiple agents producing unpredictable consequences” (Taylor *et al.*, 2011, p. 30). In similar vein Matthew Parnell refers to sustainability as emergent (Parnell, 2012):

We need a new culture to support the pursuit of sustainability as the pre-eminent paradigm, and its social goals. Such a culture will only develop through the phenomenon of emergence.

Some years ago the Australian government published *Tackling Wicked Problems* (Commonwealth of Australia, 2007) using the complexity domain in the need for government to be flexible, innovative, adaptive and collaborative in responding to intractable and multi-causal problems: “complex multi-causal problems require ‘emergent practices’” (Commonwealth of Australia, 2007, p. 3).³⁴

Sustainability is a creative complex process that evolves and emerges in unpredictable ways. These understandings lead this study to consider how might ‘jazz’ or ‘flow’ be captured and depicted to allow sustainability to be made meaningful? The role of media in communicating a new way of thinking for an Earth under threat is critical. This study examines the potential of digital media in the documentary realm to capture and communicate an emergent and unpredictable dynamic ‘flow’. The next section explores how these understandings of sustainability might be communicated through the metaphor of ‘a journey’.

³² Neuman writes “The patterns of interactions ... between individuals and institutions to govern city regions, occur through networks in built and virtual environments” (Neuman, 2011, p. xxi).

³³ The second law of thermodynamics.

³⁴ While this idea has been around for a long time, it is significant a conservative commonwealth government made it into policy.

2.5 Sustainability as a Journey

Writers often refer to the movement towards sustainability as a ‘journey’. Moreover, the use of the word ‘journey’ suggests ‘the hero/heroine’³⁵ who leaves her or his familiar surrounds to go on a quest for something the community needs for its survival and after many trials and tribulations finally returns with new knowledge. Milne *et al.* pursue this idea in their paper, *Creating Adventures in Wonderland: The Journey Metaphor and Environmental Sustainability* (Milne *et al.*, 2006, p. 823, original italics):

The metaphoric use of journey does not merely present sustainability *as if it is like* a journey, or present an argument that sustainability should be like a journey, but that through its use, at least some of us come to know sustainability *is* a journey.

The authors point out that the idea of journey predisposes “an understanding of sustainability as some kind of process rather than as a particular kind of end-state”. Further, “the journey and forward movement through time conveys if not a sense of inevitability, then optimism and hopefulness”.³⁶ It also evokes “images of organisational adaptation, learning, progress, and a movement away from business-as-usual practices” (Milne *et al.*, 2006, p. 821). The authors’ paper is a critique of the ‘journey’ metaphor, that while the journey confers heroic attributes on the part of the ‘actors’, the future remains unspecified:

Without a defined end point, future state of affairs or future condition of (or for) sustainability, though, how is it possible to know one is making progress towards sustainability?

³⁵ The concept of the ‘Hero’s Journey’ is featured in Joseph Campbell’s seminal book on comparative mythology, *The Hero With A Thousand Faces* (1988).

³⁶ The authors note the use of ‘journey’ as metaphor suggests: ‘change’, ‘risk and adventure’, ‘experience’, ‘high degree of experimentality’, ‘full of the unknown’; that change is presented as ‘heroic’; that it takes ‘patience, stamina and moral strength’; that it moves towards ‘completion or culmination’; that change efforts are portrayed as ‘noble and good’; and that it takes ‘faith and patience as well as tangible resources’ (Milne *et al.*, 2006, pp. 812-821).

While sustainability has no destination or end point as such, as Pettitt says, “there is no point of arrival” (Blagg, 2013a), there is a pathway – in Fremantle’s case a Strategic Plan – described by Pettitt as “a roadmap for the next five years,” (Blagg, 2010c).³⁷

Sustainability is an ongoing emergent movement in the direction of sustainability. It can be measured through strategic planning with quantifiable outcomes within specified time frames, but it is always ongoing. Often, though not always, it begins with a vision, and then traces the pathway to reach it. Newman and Kenworthy write: “Sustainability is a vision and a process, not an end product” (Newman and Kenworthy 1999, p. 5). An understanding of the concept of sustainability as a vision (or narrative) and how the journey moves toward that vision is central to sustainability and reflects a new way of thinking. Leadership writer Joseph Jaworski, influenced by the new ‘biology of cognition’, describes how we create the world through the experience of living it: “Cognition is not a representation of the world ‘out there’ but rather a bringing forth of the world through the process of living itself” (Jaworski, 1996, p. 185). Wendy Sarkissian, in her book *Kitchen Table Sustainability* (2009) quotes “eminent systems ecologist Buzz Holling”: “We must first establish an impossible vision, then take the first possible step, learn from the experience and then take the next step, together” (Sarkissian, 2009, p. 5). Sarkissian, who focuses on community engagement as a ‘pathway to sustainability’, describes it as a ‘quest’ (Sarkissian, 2009, p. 6):

Ongoing processes of deliberation, questioning, refinement, agreement-making, experimentation, review and adjustment must underpin how each community defines its own quest for local and global sustainability.

The ‘pathway to sustainability’ reveals that change towards sustainability is not only unpredictable and emergent, as established in the previous section; it is also iterative and incremental. This study responds to Milne *et al.*’s criticism that the ‘journey’ metaphor “serves to justify and reinforce incremental rather than radical efforts to

³⁷ Fremantle’s ‘roadmap’ had specified outcomes along the way. At the conclusion of the study Mayor Pettitt measures Fremantle’s progress in achieving those specified outcomes with a ‘scorecard’ (Pettitt & Blagg, 2013).

change” (Milne *et al.*, 2006, p. 823) by asserting that sustainability, because of its democratic nature,³⁸ is necessarily slow, however much one wishes otherwise.³⁹ This study also argues that while the journey is unpredictable and open-ended, there is always a pathway – a plan, a strategic direction - with concrete and quantifiable outcomes along the way. Indeed, sustainability is nothing without change on the ground.

Through exploring the integrative, emergent, step-by-step nature of sustainability and the importance of journey as a metaphor in sustainability writings and in practice, this chapter is foregrounding the shape of the Creative Production. The following section examines the role of local government as the mechanism by which cities become more sustainable. It sees the lack of a holistic understanding of sustainability through the absence of progress made by local governments in making their cities more sustainable. However increasingly there are glimpses of ‘pockets of change’. The section concludes with the need for demonstrations of sustainability to fill gaps in knowledge of how urban local government implements sustainability.

2.6 The Mechanisms by Which Cities Change

Precisely because so many of the world’s problems arise from the poor design, weak governance, and mismanagement of cities, it is imperative that we learn how to transform our cities into centres of the world’s solutions.

Brugmann, 2009.

The opening quote is expressive of sustainability thinking in its viewing of a problem as the source of a solution. This section begins with a brief history of local government and sustainability before examining research that reveals the gap between sustainability rhetoric and changes on the ground. However, things have recently started to change – principally because idealistic people are prepared to take risks.

³⁸ Democratic refers to sustainability’s inclusive participatory nature.

³⁹ As Mayor Brad Pettitt fantasises in *Green vs. Green* (Blagg, 2010a).

At the 1992 UN Conference on Environment and Development, held in Rio de Janeiro, a significant document, *Local Agenda 21*, was published with a focus on “the role of cities as central actors in the Earth’s ecosystem” (Brugmann, 1996, p. 363). Urban local government, through its powers in planning and decision making, was seen as the primary mechanism by which cities would change to become more sustainable (UNCED, 1992):

Local authorities construct, operate and maintain economic, social and environmental infrastructure, oversee planning processes, establish local environmental policies and regulations, and assist in implementing national and subnational environmental policies. As the level of governance closest to the people, they play a pivotal role in educating, mobilising and responding to the public to promote sustainable development.

Jeb Brugmann, an influential writer about cities and sustainability, founded Local Governments for Sustainability (LGS) in 1989.⁴⁰ In the early 1990s Brugmann became the driving force behind the implementation of Agenda 21 using LGS to lead local governments towards sustainable development. To measure the extent they were taking up Agenda 21, Brugmann conducted a ‘Local Agenda 21’ survey in 1996 (Brugmann, 1996). In a review of local government, carried out 13 years after his initial investigation, he found that aside from ‘the common good’ chronically pitted against ‘powerful self-interests’, “most everywhere, planners and civic leaders lacked a nuanced, *shared understanding* of any urbanism by which to shape growth and investment in their cities” (Brugmann, 2009, p. 206, author’s italics). He noted that while more than 10,000 cities and towns in 115 countries originally participated in implementing Local Agenda 21 through their planning approaches, in effect organising a ‘governed negotiation process’, thirteen years later, reviewing ‘these best practices’, he found wide gaps between local agendas and actual local development (Brugmann, 2009, p. 206).

⁴⁰ Local Governments for Sustainability went on to become International Council for Local Environmental Initiatives (ICLEI), the world’s leading association of local governments dedicated to sustainable development (www.iclei.org).

It seemed local authorities could negotiate ‘a governed process’ but it wasn’t translating into action. Other research studies support Brugmann’s findings. A 2008 study by Saha and Patterson examined principles of sustainable development in the planning practices of 216 US cities. The authors found sustainability was often taken to mean ‘protecting the environment’. They also found little evidence that cities were connecting sustainability to equity and social issues. Rather, initiatives were conceived and carried out in a ‘piecemeal and *ad hoc*’ manner and that while sustainability had been the dominant policy paradigm in recent years; there was a lack of ‘political commitment’ to taking action (Saha & Patterson, 2008). In a 2011 study investigating sustainability city planning in many cities (USA, UK, Europe, and cities in developing countries), effective implementation of sustainability was also found to be limited. The author concluded: “More specific linkages are needed between sustainability theory and practical application” (Wheeler, 2011, p. 103).

Sustainability in local government becomes problematic when it lacks an overarching framework. According to Newman, leaving out a major element of sustainability⁴¹ signifies a lack of a holistic understanding of sustainability (Newman 2005; Newman 2006). Occasionally environmental protection mandates diminish economic growth and reduce opportunity for those at the lower end of the socio-economic scale.⁴² Sometimes projects fall apart because the community has not been engaged in decision-making. The research outlined above points to a lack of ‘shared understanding’ of the holistic nature of sustainability, and of political leadership. These lacks expose gaps in knowledge requiring demonstrations of ‘practical application’ of sustainability in cities. Pettitt expresses this need for ‘stories that inspire’ (Blagg, 2009a):

We have to fundamentally redesign our cities because if we don’t, if we keep doing it the way we’ve done it, the world we live in, in 50 years time, is not going to be a pleasant one. It’s those stories that inspire, that show hey, this is how it’s done. This is how you make a liveable place, a place that doesn’t rely on the automobile, a place that doesn’t have carbon emissions, a place that has great green architecture and a place that still is a community and is

⁴¹ Those elements being economy, community and environment.

⁴² As was the case in Fremantle.

still affordable for lots of people. By doing that the rest of the world will see, okay, we've got to move forward.

Australian cities have also been slow to address the sustainability challenge. A 2006 Australian study, *Overall Local Council Sustainability in Australian Local Government*, found that 'financial sustainability' (to the exclusion of other parameters of sustainability), was "the most significant policy question at issue in contemporary debate on Australian local government" (Dollery *et al.*, 2006, p. 2). The authors suggest the primary cause of council failure is "infighting between councillors" leading to "policy gridlock" and a subsequent loss of public confidence. Local governments are further constrained by higher tiers of government control: "several functions formerly handled by local government are in fact strictly controlled by state and commonwealth regulation and their effective discharge is often determined by finance controlled by these higher tiers of government" (Dollery *et al.*, 2006, p. 20). Indeed, a conservative state like Western Australia, wary of even the word 'sustainability', has the power to block or to slow down sustainability initiatives from an innovative local authority.⁴³ In a 2011 article, *Making a Place for Policy in our Suburbs*, Dodson comments on the ineffectiveness of all three tiers of government with regard to urban planning: "State governments have the greatest role in urban planning through their metropolitan schemes but they have mostly stuck to bumbling managerialism that applies neither the wit nor appetite for long-run urban reform" (Dodson, 2011b). In 2011 the Commonwealth government announced a 'national urban policy',⁴⁴ however, Dodson questions whether they lack, "the critical mass to sustain lasting, coherent and strategic policy change" (Dodson 2011b). At the local scale, he argues, "most of our cities are governed by small municipalities which struggle with challenges beyond their local bounds" (Dodson 2011b). These assertions may indeed be true. However, if sustainability can be considered a creative response to 'wicked problems', it is of significance to see how far a local government can go in achieving dense green centres despite inbuilt structural challenges.

⁴³ As is the case in Fremantle.

⁴⁴ *Our Cities, Our Future – A National Urban Policy for a productive, sustainable and liveable future* (Commonwealth of Australia, 2011).

Despite structural challenges and a lack of a holistic understanding of sustainability, there are cities leading in change. These include: Seoul restoring its river; Singapore greening its density; New York upgrading old industrial buildings; Bogota building a renewable energy transport system; Paris' Velib bicycling scheme; Portland's light rail and medium-density mixed-use urban form, and many more. There are lessons to be learned from these innovative sustainability initiatives that show what is possible.

The following section examines the critical role governance plays in the effective implementation of sustainability in cities. Good governance provides an overarching framework out of a holistic understanding of sustainability and is enabled through political leadership. Local government can potentially fulfil its potential when it has a mayor with a vision prepared to take political risks.

2.7 The Role of Governance in Sustainability and Cities

Without good governance, ideas do not lead to change on the ground. As Sarkissian explains, governance provides the holistic framework that addresses 'the how' of sustainability: "it holds together all the diverse stakeholders" and sets up "a structure of decision making processes that reflect everyone's interests" (Sarkissian *et al.*, 2011, p. 268). In Neuman's words, "Governance is the sharing of government between government, people and business", seeing 'governance towards the greater good' as intrinsic in his concept of 'flow' (Neuman, 2012). The nature of governance can also be seen in what the WBCSD call 'jazz'. The 'holistic framework' that shapes the 'how' of a city's journey towards sustainability involves strategic planning. According to Bruggman, the 'strategic' city through its urban strategy has the potential to transform into a liveable efficient creative agent of global change (Bruggman, 2009). As strategic head of a local authority, a mayor plays a crucial role in leading this process.

The sustainability process is about finding innovative win-win solutions that could not have emerged from traditional adversarial politics. Sustainability requires a different way of thinking: power is dispersed, traditional boundaries are crossed, citizens are engaged, partnerships are formed, and a different kind of politics emerges. British planning academics, Raco and Flint, describe how this 'new'

politics has replaced “the traditional postwar antagonisms of left and right, with post-ideological discourses, such as those surrounding sustainability, providing an obvious grounding for consensus-based ways of working that look beyond divisions and focus instead on issues that unite disparate groups” (Raco and Flint, 2012, p. 9). Thus, the sustainability journey in local government is pointing to a new kind of politics.

However, without leadership it is doubtful the governance process would succeed. The role of leadership is key. Sustainability in cities requires a leader because it involves a journey into largely unknown territory. Andre Taylor emphasises the role of leadership as, ‘a process of influence’ involving ‘an articulated vision of the future’ that aligns resources to this vision, and motivates and inspires others: “a leader expedites those processes ... through which interdependent actions among individuals combine into a collective venture.” He warns that, “if leadership is missing, major change processes fail” (Taylor, 2010, p. 1).⁴⁵ Taylor’s description of a ‘leader’ applies to Pettitt’s leadership style without which, this thesis contends, Fremantle’s journey towards sustainability may not have been a success. In regard to the potential of an ‘articulated vision of the future’, British academic Stephen Wheeler has this to say (Wheeler, 2011, author’s italics):

If a perceived regional, national, or global *crisis* exists that can be *communicated* to the mass of the public and decision-makers *through new leadership*, then regional political and institutional gridlock can potentially be broken. Potentially, at least, regional planning can then join other levels of activity to address the threats that the current global juggernaut of unsustainable development is creating.

A mayor who can communicate a compelling narrative can potentially break through the massive inertia of entrenched opinion reflected in mainstream media. A mayor needs to make a compelling case for sustainability to bring along fellow councillors,

⁴⁵ I have experienced the truth of this through filming sustainability case studies. One example of leadership in governance that stands out is Brendan Hammond as Manager of Argyll mines (Newman & Blagg, 2009b), and as Chair of the Dampier Port Authority (Blagg, 2013b). As a result of his leadership in strategic planning, both of these organisations became financially successful, allowing sustainability to be seen as an economically profitable model.

administrators, and community. A mayor too far ahead of her or his community risks losing its support, at the same time there is an urgent need for radical change. Educating others is an imperative of leadership in sustainability (Agenda 21, 1992). Jaworski writes: “The conventional view of leadership emphasizes positional power and conspicuous accomplishment. But true leadership is about creating a domain⁴⁶ in which we continually learn and become more capable of participating in our unfolding future” (Jaworski, 1996, p. 182). Neuman and Hull also see sustainability as a ‘learning endeavour’: “this type of governance learning is emergent, evolving from the collaboration of a wide variety of interests” (Neuman & Hull, 2011, p. xxiii). In the context of mainstream media this can be an uphill battle. In Fremantle the local and influential paper was actively hostile to the sustainability agenda, leaving no room for debate. Like Al Gore taking his PowerPoint presentation on climate change from city to city, as mayor, Pettitt took his PowerPoint presentation about sustainability and Fremantle from community hall to community hall.

American political theorist Benjamin Barber, in his book *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities* (2013), argues that mayors may be the best hope for humanity. Barber sees national governments as too small and ineffectual for supra-national leadership and in dealing with negative effects of globalisation,⁴⁷ too large and gridlocked by ideology and partisanship to improve communities. This, he suggests, is the cause of rising dissatisfaction towards national leaders and governments in so many parts of the world. If local governments can show how change can happen, eventually nations will be dragged into it (Barber, 2013a).

Barber’s thesis is that city mayors are increasingly becoming the key change agents in sustainability because they are ‘solutions-focused’ and ‘get things done’. Mayors, by necessity, need to be problem solvers and pragmatists; allegiance to the city comes before allegiance to ideology.⁴⁸ Mayors are usually ‘homies’, part of the neighbourhood, with a significantly larger amount of trust invested in them compared to state and national leaders who are rarely if ever glimpsed. Unlike

⁴⁶ Jaworski also describes creating a domain as ‘setting the stage’.

⁴⁷ The Copenhagen Climate Summit (2009) did not reach agreement on action regarding climate change because nations were focused on defending their sovereign rights.

⁴⁸ Note Mayor Bloomberg’s changing political affiliations from Democrat to Republican to Independent.

abstract concepts of ‘state’ and ‘nation’, cities are where most of us live – profoundly multicultural, with open (rather than closed) borders, participatory and democratic, with a long and rich cultural history (Barber, 2013b). Perhaps the best-known mayor in the world is New York’s Michael Bloomberg, a city sustainability advocate who sees innovation as key: “We will continue empowering leaders to drive innovation, reducing the barriers they face, and supporting all those who keep challenging the status quo with innovative new ideas” (Bloomberg, 2012). However, as Bloomberg writes, “taking risks means taking on special interests. It means being attacked in the press. And for elected officials, it means potential consequences for your re-election” (Bloomberg, 2012). Bloomberg and his council have introduced innovative new ideas including their PlaNYC (sustainability strategy), ‘the library in the park’, the high-line park (restoration of industrial sites), ‘street diets’ that see the reduction of roads in favour of parks and benches to sit on, and an extensive bike-way system to name a few.⁴⁹ Political leadership in sustainability is emerging from cities, in stark contrast to the lack of leadership at a national level.⁵⁰ Barber’s view was reiterated in a recent article in *The Guardian*, *Strong City Mayors Advance the Green Agenda*, giving examples of how cities in the UK and around the world are going green while supporting economic growth, “demonstrating the importance of having strong, committed leaders pushing this agenda” (Nohrova, 2014).

So far we have looked at some of the characteristics of a mayor, which include creating a compelling narrative, putting the city before ideology, being pragmatic and taking risks, educating the community and continually learning. Now we examine how ‘character’ can inspire others to move from despair about our future to hope – that we can all make a difference.

A mayor who can create an atmosphere of open ongoing learning contributes toward the empowerment and enabling of all of us to contribute to ‘our unfolding future’.

Jaworski suggests this movement from resignation to possibility comes as a result of

⁴⁹ Both Bloomberg and Mayor Boris Johnson of London are famous for riding their bikes. Mayor Celia Wade-Brown of Wellington rode her bike to the airport to greet Hilary Clinton, and the subject of this study, Mayor Pettitt, also rides a bike. It is perhaps a symbol of both the reduced carbon footprint but also the local, accessible politician.

⁵⁰ When in opposition, current Australian Prime Minister Tony Abbott claimed, “We [the national government] stick to our knitting” to explain why they would fund road rather than rail (Carey & Gordon, 2013).

‘creative leadership’ and notes that it exerts “an enormous attractiveness ... because people are attracted to authentic presence and to the unfolding of a future that is full of possibilities” (Jaworski 1996, p. 185). This combination of openness and learning, hopefulness rather than cynicism, seeing obstacles as challenges, problems as teaching moments, brings to mind Barrack Obama. It is of interest that Jaworski views these qualities of leadership as more to do with “our total orientation of character and consciousness, than with what we do” (Jaworski 1996, p. 182).

This section has demonstrated that without good governance, sustainability cannot succeed. Good governance is holistic, inclusive, and participatory – it needs to reflect all our interests – and structures change through planning and strategy. Leadership is key, a mayor needs to bring others on side through a compelling narrative and an atmosphere of open ongoing learning that enables others to contribute.

The following section examines one of the key features of all cities doing sustainability innovation – the integration or interconnectivity of their city processes through digitality.

2.8 Sustainability and Digitality

Cities working together through digital networks increasingly plays a major role in how cities are pursuing the sustainability agenda. Cities are becoming ‘smarter’ and more sustainable together – as Bruggman writes, “Dreaming locally, collaborating globally” (2009).⁵¹ Barber also puts a heavy emphasis on digitality in the sharing of ‘best practice’ through international intercity cross-border institutions including: United Cities and Local Governments (UCLG); The International Council of Local Environmental Initiatives (ICLEI); Citynet (Regional Network of Local Authorities for the Management of Human Settlements) in Asia; City Protocol in Barcelona; US Conference of Mayors; European Conference of Mayors to name a few (Barber, 2013a). Neuman and Hull point to ‘connectivity’ both literally and digitally, as a source of prosperity (Neuman and Hull, 2011, p. xiii):

⁵¹ Bruggmann traces collaborative interconnectivity through the Internet back to ‘urban networks’ in the 1970s, linking cities to the emergence of digitality (Bruggmann, 2009).

Those city regions that can integrate service delivery for the greatest number of people via multi-modal transport links with widely available broadband and cellular connectivity are precisely those perceived to be enjoying social and economic prosperity.

Today a city's success is intrinsically bound up with its capacity 'to network'. The City of Greater Geraldton, a regional city in Western Australia, made transport links and digital connectivity their strategic goal.⁵² Sydney sees itself as the 'digital capital of Australia'.⁵³ Leaders in sustainability are pointing to the value of digitality as a tool for urban and global networking and as a source of entrepreneurship and innovation.⁵⁴ 'Urban networks' enable what Neuman refers to as 'flow'; global networks enable the sharing of best practice. Increasingly the question seems to be: what would a 'smart' city do?⁵⁵ Cities are responding to the sustainability challenge with new and innovative ways of doing things, creating new knowledge through digital media, and sharing it through global networking.

The potential of what sustainability can offer cities is increasingly glimpsed through the Internet and social media, or travel – both means increasing exponentially from the mid 2000s when digital interconnectivity took off. And, both factors significantly contributing to increasing GHGs.⁵⁶ Both the Internet and travel allow glimpses of what this thesis calls 'pockets of change', increasingly seen on our streets and in public spaces across the world. For those interested in sustainability, one can see these glimpses as sustainability leaders at work and see what is possible. Seeing is believing. Therefore, while this chapter has examined the lack of progress of local

⁵² 'Geraldton Vision' was launched in July 2012 by then federal Minister for Regional Development and Local Government, Simon Crean, with substantial financial government support.

⁵³ The idea for Digital Sydney emerged from the business community and was supported by NSW Trade and Investment. In 2010, the Digital Sydney Advisory Team, comprised of industry experts and digital thought leaders, was appointed by the NSW Government to promote Sydney and NSW as Australia's digital capital (digitalsydney.com, 2013).

⁵⁴ See the potential of the Internet to empower individual entrepreneurs and reshape the economy without traditional gatekeepers in Alexis Ohanian's book, *Without Their Permission* (2013).

⁵⁵ Borrowed from Dampier Port Authority CEO Steve Lewis who continually asks, "What would a smart port do?" (S. Lewis, personal communication, November 22, 2013)

⁵⁶ In a 2008 study ICTs were found responsible for 2% of global GHG emissions. This is expected to double by 2020 (The Climate Group, 2008). Digitality has not replaced air travel, the IPCC in their 2005 report, established aviation was responsible for 3.5% of anthropogenic climate change, which could grow to 5% by 2050.

authorities in implementing sustainability over the last 20 years (due to a gap between theory and practice and a lack of political leadership), the emergence of digitality and global networks amplifies ‘pockets of change’ and makes the task of sustainability and cities just a little easier.

In the final section this chapter summarises its main points and identifies the need for a new narrative that encompasses new knowledge informed by a moral system – to fight for the welfare of all.

2.9 Conclusion: the Potentiality of Sustainability and Cities

This chapter establishes an understanding of the imperative need for change/sustainability in our cities. The consensus amongst sustainability academics and practitioners is that ‘green density’ is the answer to ‘reducing a city’s footprint at the same time as improving its liveability’, though this is argued by some.

Sustainability has the potential to resolve conflict through a process that can be described as ‘jazz’, bringing together government, market and community through partnerships and creative synergies. Sustainability is an open-ended emergent process, not an end product or capacity. Many authors write about sustainability as a ‘journey’ with no specific point of arrival; life continues to unfold with new choices to be made. In examining local government as the mechanism by which cities change, a gap was found between the sustainability rhetoric of cities and changes on the ground. Often sustainability was applied in a piecemeal ad hoc manner. Overall, local authorities have problems implementing sustainability because of a gap in knowledge between theory and practical application and a lack of political leadership. Sustainability needs good governance and strategic direction if it is to be successful. This study points to Barber’s work (2013) suggesting mayors may be sustainability’s best hope, and the significance of their role in the absence of leadership from other tiers of government. Cities and digitality are linked in terms of a city’s success. With the rise in ICTs and the increased capacity for sharing best practice, change can increasingly be seen happening in pockets everywhere.

While a few cities have made a start, there is still much to be done.⁵⁷ This chapter concludes we are on the cusp of a new era and we need a new narrative that can communicate sustainability in action to fill the gap between theory and practice of sustainability. The sustainability narrative needs to encompass the holistic emergent open-ended nature of the sustainability journey that reflects a new way of thinking. Perhaps there is an Australian contribution to global discourse on city mayors as key change agents in sustainability. This is the implied conclusion of the chapter and one that will be pursued in further chapters.

The next chapter establishes the epistemology and methodology this study utilises to show that the processual emergent nature of sustainability is best communicated through a processual methodological approach, in this case, reflexive ethnographic documentary in the digital realm. While the specific form and nature of this documentary is specifically located within the framework of Pettitt's sustainability agenda for Fremantle, the broader principle that this thesis identifies, that a processual journey is best communicated through a processual methodology, can be applied to other settings, given the universality of digitality.

⁵⁷ For those interested in sustainability, change is being recorded for everyone to read about, especially in the books and films by Newman and Beatley, who constantly find seeds of hope emerging in every continent. See *Singapore: Biophilic City* (Newman *et al.*, 2012) and *Christchurch: Resilient City* (Newman *et al.*, 2014).

CHAPTER 3

**To Establish an Epistemological Foundation for
the Action Research Mode of this Inquiry
through Narrative Analysis and the Role of
'Voice' in Cinematic Presentation**

In the face of such a complex global issue [as climate change] the efforts of individuals can feel futile. Yet it is at precisely this time of crisis, we find ourselves equipped with exactly the tools and infrastructure required to – as individuals – facilitate communal, societal and global collaboration and action. I do not see coincidence here. The solutions are there, we just have to apply them.

Sustainability Digital Communicator, [Chris Wash](#), 2012.

3.1 Introduction: Digital Media in the Documentary Realm

This chapter links the relatively well-known socio-political subject of this thesis, sustainability and cities, to the relatively less well-known approach/methodology of digitality, which this study utilises in its investigation of sustainability and cities. Digitality refers to the condition of living in a digital culture, a concept introduced in Chapter 1, pertaining to global accessibility to digitised content transmitted over the Internet. Brugmann traces digitality back to the first ‘urban networks’ in the 1970s, to say that proximity through urbanism enabled digitality (Brugmann, 2009). By the early 2000s cumulative advances in computer technology, often referred to as Web 2.0,⁵⁸ revolutionised digitality by transferring the power of the World Wide Web to the desktop. Web 2.0 was revolutionary because for the first time, end-users (you and I at home at our ‘desktops’) became an integral part of the Internet as creators of user generated content in a virtual community. This two-way street allowed interaction and collaboration and led to the invention of Facebook in November 2004 and YouTube in November 2005 (though it was a year or so before either became mainstreamed). This was in contrast to the previous era when users were limited to passive viewing of content. Every computer (and increasingly every network device) was now a potential means of production and distribution of digitised content triggering an ‘explosion’ of new ways of telling stories and sharing knowledge, and

⁵⁸ Dietzen, quoted by Knorr, described Web 2.0 as when “The Web becomes a universal, standards-based integration platform (2003).

the possibility of countless interventions, dialogues and exchanges.⁵⁹ This research study agrees with the opening quote to this chapter, it is no coincidence that at the time we most need collaboration and action, digitality equips us with the tools we need to make that happen. We just have to apply them.

The previous chapter established sustainability as a creative processual response to a global crisis that involves change in our cities and in our urban lives. To narrate what is happening in the history of sustainability and cities is to narrate change. This thesis narrates change through digital media⁶⁰ in the documentary realm to probe its capacity to narrate history and sustainability. The Creative Production, via a Prezi, is a digital/filmed ethnographic study, over a period of two and a half years, of local sustainability culture and politics in which Fremantle is the site and Mayor Brad Pettitt the main actor/agent. The gathering of material through digital recordings, photographs and newspaper clippings took place over a period of two and half years, from October 2009 to February 2012, with a Post Script added in 2013, shortly before the end of the mayor's first 4-year term. I also kept a detailed journal where I documented my journey of learnings. This included questioning 'sustainability and cities' and 'digital media' as I attempted to make sense of a range of phenomena to work out the best way to communicate it. The Creative Production of this thesis was subsequently informed by the journaling that took place during the active research stage of this thesis.

This first section has introduced the 'digital world' in the documentary realm as a new way of telling stories and creating new knowledge. Section 3.2 states the aims of this chapter and outlines its structure.

3.2 Aims of this Chapter

The aim of this thesis is to establish the role of digital media and the position of film as a social 'voice' in sharing knowledge and exploring how we know what we know.

⁵⁹ Web 2.0 enabled me to make and distribute my own films. In February 2008 I published my first YouTube movie, *Diamonds of Hope* with Peter Newman. Eighteen months later I commenced filming this thesis to explore and evolve my learnings about the documentary mode in its digital form.

⁶⁰ Digital media refers to computer generated, digitised media content (text, audio, video and graphics) that can be transmitted over the Internet.

It asks how digital media can be utilised as a process of research, and ultimately, its capacity to narrate history and sustainability.

This specific chapter does specifically establish an epistemological foundation for the action research mode of this inquiry:

1. through narrative analysis;
2. through the role of 'voice' in cinematic presentation.

Section 3.3 establishes an epistemological foundation for this investigation through the process of constructing story/narrative, aligning itself with the epistemological paradigm that draws on the importance of story and storytelling, implicitly critiquing an epistemology of knowledge as 'product'. Subjective meaning making in social research as well as documentary necessarily involves ethics and demands reflexivity. The research study is an interplay between Social Science and Arts/Media.

Section 3.4 deals specifically with the notion of action research as active learning through being practice-based. Documentary filmmaking can be seen as action research. This section emphasises the processual nature of this mode of inquiry, that knowledge emerges through the circumstances of its creation. This section concludes that a processual methodology is the best fit with sustainability since it too is a processual activity.

Section 3.5 establishes narrative analysis as one of the core elements of the epistemological foundation of this inquiry. Narrative involves the social creation of meaning that attempts to find causes and explanations through chronology and contextualisation rather than seeing events as isolated, objective and decontextualized. This study uses the narrative mode to contribute to non-reductive processual research and learning.

Section 3.6 establishes the second core methodological approach, the role of 'voice' in cinematic presentation. A film can be seen as having a 'voice', containing within it many recruited 'voices', as well as being a discourse by an author. This study uses reflexivity to make visible its epistemological assumptions, that knowledge and the position of self in relation to the mediation of knowledge are socially and formally

constructed and should be shown to be so. Thus the construction of narrative overshadows the narrative itself.

Section 3.7 examines the history of documentary to show how it contributes to this study through its role in filling gaps in knowledge through epistophilia, love of knowledge, and through its use of cinematic presentation to motivate social change. The history of digital media (in the documentary realm) is outlined to show its impact on the author's filmmaking history, and its impact on creating new knowledge and new ways of storytelling through its participatory and universally accessible nature.

The question remains as to issues of visually communicating the invisible complexity and flow of a sustainability narrative. Section 3.8 explores the 'road movie' genre for help. The Fremantle narrative is seen as an existential journey with the filmmaker/researcher taking on the role of 'hitchhiker' to accompany the mayor's journey as 'driver' of the Fremantle narrative, and the professor as 'guide'. All three protagonists are on a learning journey as they adapt and improvise to changing circumstances. These understandings help to clarify the position of the researcher/filmmaker as author of the text, as well as being one voice among many within the text.

Section 3.9 queries the best digital mode to communicate this study's research output as a 'roadmap'. Three examples are given of linking digital media with sustainability: digital ethnography in the form of a traditional 'closed' narrative documentary; Web based interactive sites that offer 'open' narrative documentaries, but which do not allow stories to be shown as a connected series of events; and the Prezi, an interactive Web site that allows an 'open' narrative documentary, and through its 'virtual canvas', allows the films to be shown as a flowing series of events.

3.3 An Epistemological Foundation

A thesis is essentially epistemological in that it analyses the nature of knowledge and asks how do we know what we know. In the context of the digital storytelling mode of inquiry of this study, epistemology is taken to mean the construction of narrative “in which the learner plays an active role and which involves making sense of a range of phenomena” (Schaller, 2011, quoting Hein, 1998). This approach is implicitly a critique of traditional empiricist methodologies that define knowledge as: “a product: an objective, verifiable truth” (Schaller, 2011). In contrast “narrative based learning” is one in which: “Learners create their own narrative – a unique and highly personal explanation or understanding of any given experience” (Schaller, 2011). That knowledge is socially constructed is a movement away from knowledge as product – something objective, isolated, fixed – to narrative as constructing meaning – subjective, contextualised and unfurling through time (Gotham and Staples, 1996). Thus this thesis generates knowledge through an epistemology of subjective ‘meaning’ rather than objective ‘truth’. This thesis challenges conventional epistemology through aligning with narrative/story as a means of knowledge making.

Storytelling is the age-old practice of creating and sharing knowledge, “perhaps our most fundamental form for making sense of experience” (Flyvbjerg, 2004, p.299). There is a strong heritage of storytelling in Social Science. Leonie Sandercock, urban planning academic and filmmaker, explains how story organises knowledge (Sandercock, 2010a, p. 27, quoting Marris, 1997):

Storytelling, [he says] is the natural language of persuasion, because any story has to involve both a sequence of events and the interpretation of their meaning. A story integrates knowledge of what happened with an understanding of why it happened and a sense of what it means to us ...
Stories organise knowledge around our need to act and our moral concerns.

For Sandercock storytelling is not merely recounting events but endowing them with meaning by “commentary, interpretation and dramatic structure”. Giovanni Attili,

Sandercock's film partner, comments on "a different approach to knowledge" within social research, that "research cannot be considered a value free inquiry formalised through objective rules, but rather a contextualised activity in which values and moral assumptions play a significant role" (Attili, 2010, p. 45). Sandercock remembers her own undergraduate days when "story was demoted and more 'analytical' and quantitative approaches were sought", but in the last two decades, "feminists, historians, and workers in the cultural studies field, not to mention anthropologists, have reasserted it's importance, both as epistemology and methodology". However, she goes on to write, the struggle is ongoing "because of the privileging of what are seen as more scientific and technical ways of knowing" (Sandercock, 2010a, p.7). This 'struggle' may be the reason why Sandercock's digital ethnographic work with her collaborator Attili is relatively unique in the social sciences and therefore can be seen as pioneering.

Influencing this trend (towards subjective meaning-making) is the role Social Science has played through 'action research'. In their paper, *Practice Led Research and the Innovation Agenda*, Jaaniste and Haseman comment (Jaaniste & Haseman, 2009, p. 3):

Over the past fifty years challenges to the established order of epistemology have come increasingly from the social sciences, the qualitative research community, and the paradigm wars looking beyond the positivist tradition of analytical written knowledge ... There is a clear practice imperative to be found in socially-engaged research methods such as action research.

In noting socially-engaged action research⁶¹ contains "a clear practice imperative", Jaaniste and Haseman go on to note that in the Arts sector, practice-led research "inserts practice into research by offering creative works, design, content and events as core research outputs, and the processes and practices involved as core research methods" (Jaaniste & Haseman, 2009, p. 3).

⁶¹ Action research in social science tends to be found in professional workplaces such as hospitals and clinics (Jaaniste & Haseman, 2009, p. 3).

Rather than being a (questionably) ‘detached impartial observer’, the practice-led researcher becomes part of what is being researched. Knowledge emerges through ‘lived meaning’. Being a part of things happening in the present is to be caught up in the flux – impacting on those around one and vice-versa. This position is expressed by Newman, 9 months into the research process, in response to Pettitt saying, “I am only part of [the film]. Make Fremantle the core thing” (Blagg, 2010c):

This is about public policy being shifted by a certain leadership process that Brad is leading, that is underway – I think the journey is that that whole context changes with you. It needs leadership to make it happen. A lot of people in Curtin [University] find it difficult to see how you can do something where you’re totally involved in the process – even influencing the process. I think that’s the magic of it. We’re right in the centre of this whole process. And we are part of it. Linda’s part of it. She’s changing. We’re changing. We’re all learning. And Brad is too. But it’s a process we’ve identified as being of value to tell a story about.

At the same time, the researcher needs distance to ‘construct a narrative’. To be both outside and inside, objective and experiential, can be an uncomfortable place to be. According to Sandercock and Attali, “This existential reality invokes a series of important ethical issues and demands an acute self-reflexivity around relationships of power, including the power to narrate” (Sandercock & Attali, 2010a, p. 26). This demands paying close attention to “the politics of voice, to ensure, that we are not speaking for others, while being transparent about the fact that our own interpretative voice is in the frame of the film” (Sandercock & Attali, 2010a, p. 43). These same issues around power and transparency are present in documentary filmmaking.

Bill Nichols, Professor of Cinema at San Francisco State University and a leading documentary theoretician, argues that as “author of the text” the filmmaker is implicitly “participant-witness” and “active fabricator of meaning” (Nichols, 1999, p.248). This approach recognises the power of the filmmaker in shaping discourse and the need for transparency through self-reflexivity. In referring to a few reflexive documentary filmmakers, Nichols writes the following (Nichols, 1991, p. 262):

The basic epistemological assumption [in their work] is that knowledge and the position of self in relation to the mediator of knowledge, a given text, are socially and formally constructed and should be shown to be so ... The process of constructing meaning overshadows constructed meaning.

Nichol's ideas help this study to orient itself, to argue that knowledge emerges not so much from narrative, but rather through the process of creating narrative.

This section has established self-reflexivity as core to practice-based research, acknowledging the power and influence wielded by the meaning maker. The understandings and insights from the fields of Social Science and Arts/Media inform the epistemology of this thesis, that knowledge and the position of self in relation to the mediation of knowledge are socially constructed and through self-reflexivity can be shown to be so.

The following section focuses on action research through filmmaking, reiterating its practice-led processual nature and the significance of questioning one's practice, to show how a processual methodology is the best way to reveal and communicate the processual nature of sustainability.

3.4 Action Research

Action research should not be aimed to communicate prefabricated knowledge, but rather in order to provoke new knowledge through the very circumstances of its creation.

Mhando, 2002.

[Action research can be defined as] Research carried out by practitioners seeking to improve their understanding of events, situations and problems so as to increase the effectiveness of their practice. Such research does not have the writing of research and their publication as a primary goal.

McKernan, 1994, p. 4.

Both of these definitions emphasise action research as activity with a process-learning objective rather than completion of the activity. Filmmaker and academic Martin Mhando further writes, “action research occurs at the level of discourse – the ways in which research is contemplated, inflected and represented” (Mhando, 2002). Through these definitions we see methodology itself, the processual circumstances through which knowledge is created and represented, to be potentially unique and innovative.

As a practicing filmmaker/researcher I use action research as the principle mode of investigation into ‘cities and sustainability’ to ask how effectively and efficiently can a filmmaker communicate a city’s journey towards sustainability. As a digital storyteller, I collect video recordings to interpret and question sustainability in Fremantle as it unfolds. I am trying to understand the changes sustainability brings to the place where I live, and to leave a trace of that history. Utilising film as a mode of inquiry is to understand the goal is not the ‘final product’. A documentary doesn’t exist to give information or a solution, but rather to propose opportunities to change. The process of making a documentary constantly involves questioning oneself about the truth of what one is experiencing. Questioning one’s practice as well as the subject of one’s practice is vital since “questions move us towards a politics of phenomenology, a recognition of the priority of experience not as a structure to bracket and describe but as the social ground or foundation for actual praxis” (Nichols, 2001, p. 232). Action research, through experiential learning, provides a more subjective impressionistic problem solving method and equips one with new skills, methods and self-awareness. In the process I am questioning the documentary mode, a practice I have been engaged in since 1973 when I made my first documentaries. Questioning one’s practice is informed by the subject matter of one’s practice: how best to frame a narrative around ‘sustainability and cities’.

This thesis engages in action research to provoke new knowledge around ‘sustainability and cities’ and the documentary mode. This experimental work locates film as a mode of inquiry, part of the epistemological paradigm that draws on the importance of story and storytelling. Knowledge emerges through processual (circumstantial) contextualisation. A major (and complementary) influence in this work is the paradigmatic shift towards storytelling/narrative in sociohistorical inquiry. The section that follows establishes an epistemological foundation for action research mode of this inquiry through narrative analysis, how meaning is constructed through chronology and contextualisation.

3.5 Narrative Analysis

Narrative can be defined as “the organisation of contemporaneous actions and happenings in a chronological, sequential order ‘that gives meaning to and explains each of its elements and is, at the same time, constituted by them’” (Gotham & Staples, 1996, p. 483, quoting Griffin, 1993, p. 1097). In their paper, *Narrative Analysis and the New Historical Sociology*, Gotham and Staples see the paradigmatic shift towards narrative as an “ongoing intellectual rebellion” against “historiography” – knowledge that stands outside the historical, holding itself to be objective and universal, and which “decontextualizes the processes and institutions that shape and are shaped by actors’ concrete actions” (Gotham & Staples, 1996, p. 482). Contextualisation is clearly key in narrative.

The concept of knowledge as narrative, introduced in section 3.3, involves the active role of the learner in organising and shaping story/narrative. Narrative analysis is about creating meaning through questioning, analysing and shaping bits of material into a coherent whole (Gotham and Staples, 1996, p. 485, quoting Griffin, 1993, p.1098):

To locate an action in the sequence of a narrative and link the action to the narrative’s previous actions, for example, is one way to understand what ‘caused’ the action’ and thus to explain its occurrence.

To create a chronological narrative of one's own life allows one to 'make sense' of it, to leave out a significant event from that chronology means it will no longer make sense. Through a narrative analysis approach, this thesis attempts to create a narrative to identify causes and explanations, that is, to make meaning, of a city's 'journey towards sustainability' over a period of two and a half years. Gotham and Staples describe this narrative analysis activity as "process-oriented theorising" which holds that the "meaning of an event is determined by the story in which it appears and by the ensemble of contemporaneous events" (Gotham & Staples, 1996, p. 488 quoting Abbott, 1991, p. 228). The role of narrative analysis in this study is core in that it informs the construction of the Creative Production.

This section has established the role of narrative analysis as a processual and contextualised form of meaning making. The section that follows seeks to establish a further epistemological foundation for the action research mode of this inquiry through the role of 'voice' in cinematic presentation, that as a text or discourse a film can be seen as having a 'social voice' made up of a multiplicity of voices.

3.6 The Role of 'Voice' in Cinematic Presentation

[The role of voice is] That which conveys to us a sense of a text's social point of view, of how it is speaking to us, and how it is organising the materials it is presenting.

Nichols, 1999, p. 248.

The voice of the text can be seen as the 'governing' voice, containing within it the social voices recruited to the film. The voice of the text is greater than its parts, orchestrating "the recruited voices, the recruited sounds and images" as well as "the textual voice spoken by the style of the film as a whole" (Nichols, 1999, p. 262). Acknowledgement of a film's voice recognises that "events can't speak for themselves, nor can a single voice speak with ultimate responsibility"; that there can be "a gap between the voice of the 'social actor' recruited to the film, and the voice of the film"; and that the role of the authorial voice can be to "share doubts and

emotional reactions with the viewer” (Nichols, 2001, p. 252). The filmmaker engages with her or his audience “not only about the historical world but about the problems and issues of representing it as well” (Nichols, 2001, p.125). A good example of this is British filmmaker Nick Broomfield’s documentary, *Aileen: Life and Death of a Serial Killer* (2003), where Broomfield questions the truth of what Aileen, the subject of his documentary, is telling him through voice-over. Towards the end of the film, when Aileen is led away, Broomfield calls out to her he is sorry and she gives him the finger. Broomfield’s reflexive style makes visible his subjective and ambivalent engagement with Aileen and the impact they have on each other.

It is important to understand a film has an author who actively creates meaning – bringing her or his point of view into play – however much the film’s ‘voice’ might pretend to be neutral. According to Nichols, for a filmmaker to acknowledge what she or he is doing (through practicing reflexivity) “is to more closely correspond to a contemporary understanding of our position in the world so that effective political/formal strategies for describing and challenging that position can emerge” (Nichols, 1999, p. 249). For this reason he believes it is vital that the filmmaker’s “assumptions, values, and purposes motivating this production” are not hidden. Nichols writes about different styles of documentary but only “reflexive documentaries ask[s] us to see documentary for what it is: a construct or representation” (Nichols, 2001, p. 125).

Through self-reflexivity and self-referencing, the Creative Production of this thesis reminds viewers/users that what they are viewing is a subjective story/narrative, as Nichols says, “calling the present but absent filmmaker into question as readily as anything else” (Nichols 1991, p. 99). Within the ‘voice’ of the Fremantle narrative is a multiplicity of ‘voices’ allowing a multiplicity of points of view from the social actors recruited to the film. Each of these different voices is there to make sense of the phenomena, bringing her or his values to bear in their individual narratives. As ‘hitchhiker’, the filmmaker’s ‘voice’ becomes one ‘voice’ among many so no ‘final authority’ can be claimed. Rather than a work being seen as neutral, as an all-knowing report of the way things are, self-reflexive documentary makes epistemological assumptions become more visible. Both the role of ‘voice’ in

cinematic presentation and the active role of narrator in constructing narrative acknowledge the core role of reflexivity in this thesis, based on the epistemological assumption that knowledge and the position of self in relation to the mediation of knowledge are socially and formally constructed and should be shown to be so.

Since digital media (in the realm of documentary) is the mode of this inquiry, it is important to establish what the documentary mode contributes to this investigation. The following section offers a brief history of documentary to show how it creates new knowledge and acts as a ‘catalyst for change’; and a history of the ‘digital world’ to show how it intersects with the filmmaking history of the researcher and to foreground the use of digitality as a research tool.

3.7 The Potential of Documentary in a Digital World

John Grierson,⁶² who invented the term ‘documentary’ and is widely considered to be the father of documentary, famously defined documentary as “creative treatment of actuality”. The term “creative treatment” points to the filmmaker’s role in how “actuality” is represented. Nichols defines documentary methodology as analysing a documentary’s relationship to the historical world, a world we all share, as a discourse about that world (Nichols, 1991). A documentary can take many forms of ‘creative treatment’, but whatever the style, all documentaries make truth claims about the world. In this they are unique in what Nichols calls ‘epistophilia’ – a desire for knowledge (Nichols, 1991). In the 1920s, when the first documentaries were made, they were essentially ethnographic studies of the unknown.⁶³ Documentaries could be seen as filling gaps of knowledge since they “depicted a human and physical geography that had not been captured before in moving images” (Salles, 2007, p. 1).⁶⁴ Thus the documentary mode, from its beginning, can be seen as filling gaps of knowledge out of love of knowledge.

⁶² John Grierson (1898 – 1972) was a British born documentary filmmaker and educator.

⁶³ The earliest documentaries were ethnographic studies. Robert Flaherty made the first successful feature length documentary film *Nanook of the North* (1922) set in northern Canada. Other documentaries he made were set in Samoa, *Moana* (1926), and the Aran Islands, *Man of Aran* (1934). Basil Wright’s *Song of Ceylon* (1934) was made in what is now known as Sri Lanka.

⁶⁴ For this reason film director Walter Salles sees these films as the earliest manifestation of the ‘road movie’.

Also from the beginning, documentaries used ‘cinematic presentation’ (techniques of dramatic engagement)⁶⁵ as a form of ‘creative treatment’ to engage the viewer and to communicate complex ideas. Bill Nichols writes that documentary relies heavily on “finding people, or social actors, who reveal themselves in front of the camera with an openness and lack of self-consciousness” so as to impart to viewers, “a feeling of emotional involvement or engagement with the people and issues portrayed” (Nichols 2001, p. 94). John Grierson used documentary to great effect during the Great Depression and WW2, deliberately using cinematic presentation as a tool to encourage participatory citizenship. He wanted a way to counter the tabloid press: "I look on cinema as a pulpit, and use it as a propagandist" (Ellis & McLane 2005, p. 71). The more emotionally engaged the viewer, the more effectively a documentary inspires action towards social change (Nichols 1991, p. 178).⁶⁶

The subjectivity John Grierson exhorted the documentarist to support was one of informed citizenship ... Other subjectivities are also possible ... but all function as modes of engagement with representations of the historical world that can be readily extended beyond the moment of viewing into social praxis itself.

To this point we have established documentary’s heritage as filling gaps in knowledge through epistophilia, and as using cinematic presentation to become more effective as a ‘catalyst for change’. We now move to documentary as it manifests in ‘a digital world’ to lay the groundwork for the digital nature of the Creative Production of this thesis.

This thesis argues that the starting point for ‘digital media’ (as a research tool) can be found in the late 1960s when the Canadian government, under the liberal leadership of Prime Minister Pierre Trudeau, financially supported the National Film Board of

⁶⁵ These include: characters, dialogue, conflict, and resolution of conflict.

⁶⁶ It is also true to say that documentary tends to be ‘left-wing’. As Nichols says, “The vitality of documentary films is as indisputable as their predominantly left-of-centre views”. The reason for this is that there is less onus on the right to engage with documentary since its views are represented in mainstream media “to such an extent that a right-leaning bias has gradually become the norm” (Nichols, 2007, p. 85).

Canada's *Challenge for Change* series.⁶⁷ The series was made up of short documentaries focusing on social issues and the first to be shot using video, rather than 16mm film, through the use of a revolutionary new technology called the 'Portapak'.⁶⁸



Image 3.1 The Portapak.

Source: SONY publicity photo, 1967.

This new technology meant filmmaking was now accessible to 'ordinary' people who didn't have the expertise needed for shooting on 16mm film. Compared to 16mm film, videotape was inexpensive, easy to use, and had the added benefit of 'instant replay' unlike film that needed to be sent away to a laboratory and processed.⁶⁹

By using the Portapak, films would give a voice to the politically and socially disenfranchised about issues such as unemployment, substandard housing and racism, to open a dialogic process with policy makers. To this end, the National Film Board (NFB) sent filmmakers across Canada to hook up with activists, leaders and 'ordinary people', to stimulate the development of an engaged citizenry by using the

⁶⁷ This was effectively under the stewardship of John Grierson who had helped set up the National Film Board of Canada, and was still director at the time of *Challenge for Change*.

⁶⁸ Sony produced the first Portapak in 1967 – a battery powered, self-contained videotape analogue recording system.

⁶⁹ Filming on video was only limited by the standard 20 min. length of videotape inside a VHS cassette loaded into the recorder.

power of media (Waugh et al. 2010). The most famous example now lends itself to the term, ‘the Fogo Process’. This project began as a Government/University partnership in response to unemployment amongst the islanders of Fogo, an island off Newfoundland. Video was used to document the stories of the people and what they wanted for their future. To communicate their stories and arguments to policy makers involved a back and forth process using videotape cassettes (sent through the mail). This video dialogue ultimately led to significant policy changes that gave Fogo islanders some ‘social and economic security’ (MacLeod, 2004). In 1973, at the age of 22, I was inspired to replicate the NFB’s idea, to use the Portapak as a tool for change.⁷⁰ Its main drawback was editing, which could only be done through manually re-recording selected bits from the cassette in the Portapak recorder onto a new cassette in a linked up VHS recorder, a relatively hit and miss affair if one was doing it at home.

Challenge for Change sowed the seeds for digital media through its social issue content; its use of electronic tape; the portability and (relative) accessibility of the Portapak; and its transferability via VHS. In the 1980s *Challenge for Change* petered out, mainly due to political change.⁷¹ Over the next 10 years, from the mid 1980s through to the mid 1990s, technological developments saw analogue electronic tape replaced by digital electronic tape, VHS replaced by DVD. During the same period

⁷⁰ In 1973 I was employed by the Western Australian Department of Health who kindly bought me a Portapak to use video as a means of education towards social change. One project involved opening up a dialogue on sex education in schools. Over a few Saturday nights I used the Portapak on Perth’s city streets to initiate discussion on sex education. The interviews I conducted were simultaneously playing on a hooked up television I had set up. This excited the participants and enticed others to be interviewed. There was no end product as such – the interviews were part of a process to get people talking about something not usually talked about in the public domain. In a more ambitious experiment, in an outback wheat-belt town, I handed the camera to a group of Indigenous school students. They were in a separate class at school due to being seen as ‘no-hopers’. The idea was that they would make films about their town and thus become empowered. Subjects included the town’s hospital, jail, school, and local milk bar where the students spent their spare time. At the end of the project the films would be shown at their school. Unfortunately our efforts resulted in official complaints from the school principal to my boss – in just a few days I had apparently undone the racial harmony that had taken the town years to achieve. I resigned my position in the Health Department, but the year or so I spent ‘playing’ with the Portapak as a means of dialogue (rather than end-product) taught me how powerful it was as an instrument. Too powerful perhaps, I’d gotten burnt and afterwards moved to the relative safety and romance of fictional film.

⁷¹ Globally it was the era of Margaret Thatcher and Ronald Reagan.

and up to the mid 2000s, I was employed by an educational video company and personally experienced this transition.⁷²

Now a brief history of digital documentary has been established, this section moves to the latest incarnation of documentary (as filling gaps of knowledge out of love of knowledge, and as a ‘catalyst for change’) – ‘multimedia’ as enabled by Web 2.0. On their website, the Berkeley School of Journalism define multimedia storytelling as (kdmcBerkeley, 2014):

Some combination of text, still photographs, video clips, audio, graphics and interactivity presented on a Web site in a nonlinear format in which the information in each medium is complementary, not redundant. Nonlinear means that rather than reading a rigidly structured single narrative, the user chooses how to navigate through the elements of a story. Not redundant means ... different parts of a story are told using different media.

As a globally accessible and participatory medium, multimedia has been co-opted by activists to promote social change. In his YouTube film, *How Can Multimedia Promote Social Change*, Matt Thompson can be seen practicing what he preaches (Thompson, 2007):

We are sensual creatures. We can't fix or understand what we can't see ... when you can paint a picture and put a human face on the problem and the solution and draw people a map they're just a million times more likely to understand, to react on a gut

⁷² Digitisation had a profound impact on all of us producing educational video. Digitisation of imagery meant the inclusion of imagery from the Web as well as other forms of media, which in turn enabled ‘multimedia’. Multimedia at this time meant some combination of video, photographs, graphics, animation, and text, largely inspired by Ken Burns’ use of photographs, letters and diaries in his American Civil War series (1990). However, since these films could only be passively viewed through a DVD, they cannot be described as ‘interactive’. Digitisation also gave us the freedom to experiment and take risks because the process no longer involved time-consuming linear analogue editing, but instant non-linear digital editing. This transformation can be seen in the exuberant editing style of Baz Luhrmann’s *Romeo and Juliet* released in 1996. It was easier to experiment when one could check out an idea in a moment rather than taking hours only to discover it didn’t work. By the way, technology dictates all sorts of things – since VHS tapes were originally 20 min. long, the educational videos we made were 20 min. long, even after DVD replaced VHS.

emotional level and to take the kind of action we're looking for them to take.

Putting a "human face on the problem and the solution" personalises issues. The digital storytelling aesthetic of 'up close and personal' (since multimedia is made to be viewed from a network device) suggests authenticity and 'truth'.⁷³ Multimedia (via YouTube and countless other Web sites) tends to offer a counter-cultural alternative to mainstream 'top down' media.⁷⁴ Its democratically accessible nature has made digital storytelling the media tool of choice for political and environmental activism across the globe, and fixed its association with radical change as can be inferred from Sandercock (2010a, p.34, original italics):

Within the last decade we've seen a rapid 'democratising' of film/video making, along with many other important tools of the digital revolution, all of which amount to technological developments that offer enormous *communicative and activist* possibilities for planning and policy.

This 'bottom-up' activist use of digital media is of significance to this study since sustainability, as an alternative political/cultural paradigm to the dominant technocentric one that currently holds sway (Gladwin *et al.*, 1995), lies mostly outside the remit of traditional media outlets.

YouTube, as a vehicle for the emergence of new knowledge and new ways of telling stories, became the focus of study for Michael Wesch, cultural anthropologist at Kansa State University, who has made the YouTube community the focus of study for his students (Wesch, 2008; 2009). What follows is a list of subjectivities his students have learned (Wesch, 2009, p. 7):

⁷³ *Diamonds of Hope*, published on YouTube in February 2008 to accompany Peter Newman on a book tour through the US, embraced this close-up multimedia aesthetic. Using 'green screen' technology, Peter is seen in medium close-up against the backdrop of a city in constant motion. In terms of my practice, communicating through the YouTube space helped me evolve towards a more authentic and immediate cinema, and allowed me to share my films, which in turn have invited responses.

⁷⁴ As an example of 'top down media', Murdoch's The Australian newspaper typically supports right wing politics that tend to be 'sceptical' of 'climate change', and was ferocious in its opposition to the Carbon Tax contributing to the demonisation of Australia's first female prime minister (Jackson, 2012).

- Our worldview is not natural and unquestionable, but culturally and historically specific.
- We are globally interconnected in ways we often do not realise.
- Different aspects of our lives and culture are connected and affect one another deeply.
- Our knowledge is always incomplete and open to revision.
- We are the creators of our world.
- Participation in the world is not a choice; only how we participate is a choice.

What we learn from YouTube is essentially subjective because of its global, participatory, dialogic nature. New stories invite responses and become part of dialogic processes. YouTube teaches us we are globally interconnected, that our knowledge (what we think we know) is “always incomplete” and that we have the (digital) capacity to participate in our future. Thus YouTube can be seen as empowering people with the desire to take part in radical change, to be part of that change. Wesch comments on the impact of digitality on learning (Wesch, 2009, p. 1):

Classrooms built to re-enforce the top down authoritative knowledge of the teacher are now enveloped by a cloud of ubiquitous digital information where knowledge is made, not found, and authority is continuously negotiated through discussion and participation.

Rahn (2008) strongly suggests that the sharing of information in a (virtual) public space is “key to developing relationships and evolving a culture” (Rahn, 2008, p. 302). Increasingly social networking is influencing new resources of knowledge; at the same time “giving opportunities to improve working methodologies and knowledge exchanges between the actors involved” (Perry *et al.*, 2010, p. 75).⁷⁵ This development has played a major role in sustainability and cities; digital networks,

⁷⁵ Much of the research in this field (Perry *et al.*) is being driven by commerce looking to maximize the business potential of social media.

both local and global, allow mayors and local authorities to share examples of best practice and to engage in global collaborations. Examples of these global and regional networks were given in section 2.6.

Digitality and storytelling have fused together only recently and digital storytelling is still relatively young, at a stage of experimentation and risk taking. This is an exciting innovative space to be in, an opportunity to take risks, to question the way documentaries are made, to question the role of digital media and the position of film as a 'social voice' in exploring how we know what we know, and ultimately to question digital media (in the realm of documentary) as to its capacity to narrate history and change.

Chapter Two argued that since there is a gap between sustainability rhetoric and change on the ground, cities need demonstrations of how sustainability works. This section has established the role of documentary in the digital world as filling gaps of knowledge and catalysing social change. This research study now brings together digitality and sustainability and cities through the concept of the 'road movie' to help in the construction of the Fremantle sustainability narrative.

3.8 The 'Road Movie' and How it Helps to Communicate Sustainability Through Digitality

In questioning digitality's capacity to narrate sustainability and cities, the big issue is whether digital media (in the form of 10 min. YouTube films) can capture and convey sustainability as a journey over time – a narrative about ongoing, unfolding change? Can digitality make visible sustainability's emergent and processual nature, its invisible complexity and networked 'flow'? These were the questions I was asking, through my journals, over the course of the research period. It was over a year before answers to these questions began to emerge, helped by the 'road movie' genre.

Walter Salles, director of *The Motorcycle Diaries* (2004) and *On the Road* (2012), saw the first documentary filmmakers as the founding fathers of the road movie

narrative form since they had, “depicted a human and physical geography that had not been captured before in moving images” (Salles, 2007, p. 1).⁷⁶ These words resonated since they echoed what Nichols has to say about documentary as epistophilia – filling gaps of knowledge through desire for knowledge, and in particular for this thesis, to fill gaps in knowledge around sustainability and cities.

Salles also alludes to the existential crisis often at the heart of road movies, particularly in the film that defined road movies for today’s audience, *Easy Rider* (1969),⁷⁷ when he writes, “the most interesting road movies are those in which the identity crisis of the protagonist mirrors the identity crisis of the culture itself” (Salles, 2007, p. 2). This observation is echoed by British novelist Sam North who writes that the essential elements of road movies are the “searching for meaning of life and economic poignancy” (North, 2005). Using the analogy of the road movie, the practice-led researcher (myself) becomes the ‘hitchhiker’ – the protagonist through whom we experience the story. The existential search for meaning, both for the hitchhiker and for much of the rest of the world, arises from our uncertainty and doubt about our future in a world increasingly compromised through climate change, depletion of resources and loss of biodiversity. These inescapable looming disasters already unfolding, combined with the global ‘debt crisis’, will most certainly bring about a condition of “economic poignancy”. It is a harrowing nightmare because there is nowhere on Earth to escape the consequences of our actions. In this context it makes sense that the hitchhiker should ‘hitch a ride’ with Pettitt since he offered an alternative vision of the future, and the possibility of taking part in creating it. Likewise the road movie genre offers the possibility of a new beginning, “the road is the passage to which a new beginning is possible free from bonds of the past” (North, 2005, p. 1).

As hitchhiker/researcher, my main fear was that I wouldn’t recognise those ‘distinct historical moments’ that might communicate sustainability in the profusion of sustainability initiatives that commenced within weeks of Pettitt becoming mayor.

⁷⁶ Salles goes on to assert the genre goes back to *The Odyssey*, and perhaps even further back, to the cave paintings of Lascaux as the “true first accounts of life in movement” (Salles, 2007, p. 1).

⁷⁷ *Easy Rider*, set against the Vietnam war, depicts an implosion of the American Dream and the end of innocence.

How could I create meaning out of something I couldn't identify in the first place?⁷⁸ As North comments, "leaving for the future without a map can be a daunting task". However, as it happened the 'hitchhiker' did have a guide in Newman who also came on the journey. While that offered some surety, for the first year I was afraid I would miss what was in front of me; rather than the road being 'a new beginning' it would be a road to ruin.

Thus the 'hitchhiker' protagonist finds herself on a journey into the unknown with a driver and a guide, but with no idea of what will happen next. To Salles, unpredictability plays a big part in making a road movie (Salles, 2007, p. 2):

I believe that a defining aspect of this narrative form [road movie] is its unpredictability. You simply cannot (and should not) anticipate what you will find on the road ... You have to work in synchronicity with the elements. If it snows, incorporate snow. If it rains, incorporate rain. Likewise, a road movie should be transformed by the encounters that occur on the margins of the road. Improvisation becomes necessary and natural ... In terms of film grammar, the road movie is limited only by one obligation: to accompany the transformations undergone by its main character as they confront a new reality.

The unpredictability of making a road movie informs the product, the film itself. By adapting to changing circumstances and working "in synchronicity with the elements", the making of the film accompanies and influences the unpredictable experiences undergone by its main character "as they confront a new reality".⁷⁹ Salles' comments resonated in the sense that I saw myself as the 'road movie' filmmaker constantly adapting to changing circumstances on the road, accompanying the 'main character' and driver of Fremantle's sustainability narrative, Pettitt, likewise adapting to changing circumstances. As 'hitchhiker' I become the means by which the viewer/user accompanies "the transformations undergone by its main

⁷⁸ I had already experienced confusion and uncertainty about what construed sustainability. When Peter Newman commissioned me to make *Sustainability Street* in 2009 I couldn't understand what middle-class 'hippies' had to do with sustainability until after the film was made.

⁷⁹ There were many unforeseen (by the director) encounters in *The Motorcycle Diaries*, its stylistic approach being a mix of drama and documentary.

character”. Thus in some sense the Fremantle narrative has two protagonists – the mayor as driver of Fremantle’s journey, and the hitchhiker through whom the viewer experiences Fremantle’s journey. These understandings clarified my position in the study.

My self-reflexive persona as ‘hitchhiker’ gives me a point of view from which to question and query the journey I am on – the outsider picking up the culture and trying to make sense of it through films.⁸⁰ The road movie genre also helps to bring out elements of Fremantle’s sustainability narrative – the unpredictability of encounters “on the margins of the road”, Pettitt’s creative improvisational responses, and the consequent transformations that emerged. The episodic nature of the road movie solves problems by keeping the sustainability journey open, existentialist, and malleable. More importantly, the genre with its socio-economic *raison d’être*, its idea the journey is more important than the destination, and its open-ended structure are all elements that reflect the nature of sustainability.

Whilst the hitchhiker (and filmmaker) began her journey into the unknown without a map, through her experiences ‘on the road’, and with the help of the driver and the guide, she has traced out a ‘roadmap’ that shows the way for others wanting to join the sustainability journey. Hitching a ride with the mayor, ‘driver’ of Fremantle’s journey, reveals he too is venturing into frontier territory (bringing a band of others with him) – at times doubting himself, but still prepared to take political risks – to be fully vindicated by the end of his first 4-year term. Both ‘hitchhiker’ and ‘driver’ show ‘leadership’ through their courage in venturing into the unknown, in not allowing risk of failure to deter them. True to the road movie genre, their courage ‘on the road’ is rewarded with what North described as the possibility of a “new beginning ... free from bonds of the past” (2005, p. 1).

Confronting a ‘new reality’ necessitated the evolution of my practice, a movement away from unearthing stories in the past, towards an active engagement with the present, to do something new – capture ‘change’ in a holistic way, over time.

⁸⁰ I had spent 30 years living on Australia’s east coast, and while I had strong ties to Fremantle, in many ways it remained an undiscovered place.

This section has discussed the ways in which the road movie genre has helped this thesis take shape and how it might structure Fremantle's journey toward sustainability as a Creative Production. The question remains however as to what digital format is capable of holding together a series of YouTube movies in a way that enables the sustainability journey to be depicted as a 'road movie' across a specific geographical terrain during a specific period of time? In other words, by what means is digital media capable of narrating history and change?

The following section seeks to answer this question through examining three different modes of bringing sustainability and digital media together, concluding with the Prezi, the mode this thesis utilises.

3.9 Examples of Linking Sustainability and Digital Media

Since the digital revolution (through Web 2.0) there has been an abundance of multimedia in the service of social change. More specifically, we are investigating the role of digital storytelling and the part it plays in transformation towards sustainability. What follows are three examples of linking digital media and sustainability: Sandercock and Attili's digital ethnographic work in the context of urban planning; Web based interactive platforms as 'catalysts for social change'; and the Prezi, the digital format used in this dissertation.

3.9.1 Ex. 1 Digital Ethnography

In developing our approach to digital ethnography as planning praxis, our intent is both to evoke and to provoke: to evoke the richness and diversity of urban life through a polyphonic multimedia approach, and to provoke an urban conversation or a community dialogue about the subject matter.

Sandercock and Attili, 2010a, p. 41.

Research into the field where 'sustainability and cities' intersects with digital media led this study to the pioneering work of Leonie Sandercock and her collaborator

Giovanni Attili who “experiment with film as social research, community engagement and policy dialogue” (Sandercock & Attili, 2010a, p.23). Their first collaborative project, *When Strangers Became Neighbours: the Story of the Collingwood Neighbourhood House and the Integration of Immigrants in Vancouver* (2007), is a 50 min documentary that uses multimedia to document a case study of a neighbourhood community centre and what it accomplished over 20 years. The opening quote underlines the central role ‘dialogue’ plays in the filmmakers’ intentions. Sandercock, referring to Freire (1970), writes that digital ethnography “is dialogical in the sense that it includes and (if successful) is included in a polyphony of voices, with no one voice, including that of the researcher, claiming final authority. It is also potentially liberatory, in creating the space for people to tell their own stories” (Sandercock 2010b, p. 61). In regard to the film’s subjective engagement with its subject matter, Attili writes, “It is a story that doesn’t pretend to represent ‘the truth’; rather, it is explicitly subjective, even partial ... It is a way of starting a public conversation” (Sandercock, 2010b, p. 60, quoting Attili, 2009, pp. 260-261). In evaluating their project, the authors state their position in the following terms: “This is an epistemological as well as a pragmatic exploration, probing the capacities of multimedia as a mode of inquiry, as a form of meaning making, as a tool of community engagement and as a catalyst for public policy dialogues” (Sandercock & Attili 2010a, p. 25). Their film, funded through the University of British Columbia where Sandercock is based, has gone on to win many prestigious awards and recognition for innovation in planning education as well as impacting on policy. Sandercock and Attili see their work as “an exploration of a new frontier in the urban policy and planning fields” (Sandercock & Attili, 2010a, p. 43).

It was exciting to discover Sandercock and Attili’s writings; their utilisation of digital media as a research tool could be describing the approach this research study takes. Through their work I could see this thesis had a home in the field of Social Science, that it belonged. I also saw strong echoes of the *Challenge for Change* program that had made such a big impression on my early career as a filmmaker. Sandercock makes the point: “Challenge for Change did not set out to make progressive films *about* social issues but instead to use the filmmaking process as a *form* of social change”, essentially to empower “politically and socially disenfranchised people” (Sandercock, 2010a, pp. 32-33, original italics). By focusing

on the process of community engagement, Sandercock is pointing to the central role it plays in her film work with Attili. This can be seen in their most recent project, *Finding Our Way: Healing Canada's Apartheid* (2010), which involved two and a half years of editing in collaboration with the two First Nations communities involved in the project. The extent of community involvement in the process of editing however, points to the first of many differences between their work and this thesis:

- While Sandercock and Attili are collaborating with organisations and “politically and socially disenfranchised people” in ‘disadvantaged’ communities (migrants in an urban setting and First Nations people in a regional setting), I am collaborating with politically and socially enfranchised people in a ‘privileged’ community. The ethics involved in the filmmaking process are consequently less complex.⁸¹
- Sandercock and Attili’s film projects do not operate as autonomous entities but rather as stages in an educational process involving accompanying texts, workshops and facilitators, new curriculums, and training programs.⁸²
- While their process is on a relatively massive scale requiring a budget and many researchers over a significant amount of time, the costs for this Creative Production have been minimal since I am the only person involved and the digital software I am using is free.
- A significant difference in terms of ‘cinematic presentation’ is that while Sandercock and Attili look to things that have happened in the past, the Creative Production of this dissertation operates in an unfolding present.⁸³

⁸¹ Every interview, conversation, and event filmed for the Creative Production was in full knowledge that it would be exhibited in a public space (YouTube) for an educational purpose.

⁸² For example, the national training program they conducted alongside *Where Strangers Become Neighbours* (2007). In regard to *Finding Our Way: Healing Canada's Apartheid* (2010), “the two filmmakers also hope to direct a curriculum around the film with the First Nations Education Steering Committee in British Columbia” (Canadian Association of Planning Students, 2010).

⁸³ This difference will be elaborated on in Chapter 4.

- In regard to their utilisation of digitality through ‘multimedia’, Sandercock and Attili’s documentaries comprise ‘talking head’ interviews multi-layered with complex and beautiful graphic effects created by Attili from text, statistics, newspaper clippings, and photographs to create what Attili refers to as, “an ethnographic narrative that is built on the intersection of multiple narratives captured by the ethnographer” (Sandercock, 2010b, p. 60, quoting Attili, 2009, pp. 260-261). However they cannot be accessed on a Web site in a nonlinear format that allows interactivity, rather the films are made to be screened in a facilitated ‘workshop’ setting or screened in the traditional sense – to an audience in a theatre. For this reason they can be described as ‘closed’ narratives in comparison to ‘open’ narratives that can be interacted with on a Web site.

To contextualise Sandercock and Attili’s work in the field of Social Science, it is important to note how little use is made of digital media in Social Science. Sandercock makes this clear when she urges, “it is surely time for the urban professions to appreciate the multifarious potential of this new media. All the more so since the planning and design fields have been forced by the demands of civil society to be more engaged with communities, and thus necessarily to be more *communicative*” (Sandercock, 2010a, p. 19, original italics). Dhiraj Murthy echoes this attitude in his paper, *Digital Ethnography: An Examination of the Use of New Technologies for Social Research* (2008) where he argues “social researchers cannot afford to continue this over-all trend of sidestepping digital methods in the future” (p. 838).

To summarise, this Canadian example of sustainability (through urban and regional planning) linked with digital media is unique in the social sciences making Sandercock and Attili pioneers, leading the way for others to follow. It has also established and clarified that this project is located in the field of digital ethnography in Social Science. However, while we are all utilising film as “social research, community engagement and policy dialogue”, there are major differences, most significantly in regard to ‘closed’ vs. ‘open’ narratives.

The next example looks at sustainability (in regard to social justice) linked to digitality utilising the interactive mode of Web based multimedia platforms.

3.9.2 Ex. 2 Web-Based Multimedia

It's a challenge but it's also an opportunity right now with so many forms of media at our fingertips – why wouldn't we explore the boundaries? I'd say take the handcuffs off the documentary linear form and just blow that out of the water and have fun, experiment.

Cizek, 2010, p. 440.

As the quote above asserts, this form of digital storytelling breaks away from the traditional linear 'closed' narrative form of documentary that Sandercock and Attili's work represents. Also, unlike the previous example, unique in its field, there are many projects involving elements of sustainability that use this technology. For this reason three examples are given, going into more detail on the third since this is the only one that has been theorised about.⁸⁴

Ex. 1: [*The Waiting Room*](#) (Nicks and Davis, 2014) is set in the waiting room of Highland Hospital in Oakland, California with the intent to evolve relationships between public policy and people's lives. The ongoing project, which began in 2009, is funded by the MacArthur Foundation and a number of other charities and media businesses. Its content includes an ongoing story project made up of voices recruited and filmed in the hospital's waiting room. The resulting short films are all close-up on their mostly black American subjects and charged with a sense of immediacy and authenticity. In addition, a successful feature length documentary has been made out of this material. This content is delivered across a variety of platforms including television, radio, public spaces and the Internet. The project has been successful in that it contributed to the 2010 US Federal debate on health care. What is problematic is that sites like these are continually evolving. When I started to research Web sites in 2010, this site was in its early stages, in a different form to how the material is

⁸⁴ There is no body of theoretical discussion on any of the following examples in comparison to the considerable amount written by Sandercock and Attili on their work.

presented today. When originally accessing it, one would see the latest in the series of short films as well as snippets of information, for example the project's contribution to the health care debate. Four years later, one will be presented with a mosaic of faces, 241 stories to choose from, and no reference to the health care debate. Its historical context has been lost as it moved on.

Ex. 2: In Australia, the National Film Board of Canada mentored a multimedia project, *Big Stories Small Towns* (Lee *et al.*, 2009), which gave Port Augusta, an industrial city in South Australia, a voice through many smaller voices recruited from the community. The individual short films are accessed through the website in the form of an interactive mosaic of faces. The ongoing project, which began in 2008, now encompasses other communities and is currently described as “collaborations between small town communities and filmmakers in residence” (Documentary Australia Foundation, 2014). The project has been funded by a series of agencies including the South Australian Film Corporation and SBS (Special Broadcasting Service). Again, as with the first example, the project has continually evolved and is currently crowd sourcing for funding (Documentary Australia Foundation, 2014).

Ex. 3: The third example, *Filmmaker-in-Residence*, launched in 2006 by the National Film Board of Canada, is a digital project using multimedia and an interactive Web based platform to impact on public policy and can be seen as a reincarnation of *Challenge for Change* in a digital age (Filmmaker in Residence, 2014):

Inspired by the National Film Boards's legendary Challenge for Change program, and fuelled by the digital revolution, Cizek will use many forms of media – film, photography, text and an immersive online documentary – to effect change and to tell good stories.

The *Filmmaker-in-Residence* project is based around a teaching hospital in Toronto. While it encompasses the essential elements of *Challenge for Change* – empowerment of the ‘disenfranchised’ through ethical collaboration to enable an evolving dialogue with policy makers in order to impact on public policy – it is also intended to push the boundaries of “documentary in the digital age” (Cizek, 2010,

p.428). Katerina Cizek writes that the idea emerged of making a feature film through the Web, not using the Web as a companion site or a place to “dump stuff that you couldn’t put in the film”, but as a “free, easy accessible way” to access the story. Cizek describes her digital documentary as having a “fairly linear narrative” with immersive elements including “full frame photography, audio, text, and some video, delivered in a very simple flash structure” (Cizek, 2010, pp. 439-440). The interactivity comes in choosing which ‘immersive element’ to follow. Cizek describes this approach as “flash-based narrative structure” and observes that her specific purpose in choosing this mode was “to tell a story that no other media could tell” (Cizek, 2010, p. 440). By this she means the sensitivity around some of the projects, for example homeless mothers, a story that could never have been filmed, is told through photographs instead. As Cizek says, “Documentary doesn’t have to be on a camera. There’s so many ways of telling documentary stories, and that’s what I wanted to do on the web site” (Cizek, 2010, p. 440). The *Filmmaker-in-Residence* project has gone on to win many prestigious awards, as have the other Web sites referred to. They are all seen as socially responsible and as cutting edge in their use of multimedia in the documentary realm. What all these Web sites also have in common is (largely) government support and sophisticated (and expensive) interactive Web sites. They do not have a sense of the journey their subject matter must have evoked, just their arrival.

This thesis sees all three examples outlined above as keeping alive the spirit of *Challenge for Change* and as such are variations on a theme, aligning with Sandercock and Attali’s purpose in using film as ‘social research, community engagement and policy dialogue’, which is also the purpose of this research study. However, unlike the ‘closed’ narrative structure of traditional documentary, social Web architecture is designed for interaction and user experience. Research into what might be the right platform for this dissertation’s Creative Production began with Web sites like these, but as with Sandercock and Attali’s work, major differences emerged:

- A characteristic of the Web sites outlined above is that while they might present an ‘ongoing story’, they are all in the form of short films that can only be accessed one at a time. Often these films are visually presented as a

‘mosaic’ of faces. In the case of *Big Stories Small Towns*, each face in the mosaic is hyperlinked to an individual story. There is no sense of an interconnected whole that holds these pieces of mosaic together.⁸⁵

- To navigate the complex structure of these Web sites, that hold so many different modes, relies on explanatory pieces of text, and for me anyway, causes confusion.
- Since all these Web sites are continually evolving, it is difficult for them to act as ‘living’ archives that can hold the journey. Rather, as mentioned earlier, once they have reached the end-product stage there is no sense of how they got to where they get.

Both digital ethnography and interactive Web based sites show digital media as capable of narrating history and change within a localised environment, however neither mode can show things happening over time as a continuous contextualised flow – a journey. The challenge for this research project was to find a way to embed a series of 67 YouTube movies to allow the sustainability story to be communicated as an ongoing journey through time. The final example of a mode of linking digital media with sustainability is through the use of the Prezi, a digital nonlinear storytelling tool invented in 2009, around the same time as work on this thesis began.

3.9.3 Ex. 3 The Prezi

Prezi is a “cloud-based⁸⁶ presentation software and storytelling⁸⁶ tool for presenting ideas on a virtual canvas” (Prezi.com, 2014).⁸⁷ When I accidentally came across Prezi on the Internet it was a major turning point for the project. I had found what I was looking for – a ‘virtual canvas’ that would allow Fremantle’s journey to be

⁸⁵ Though clearly there is an overarching structure when a traditional ‘closed-narrative’ documentary film is made out of the individual pieces.

⁸⁶ “Cloud refers to operations that involve a network. The term often refers to the public Internet; however, a cloud may also be a private, internal network” (PC Magazine Encyclopedia, 2014). In the case of Prezi, Prezi presentations are stored through their private network and publically accessed through their Web site.

⁸⁷ Prezi was launched in 2009 by Hungarian co-founders Adam Somlai-Fischer, Peter Halacsy and Peter Arvai.

presented as an interactive ‘road map’. Compared to the ‘mosaic’ nature of the Web sites I had researched, where the films were separate entities unconnected to each other, Prezi allowed an unfurling scroll that could hold all the YouTube films to reveal an ongoing journey through time. That’s how I came to think of it, as a rolled up scroll that could be sent out into the world like a message in a bottle, but magically, inside that scroll is a living archived world.

Prezi was invented as a nonlinear alternative to PowerPoint, aimed specifically at educational users.⁸⁸ It is usually used as a presentation tool in the same way PowerPoint is used – as the focus of a lecture – but rather than a series of separate slides, slides are embedded in a ‘virtual canvas’ and shown as a series of ‘frames’. Each frame might include within it a mixture of text and photographs (like a PowerPoint slide), however it is possible to also include YouTube links, audio files, animation files and an assortment of other formats. Once the frames are set, the Prezi maker establishes a pathway between them. This default pathway moves from frame to frame by the presenter clicking a forward arrow. The ‘Zooming User Interface’ (ZUI), a prominent feature of Prezi, allows the presenter to ‘zoom’ from a ‘close-up’ frame to a frame that encompasses the entire presentation, or to any point in-between, and visa versa.

The open architecture of the Prezi is its biggest strength because it enables the construction of a chronological and holistic narrative made up of many bits of material. Its ZUI capacity allows the ‘detail’ to be contextualised within the ‘big picture’. The only limitation is how the Prezi is shared. Once a Prezi is uploaded to the Prezi website, a link sent via email, Facebook, LinkedIn, or Twitter will take the recipient directly to the cloud stored Prezi. Since access to the Prezi can only happen by directly sending and receiving a link, it is relatively hidden on the Internet.

This thesis needed to adapt Prezi from its usual use – within the controlled context of a presenter delivering a public lecture – to an ‘end user’, alone with her or his network device. For this reason the Prezi needed to be autonomous and ‘foolproof’. In making the Fremantle Prezi, 67 YouTube films were placed along a time line, in

⁸⁸ If one is a teacher or student, Prezi is available free as an online tool. It is also available as an offline tool, Desktop Prezi, for US \$59 per year.

spatial relationship to each other. Fremantle's journey to sustainability is represented by a 'stepping-stone' pathway, which is the spine of the narrative driven by Pettitt, and contextualised by interviews and events representing the 'detours and diversions' taken by the 'hitchhiker'.

As researcher I am utilising digital media to actively participate in Fremantle's journey, to document the journey, to shape it into a narrative and to navigate it like a map. Through self-reflexivity along the way, I am questioning myself – not to acquire knowledge but to create new knowledge, filling gaps in knowledge around 'sustainability and cities' and the documentary mode. Through its participatory nature and holistic depiction of Fremantle's journey towards sustainability, this thesis argues the utilisation of the Prezi to link sustainability and digital media is the most efficient and effective means of communicating 'sustainability and cities'. Unlike other means of linking digital media with sustainability, the cost of using Prezi as an interactive Web site is negligible – one does not need to hire an expert to make it.

This section has looked at three examples of linking digital media and sustainability to contextualise this study's use of the Prezi to communicate sustainability. The Prezi's open architectural structure allows the structuring, organisation and management of knowledge in the form of a narrative depicted as a roadmap.

Digital media is utilised as a research tool in this study through film/video recordings (cinematic presentation), reflexivity (the role of 'voice' in cinematic presentation), and the Prezi (Web based 'virtual canvas'). The Fremantle Prezi will be analysed using these tools in Chapter 4.

3.10 Conclusion: The Fremantle Prezi allows the Sustainability Journey to be Represented Holistically and Interactively

This chapter began with the concept of 'digitality' as the condition of living in a digital culture, and 'digital media' as a new way to tell stories and to create new knowledge. This chapter then established the epistemological foundation of this

inquiry through narrative analysis and the role of ‘voice’ in cinematic presentation to show that chronology, contextualisation, reflexivity and cinematic presentation are key to this research study’s argument – to show digital media as capable of narrating history and sustainability.

As part of the paradigm of story and storytelling, this study aligns itself with a shift in epistemology from more conventional understandings of knowing that stand outside the ‘historical’ as decontextualized, towards the subjective creation of meaning through contextualised narrative. Utilising action research, this thesis inserts practice into research through its Creative Production and the processes and practices involved in its construction; new knowledge is provoked through the very circumstances of its creation. This is a subjective approach that creates ethical issues around ‘power’ and necessitates close attention to self-reflexivity on the part of the researcher. Reflexivity is core to this study since it is founded on an epistemology that knowledge is socially constructed and should be shown to be so.

Documentary, with its heritage of filling gaps of knowledge through love of knowledge, has the capacity to fill gaps of knowledge in sustainability and cities and to use cinematic presentation as a tool for persuasion. As a cinematic narrative we are delving into the unknown and coming back with new knowledge to share. Because of the nature of the Prezi, the audience may know what direction the story is going in, but they don’t know what will happen next, or how things will turn out. ‘Characters’ interact through ‘dialogue’. Drama is shaped through style and editing. The documentary filmmaker uses visual and audio modes of communication and cinematic techniques to emotionally engage the viewer “beyond the moment of viewing into social praxis itself” (Nichols, 1991, p. 178). Grierson, and countless documentary filmmakers since, have used cinematic representation to compete with popular media to encourage participatory citizenship. For people to take action, one needs to “put a human face on the problem and solution” (Thompson, 2007). In this Creative Production, Pettitt is the ‘human face’ of sustainability as he creatively responds to the imperatives sustainability demands of him in his role as mayor.

The ‘road movie’ genre helps this study link sustainability and digital media. The question remains as to what might be the most efficient digital means to convey a

holistic and contextualised sustainability journey through time. Three examples of linking sustainability and digital media are offered to contextualise this study:

1. 'Digital ethnography' in the form of a 'closed' narrative, traditional documentary.
2. Web based interactive platforms in the form of an 'open' narrative, however each mini-narrative within the 'open' narrative is a separate structure.
3. The Prezi in the form of an 'open' narrative, capable of connecting the mini-narratives in a holistic flowing interconnected manner. This analysis of different modes reveals the Prezi is the best mode to narrate sustainability as processual, temporal and contextualised.

The next chapter examines the Fremantle Prezi's utilisation of digital media as a research tool to investigate its capacity to narrate history and sustainability. Digital media is utilised in three ways: engagement through cinematic presentation; reflexivity through the role of 'voice' in cinematic presentation; and the Prezi itself, the structure by which knowledge is managed and organised.

CHAPTER 4

THE PREZI: HITCHING A RIDE ON FREMANTLE'S JOURNEY TOWARDS SUSTAINABILITY A DIGITAL MEDIA PRESENTATION

4.1 Introduction: The Prezi as a New Way of Presenting Research

The previous chapter established the epistemological foundation for the action research mode of this inquiry into sustainability and cities through narrative analysis and the role of ‘voice’ in cinematic presentation. Meaning is created through the construction of story/narrative, and reflexivity plays a core role because knowledge is socially constructed and should be shown to be so. The Prezi expresses and represents research, gathered around a city moving towards sustainability over a period of two and a half years, as a digital media ‘roadmap’. The roadmap is made up of 67 YouTube films with a total viewing time of approximately 10 h. and 45 min. It is an ethnographical case study of a living unfolding environment presented as a living timeline, embedded within the virtual canvas of a Prezi. Since sustainability in action is a living process, it makes sense that a living processual methodology will show this most clearly.

The Prezi narrative begins in September 2009 with Pettitt’s mayoral candidacy and his objective to make Fremantle denser and greener. His aims are expressed through a ‘strategic plan’ that guides and shapes Fremantle’s journey towards sustainability. The narrative ends in February 2012 with the defining and symbolic success of the unanimous passing of Amendment 49, a controversial scheme amendment leading Fremantle towards green density. A Post Script was filmed in July 2013, towards the end of the mayor’s first 4-year term, before he was reelected as mayor. This fills in the 18-month filming gap and summarises Fremantle’s journey as having ‘no point of arrival’. This final part of the journey includes a ‘scorecard’ that shows the City of Fremantle has achieved \$1 billion of green redevelopment investment, achieving what it set out to achieve (in the form of quantifiable outcomes) as stated in its strategic plan. Success was achieved in spite of the conflict and drama, obstacles and travails along the way. Thus this research study can be said to cover a 4-year term of a new green mayor resulting in successful outcomes in terms of sustainability and cities.

The Prezi allows the structuring of narrative through a ‘prologue’, a ‘stepping-stone’ journey, and a constellation of ‘satellites’ that surround the pathway and provide

contextualisation to the journey. These structures will be questioned in terms of their utilisation of digital media as a research tool. Digital media is utilised through ‘cinematic narrative’, ‘reflexivity’, and the Prezi as a whole. For sustainability to be implemented in cities, what is most important to communicate is the ‘how’. A written case study could do this, but this study argues the use of digital media as a research tool communicates the ‘how’ more powerfully, effectively and efficiently.

This section has introduced the Prezi as ‘a new narrative’ about sustainability through the utilisation of digital media as a research tool. Section 4.2 states the aims of this chapter and outlines its structure.

4.2 Aims of this Chapter

The aim of this thesis is to establish the role of digital media and the position of film as a social ‘voice’ in sharing knowledge and exploring how we know what we know. It asks how digital media can be utilised as a process of research, and ultimately, its capacity to narrate history and sustainability.

This specific chapter does specifically question the utilisation of digital media as a research tool through:

1. cinematic presentation;
2. reflexivity; and
3. the Prezi;

to assess digital media’s capacity to narrate history and change.

Section 4.3 establishes the parameters of this research study through the City of Fremantle’s strategic plan, driven by the mayor, which shapes the Prezi as a roadmap.

Section 4.4 shows how to use the Fremantle Prezi as an immersive experiential learning process.

Section 4.5 orientates the user to the roadmap through a ‘prologue’ that involves the user participating in the Prezi as an active learner. The prologue utilises cinematic presentation and reflexivity to introduce the main actors/agents, to set the scene, and to establish what is at stake.

Section 4.6 analyses the ‘stepping-stone’ journey utilising digital media via cinematic presentation and reflexivity as a research tool. Cinematic narrative involves ‘character’, ‘dialogue’, ‘conflict and resolution’, and ‘style’. Cinematic narrative communicates sustainability by putting ‘a human face on the problem and solution’ to engage the user and to communicate complex ideas.

Section 4.7 analyses the contextualisation of the stepping-stone journey through its satellites, utilising digital media as a research tool through ‘reflexivity’, which communicates that knowledge is socially constructed. The filmmaker/researcher as ‘hitchhiker’ communicates her learnings along the way through postcards that open a dialogic process with the narrative and the user.

Section 4.8 concludes that digital media through cinematic narrative, reflexivity and the Prezi, allows sustainability to be communicated powerfully and effectively, in a way that reflects its contextualised, integrative and emergent nature.

Before the commentary/exegesis can begin its analysis of digital media as a research tool it is necessary to establish the research parameters for this study.

4.3 Establishing the Research Parameters

The content of the filmed recordings, and ultimately the Prezi narrative, was informed by the City of Fremantle’s *Strategic Plan 2010-2015* (City of Fremantle, 2010). Making a strategic plan is the first job required of a new council and in this case it was put together in record time. Driven by the mayor as ‘strategic head’ of the City, it prioritised green re-development and increased density,⁸⁹ and was

⁸⁹ For the city centre, it included an additional 1,500 dwellings, and an additional 90,000 sq. meters of retail and office space.

distinguished by being only six pages long.⁹⁰ The strategic plan is expressed through 7 strategic imperatives, see Box 4.1 below.

The 7 strategic imperatives in Fremantle's *Strategic Plan 2010-2015* (City of Fremantle, 2010):

1. **Economic development** – to strengthen Fremantle's economic capacity.
2. **Urban renewal and integration** – to provide a great place to live, work and shop through growth and renewal.
3. **Climate change and environmental protection** – to lead in the provision of environmentally sustainable solutions for the benefit of current and future generations.
4. **Transport** – to lead in the provision of environmentally and economically sustainable transport solutions.
5. **Character** – to sustain and grow arts and culture and preserve the importance of our social capital, built heritage and history.
6. **Community and safety** – to create a community where people feel safe in both private and public spaces.
7. **Capability** – to deliver on the achievement of our strategic imperatives through good governance, strong leadership, effective communication and excellence in service delivery.

Box 4.1: The 7 Imperatives of Fremantle's *Strategic Plan 2010 - 2015*

⁹⁰ By not giving details of the 'how', the plan allowed for flexibility.

While each of the imperatives outlined in the box above point to a different facet of sustainability, much of the research study focused on the first two strategic imperatives that deal with the economy. The imperatives of ‘Economic Development’ and ‘Urban Renewal and Integration’ are interwoven to the extent it is difficult to separate them. They are expressed through three major redevelopment plans, all of which embrace medium density, mixed-use, sustainable urban design to increase Fremantle’s residential and working population, see Box 4.2 below.

Fremantle’s 3 Redevelopment Plans:

1. The northern entrance to Fremantle, known as the ‘East End’ redevelopment plan (Amendment 38), to accommodate 2,500 new residents within walking distance of the city centre.
2. The inner east of the city centre, known as the ‘City Centre Strategic Sites’ redevelopment plan (Amendment 49), to accommodate 2,500 new residents in 1,500 new dwellings with an additional 70,000 sq. metres ‘A-grade’ commercial office space and 20,000 sq. metres of retail space.
3. The ‘Knutsford St’ project, the last ‘brownfield’ site in Fremantle located a kilometre or so back from the city, to accommodate 1,500 new residents, in partnership with LandCorp (manager of land assets belonging to government).

Note: A brownfield site is a site previously used for industrial purposes.

Box 4.2: Fremantle’s 3 Redevelopment Plans

The intention was that the redevelopment be high ‘green star’ rated (aiming towards zero carbon emissions); that it include affordable housing; that it provide good public spaces; and that it become ‘the heritage of the future’. These intentions, articulated

by Pettitt in his mayoral campaign and regularly throughout the study, encompassed the ‘sustainability and cities’ agenda of density (vs. sprawl), and liveability (improved wellbeing) established in section 2.3. The progress of the three green redevelopment plans was contextualised by the state-planning directive, ‘Directions 2031’: “This plan assumes an increased population of the metropolitan area of 556,000 to 2.2 million by 2031, which will require an additional 328,000 dwellings” (Government of Western Australia, 2009).⁹¹

Since much of the study involved planning, there was little to be seen on the ground to show sustainability was happening. This had implications both in terms of advocating sustainability to the public, and in terms of constructing a visual narrative.

The remaining five imperatives included in the research study were:

- ‘Transport’ through the implementation of bicycling infrastructure and collaboration with neighbouring local authorities in planning for railway and light rail corridors;
- ‘Character’ through placemaking, particularly around Kings Square where the Council offices were located;⁹²
- ‘Community and Safety’ through the search for solutions to the problem of a few clearly dysfunctional Indigenous people⁹³ who congregated and often fought outside Pettitt’s office in Kings Square.

⁹¹ ‘*Directions 2031 and Beyond – Metropolitan Planning Beyond the Horizon*’, was adopted on 30 August 2010 by the Western Australian Planning Commission. It is the metropolitan level strategic plan that establishes a vision for future growth of the Perth Metropolitan Area and the adjoining Peel Region. The document provides a framework to guide the detailed planning and delivery of housing, infrastructure and services necessary to accommodate that growth. This plan represents the highest level of strategic land use planning for the metropolitan region. The plan sets out principles and strategies to provide for the required dwellings, with a renewed focus on improved job self-sufficiency within the various sectors across the metropolitan area. The optimal development target is that only 53% of new housing occurs through Greenfield development. In contrast, 47% of additional dwellings are to be accommodated in existing built-up areas. The infill rates currently being achieved will be required to almost double to reach this 47% target. The plan has also been formulated on the assumption that Perth will reach a population of 3.5m people by 2031.

⁹² Kings Square is a central location and considered by some to be the ‘heart’ of Fremantle.

⁹³ Dysfunctional in the sense they were under the influence of alcohol and/or drugs.

- ‘Climate Change and Environmental Protection’ through the City’s engagement in an ongoing process of improving their ‘carbon neutrality’ status.
- ‘Capability’ through ‘good governance’. A good example of this, which I learned after the study was over, was when Pettitt revealed that at the beginning of his mayoral term he told his councillors there would be no more vote swapping.⁹⁴ By voting according to the merits of each case rather than lobbying each other, Pettitt established a tone of integrity and transparency within council from the beginning.⁹⁵

While neither of the imperatives ‘Climate Change and Environmental Protection’ and ‘Capability’ tended to emerge during the research study, all seven imperatives are interrelated and expressed through the different structural elements of the Prezi.

Now the parameters of the research have been established, the next section shows how to use the Prezi as an immersive experience.

4.4 How to Use the Fremantle Prezi

To access the digital media presentation *Hitching a Ride on Fremantle’s Journey Towards Sustainability*, the following link: <http://prezi.com/ffhanmcfzdr/> needs to be copied into one’s Web browser. Once the address has been entered, the following image will appear:

⁹⁴ Pettitt told his students this when he co-taught with Peter Newman ‘Sustainability Leadership’ at CUSP Institute in October 2012 (Pettitt & Blagg, 2012).

⁹⁵ Pettitt’s comments regarding voting according to merit are seen as text in the first of the conversations, *How to Say Yes*.

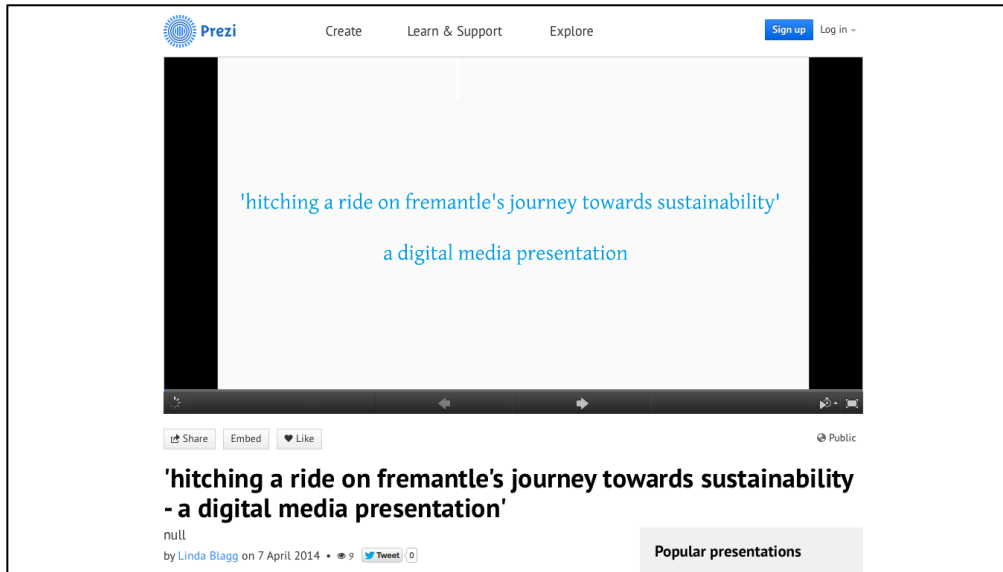
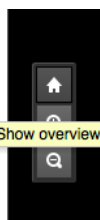


Image 4.1: Opening frame of Prezi

Source: Blagg, 2014.

Allow time for the presentation to upload, it may take a minute or two. The presentation can be expanded to fill one's screen. The arrows at the foot of the screen follow a default pathway forward and backwards, frame to frame. When one hovers to the right edge of the screen the following icons appear:



Clicking on the house icon gives an overview of the Prezi; a useful tool when one steps off the default pathway and gets 'lost'. Below it are the 'zoom out' and 'zoom in' icons.

Image 4.2: Detail from Prezi 1

Source: Blagg, 2014.

The Fremantle Prezi can be 'read' as a series of 'frames' along a default pathway, however it is intended the user becomes involved in the Prezi in a more active, immersive way. One of the delights of Prezi, aside from its bright white aesthetic, is to glide over it using one's cursor in the same way one would explore Google Earth – moving the cursor in to get closer, out to get further away, and clicking on an item to view it. The user is encouraged not to use the default pathway but rather to take on

the role of ‘hitchhiker’ and actively explore the Prezi as a ‘roadmap’ to see how far a mayor can go in implementing sustainability in his city. By participating as an ‘active learner’ the Prezi experience becomes a journey of learning, of putting bits and pieces together to create meaning, as my journey was.

Before immersing oneself in the experience, the user is recommended to orient her or himself by clicking through some or all of the 56 ‘frames’. Early on, the user will see the big picture:

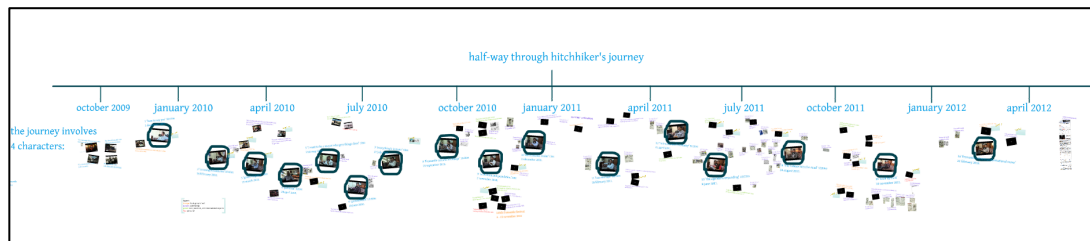


Image 4.3: Overview of Prezi

Source: Blagg, 2014.

The major elements to be seen include: a timeline drawn across the top of the frame to indicate the temporal nature of the roadmap; an introduction to the main characters; a series of 17 ‘stepping-stones’ to represent the narrative spine,⁹⁶ and a constellation of ‘satellites’ made up of films, newspaper clippings, and postcards. Pettitt drives the central stepping-stone narrative through a series of conversations with Newman that take place in his mayoral office. The satellites represent the hitchhiker’s detours and diversions providing reflexivity and contextualisation to the narrative spine. A map legend explains the use of four different colours in the titles of the satellite films to distinguish between: local government; community; local, national and international experts; and personal. A list of films in order of appearance in the Prezi is found in the Appendix.⁹⁷ It is a useful reference guide to have when entering the Prezi because it gives each film’s subject matter, date it was filmed, where it was filmed, and length.

⁹⁶ The last stepping- stone can’t be seen in this view of the Prezi since it is 18 months into the future.

⁹⁷ Films within the Prezi referenced in this chapter are referred to by their title only in preference to APA style which would be too unwieldy in terms of how many films there are.

This section has given an overview of the Fremantle Prezi and established how to use it as an active learner. The following section orientates the user to the journey through a ‘prologue’ that introduces the main actors/agents, sets the scene, and establishes what is at stake, through the use of interactive ‘cinematic representation’ and reflexivity.

4.5 The Prezi Prologue

In a ‘road movie’ it would be unusual to begin the journey immediately, typically time would be taken to set up characters and establish what is at stake. In the Prezi, the ‘set up’ is done through a ‘prologue’, see Figure 4.4 below.

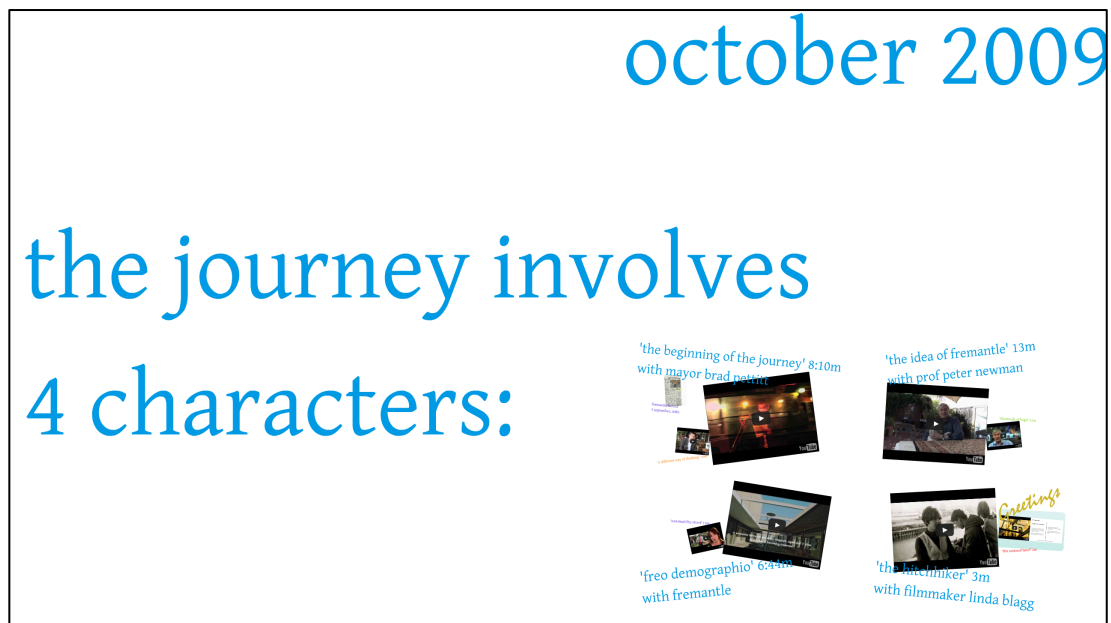


Image 4.4: Prezi prologue frame

Source: Blagg, 2014.

All the ingredients of the Prezi are visible in this frame: films, a newspaper clipping, and a postcard, however there is no default pathway to guide the user from object to object within the frame. This reflects that there is no chronology as yet⁹⁸ – it is up to

⁹⁸ The films included were made between 2008 and 2010. To have a default pathway here would be confusing, suggesting a non-existent chronology.

the user which film they watch and in what order – thus the Prezi invites participation and interactivity.

The prologue introduces the four main characters: Mayor Brad Pettitt as ‘driver’; sustainability Prof. Peter Newman as ‘guide’; filmmaker/researcher Linda Blagg (myself) as ‘hitchhiker’; and Fremantle, a survivor from ‘way back’.⁹⁹ There are 8 films incorporated into the prologue (including one within the postcard)¹⁰⁰ making up a total of 76 min. viewing time. The size of the film suggests its importance – the smaller ones being secondary to the larger ones. The titles of the films also play a part in that they generally suggest the essence of what a film communicates: *The Beginning of the Journey* encompasses Pettitt’s mayoral campaign and election; *The Idea of Fremantle* gives an overview of Fremantle’s last 35 years from the perspective of Newman, an activist/academic resident; *The Hitchhiker* introduces the aims of the case study; and *Freo Demographio* describes Fremantle in demographic terms, as it was at the beginning of the study. The smaller sized films give background detail to the actor/agents: *A Different Way of Thinking* connects the big picture of sustainability to how it applies to Fremantle; *Diamonds of Hope* is the idea each one of us has a ‘diamond’ to contribute to our community and that ‘hope’ is a choice made in the midst of despair to live as though, “what I can do will make a difference”; *Sustainability Street* is an example of how sustainability plays out in Fremantle’s community through the contribution of two activists in the street where they live.¹⁰¹

The newspaper clipping introduces Pettitt through the eyes of the *Fremantle Herald*. While the article is in Pettitt’s words, what is brought to the fore is the editorial underlining of Pettitt saying, “yes” to substantial new developments. This newspaper clipping is one of 55 interspersed throughout the journey, largely from the *Fremantle Herald*, but also from the *Fremantle Gazette*, the *West Australian*, the *Sun Herald*,

⁹⁹ In the sense a place can be said to have a character.

¹⁰⁰ Of the postcards, only 2 have films embedded rather than photographs.

¹⁰¹ Sustainability activists, Shani Graham and Tim Darby, run the annual Hulbert St Sustainability Fiesta - a successful bottom-up, street initiative. Not long after the September 2010 Fiesta, the Hon Melissa Parke, Fremantle’s ALP federal representative, delivered a speech to parliament about the event (Parke, 2010). She praised the community spirit, dedication and generosity of Shani and Tim, and paid tribute to Fremantle as leading the way to a more sustainable lifestyle.

the *Sydney Morning Herald* and the *Financial Review*.¹⁰² What is significant about the *Fremantle Herald* is the role it played in Fremantle's unfolding drama. Its editor, Andrew Smith, made it the mouthpiece for opposition to the new mayor and his council so essentially its inclusion represents the 'green anti-development' point of view. As a popular and widely read local newspaper with major influence in the community, Smith is Fremantle's version of Murdoch, unafraid to be divisive, opinionated and occasionally, slanderous. The impact of his righteous ire has had severe effects on those who have been subjected to it.¹⁰³

Reflexivity is introduced through the postcard, written by myself as 'hitchhiker', one of 21 interspersed throughout the journey. Rather than a photograph, this one contains within it a short 'personal' film, *The National Hotel*, which poetically evokes Fremantle as dead or dying, the possibly of new life fragile and uncertain. It also communicates the length of time things take to happen in Fremantle – the fire that destroyed the hotel happened at the beginning of 2007, but the hotel did not reopen until the end of 2013, seven years later. The series of postcards reflect my engagement with the narrative and reveal my learnings along the way. The subjectivity of the postcards is intended to invite a response from the user, to open a dialogue as well as to recognise the contested nature of the issues.

The number of films that make up the prologue add up to a lengthy introduction but it takes time to prepare before one embarks on a two and half year trip. By the user immersing her or himself in the prologue they will discover:

- Fremantle was once bohemian:

In the 1970s Fremantle became a 'trendy' place to live. It's European 'feel' and cheap housing attracted artists, academics and craftspeople who proceeded to establish an innovative, creative culture.¹⁰⁴ The Fremantle Society (TFS) was formed at this time and throughout the 1970s and 1980s it

¹⁰² Unlike the other newspapers, the *Financial Review* is a national newspaper.

¹⁰³ Victims included Newman, see *The Idea of Fremantle*, and Cr Andrew Sullivan, see *Side Stepping the Charging Bull*.

¹⁰⁴ Peter and Jan Newman moved to Fremantle in 1974 and still live in the same house they bought when they arrived.

fought the road lobby and unsympathetic development and mostly succeeded in preserving much of Fremantle's built heritage.¹⁰⁵



Fremantle is pre automobile in its urban design ... with offices, houses, shops and industry mostly within walking distance. These physical features have a very definite effect on the community spirit of Fremantle ... One of Fremantle's greatest assets is that it is the one place in the metropolitan area which has retained this pre-automobile character. ... Put simply, Fremantle is much more like an old European city and the rest of Perth is more like modern American cities.

Newman, 1979.

Image 4.5: Local newspaper article on P. Newman.

Source: Newman, 1977.

- Fremantle won the America's Cup:

In 1986, Fremantle was on the global stage when Australia defended the America's Cup Yacht Race after beating the US who held the trophy for 120 years. This event led to an influx of state and federal funds leading to significant infrastructure and restoration work, including restoring the Town Hall.¹⁰⁶ It also led to a backlash by those who opposed the event and the changes it brought to Fremantle.

¹⁰⁵ Newman was a founding member of TFS.

¹⁰⁶ Newman played a major planning role at this time of renewal, working with local and state government.

- Fremantle has a University:

In 1992, Notre Dame University was established in Fremantle’s historic West-End precinct, bringing youth and heritage restoration. During most of the making of this film Curtin University was also present in Fremantle through CUSP that was also in the historic West-End.

- Fremantle is a tourist destination:

Fremantle’s walkability, heritage conservation, and entertainment precincts has made it one of Perth’s most popular tourist destination, and after Perth, the most visited by interstate and international visitors.

- Fremantle is depressed:

Once Perth’s second city, Fremantle can hardly be classed as such these days. While it has many of the elements of a major regional centre¹⁰⁷ with hospital, university and football team, Fremantle has been economically in decline for the last 15 years, some say since the America’s Cup in 1986, the last time there was a substantial injection of funds into the city. In the last decade, while the rest of Perth enjoyed a boom and a 90% growth in commercial floor space, Fremantle suffered a 10% decline:

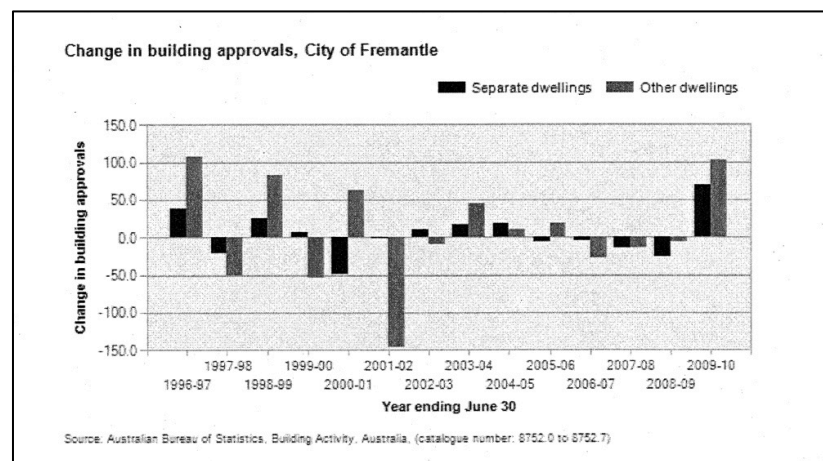


Figure 4.1: Graph depicting Fremantle building approvals 1996 - 2010

Source: City of Fremantle, 2011.

¹⁰⁷ Fremantle is a regional centre to a much wider population of around 300,000 from the southern suburbs.

This highly revealing graph of building approvals from 1996 – 2010 depicts Fremantle’s mostly negative growth.¹⁰⁸ The sense of things gradually winding down was confirmed in August 2009 when the WA Department of Planning and Infrastructure downgraded Fremantle from one of three ‘second tier’ cities, to ‘third tier’ – on a par with many suburban centres across Perth. In Fremantle the decline of economic activity is reflected in the number of businesses for sale and the general dishevelment of the CBD. Fremantle may burst with visitors over weekends and summers, but on a weekday it can seem like a ghost town. For a city that was once bigger than Perth (19th Century), and long known as Perth’s most important centre outside its own CBD (20th Century), this downgrading was a humiliation. In October 2009, the city entered a new phase with the election of its first green mayor with a stated agenda of restoring Fremantle to its ‘primary’ status by being both pro-green and pro-development. The upturn in development apparent in the above Figure in the most recent data provided is part of the story of the Prezi.

- Fremantle is small:

Fremantle and its surrounding suburbs cover 19 square kilometres:

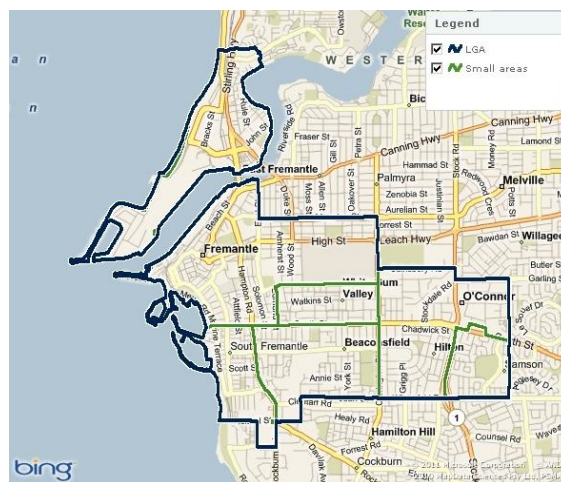


Image 4.6: Fremantle’s boundary

Source: City of Fremantle, 2011.

¹⁰⁸ In that same period (and probably related) The Fremantle Society (TFS) held political sway ensuring new developments were restricted to maintain the integrity of Fremantle’s built heritage, namely to keep to the scale of its 19th and early 20th Century buildings.

The size of its population has hardly changed in 35 years: 26,036 in 1971 (ABS, 1971); 26,584 in 2011 (ABS, 2011), equating to 13.97 people per hectare, (City of Fremantle, personal communication, March 17, 2011).

The city centre, comprising just over one square kilometre, has a population of 1,292 equating to 12.8 persons per hectare (City of Fremantle, personal communication, March 17, 2011). To get an idea of how low-density this is, consider the average European inner city with its lively and diverse mixed-use, medium-density housing averages 80 persons per hectare (J. Kenworthy, personal communication, February 16, 2011).

- Fremantle is expensive:

Fremantle was traditionally a diverse working-class city but is now predominantly middle-class, middle-aged, and largely professional.¹⁰⁹ As house prices have gone up, those original artisans and artists who made Fremantle bohemian have moved out to Fremantle's suburbs. This has led to Fremantle's increasing homogeneity and gentrification. People who work in Fremantle mostly can't afford to live there, and those who live in Fremantle mostly work elsewhere. This is the opposite of what it means to be a sustainable city, which is about a place where people can live, work, and shop. Fremantle is in danger of becoming a weekend tourist town and a dormitory suburb for the wealthy or as Newman *et al.* (2009) describe it: an 'eco enclave'.

- Fremantle people who stand up for sustainability can get crushed:

Fighting for sustainability in Fremantle can become personalised in the sense that an individual's reputation can be destroyed through innuendo as well as open slander through the pages of the *Fremantle Herald*. The individual also risks being ostracised within their local community.

¹⁰⁹ The 2006 census showed the proportion of residents having a university degree or above is 71% above the state average, residents aged 65 and over is 32 % above average, and the number of professionals, 42% above average (City of Fremantle, 2010).

- Fremantle is a political trendsetter to the rest of Australia:

Fremantle is a highly activist and ‘green’ community evidenced in the State by-election in May 2009 when Fremantle residents were the first voters in Australia to give the highest primary vote to a Greens candidate. The election of Adele Carles¹¹⁰ ended 85 years of uninterrupted Australian Labor Party (ALP) representation for Fremantle at State level.¹¹¹ The national media frequently reports on Fremantle electoral results since Fremantle is seen as something of a political trendsetter to the rest of Australia.

- Fremantle as a potential model for ‘sustainability and cities’:

At his mayoral campaign launch, Pettitt, sustainability academic and Fremantle city councillor, vowed to fight for affordable housing for people on average incomes¹¹² and for Fremantle to be more than a tourist town or dormitory suburb. His big idea is to bring density back into Fremantle through more people living and working there, “to restore [Fremantle’s] economic and social heritage as a thriving, vibrant and diverse center, second only to Perth”. As Pettitt says, “Now we have protected our past, it is time to protect our future”.

The prologue introduces the main actors/agents, sets up the story, and includes the three ingredients of the Prezi (films, newspaper clippings, and postcards). By familiarising her or himself with Fremantle’s recent history, the user is able to see what is at stake in Fremantle’s journey towards sustainability: Can Fremantle be a beacon to the rest of the world? Or is the new mayor an idealistic dreamer? How far will he get? Will he be destroyed in the attempt? These are the dramatic imperatives that will drive the narrative forward.

Fremantle’s recent history through the prologue is not laid out chronologically but is rather experienced by the user in fragments, as voiced by the individuals who tell their stories. The user becomes an active learner in making sense of the fragments,

¹¹⁰ The Fremantle Society and the *Fremantle Herald* supported Adele Carles’ successful electoral campaign.

¹¹¹ Fremantle turned back to the ALP in the March 2013 state election.

¹¹² ‘Average incomes’ means what is affordable for nurses, teachers, and police.

which involves bringing her or his own assumptions and values into play. Now the user is oriented, she or he is ready to start the journey, to step onto the mayor's pathway, to see Pettitt reflect on the journey he is on and his opportunity to put "great visions, great ideas" into practice.

This section has introduced the utilisation of digital media through participatory dramatic representation and reflexivity. The following section examines the central 'stepping-stone' narrative in terms of its utilisation of digital media through: cinematic presentation (characterisation, dialogue, conflict, resolution and style), and self-referencing.

4.6 The Prezi Stepping-Stone Pathway

The new mayor, along with the majority of his council, had recognised the most urgent issue was to reverse Fremantle's economic decline.¹¹³ Their intentions were expressed through Fremantle's *Strategic Plan 2010-2015*, outlined in section 4.3. The stepping-stone pathway is Pettitt's narrative in the sense he is the 'driver', driving the strategic plan, which he describes as a roadmap: "The strategic plan is a roadmap for the next five years" (see stepping-stone 4 *Patience*). From the first stepping-stone film, *How To Say Yes*, Pettitt knows the direction he wants to go in, linking up all the projects so they form a coherent whole:

And that coherent whole is Fremantle as a sustainable, vibrant regional centre, which has a great sense of place and community. With density pushing the boundaries in terms of design and sustainability. That's the Fremantle I want to live in.

The projects, tied to the strategic imperatives, weave in and out of the stepping-stone films, holding them together within the larger stepping-stone narrative to create a coherent whole.

¹¹³ Five new councillors, elected at the same time Pettitt became mayor, were all in line with this new direction. Many of them became candidates because they wanted to work with Pettitt as mayor.

The pathway of steeping stones is the spine of the narrative; the primary aspect of the entire digital production. It is made up of a series of conversations between Pettitt and Newman, a person Pettitt sees as a mentor (B. Pettitt, personal communication, September 14, 2009):

I guess that's what's been amazing – seeing history catch up to Peter's thinking. The things he was saying 20 years ago are now taken increasingly as just common sense. But 20 years ago they were deeply radical.

Newman is somewhat unique in being both an academic and an activist. He has played a significant role in Fremantle's history. In the 1970s he was a city councillor fighting to preserve Fremantle's heritage from the road lobby. As part of a group he fought to reopen the Fremantle rail-line to Perth when the Liberal party closed it in September 1979. After 4 years of political activism, the Fremantle line was reinstated in July 1983 by a new Labor government. Newman went on to use the reopening of the Fremantle line as a story to inspire people around the world. He was integral to Fremantle's revitalisation after Fremantle won the America's Cup Yacht Race in 1987. In 2003 he, along with his research students, wrote the Western Australian State Sustainability Strategy, launched in 2003, the first of its kind in the world. From 2001 to 2008, Newman worked closely with Alannah MacTiernan, Minister for Planning and Infrastructure, in the roll out of Perth's new train lines. The Perth railway system is now a leading world example as a successful business model for public transit. Since 2008 he has been a member of Infrastructure Australia, and since 2010 a Lead Author for transport on the Intergovernmental Panel on Climate Change (IPCC). In January 2008 Newman moved from Murdoch University to Curtin University to become director of Curtin University Sustainability Policy (CUSP) Institute. Through his numerous radio interviews on local and national radio, through local and national newspaper articles, and through rapidly increasing TV appearances, Newman is seen as a local, national and international voice on sustainability and transport issues.

However Newman's local sustainability activism has led to some controversy in his hometown, see Prologue film *The Idea of Fremantle*. In fact Newman became seriously ill in 2008 with stress brought on by being accused of corruption by the

editor of the local newspaper, Andrew Smith, and in the letters Smith published, some from members of Newman's church, unable to accuse him directly. For Newman sustainability had become personal, as it was to become with Pettitt. And this pain too, as Newman points out, is part of the journey.

Newman was keen to be involved with a city that wanted to put sustainability into action. Pettitt and Newman had known each other for a long time. Newman was Director of Murdoch University's ISTP (Institute of Sustainability Technology Policy) when Pettitt attended as a student. It made sense to bring two colleagues and friends together with the same sustainability mind-set; who speak the same language. If the scenario had involved just Pettitt and myself (as interviewer), it would have lacked the richness and spontaneity of what emerged in conversation between these two academics in 'sustainability and cities'.¹¹⁴

In the series of conversations, Pettitt is the only person on screen; Newman's 'off camera' presence is indicated through his voice and by the direction of Pettitt's 'eye line'. Not including Newman in a two shot was a deliberate choice, I wanted the focus on the main protagonist – the driver. The agenda for the conversations is set by the Strategic Plan that Pettitt is driving. If I'd had a second camera focused on Newman it would have more strongly conveyed the idea of a conversation taking place, however it would have ended up looking more staged. At all stages I wanted to keep the project simple and 'no-frills', to allow moments to unfurl. This approach allows us to see Pettitt thinking and reflecting. This is important because sustainability is about a 'new way of thinking'.

Reflexivity also played a part in the conversations through 'self-referencing' – those occasions when Pettitt's eye line shifts to the third person present in the room, myself as filmmaker and occasional participant, and Pettitt's responsiveness to my presence.

The following segments will examine the stepping-stone narrative to consider how well digital media, through cinematic presentation, communicates history and

¹¹⁴ There was one stepping-stone film made while Newman was away (stepping-stone 4 *Patience*), mainly conducted to keep up the monthly momentum of meetings with Pettitt.

sustainability. The first segment considers the technique of ‘characterisation’ – how visual and audio modes of communication can reveal a different way of thinking and a new kind of politics more effectively and efficiently than words read off a page.

4.6.1 Character

The first conversation between Pettitt and Newman, *How To Say Yes*, took place during Australia’s December 2009 climate change debate when opposition Liberal leader Malcolm Turnbull ‘got dumped’ for the populist Tony Abbott¹¹⁵ because he supported action on climate change. Against this context, Pettitt protests the lack of political leadership nationally and globally:

No one is going to get to that ‘solutions focus’ until there’s places like Fremantle working their way through it, as an example of leadership as whole of council. To take away the fear that sustainability is an attack on the Australian way of life and everyone will suffer. Instead what cutting carbon emissions requires us to do is the things we should be doing anyway, in terms of peak oil, and creating good liveable neighbourhoods.

It is not words alone that convey meaning here but Pettitt’s body language and his exaggerated tone of voice when he says, “everyone will suffer”. This example shows the power of ‘audio’ – the way someone speaks can communicate so much more than reading words off a page. It is also significant that Pettitt refers to leadership as ‘whole of council’. There is a pragmatic understanding here that he is one of thirteen and nothing unless he can bring his councillors with him. Pettitt goes on to say, “local government needs to take the initiative to show political leadership is possible” setting up the underlying *raison d’être* of the Fremantle study.

The nature of ‘leadership’ emerges again in conversation 6 *Groundwork*, which took place shortly after Kevin Rudd was replaced by Julia Gillard as Prime Minister, a leadership change caused by Rudd backing away from an Emissions Trading Scheme:

¹¹⁵ Tony Abbott became Prime Minister of Australia in October 2013.

I think people actually really do want a government that's going to make hard decisions and stand for something and help us do that transition to a more sustainable society. They expected people to stand by their principles. If you call something 'the greatest moral challenge of our time' and then are not going to do anything about it you can't have integrity. Both major parties think we can address the big sustainability challenges by not changing much at all, ultimately fiddling around at the edges and thinking that will get us to where we want to be. I find it fascinating because the evidence is clear that it requires pretty fundamental change. I am amazed at the lack of political courage.

It is doubtful there are many mayors in Australia who can articulate the 'big picture' of sustainability as passionately and coherently as Pettitt. However his words raise the dramatic stakes: will he have the integrity and courage to make the 'hard decisions' required in Fremantle? A little later in the conversation, after discussing with Newman redevelopment plans for the city centre, he expresses some sympathy for Rudd's position and a little of his own frustration:

You can get bogged down in this process. And people expect that things are going to change and they don't. How do you make sure you get those tangible things where people can see change happening.

Pettitt articulates an ongoing quandary for a politician, high expectations from the public combined with nothing tangible to be seen on the ground. This will be an ongoing theme throughout his sustainability journey.

The strategic plan that shapes the conversations was workshopped by the community in mid May 2010 (see *Community Consultation on Strategic Plan 2010 – 2015*), and officially launched five months later (see *Launch of Strategic Plan*),¹¹⁶ but it can be seen emerging from the beginning of Pettitt's narrative. The first conversation, only 6 weeks after Pettitt became mayor, introduces key imperatives and sustainability

¹¹⁶ In Brad's launch of the Strategic Plan, he refers to the many positive outcomes to density, not the least of which is "one less dwelling built on the urban fringe".

themes including: change through local government; need for leadership; green urbanism; prioritisation of density, affordability and sustainability through scheme amendments and green redevelopment projects; partnerships with business, community and government; community engagement on scheme amendments through workshops; and oppositional politics through The Fremantle Society. Pettitt has hit the deck running. The following few paragraphs, which encompass some of the content of this first 10 min. conversation, show clearly how much can be communicated in a short space of time, proving how efficiently cinematic presentation communicates sustainability.

Pettitt introduces the first of many ‘challenges’ (as opposed to problems) in transforming a city when he asks, “How do you proscribe urban form when you don’t own the land? We’re breaking new ground here, that’s the challenge”. The question is sincere. Sustainability isn’t an answer to the question, rather the beginning of a ‘solutions-focused’ process. Expressing a problem as a challenge is to invite a creative response. Pettitt is lively and enthusiastic when he outlines an incentive scheme that would reward developers with extra height if they achieve high levels of green star ratings through their buildings – a concept referred to as ‘discretionary height’. In response to Pettitt’s strategic plans, Newman says, “That’s the kind of technical internal stuff where you will probably achieve the most, and yet nobody will know what you did”.¹¹⁷ The new urban form that will emerge from planning changes won’t happen for another 4-5 years and then somebody else might get the credit.¹¹⁸ The answer to this issue of ‘invisibility’ lies in: “Bringing the public with you on this journey. Has to be there from the start”. Pettitt includes me in the conversation when he tells Newman about a well-attended community workshop on a scheme amendment I had recently filmed.¹¹⁹ From the beginning, through self-referencing, I am clearly seen both as part of the process Fremantle is engaged in, and as filmmaker.

¹¹⁷ In the second conversation, *Crossing Boundaries*, Peter reiterates this point, “That is the hard politics of sustainability, you are actually having to do something whose benefit will be seen significantly further down the track”.

¹¹⁸ This is an issue Peter returns to many times through the course of the conversations and perhaps summarises his only critique of the new council – the lack of outward signs for the public to see sustainability/change is happening.

¹¹⁹ See *Community Consultation of the East End Plan*. The ‘East End’ scheme amendment was already in progress when Brad became mayor.

Sustainability Principles Emerge through Characterisation

At the same time as the imperatives are discussed, sustainability principles emerge that define and clarify the sustainability journey. Sustainability as a political idea is the opposite to the traditional antagonisms and divisiveness of party politics. The general idea of sustainability is to find common ground, to find ‘wins’ for everyone. In this first conversation, when Pettitt discusses his relationship with The Fremantle Society (TFS) – on his mind since his next appointment is to speak at their AGM, he refers to what he sees as their irrelevance: “None of their candidates got up in the election, they were all soundly beaten, everyone was tired of their way of doing politics ... Old dualisms don’t make sense any more”. He doesn’t want to appear “too triumphalist”, but he still plans to lay down the challenge: “To ask what’s a positive and constructive way they can be engaged?” This is a strikingly efficient way of summarising the politics and methodology of sustainability, and Pettitt’s leadership style; one appeals to the opposition not by opposing them, but by engaging them. Sustainability is a new kind of politics, a theme that is carried through in the following two conversations.

Conversation 2 *Crossing Boundaries*, filmed a month later, picks up on TFS when Newman asks Pettitt how his speech went at their AGM. Brad refers to objections from a small number of ‘hardcore’ members, “who see that everything that’s bigger than existing buildings, imposes on/diminishes the heritage of the city”. They agree that it is not possible to win everyone over otherwise there is a danger of going to the lowest common denominator. For Newman, “Sustainability is about hard decisions”. Pettitt responds by saying, “That is the crux of it. This is not a consensus decision”. Newman reiterates that educating the community is vital, “Seize every opportunity to talk it through ... so you can get as many as possible to come with you”. This balance between ‘bringing the community with you’ and not letting nimbyism take over is another ongoing theme.

In conversation 3 *Green vs. Green*, the sustainability idea of engaging the opposition (by finding common ground) is elaborated through Pettitt’s working relationship with Adele Carles, Greens member for Fremantle. Before Pettitt reveals details to us, he asks me for reassurance about handling the subject carefully and I remind him he

has ‘final veto’. By including this exchange in the edit, the presence of trust in our working relationship is self-referenced, and we know the story we are about to hear will be personal. Carles had attacked Council through *The Fremantle Herald* from the beginning of Pettitt’s mayoral term. After many attempts to meet up, Pettitt finally had a meeting with her that he describes as “very fiery”, and “reasonably unpleasant”. He tells us what he said to her: “You can keep going down this route of just attacking Council from the side, or we can actually work together and get some really good things done”. He tells her the things she was attacking Council on were things Council couldn’t do anything about, “no point in putting energy into something you can’t change”. However there were things they could work together on, “like the wind farm at Rouse Head, and sustainable building”, things they’d agreed on, and where they were already making progress. Pettitt thought their meeting had cleared the air, but as time went on it became clear Carles remained entrenched in warfare, ultimately delaying the most important planning change the council was involved in for nearly a year.¹²⁰ A little later in the conversation the conflict is further personalised when Pettitt tells us that at a Greens event before the mayoral election, that included TFS, “Every person in the room was doing everything they could not to get me elected”. He laughs after he says it, but Newman and I are genuinely surprised – you would think they shared things in common. Pettitt goes on to say, “It’s actually been really good for me ... Party politics is not relevant to my job”. Through Pettitt’s self-deprecating humor and positivity, another sustainability principle has emerged – sustainability is not about party politics. Pettitt’s trust in both Newman and myself allows him to be personal and frank. There is a sense of privilege in hearing about what is happening ‘behind the scenes’ that is a powerful way of engaging and holding the user/viewer’s interest – what will the next revelation be?

‘Crossing boundaries’ and inclusivity in general is another sustainability principle that emerges through the conversations. We see this in conversation 2 *Crossing*

¹²⁰ Proving perhaps that Pettitt lacked psychological insight into the impact his meeting with Adele actually had on her. At the same time, it illustrates his genuine belief in the power of ‘common sense’, inherent in sustainability’s collaborative approach in order to get things done.

Boundaries, in relation to an event organised by The Fremantle Network (TFN)¹²¹ that involves the presence of the Premier of Western Australia at a speech Pettitt is going to give at the Fremantle Arts Centre:

Pettitt: It's an opportunity for [Premier Barnett] to understand where the thinking is at in Fremantle. And for him also to share his ideas about that. An interesting conversation between I guess someone who's far more green and left than the Premier would be, but actually realizing we have a lot in common. And that the sustainability agenda is actually not in any way opposed to that of the Liberal party.

Newman: Crossing the boundaries is as much the sustainability agenda as anything else. So what you're doing is not just lecturing the Premier, it's actually symbolically showing that everybody can be part of the agenda.

Newman framing the speech Pettitt will deliver as, "lecturing the Premier", points to Pettitt's symbolic power in this situation, whatever may result from the event. Newman's comments also serve to remind us that sustainability is a new kind of politics where "everybody" can be part of the journey.

In conversation 3 *Green vs. Green*, the incremental nature of sustainability is underlined:

Pettitt: Ultimately there are a whole bunch of steps along the way and, as long as they're not taking you away from that goal – which is a socially equitable, low carbon, really strong community and a vibrant economy. As long as its not taking away from that – we need to acknowledge it's going to be those small steps get us there eventually.

¹²¹ TFN is a local group whose goal is to bring together an unconventional mix of people engaged in Fremantle's future to 'cross-pollinate' see *Cross-Pollination*. Pettitt was a founding member of the group which can be seen as a creative response to TFS.

Sustainability is incremental however much one might wish it otherwise, as Pettitt goes on to say: “I would love to demand that the whole area has to be on renewable energy and only 6 star green development – probably get nothing built”.

Sustainability (reflected through Pettitt’s pragmatic, ‘sensible’ approach) is in contrast to what Newman describes as ‘waving the flag’ – demanding things that are not achievable: “The politics of change is about getting development and doing it in a way that is achievable”.

The Emotional Cost of the Sustainable Journey through Characterisation

Visual and audio modes of communication reveal the emotional cost of the journey. A year or so into the study, Pettitt expresses moments of frustration and impatience. One problem that resists a ‘solutions-focused’ approach is happening right outside his window, in Kings Square, at the time marred by violence on a regular basis. In conversation 13 *The Agenda is Expanding*, Pettitt stands at his window in his bike riding gear, watching a fracas taking place outside in the square, wondering if it’s bad enough to call the police. This is an issue that pervades the entire narrative – the intractable problem of a small group of Indigenous people who use the space to get drunk – and how to deal with it.¹²² This time Pettitt decides it’s not serious and sits back down, adamant that “certain kinds of behavior [are] no longer acceptable”. Here and elsewhere in the narrative we see the emotional impact on Pettitt of an unsolvable issue that is literally outside his window, involving people he recognises, some of whom he went to school with, and his recognition, “You don’t solve it. You never solve it”.¹²³

Body language reveals character in an immediate vivid way. At the end of the conversation referred to above, after Pettitt has described the many innovative initiatives now in motion, he uses his arms to gesture what is involved in ensuring everyone is going in the same direction:

¹²² This issue is in the broader context of Fremantle as a traditional Aboriginal meeting place, see *Spirit of Place*.

¹²³ As Kings Square placemaking efforts grew and transformed the area into a community hub, the Indigenous group moved elsewhere in the city. In conversation 15 *Inch by Inch*, Pettitt says the big lesson he’s learned is that, “You can’t solve a problem, you just shift it”.

It sometimes feels like a bit of a process – when you’re trying to push forward a lot of loose things – nudge this bit forward, push that one.

His physical gestures reveal his role as mayor involves ‘shepherding’, clearly a somewhat frustrating and exhausting activity.

In conversation 14 *The Rubber Hits the Road*, when Pettitt and his council are dealing with “hysterical responses” to the controversial Amendment 49 that proposes increased density in the town centre, Pettitt expresses his frustration visually and vocally with the local and influential newspaper, the *Fremantle Herald*:

Challenge is, we’re going to have to work around them. Makes it just that little bit harder because space for sensible debate, for getting through those issues, is not going to happen. Then you think, how else do you do it? I just hope the public is smart enough to realize this, not to buy into it. Then we get this backlash against something that’s not even there.

The most powerful visual moment comes at the beginning of conversation 15 *Inch by Inch*, when Pettitt’s exhaustion and pain is riven across his face, the sense he is in physical discomfort, as he expresses his frustration at “inch by inch” progress: “It’s all very incremental. Let’s inch forward”. Pettitt’s emotional response brings home the impact of the slow and incremental nature of sustainability. In conversation 16 *Fremantle’s First Transformational Move*, when Pettitt is discussing the “innuendos” flying around through emails and the *Fremantle Herald*, that he and his councillors are in league with “greedy developers” and “corrupt”, his voice becomes thick as if his throat is closing up. We can see and hear the emotional impact of an intractable uncompromising opposition. These captured moments bring alive the pain involved in the story of implementing sustainability in a city.

These painful moments were exacerbated when Pettitt’s father was diagnosed with inoperable cancer in April 2011, (see *Intimations of Mortality*). The following few months, while his condition worsened, was a period of intense activity for the Council. In conversation 14 *The Rubber Hits the Road*, Newman counsels, “It is all part of the [ordinary, human] journey” and advises Pettitt to spend time with his

father and to delegate more responsibility: “it will bring out the best in your colleagues”. While Newman is always off-screen, at times like this his ‘character’ is also revealed. Pettitt’s father, a ‘local Freo boy’, died towards the end of 2011. What Pettitt is dealing with in his private life impacts on his work, in the sense that when one is dealing with ‘life and death’ issues, it gives a perspective on life in general. Pettitt can see he puts too much of his time into work. Sharing this level of intimacy strengthens the bond between the three of us as we travel the road together.

These moments of pain are moments only. There is also the joy of the journey and it can be seen from the beginning. At the end of the first conversation Pettitt says he can’t wait until the silly season is over, “so I can actually do the work I love”. His openness, enthusiasm and sincerity about his love for his job shines through and continues throughout the narrative despite setbacks and frustration. By his final conversation, *Post Script: No Point of Arrival*, Pettitt’s hair has noticeably grayed and his boyishly enthusiastic persona seems weighted down by gravitas. These changes tell us what the journey has cost, but his open enthusiasm still shines through when he gives us the glad news that the Bureau of Statistics have said that “probably about now, Fremantle has finally risen above 30,000 population mark for the first time”. By the end he can say with some justified pride:

I’m pretty satisfied about what we have got done. If I’d thought back then, three and half years ago, that we would have got all these things done I’d be thinking – that’s pretty good.

To this point the segment has focused on how digitality reveals ‘character’, showing us what leadership looks like (rather than reading about it). In section 2.7 ‘leadership’ is seen as key in making sustainability happen. As the study progressed I came to believe more and more that it was not so much what Pettitt did, but the kind of person he was, his ‘character’, that led to his success as mayor. In Jaworski’s writings on leadership, he refers to the “enormous attractiveness” exerted by ‘creative leadership’, which has to do with “our total orientation of character and consciousness, than with what we do” (Jaworski 1996, p. 182). Pettitt is essentially a hopeful person in that he looks at the world as filled with possibilities. This quality of hopefulness can be seen as a “future-oriented way of seeing and understanding the

world that is trusting, confident and optimistic” (Van Hooft, 2011, p. 52). To Pettitt, problems and obstacles invariably became ‘challenges’ and learning moments; despite the painful and frustrating barriers along the way, he maintained his direction and (mostly) hopeful attitude. It is this quality, this study asserts, that attracted others to Pettitt. In section 2.7, Taylor asserts that a leader is someone who creates a compelling narrative that inspires and motivates others, expediting those processes “through which interdependent actions among individuals combine into a collective venture” (Taylor, 2010, p. 1). This is clearly shown when the Fremantle narrative reaches a symbolic conclusion with unanimous agreement amongst the entire council to pass a planning amendment that Pettitt had driven from its inception. Pettitt’s character has brought his entire council along with him, aligning everyone to his vision.

Having Pettitt at the centre of the story is the strongest element of the narrative. Along with occasional bursts of impatience and frustration, more than once he reveals his doubt he is ‘not going far enough’. His uncertainty reveals he too is on a learning journey, continually adapting to changing circumstances. There is something fundamentally human about acknowledging one does not have all the answers, which allows us to more easily connect with Pettitt. (The opposite is also true – if someone shows no doubt, no uncertainty, indeed has all the answers, it becomes more difficult to make that human connection.) These ‘human’ moments are vital, not only because they allow others to engage with Pettitt, but also because they implicitly communicate that ‘ordinary’ people are capable of extraordinary things.¹²⁴ Using cinematic presentation allows a personal engagement with Pettitt, which helps to more strongly communicate and engage with the sustainability story. This segment has analysed the research study’s use of ‘cinematic presentation’, through ‘characterisation’, to reveal Pettitt’s leadership skills and ‘a different way of thinking’. Later in the chapter, when the Fremantle context for Pettitt’s journey is examined, we meet the talented people who were attracted by these qualities of ‘creative leadership’ to join the journey. This research study contends these qualities

¹²⁴ One of the most valued responses I have had by a person viewing one of the conversation films is the comment: “How is it that someone so normal can be so effective?” (E. Stanton-Clements, personal communication, March 25, 2014).

played a major role in the Council achieving their objectives in spite of the obstacles in the way. It is difficult to imagine reading words off a page could communicate these elements of Pettitt's character that were so vital to Fremantle's success. The second segment in this section examines the role of dialogue in cinematic presentation as a way of communicating sustainability and cities.

4.6.2 Dialogue

For Pettitt, the conversations with Newman are opportunities to reflect on the relationship between the sustainability agenda and the City's strategic imperatives. In conversation 6 *Groundwork*, Newman asks Pettitt what the strategic plan is saying about sustainability. Pettitt tells him it has a few headings but they are all aspects of sustainability:

Firstly, about sustainability: revitalising the economic centre of Fremantle. The more people we've got living in the middle of Fremantle the less people we have creating new suburbs on the fringes. So actually at its core it's about creating a transit orientated city. That's certainly very key. And some key targets about what we do to do that. We're going to have five new major developments in the city centre happening in the next three years. Just those clear targets – 20,000 more sq. metres of retail space. Going to have a new government department. Clear targets we are going to achieve in the next 3 years. And I think they're all doable. And I guess the other thing I'll say about the strategic plan is – it's really tiny. It's only a few pages long. Because we wanted to say this actually is what we're going to do. It's not about everything we do. These are our key priorities.

Through the conversations, monthly for the first year, Pettitt was obliged to summarise the progress of the 'key priorities' at regular intervals, which meant not getting bogged down in detail. This factor helped to communicate change succinctly.

In the conversation above, which occurs in June 2010, Pettitt refers to "five new major developments in the city centre". This will become Amendment 49. However it is not until February 2012 that Amendment 49 is unanimously passed by Council,

and not until early 2013 that it officially becomes policy through state planning. After this there is invariably a lag before development applications come in. Through the conversations, we learn that Pettitt's biggest learning (and frustration) is the length of time involved in the process of amending a planning scheme. This is explored further in the following segment through the use of drama and resolution in cinematic narrative. For now, this segment is about researching sustainability as a series of conversations/dialogues between two academics discussing the politics of Fremantle and how Pettitt's journey is unfolding, to allow new knowledge to emerge.

In conversation 16 *Fremantle's First Transformational Move*, after the unanimous passing of Amendment 49, Newman and Pettitt discuss sustainability (as it has worked its way through Fremantle) as a new kind of economics:

Newman: It's a rediscovery of economics, a new kind of economics.

Pettitt: We got accused of being too economically focused. What we did when we started was out of economic necessity and how then do you make sure you get those social and environmental benefits as well. We've done that. Diverse housing, plus social and affordable housing, the incentives for green building. I can't think of anywhere else in Perth where those kinds of incentives are offered. And for me, if we get those densities plus the social and environmental benefits, that's going to be an extraordinary development.

Newman responds by saying that Fremantle's changes will 'roll over' into surrounding local governments. One can see how Newman affirms and validates Pettitt's journey in Pettitt's response:

Pettitt: It's been a great process actually, reflecting upon it.

Newman: Quite quick really, but intense and painful and thought provoking. Just saying, when you look down on Kings Square and see so many young people out there, music being played, chess, table tennis, the wifi used, the markets happening, lots of people. This was part of the dream.

Pettitt: The Kings Square, one of the most rewarding parts of the last couple of years. When I first set up this office, looking out over the place that was always empty, to now, one that has people all hours of the day. Real sense of having that as a used public space again.

The transformation of Kings Square, covered by many films in the Fremantle Prezi, is the main outward sign of the changes sustainability has brought to Fremantle. ‘Placemaking’, along with urban planning and the importance of redevelopment, can be seen as constituting the basic thrust of sustainability in Fremantle.

A dialogue is a two way process that develops an idea and contributes towards learning. Visual and audio modes of communication bring this process alive to the point we see ideas literally take form. A good example of this occurs in Conversation 5 *I Want To Be A Mayor Who Gets Things Done*. Pettitt is discussing with Newman the upcoming budget and the difficulties he is having with the City’s engineers regarding spending less money on roads and footpaths and more on bicycling infrastructure:

Pettitt: If you’re going to have a strategic plan that prioritises certain things, the budget has to reflect that. If that means you don’t have the world’s shiniest roads, then so be it.

Newman: That’s the biggest change that Spence Havlick was able to bring to his Council,¹²⁵ he got them to agree that they needed to have 30% sustainable transport as their goal, once they agreed to that, he said that means 30% of the transport budget.

Pettitt responds as if a light bulb has switched on in his head. At some of these meetings with Newman he keeps an open notebook on his lap and he now writes, grinning and clearly excited. Newman impacts on Pettitt’s journey in a very real way.

¹²⁵ Havlick was a councillor with the Boulder, Colorado local authority (see Newman and Kenworthy, 1999).

An ongoing dialogue over two and a half years allows ideas to take shape and develop. Through the conversations, an exchange emerged about sustainability meaning green redevelopment compared to the more ‘eco-centric’ idea, that sustainability means little or no development. The conflict between these two ideas to some extent frames the narrative. It was important to counter the ‘eco-centric’ idea since it had played a significant role in Fremantle’s fall into depression and continued to impact through Pettitt’s first term as mayor. This particular conversational thread emerged three times: at the beginning of the narrative, mid-way through, and at the end.

In conversation 2 *Crossing Boundaries*, Pettitt sees the anti-development argument as expressing “fear of change”. Newman responds by seeing a need for “reclaiming the sustainability agenda” through:

Newman: [Demonstrating] how in every step of development, you reduce the footprint and improve liveability at same time. Liveability enmeshed in things to do with employment, housing, community facilities, design, walkability, public transport – all the things that make life easier.

In conversation 3 *Green vs. Green*, the argument develops in what distinguishes pro-development ‘green’ from anti-development ‘green’:

Pettitt: Very much a case of the greens being about stopping development and saving things. I guess that’s not the issue any more. We’ve actually got to deal with new cities and new things if we’re going to meet the sustainability challenge. You can’t meet that challenge just by stopping things.

The idea the “sustainability challenge” is not about “stopping things” is developed in conversation 9 *Activation and Population*, when Newman asks Pettitt what he thinks about the ‘Degrowth’ movement – the idea of the downscaling of economies to solve environmental problems:

Pettitt: By just saying we give up, we just go backwards, is actually saying there was only one model for growth and that failed. So choice of growing or

not growing makes no sense to me. We've actually got to find, actually have to find a way of doing sustainable growth. More radically, to take that back to carbon, we need to reduce our emissions 50 – 80% depending on time frame. You can't do that by just not growing, by keeping our society the same. We actually need to transform our society. I don't see how they say 'not growing' is a solution, because the reality is, we're unsustainable in our current form.

Pettitt's eloquent and passionate response made an impression on me and clarified my own doubts on the matter. He helped me to understand that "sustainable growth" was the crux of sustainability, a concept that clearly some people in Fremantle found an oxymoron. In the penultimate conversation, *Fremantle's First Transformational Move*, Newman frames the conflict in terms of the future of civilisation:

Newman: Something about sustainability that attracts this really personal stuff that gets at the deep ethics because you are actually tackling a very deep matter, which is about civilization. You actually have to do this otherwise Fremantle starts collapsing.

While Pettitt sees the reason for those who oppose Fremantle's sustainability agenda as a "fear of change" and 'nimbyism', Newman sees it as a battle between ideas, something he clearly states in their final conversation, *Post Script: No Point of Arrival*:

Newman: It's not that they're nasty people. It's actually a battle of ideas. And the despair that's been created by the idea that somehow or other, having more people and more consumption occurring will inevitably destroy the planet, therefore anything you can do to stop development. That's what we're dealing with. My most latest writings, travels, work on IPCC, is much more hopeful now. That population and consumption can be decoupled from their impacts that in the past have been associated with them. That we can create better cities, better futures that are also regenerating the environment. That idea still has to be won.

Pettitt: Where for me, change is the potential to make things better.

Newman: That's why it's a battle between despair and hope – to recognise it's a battle every step of the way. Matter of winning it one step at a time, in one place at a time. This is one that's turned the corner.

This sequence of exchanges connects Fremantle's sustainability process to the larger global context of sustainability and cities discourse. Sustainability learning emerges through dialogue. The next segment examines how cinematic techniques of drama assists in the communication of Fremantle's journey.

4.6.3 Drama and Resolution

There was drama involved in not knowing what was going to happen next, true for all three of us engaged in Fremantle's unfolding narrative. Documentary theorist Bill Nichols writes that filming events as they unfold “brings a powerful authenticity to this [documentary] realm ... because filming in the present allows one to see the characters reflect on events we observe in detail. This is impossible in interview based films that give us no sense of a character's present but only use his or her words as testimony about the past” (Nichols, 1990, p. 263). Drama is made more authentic when things are unfolding in the present, rather than referring to things that have happened in the past that can't be witnessed. There were many unfolding stories within the narrative, some resolved, some not, however the main drama revolved around the question: Will Pettitt and his Council succeed in ‘turning the ship around’? With the massive obstacles in their way this was not a foregone conclusion. These included ferocious opposition from an alliance made up of local member Adele Carles, members of The Fremantle Society, and the *Fremantle Herald*, as well as an assortment of resident action groups like The Fremantle Park Association and The Fremantle Inner City Residents Action Group. Obstacles also came from the ongoing impact of the GFC, which hit around the time Pettitt's term as mayor started in late 2009, slowing down bank lending and building projects. There were also obstacles regarding the higher cost of building in metropolitan Perth in comparison to building in the Eastern States, and building apartments rather than single dwellings. And last but not least, obstacles in the form of a recently elected Liberal state government who were not interested in sustainability, and in some cases

actively intervened to stop it.¹²⁶

By the end of the mayor's 4-year term, the City of Fremantle had generated nearly \$1 billion of green redevelopment investment fulfilling Pettitt's vision of growing the number of workers and residents in Fremantle through green built form to accommodate them. So how did they do it?

In their first conversation, when Newman asks Pettitt what he thinks might get in the way of Fremantle's journey towards sustainability, Pettitt's response is "lack of trust" from the community and the "inherent conservatism" of government bureaucracies. He was right on both accounts. The drama is mainly focused around the 'green vs. green' conflict that involved the community. We see how this drama plays out through the Amendment 49 process – symbolic as Fremantle's 'first transformational move' when the Council unanimously passed the amendment in February 2012. The scheme amendment began early in Pettitt's term in office with the targeting of "five new major developments in the city centre", as key to Fremantle's revitalisation (see conversation 6 *Groundwork; City Central*). These potential development 'hot spots', some of which belonged to the City, were uniformly down-at-heels, mostly built in the 1960s, and ugly. Amendment 49 would see these hotspots replaced by 'cutting-edge' green architecture. Community involvement would be essential. While community engagement through 'community workshops' has already been referred to, Pettitt and his council were interested in a more meaningful form of engagement.

In conversation 2 *Crossing Boundaries*, Pettitt introduces the idea of a deeper engagement with community through 'working groups'¹²⁷ including a professionally appointed 'design advisory committee' (DAC):¹²⁸

¹²⁶ In conversation 7 *Everything's In Place*, Pettitt reveals that the East End amendment has been rejected by the Planning Minister. He suspects it's because of the City's mandatory requirement that "new commercial buildings be 4-green star and above". In conversation 11 *Intimations of Mortality*, Pettitt reports the reason the Minister rejected the amendment was because of lobbying from the landowners involved. Before the amendment can be accepted, the sustainability mandate needs to be replaced by "best practice to highest standard".

¹²⁷ This idea was introduced in the first conversation, however due to length-of-film constraints and not wanting to overwhelm the viewer, as I was, it was left until the second conversation to be introduced.

The working groups are evolving, each one attached to a Strategic Imperative. To help the community to engage very clearly in what Council sees as its priorities. [Regarding DAC] Much more professional way of making decisions. But also being very clear – increasing our community involvement at lots of levels.

The idea of working groups was to involve talented people from the community to help Fremantle achieve its strategic outcomes. Each working group (attached to each of the 7 strategic imperatives) had to come up with a concrete plan within a specified time frame. By conversation 6 *Groundwork*, both working groups and DAC had passed through Council:

We agreed to start new working groups, which are about outcomes. So they will only meet six to nine months and come up with an outcome for Council to implement. And we've linked to our budget a quarter of a million dollars each year for the working groups. We're actually saying to the community, if you come up with a good idea that's affordable, then we'll implement it. For me that's real community engagement and consultation.¹²⁹

We've created a new panel [DAC], which has experts from both development, heritage and sustainability. General community feeling that DAPs could undermine some of what we're trying to achieve in terms of

¹²⁸ In April 2010 the WA Department of Planning would introduce 'Development Assessment Panels' (DAPs) to assess all developments over \$3 million, taking this power away from local authorities. The Council's implementation of DAC can be seen as a proactive creative response to DAP.

¹²⁹ I agreed with Pettitt on this. Over the course of the research study I attended many community consultations, two of which I filmed: *Community Consultation of the East End Plan* and *Community Consultation of Strategic Plan 2010-2015*. These were not the only community workshops the City facilitated, however they give a sense of the process involved. A community workshop that involves a hundred or so people over the course of a day may be useful, however it is limited in its impact – one can only go so far in such a short time. The film, *Meaningful Community Engagement* shows the various Chairs of the working groups reporting their progress back to the community, an event hosted by The Fremantle Network (TFN).

good design outcomes. But I think having a panel of people of this pedigree; I think DAPs will have to listen to their recommendations.¹³⁰

Soon after the landmark East End amendment was passed through Council in early December 2010 (see *A Most Significant Decision*), Pettitt mentions the key working group, City Centre Strategic Sites Working Group (CCSSWG), whose report is ‘due soon’ (see conversation 10 *The Economic Realm*). This will allow the Council “to initiate the city centre amendment” to be known as Amendment 49.¹³¹

The CCSSWG had been established in line with Strategic Imperative 2 – Urban Renewal and Integration. This was the key working group because Fremantle’s economic revitalisation was dependent on revitalising the city’s ailing centre.¹³² The CCSSWG was made up of nine people including: Chair Cr Andrew Sullivan, Mayor Brad Pettitt, City CEO Graeme McKenzie and local architects and community members including three ‘hardcore’ representatives of TFS – Don Whittington, Ian Alexander and Cr John Dowson. Clearly the City had made an effort to include opposing points of view. In June 2011, in conversation 13 *The Agenda is Expanding*, Pettitt explains to Peter the CCSSWG is the only group that hasn’t gelled: “They’ve had 26 meetings and still haven’t presented their report”.¹³³ The group’s lack of progress was important because it threatened to delay what Pettitt was later to describe as “Fremantle’s first transformational move”. All of this effort was within a context of uncertainty about Fremantle’s ability to economically survive as a city.

In July 2011, when the CCSSWG finally presented its report, its three TFS members presented a ‘minority’ report, dissociating themselves from the working group. In an

¹³⁰ The Chair of DAC was a local resident, Geoffrey London, at the time State Architect to the state of Victoria, and one of its members was Dominic Snellgrove, an internationally recognised architect of ‘cutting-edge’ green buildings (see *Local Talent*).

¹³¹ The amendment essentially meant two-to-four storey buildings became four-to-seven, some sites up to nine. There was an attempt to allow exceptions in the case of landmark architectural design but this was dropped after ‘hysterical’ responses to the *Fremantle Herald*’s reportage.

¹³² This economic imperative is established in *City Central*, a film I was commissioned to make by the City of Fremantle to encourage investment.

¹³³ When I interviewed Cr Sullivan in October 2011 (*Side Stepping the Charging Bull*), he told me that TFS members on the CCSTWG had not changed or developed their arguments in seventeen months of meetings, and in fact had often been absent from the working group meetings.

alliance with, now Independent, MP Adele Carles¹³⁴ and Andrew Smith editor of the *Fremantle Herald*, they began an active campaign to undermine the recommended plans because, “they threatened to destroy Fremantle” and proceeded to do everything within their power to stop the green redevelopment amendment becoming policy. Perhaps the best example of this was the model, made by TFS and the *Fremantle Herald*, of what Fremantle would look like under the proposed plans, which featured on the front page of the *Fremantle Herald* shortly before Amendment 49 went to Council:¹³⁵



Image 4.7: The front page of the *Fremantle Herald*

Source: Smith, 2012.

¹³⁴ As a result of Adele Carles having an affair with a minister in the Liberal government she was forced to resign from the Greens party.

¹³⁵ The front-page article continued on p. 5 with the title: A Nightmare Future.

The model was put on display at a local shopping centre accompanied by a petition. When I went to take photographs of the model, I was shocked to see young school students in their school uniform signing the petition. By showing what was meant as a flexible building envelope as “something beyond the worst-case scenario” (see Cr Sullivan in *Twelve Councillors Speak from the Heart*), they were influencing impressionable young minds with a false and misleading representation.¹³⁶

Pettitt and his Council had done their best to apply sustainability’s integrative approach, discussed in section 2.4, but this was a case where the intransigence and inflexibility of those who opposed their plans meant there was never going to be consensus.¹³⁷ The ‘hard politics of sustainability’ demanded courage on the part of the mayor and his councillors to stick to the integrity of their vision despite the intense pressure they were put under by the green anti-development alliance. This understanding is brought home in the film about the council meeting when the Council unanimously passed Amendment 49, *Twelve Councillors Speak From the Heart*. On this occasion, each councillor used the opportunity to make a three-minute speech about why they supported the principles behind the amendment. These speeches were impassioned and heartfelt, marking the occasion as momentous for the City.¹³⁸ It is also worth noting that in their speeches almost every councillor referred to the abuse they had suffered, through emails and phone calls, in the lead up to the vote. Thus each one was expressing courage to assert their support for green density in spite of that pressure.

A few days after the council meeting, in conversation 16 *Fremantle’s First Transformational Move*, Pettitt called the passing of the amendment Fremantle’s first transformative move. While the ship was still a long way from shore; the foundations had been laid for increased density through green redevelopment in the centre of the city. His pride in his Councillors can clearly be seen:

¹³⁶ The model inspired local sustainability design studio Coda to make an alternative model to show the creative potential of what Amendment 49 was offering, see *Coda Contribution*.

¹³⁷ It was significant that international cities expert Charles Landry, in *Charles Landry Comes to Fremantle*, reflected that many of the people involved in his ‘creative cities audit’ saw the flexibility required to make changes in Fremantle “as weakness”.

¹³⁸ The speeches may also have had something to do with the fact the councillors knew a filmmaker would be attending the council meeting. In any event, a film file of the uncut speeches is now lodged in Fremantle Library’s local history archives.

It was amazing to hear everybody respond, not debating the details, but debating in many ways their vision for what Fremantle should be like, and that Amendment 49 was core to that vision. We are all travelling in the same direction. It's an amazing shift for Fremantle, to have a Council able to do that. I'm especially proud because there was a lot of pretty ferocious opposition coming in over the last couple of months, pretty hard to stay resolute in the face of that.

Newman: It's an historic moment in Fremantle. It's a cathartic time where the notion of sustainability is developed – which is quite a sophisticated idea – that you develop but you can do it differently. And to accept that that needs a different approach to what has been. It's pretty special to have got to that point – the whole of Council understanding that. Everyone is dealing with this issue and they're not quite sure how to play the politics of it. You've stuck to your guns and you've actually got a united voice now. And what was really clear, you have the vast majority of the population with you. Nobody is going to lose votes on this.

This exchange clarifies that the drama that has played throughout the narrative, of 'green vs. green', has reached a resolution. Newman puts the ending into words:

You now have a complete council that totally understands what sustainability means for local government, and in this case, how it translates into the statutory authority in a local area that everybody can see needs fixing.

In the final conversation, *Post Script: No Point of Arrival*, three and a half years after his term as mayor began, Pettitt articulates that whatever happens now, change has been 'locked in':

Locked down some of those really key Fremantle things, which has sustainability at its heart. Focus on green buildings, affordable housing and diverse inclusive community. Focus on having a city that's unique and bespoke and has that sense of being alternative and artist focused.

This is the vision Pettitt started with, that he never deviated from, that at various stages involved ‘hard decisions’. In this final conversation he reveals three quarters of his time as mayor has been spent seeing scheme amendments through Council.¹³⁹ Through the conversations we learn that Pettitt’s biggest learning (and frustration) was the length of time involved in the process of amending a planning scheme. However it was these planning changes that led to Fremantle’s largest ever injection of funds through nearly \$1 billion of green redevelopment investment. A few months later Pettitt went on to win his second mayoral election with a higher majority of votes than the first, proving courage and integrity does not necessarily mean losing votes.

In the context of the global ‘Green vs. Green’ theme that runs through this study, the understanding that hard decisions need to be made is an important one to share with other cities wanting to make the same journey. Fremantle’s journey proves it takes strong leadership (through whole of council) in “going green while supporting economic growth” (Nahrova, 2014).

The final element of cinematic presentation utilised to communicate the sustainability narrative is the filmmaker’s use of style.

4.6.4 Style

As filmmaker, my intent at all times is to promote emotional engagement with the subject matter. This is achieved through aesthetic and editing towards dramatic effect. Individuals were filmed in a space that reflected their personal/local environment, engaged in conversation with the filmmaker. Unlike an interview, a conversation allows an intimate atmosphere, mutual curiosity and trust. Conversations, whether between Pettitt and Newman, or myself and Fremantle locals, flowed and evolved, sometimes in unexpected ways. In conversation people

¹³⁹ While Amendment 49 was unanimously passed by Council in February 2012, it was not until early 2013 that it officially became policy through state planning. From that point, there was a lag of a year to 18 months before development applications started to come in (see *Fremantle Revitalisation Strategic Plan Scorecard*). Thus this essential amendment process, which began early in 2010, took nearly 4 years to come to fruition.

are more likely to reveal their vulnerabilities, to be seen as ‘human’, and it is this that connects us with each other.

While a conversation was happening, only one side of the conversation is seen. This element of my aesthetic is to do with simplicity, and because it allows us to ‘see’ an individual thinking, their train of thought. As a filmmaker I look for those moments to prioritise them – they are the moments when the person is totally present, alive in the moment. At the same time, it is always helpful to have images to cut away to, to enliven and illustrate what is being said. One of the biggest disappointments in the Fremantle project was the lack of ‘visuals’ to illustrate Pettitt’s revitalising narrative because nothing was changing on the ground. This was due to the slowness of changing planning schemes, and the process itself being ‘invisible’. It was a relief when placemaking efforts around Fremantle took hold in early 2011, particularly in Kings Square; at least there was one sustainability imperative that could be illustrated.

All the films are ‘multimedia’ in that they comprise digital recordings, stills, newspaper clippings, text, statistics, graphics and occasionally music. Multimedia aesthetic is primarily about condensed storytelling – using different modes to add levels of meaning, as well as interest. One needs to reduce a multimedia film to its essence, the shorter the better, in a world where competition for the viewer’s attention is overwhelming.

All films involve editing and the editing process is always an editorial (that is, interpretative) process, in that it involves choices of what to select, and how to shape a story for a desired effect. Since each conversation between Pettitt and Newman was approximately 45 min. long, and I was aiming for a 10 min. length, a lot had to be left out. Criteria for selection, after ‘moments of aliveness’, included: strategic imperatives from Fremantle’s *Strategic Plan 2010-2015*; moments when Pettitt was most fully in the moment (and therefore most ‘alive’); material where I had visuals I could cut away to; stories that would link and interconnect to what had gone before and what was to come; and a shape that would allow each individual film to be a coherent entity in itself. As editor I also needed to keep in mind the arc of the larger stepping-stone narrative, it too needed to be a coherent entity, as well as

progressively unfolding Fremantle's sustainability process. For this reason I was not able to begin editing the conversations until October 2010, nearly a year after I had filmed the first one. I needed that amount of time to work out how things fitted together, particularly since there was so many sustainability initiatives happening from the start.

This section has examined the central stepping-stone narrative through the utilisation of digital media through techniques of cinematic narrative to communicate a city's journey towards sustainability. The 17 films that make up the central narrative add up to approximately 3 h. in viewing time. It is beyond the scope of this section to fully analyse these films in terms of their use of cinematic presentation and the wealth of knowledge to be found in them. It is also difficult not to overlap the different cinematic techniques used in this research study. However, the analysis in this section has shown how a series of 10 min. films, held together within a larger narrative like a string of pearls, effectively and efficiently communicates the strategic imperatives, general principles of sustainability, and the leadership skills necessary to overcome obstacles, that resulted in Fremantle's success.

The prologue and central narrative have been discussed in terms of their utilisation of digital media through cinematic presentation to communicate sustainability. The following section deals with the third structural element within the Prezi, the constellation of 'satellite' films that surround the stepping-stones, and how they contribute towards a meaningful narrative through the many recruited 'social voices', including the voice of the filmmaker/hitchhiker.

4.7 The Prezi Satellites

The 'satellites' show the detours the hitchhiker (myself) made to document Fremantle's journey: the sustainability-oriented community; local government's initiatives and partnerships; experts who give an outside perspective; opposition to the council's plans (through the local newspaper); and postcards from the hitchhiker, all revolving around the spine of the journey.

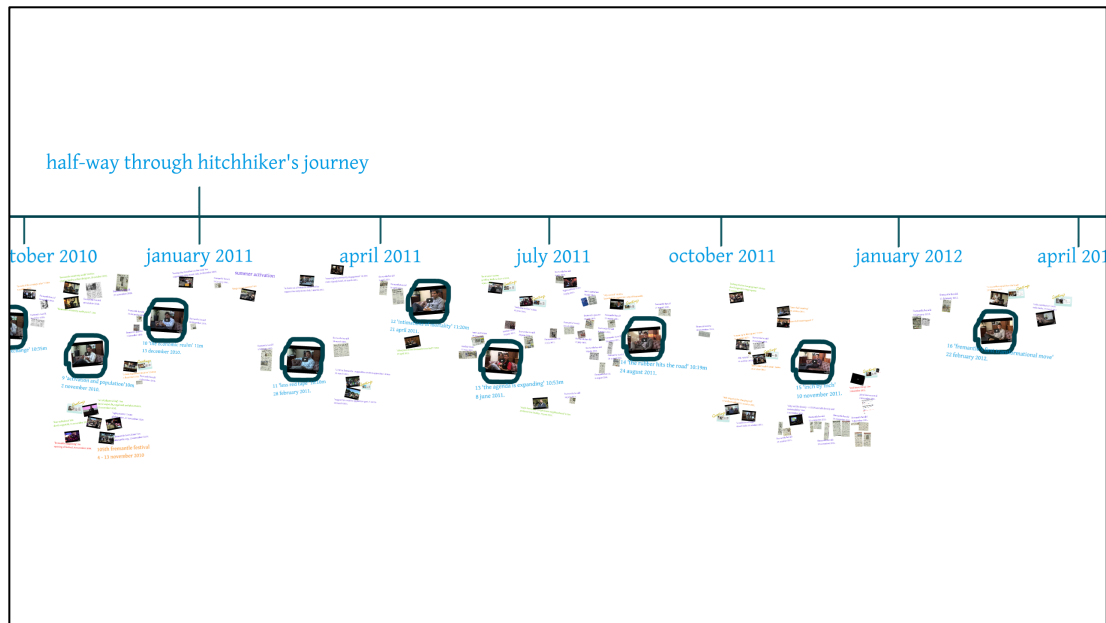


Image 4.8: Detail of Prezi 2

Source: Blagg, 2014.

Gotham and Staples state that ‘contemporaneous context’ creates meaning in a narrative (Gotham & Staples, 1996). The Prezi satellites, which include 41 films¹⁴⁰ adding up to approximately 6 h. 30 min. of viewing time, contribute a multitude of interconnected ‘voices’ to provide a ‘contemporaneous context’ to Pettitt’s central narrative. The big picture seen in the figure above shows noticeable clusters of newspaper clippings reflecting the flurry of activity in July and August 2011 from the ‘green anti-development’ lobby as Amendment 49 gathers momentum, and then another flurry leading up to the vote on Amendment 49 in February 2012. To see the big picture in this way brings alive the drama of the journey, its complexity, how everything is interconnected.

This section focuses on the core role of ‘voicing’ and reflexivity in the presentation of research through digitality to show the social construction of meaning. The role of reflexivity as a research tool is to acknowledge a film is not neutral but rather a ‘discourse’ by an author – that knowledge is socially constructed. The author’s presence in the films, through self-referencing and self-reflexivity, make the author’s

¹⁴⁰ When each satellite film was finished, it was uploaded to a dedicated Vimeo film channel <https://vimeo.com/channels/thesixonesixohhh> for access to the public.

power and influence as narrator transparent. Self-referencing occurs in many of the films. I have already referred to my off-screen presence in the conversations between Pettitt and Newman. In many of the contextual films, filmed on the streets of Fremantle, figures in the frame (including Pettitt) smile and engage with the camera (me). This kind of self-referencing makes it difficult for the viewer to forget that behind the scenes there is an author shaping the narrative as well as impacting on it and being impacted on by it.

4.7.1 Reflexivity through Postcards

As the self-conscious ‘active learner’, self-reflexivity manifests itself in the idea of the ‘hitchhiker’; in the choices I made as to the detours I took, and the postcards I wrote from some of those destinations. Not having lived amongst the people and politics of Fremantle, it was with a sense of discovery to actively seek out what would give meaning to what I was hearing within the mayoral office. While Pettitt was the ‘driver’ of the central narrative, as hitchhiker I was choosing the detours in order to help me understand and make sense of the new world I was discovering, and communicating those learnings through postcards.

Some of my detours, particularly at the beginning when I was still ‘at sea’, were suggested by Pettitt and Newman. Both of them thought it was important I meet Bruce Moriarty, Pettitt’s mayoral campaign manager, and according to Newman, a ‘king-maker’. I found out Moriarty was a real-estate agent and a developer and was somewhat confused. I had found myself in a topsy turvy world where ‘greens’ opposed Pettitt, and business supported him. I am a ‘baby boomer’ and tended to see developers as ‘baddies’; how could Pettitt be friends with a developer?! In my interview with Moriarty, *Fremantle Needs More People*, I learned that the high cost of building affordable housing, which he had done, meant lower profits. Clearly not all developers were ‘greedy’. Moriarty is a Canadian and ‘a character’: passionate about more people moving to Fremantle to enjoy the amenities Fremantle has to offer, and to make the place more ‘cosmopolitan’; scathing about the negative impact the heritage lobby has had on Fremantle. If development didn’t happen soon, he warns, the government would take matters into its own hands and we would lose our

autonomy.¹⁴¹ He was also not entirely optimistic about Pettitt's chances since "Brad was up against it". Engaging with Moriarty meant seeing Fremantle through his eyes. I was able to see more clearly the role of business in the sustainability agenda because Moriarty embodied that sector. I also came to understand that as an influential person in the community, Moriarty had lobbied local businesses to support Pettitt in the election, that business had helped sustainability get off the ground in Fremantle. I communicated the gist of these learnings in a 'postcard'.

During the course of the investigation I was surprised on three occasions. Finding out the local greens opposed Pettitt as mayor, and the scenario described above, when I found out Pettitt was supported by 'business', were the first two. The third surprise happened while I was filming the Council planning committee meeting that would decide whether or not the East End amendment would go ahead (see *A Most Significant Decision*).¹⁴² This meeting, held just over a year into Pettitt's term at the end of 2010, was the first time I understood that 'height' was the sole criteria by which design was judged by the 'green anti-development' alliance, represented at the meeting by Cr Howson. This is visually communicated when Cr Howson holds up his laptop to show a photograph of a development that is a metre or so higher than the 1920s wool store that is adjacent. I had assumed there was more to their opposition to the City's strategic plans than the difference one extra storey made. It seemed the height of irresponsibility to be so inflexible and dogmatic when the future of Fremantle was at stake. It also seemed highly ironic that at this meeting to vote on what Cr Howson described as: "The biggest scheme amendment in 200 years!" there were only a handful of community members present. If people cared so much, where were they?

The postcards, informed by the journals I kept, constitute the reflexive voice of the hitchhiker (myself) in making sense of the narrative and communicating my learnings (and confusions) along the way. As such they constitute a self-reflexive dialogue with the narrative. By practicing processual self-reflexivity in this way, the

¹⁴¹ Bruce's prediction came true shortly afterwards when the WA Department of Planning introduced DAPs – a policy that took power away from local authorities regards substantial new developments.

¹⁴² This was a Planning Committee meeting, not a full Council meeting. I was not allowed to film Council meetings because one of the Councillors (a member of TFS) had refused permission, however this person was not involved in the planning committee.

filmmaker's position ensures "effective political/formal strategies for discussing and challenging that position can emerge" (Nichols, 1991, p. 249).

The following three segments focus on 'voicing' through: the range of social voices recruited to the digital project, their interrelationships through dialogue and vision, and the filmmaker's personal creative contribution.

4.7.2 Recruiting Different Social Voices

Through the hitchhiker's 'detours and digressions', I can argue a point, trace something for the community, and move on. My first detour was to visit Bart Houwen, a sustainability advocate and Chair of the Board of the Fremantle Community Bank (see *What Can Fremantle do for the Rest of the World*). This was my only trip outside the Fremantle locale, in the adjacent City of Cockburn. As an 'outsider', Houwen perceives Fremantle as having a "siege mentality" – "looking inwards when they could be looking outwards and asking what Fremantle can do for the rest of the world". He compares the two councils of Cockburn and Fremantle: "A lot of the initiatives promoted or driven by Fremantle come from community groups rather than initiated from the top - which is the complete opposite to Cockburn". His comment reinforces sustainability leadership in the City of Fremantle through its strong links with grassroots community issues. His comments about 'navel gazing' seemed a reflection on The Fremantle Society's preoccupation with the past.

One voice I was keen to recruit from early on was an Indigenous voice. I wanted to contextualise the violence issue in Kings Square revealed through Pettitt's narrative, and to establish Fremantle as a place of consequence before white settlement. *Spirit of Place*¹⁴³ was filmed in June 2010 during Fremantle Heritage Week and featured CUSP Institute academic and traditional owner Len Collard.¹⁴⁴ Collard tells his story at the Round House, the first permanent structure to be built in Fremantle,¹⁴⁵ also

¹⁴³ Placemaking, including 'spirit of place', is a key element of sustainability, included in the strategic imperative to do with 'Character'.

¹⁴⁴ At the time Collard was based at the CUSP Institute as a research fellow on Nyungar place nomenclature. He is currently full professor at the University of Western Australia.

¹⁴⁵ In 1829, prior to the arrival of the first Swan River settlers, the colony's civil engineer Henry Reveley was commissioned to design the Round House. It was completed in 1831.

known as Walyalup¹⁴⁶. Although called a gaol by the tour guides, the Round House was probably built as a fort to enable the new settlers to defend themselves.¹⁴⁷ As Collard tells us, this was never needed and soon it was used as a gaol for Indigenous people who had begun stealing sheep – an entirely logical step in their worldview and law. For the next 60 years or so, until the early 20th Century, the Round House acted primarily as a holding post prior to transportation for Aboriginal men from across the State. Over that period an estimated 3000 Aboriginal men and boys were either shipped or marched in chains to Fremantle’s Round House before being rowed to Carnac Island, and after 1839, to the infamous Rottneest Island men’s prison where ultimately 3400 Aboriginal men and boys were sent, and upwards of 364 never returned. For Collard, this history is personalised through family members: “Some were chained up, and some were doing the chaining them up”. After the prisoners had done their time, many of them settled in Fremantle and married “local fellas”. This history is only one element of Collard’s complex narrative, however it inextricably links Fremantle’s white history with the history of Walyalup as a culturally significant place. To contextualise Fremantle in this way is helpful in understanding Fremantle’s significance as a Nyungar gathering place today.¹⁴⁸

I was also eager to include Geoffrey London, Chair of Fremantle’s new Design Advisory Committee (DAC), mainly because I saw DAC as a creative response to the government’s Design Assessment Panel (DAP). It took over a year to finally pin London down because he spent most of his time in Melbourne as Victoria State Architect (see *Local Talent*). As with the other interviews, my focus was on personal stories, what was that person’s involvement in Fremantle in terms of their visions and values, and combining that with larger social and economic forces at play. To London, who has lived in Fremantle for 35 years, “densifying our city is critical for its ongoing success”. Using height as an incentive was a means of funding ‘affordable housing’; essential if we are to retain a diverse mix of people that

¹⁴⁶ According to Collard, Walyalup, means ‘the crying place’ because the sand dunes were used as burial places. There are also other interpretations of its meaning.

¹⁴⁷ One cannot help connecting Houwen’s comment about Fremantle having a ‘siege mentality’ with this defensive redoubt, Fremantle’s oldest and most revered building.

¹⁴⁸ Towards the end of the study period, the mayor started regular consultations with a group of traditional owners, including Len Collard, with a view to finding a piece of land that would be dedicated, in some form, for the use of local Aboriginals. On 7th of March 2014 an Aboriginal Cultural Centre was opened on Arthur Head, an historical area that takes in the Round House.

Fremantle had been famous for in the past. Off camera London made a telling comment that this was the first time he had been asked to contribute by the City of Fremantle. These detours link backwards and forwards to the central narrative, in this case reflecting Pettitt's comments about 'meaningful community involvement' through the City's engagement with 'talented locals' in its internal decision-making processes. As Pettitt points out in conversation 13 *The Agenda is Expanding*, the more Fremantle's talented people join the journey, the more the journey acquires diversity "to start to work across some of the challenges and cracks in the Freo community".

Stuart Hicks,¹⁴⁹ who features in *Central City* and *A Coalition of Hope*, seemed to appear out of nowhere as a major player in Fremantle's revitalisation. He makes his first entrance in conversation 14 *The Rubber Hits the Road*, when Newman remarks to Pettitt that in their previous conversation, "the Fremantle Union hadn't been invented". He is referring to a front-page story in the *Fremantle Herald* about Hicks' interest in integrating the railway, currently surrounded by a sea of car parks and bus parking bays, into the city. The Fremantle Union, that he had started, brought together the heads of the five government departments involved on the ground, and whose agreement was vital if anything was going to happen around the railway/city nexus. This was something that had never been tried before. In my interview with Hicks, largely instigated after Newman told me Hicks was a mentor of his, I was strongly affected by his idea of 'a coalition of hope': "A coalition is a coming together, a converging of hearts and minds sufficiently for them to be able to influence things in a way that collectively makes sense ... a coalition is about the people". He also warns of the hold the past has on our imagination, "that we freeze our imaginations with a sense of the past rather than energise our imaginations over what this city could be in fifty years or a hundred years time". Hicks also contributes towards the drama when he says, "the time is right", we have a "narrow window of opportunity", that the "next couple of years will make or break our city".

¹⁴⁹Stuart, once head of Perth's transport system, is highly influential in government circles and plays a significant role in Perth's redevelopment. He lives in Fremantle when not in his semi-retirement home in Margaret River.

As hitchhiker I go towards what attracts me. The above examples show some of the ‘social voices’ that attracted me, and who confirmed and validated Pettitt’s position and narrative. The following segment looks at how showing different voices in relationship, echoes the interconnected networks that enable sustainability.

4.7.3 Social Voices in Dialogue

These satellites contribute different ‘social voices’, including mine, to the narrative. Each voice brings with it values that shape her or his narrative, offering a diverse multi-layered range of perspectives on Fremantle and sustainability. The films, made up of interviews, meetings and events, are broken down into four sectors distinguished by the colour of their title: purple for ‘community’,¹⁵⁰ orange for ‘local government’,¹⁵¹ green for ‘experts’, and red for ‘personal’. The reason for distinguishing the satellites in this way is to show government, community and experts spatially related to each other on the ‘common ground’ of the Prezi, interconnected with each other and the central narrative through relationship. An example of this was the community’s involvement in ‘placemaking’ as a result of educational efforts by the City (instigated by Pettitt), to bring placemaking experts to town. In September 2010 Pettitt had just returned from a 6-week ‘study tour’ that included Paris, New York, and Portland in Oregon, inspired to do more in the city around placemaking (see conversation 8 *Cultural Exchange*). Soon afterwards the City helped to bring two international experts in placemaking to Fremantle for workshops: Charles Landry in *Charles Landry Comes to Fremantle*, and David Engwicht in *Art of Placemaking, Freo Walkabout* and later the following year, *Picking the Low Hanging Fruit*. These experts made an educational impact on both the City’s administration and the community. The formation of the Cappuccino Strip Street Club led to fortnightly events to ‘make streets feel more like home’ (see *Boxing Day Breakfast on the Strip* and *At Home on a Fremantle Street*). At the same time the City began its own placemaking program, *Kings Square Summer*, initiating the beginning of the transformation of Kings Square.

¹⁵⁰ I include the newspaper clippings as ‘purple’ for community since they represent a ‘social voice’ within the community.

¹⁵¹ It is often problematic to make the distinction between local government and community since almost all the community events filmed were co-funded by the City of Fremantle.

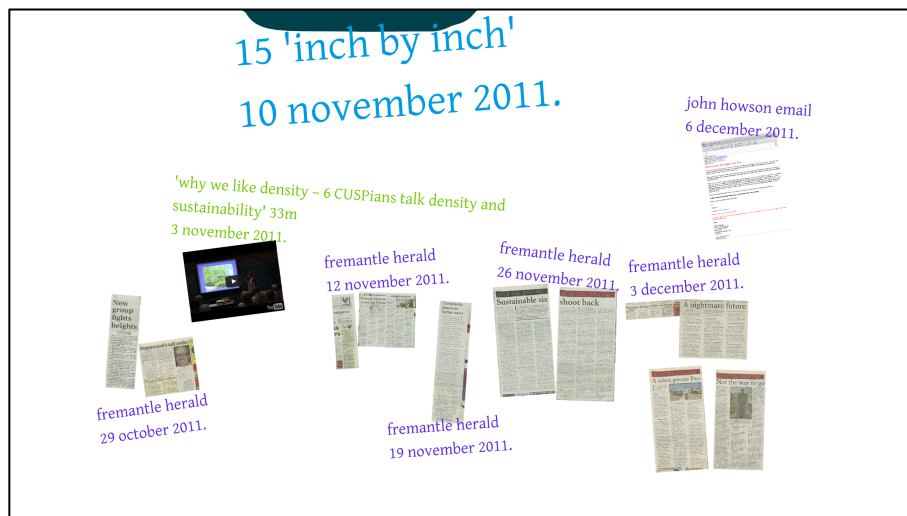


Image 4.9: Detail of Prezi 3

Source: Blagg, 2014.

In the image above, one can see a dialogue unfolding between researchers in sustainability at the CUSP Institute and members of the community, through the *Fremantle Herald*, relating to Amendment 49. The Fremantle Prezi allows one to see the flux of a living unfolding drama through different social voices, each bringing their values into play, engaged in debate.

The Prezi allows the interconnections between people to be seen over time, an individual glimpsed in the background of a film can keep reappearing in successive films and develop as a ‘character’. Rachel Pemberton, whom I never interviewed, is nonetheless a compelling voice within the Fremantle narrative. Pemberton is introduced towards the beginning of the narrative, in *Cross-Pollination*, as coordinator of The Fremantle Network (TFN); is fleetingly glimpsed at the two community workshops organised by the City of Fremantle (*Community Consultation on the East End Plan; Community Consultation on Strategic Plan 2010 – 2015*); makes a glamorous entrance in *Fremantle Happening*, the opening to the 2010 Fremantle Festival; and is host to placemaking expert David Engwicht in *Freo Walkabout*. Over the summer of 2011 she is seen at more length in the placemaking activities of the Cappuccino Street Strip Club, a community group she mostly instigated. In March she is TFN host to the ‘working groups’ presenting their

‘updates’ in *Meaningful Community Engagement*, and a few days later she is seen at the CUSP Institute helping to organise a ‘creative protest’ in *Fremantle – Magnet for Creative Opposition*. In June 2011, she is seen helping small children change into dress-up clothes in *Welcome to Freo*, an event hosted by the Fremantle Greens for ‘Welcome to Refugees’ week. She pops up again at a placemaking workshop with David Engwicht in Kings Square, *Picking the Low Hanging Fruit* and in October 2011, she is present at a City of Fremantle’s breakfast event for bike riders in Kings Square, see *Tune Up in the Square*. By this stage she is running a campaign to be elected as a councillor in the mid-term Council Elections. In *Fremantle Local Election* we see Pemberton elected as one of the new councillors, and in *Twelve Councillors Speak from the Heart*, by the time she gives her speech, we feel we already know her.



Image 4.10: Photograph of Rachel Pemberton with Bruce Moriarty

Source: Blagg, 2011.

Pemberton, through her appearance alone, cinematically weaves together events. She also symbolically represents a new era, as Cr John Dowson, whom she replaced in the election, represented the old.

While the context of the wider world (local, state, national, global), is folded within Pettitt's stepping-stone journey, the satellites more specifically contextualise his narrative within the locale of Fremantle. If the central stepping-stone pathway stood alone, Pettitt would be seen in relative isolation. The many and varied 'voices' within the satellite films act as reference points to each other and to the central narrative, validating and affirming Pettitt's 'voice'. An example of this is how Pettitt's 'orientation of character and consciousness' attracted others to join the journey. In an interview with councillor Andrew Sullivan, *Sidestepping the Charging Bull*, he reveals it was Pettitt who motivated his decision to become a candidate in the council election: "I could really see that with Brad potentially as Mayor there could be quite a significant change in the way in which Fremantle was going to progress and I wanted to be a part of it". As far as Sullivan was concerned, compared to the divisiveness that had marred Fremantle politics in the past, "Brad doesn't have a divisive bone in his body". With "Brad as Mayor" there would be an opportunity to "actually get the decision-making process back on an even keel". Andrew's response to Pettitt's leadership qualities was to bring his considerable talents to the table. Other councillors were equally drawn to getting involved in Fremantle's sustainability agenda.¹⁵²

The final segment, before the conclusion, focuses on the 'personal' films, which represent sustainability in Fremantle from a filmmaker's point of view.

4.7.4 The Filmmaker's Personal Contribution to the Prezi Narrative

To this point the section has focused on the reflexive postcards and the social voices recruited to the film and how these elements interrelate with the central narrative. The final reflexive element of the satellites to be discussed is the filmmaker's contribution through the films designated 'personal'. These include the previously discussed prologue film, *The National Hotel*; Fremantle on Easter Saturday night, *Dancing in the Street*; the launch of Pettitt's first festival as Mayor, *Fremantle Happening*; bike-riders arriving at a night time event, *The Lights of Fremantle*, and the most ambitious, *Wool Store Rising*, about concrete transformation. These films

¹⁵² Other friends of Pettitt who became councillors include Cr. Dave Coggin, Cr. Tim Grey-Smith, Cr. Rachel Pemberton and Cr. Ingrid Waltham.

communicate Fremantle in a more visually expressive way than the other films. As a filmmaker I was always looking for opportunities to depict ‘revitalisation’ – the central idea of Pettitt’s narrative – however this proved challenging since there was little change to be seen on the ground. For a time I thought I could use the restoration of the burnt out National Hotel to symbolise the ‘phoenix rising from the ashes’, however due to the GFC, restoration work was extremely slow and finally ground to a halt in May 2011.¹⁵³ This was a blow, but not long afterwards a better opportunity arose. In conversation 12 *Intimations of Mortality*, Pettitt mentions that the “old Wool Stores building”, a neglected iconic heritage site, is to be made into a “work of art” in time for the ISAF sailing championships in late 2011.¹⁵⁴ To make this happen involved Pettitt getting together the building’s owner (Marylyn New), the ‘local identity’ running the championships (John Longley), and the City of Fremantle (himself), around a table, something that Pettitt tells us, while laughing, took some effort:

It was hard to get everyone around the table. Took my poor PA – I just said keep ringing, keep ringing. Concrete art and Marylyn New. Got them all around the table!

New had history with the City because she had let her heritage-building fall into disrepair and had recently been given a court order to make essential repairs so it not deteriorate further. To many in Fremantle, New was ‘the enemy’. Without Pettitt as Mayor, it is difficult to imagine a project like this happening. To show what could emerge out of three disparate people sitting around a table would be symbolic of sustainability as well as Fremantle’s revitalisation.¹⁵⁵ To pay for the work, ISAF and the City contributed \$25,000 each; New was contributing her recently ‘fixed-up’ building and her building manager. While the artwork would only last 3 - 4 years, it would take at least that long before redevelopment might potentially start.

¹⁵³ I was in touch with the owner, Sean Butler, who had contacted me after seeing the YouTube movie, interested in commissioning a film about the hotel’s restoration. In 2011 Sean was bankrupted.

¹⁵⁴ ISAF refers to International Sailing Federation.

¹⁵⁵ The project was symbolic of sustainability because it involved getting three people representing the three sectors of sustainability (business, government and community) around a table.

Throughout October and November 2011, I filmed the transformation of the Wool Stores. It was an enjoyable experience because it was about communicating visually, rather than through ‘talking heads’ and dialogue. The process of creating an innovative urban art project involved prominent local sculptor and artist, George Haynes; many street artists, known and unknown; and Fremantle primary school students from six different schools. It also involved many workers, including Irish and English carpenters who had only recently arrived in Australia and were harassed by flies and summer heat. The project also included the building’s past through a personal link I had with someone who had worked there during the 1960s. With all these diverse components it was very much a community project. When the project was finally completed, I had the task of reducing many hours of footage to 20 min. and finding a local composer to create a musical score. This was my personal contribution to Fremantle’s sustainability story and later I took great pleasure in organising an outdoor screening in Kings Square, projecting the film up against the wall of the Town Hall. Most importantly, making the film allowed me to see something concrete and transformative emerging out of the sustainability process – a learning that went very deep.

In the last three segments I have examined the utilisation of digital media through ‘voicing’ – the diversity of ‘social voices’, including my own, contributing an ongoing dialogue, in flux, to the Prezi narrative. To reiterate Sandercock, digital ethnography is “dialogical in the sense that it includes and (if successful) is included in a polyphony of voices, with no one voice, including that of the researcher, claiming final authority. It is also potentially liberatory, in creating the space for people to tell their own stories” (Sandercock 2010, p. 61). Here, enabled by the Prezi’s open architecture, a “liberatory” space has been created for a multitude of ‘voices’ to tell their stories. Thus the satellites, through contextualisation, fill gaps in knowledge around the sustainability journey through an unfolding open dialogue. Again the idea of sustainability as a networked flow is brought to mind.

This section dealing with the satellites does not cover all of the 41 films that comprise the contextualisation of Pettitt’s narrative, but enough to make the assertion that reflexivity and the role of voicing in cinematic narrative plays a crucial role in narrating the ‘big picture’ of how sustainability works. It is possible to ‘enter’ the

stepping-stone narrative at any point, or to travel the stepping-stones in order, but the idea is to move back and forth from the central narrative to the context, embodied through the satellites, to see how the two interrelate and impact on one another.

The final section of this chapter brings together the different structural elements contained within the Prezi to show its capacity to communicate sustainability more efficiently and powerfully than reading the story from words on a page or from a regular documentary.

4.8 Conclusion: The Prezi as a Whole

The Prezi presentation is dictated by temporality through a timeline, beneath which 67 films are structured and managed through a prologue, a pathway of stepping-stones, and a constellation of satellites. Each structural element is vital in conveying the complexity, interconnectivity and contextualization that is necessary to make meaning and fill gaps in knowledge around sustainability. The role of the Prezi as a digital research tool is to hold both the product (Fremantle's journey as a roadmap), and the multi-causal explanations; Pettitt's narrative and the context within which he moves. The Prezi's open architectural structure allows the mayor's step-by-step journey to be connected with the larger socio-cultural and political forces at play in Fremantle – the combination of narrativity and case study research “linking local action and wider structures in nonreductive processual ways” (Gotham and Staples, 1996, p. 492). The Prezi also allows a mapping of history that is along many fronts – open-ended and interconnected like sustainability itself. It is also expressive of hitchhiking – the idea of getting on and off the ride, being free to go where one's interests lie.

The Prezi is the structure by which knowledge is created, managed and organised. Through contextualisation, filling gaps in knowledge, meaning is created. If the films that surrounded the central narrative were left out, the central narrative on its own would be incapable of communicating the full sustainability story. This process oriented approach stresses the interconnectedness of human agency, structure and the

interplay of various factors. It also suggests the possibility of a new kind of documentary; the Prezi allows interconnectivity and relationship to be visually built in and communicated. The Fremantle Prezi allows us to see the importance of context to knowledge.

This chapter has established the parameters of the research study through the City of Fremantle's *Strategic Plan 2010-2015*, driven by the mayor as a roadmap for the next 5 years. This was followed by an introduction to the Fremantle Prezi and how to use it as an immersive experience. The following three sections analysed the three structural components of the Prezi: the prologue that introduces the characters and the story; the stepping-stone narrative driven by Pettitt as mayor; and the satellites that contextualise his pathway. Digital media is utilised through cinematic presentation, reflexivity and the Prezi as a whole. This chapter shows that the process-driven, hidden interrelated complexity of 'sustainability and cities' can be visually depicted and communicated through the Prezi.

The final chapter examines the findings of this thesis through reiterating the two questions that drive this inquiry, and how the research study has responded to them through the Creative Production and the commentary/exegesis. Since this is an action research mode of inquiry, the impacts of practice-led research are also examined. The chapter concludes with the limitations of this inquiry and the direction further research might take.

CHAPTER 5

CONCLUSION: DIGITAL STORYTELLING AND SUSTAINABILITY: ENGAGEMENT, RECORDING AND COMMUNITIES

5.1 Introduction: Digital Storytelling and Sustainability: Engagement, Recording and Communities

Chapter 1 introduced this research study as practice-led action research utilising digital media to investigate Fremantle's journey towards sustainability led by its new green mayor. By linking sustainability and digitality, this study reveals their synchronicity and how well they fit together and enhance each other as a cultural phenomenon. Sustainability needs Digitality to make it visible, Digitality needs Sustainability to grow and innovate. Even their histories are synchronous – both born in the 1960s and still relatively young. Both require courage because of the risk and uncertainty involved in going into 'unknown territory'.

Digital media and sustainability, through form and content, can be seen to be inextricably linked and to symbiotically support each other through the idea of the journey. The 'open' documentary that invites interaction and has no end product in mind is the sustainability narrative about ongoing change with 'no point of arrival'. The 'road movie' genre with its episodic nature, the idea the journey is more important than the destination and that "the identity crisis of the protagonist mirrors the identity crisis of the culture itself" (Salles, 2007), is the story of me hitching a ride with Pettitt. By the end of the journey the hitchhiker has a holistic 'big picture' understanding of sustainability and, almost inadvertently, a new kind of documentary.

When I began this journey I had an idea of knowledge as 'product'; I wanted to put things into separate boxes and label them – this was sustainable transport, this was placemaking, this was economic redevelopment. To do otherwise would be too 'messy' and confusing.¹⁵⁶ This went on for nearly a year before I realised I needed to take a holistic approach and approach the journey chronologically rather than

¹⁵⁶ The first two or three times I filmed Brad and Peter in conversation, I kept interrupting to ask them which strategic imperative were we now discussing. It took a little while for me to 'get' how interconnected the imperatives were.

thematically and I began to ‘get’ sustainability in a more visceral way. Matthew Parnell, while presenting his thesis *Sustainability is a New Emergent Cultural Phenomenon* to an audience at CUSP Institute, described sustainability as a way of being, like putting on one’s sustainability underpants first thing in the morning, seeing the world through the lens of sustainability from the inside out (M. Parnell, personal communication, September 18, 2012). This concept describes my understanding of sustainability after completion of the journey.

The Prezi affords the capacity to do more than simply record; one can narrate, trace, reflect, map. This is a creative process – a mapping of history to leave a trace of that history. It is a movement away from knowledge as product – something objective, isolated, fixed, to narrative as constructing meaning – subjective, contextualised and unfurling through time. To create a chronological narrative of one’s own life allows one to make sense of it; if a significant event is omitted it will no longer make sense. In a similar fashion, this thesis attempts to make sense of Fremantle’s journey towards sustainability through a chronological narrative. Through the self-reflexivity of the ‘hitchhiker’ I enter into a dialogue with the narrative, sharing doubts and confusion through postcards as I attempt to decipher and translate that journey to the community. Gotham and Staples describe this activity (of self-reflexivity in the construction of meaning) as “process-oriented theorising” which holds that the “meaning of an event is determined by the story in which it appears and by the ensemble of contemporaneous events” and that “things happen because of a constellations of factors, not because of a few fundamental effects acting independently” (Gotham & Staples p. 492, 1996). The Fremantle Prezi clearly shows chronology and a ‘constellations of factors’ through its timeline and its constellation of ‘satellites’. Embedding this holistic contextualised journey into a Prezi that operates as an autonomous whole, like a message in a bottle, and sharing it through emergent digital networks around the future of cities, could equip local councils to implement plans which are socially and ecologically sustainable and seek to benefit all life on Earth.

As the tool that stands between Fremantle’s journey and the Prezi that reflects that journey, I am the fallible human with my own blind spots and weaknesses. I don’t attempt to hide this; on the contrary, as author of this digital discourse, I have made

myself transparent to allow the narrative to work in its own right as a demonstration/model where I am one ‘voice’ among many. There are also many times when my presence is acknowledged within the films. By acknowledging my presence in this self-referential way I am again reminding the viewer that the author is present, is part of the story.

Constructing Fremantle’s journey as a digital story has been an emergent journey of learning for me – emergent in the sense I had no idea where I would be by the end of it. Practice-based learning has led me to a deeper understanding of sustainability and cities, and of the potential of digital storytelling. Before the journey I would have described myself as a digital filmmaker, now I describe myself as a sustainability digital filmmaker. Implied within this description is the notion of engagement with community, which means to be ‘localised’. Sustainability/change happens at a local level – that’s why mayors should be running the world according to Barber. It’s changes in our cities where humankind now mostly live that will make all the difference to our collective future as a species.

‘Community media’ is media embedded in locality, in the ground beneath our feet, and therefore deeply engaged with community. As the mayor rides the streets of Fremantle on his bike – recognisable and accessible, so too for myself as local filmmaker, made recognisable through walking the streets hoisting camera and tripod. As the study progressed I was occasionally recognised on the street, even without my camera, and folks (mostly young) would comment on the films they’d seen on my 6160 Vimeo channel.¹⁵⁷ On occasions I would be contacted to cover a story where an injustice was perceived to have happened but had to decline since it wasn’t relevant to the thesis. I networked with other local filmmakers and offered to share footage I had shot if I had filmed a special performance or event. When events I wanted to film happened simultaneously, I would draw on these connections offering a small amount of money and a film credit to film the event I couldn’t attend. Before I’d built up a library of my own photographs, I negotiated with a local photographer to use his work. With regard to music, I made an effort to track down local music and local composers to assist with soundtracks. With *Wool Store Rising*,

¹⁵⁷ The 6160 Vimeo Channel was where I shared all the Prezi films except for the 17 conversations between Brad and Peter which were held back until the study’s completion.

a ‘personal’ movie that symbolises Fremantle’s revitalisation and conceptualises sustainability, I created an event and screened it on the council building in Kings Square to an audience of around 40 people. This growing recognition of my role in documenting Fremantle over a period of two and a half years led, I believe, to acceptance from the community, and for me a sense of belonging.¹⁵⁸

This concluding chapter restates key insights derived from each part of the commentary/exegesis to show the steps in the argument of this thesis: that digitality is the best way to narrate history and sustainability through engagement, recording and community. This is followed by focusing on two major findings from this action research study: the role of filmmaker as mediator – standing between Fremantle’s unfolding journey and the Prezi; and secondly the adaptation of the Prezi as a new form of documentary that communicates sustainability in a way that reveals a sustainability way of thinking. This is followed by an evaluation of the study based on the impacts of action research through engagement with community in recording Fremantle’s sustainability journey over two and a half years. The chapter concludes with limitations of the study and the direction further research might take.

5.2 Commentary/Exegesis Structure

This section of the chapter establishes the concepts and arguments that are foundational to the Creative Production of this thesis:

Chapter 1 sets out the case that practice-led research reveals knowledge as socially constructed, thus this thesis is part of a worldwide transformation that is taking place within Humanities, moving away from knowledge as discipline-based to knowledge as practice-based (Mhando and Petkovic, 2014). The thesis, contained in two parts, a

¹⁵⁸ An area where I’d most like to follow up is to take the movies out of the computer and project them in the town square. It is one experience to watch a movie on one’s ipad or laptop, quite another to view as a communal experience under the stars. This would be truly celebrating localism. Another side effect of localised filmmaking is that it contributes towards creating an identity of place – to see the place where one lives reflected back at you in a movie is a powerful thing – hey my place is important too!

Creative Production and an Exegesis, responds to the research questions re-stated here:

1. How can a green mayor and his council shape a city's economic development to create an expanding and sustainable future for their city?
2. How can the Prezi make a significant contribution to digital storytelling and enable the sustainability journey to be better communicated?

The bigger question that lies behind these questions is: How do we narrate what is happening in the history of sustainability and cities? How do we narrate change? By the end of the research study the questions have become: How does and how did a green mayor shape a city's economic development to create an expanding and sustainable future for their city? How well does the Prezi communicate this?

Chapter 2 introduces cities as central to issues of sustainability and the argument that 'green density' is an answer to those issues, although some disagree. The history of sustainability and cities is established as a relatively new cultural paradigm based on values of social equity, environmental protection, and economic prosperity to leave a legacy for future generations. For a city to reduce its footprint and at the same time improve its liveability involves the integration of the community, business and government sectors – a creative collaboration referred to as 'playing jazz' by the World Business Council of Sustainable Development (WBCSD, 1997). This integrative processual approach allows the resolution of conflict. However, while local authorities are instrumental in cities becoming more sustainable, there is a gap between sustainability rhetoric and changes on the ground indicating a need for models of local government implementing sustainability. Sustainability is enabled by political leadership through mayors who are potentially key change agents since they are responsible for local changes that lead to reduction in carbon emissions in conjunction with making their cities more liveable. Moreover digitality plays an increasingly important role in cities achieving success in sustainability through urban networks, the sharing of best practice and virtual collaboration through intra-city networks.

Chapter 3 notes the historical shift in research from the traditional ‘objective’ decontextualized scientific model of knowing, toward sociohistorical narrative analysis, which emphasises the active role of the learner and the importance of contextualisation to knowledge making. Social Science has a heritage of using visual and storytelling modes to communicate, with the understanding the power inherent in the role of narrator is acknowledged through ‘transparency’. Media in the documentary realm has a heritage of epistophilia, ‘filling gaps of history’, and catalysing social change through utilising cinematic narrative. Cinematic presentation also involves reflexivity since a film cannot be ‘neutral’. Through the reincarnation of activist documentary in a ‘digital age’, the digital media presentation within this thesis attempts to fill gaps of knowledge in the quest of and towards sustainability out of a desire for knowledge around ‘cities and sustainability’. Since sustainability has been established as processual, using a processual methodology will allow this to be shown. Digitality and sustainability, in an interplay between Arts and Social Science, are brought together through the idea of the journey, informed by the ‘road movie’ genre. The Chapter contextualises this investigation through examining three modes of linking digitality and sustainability, including this study’s use of the Prezi, which communicates Fremantle’s journey towards sustainability as a ‘roadmap’.

Chapter 4 investigates the Creative Production, an adapted Prezi accessed through the Internet. After establishing the parameters of the research study, the Fremantle Prezi is introduced to show how to use it as an immersive learning experience. The Prezi structures and manages knowledge through: a ‘prologue’ that introduces the actors/agents; a ‘stepping-stone journey’ that represents the mayor’s narrative as he ‘drives’ Fremantle towards sustainability; and a constellation of ‘satellites’ that contextualise the mayor’s journey within Fremantle. These components are analysed as to their utilisation of digitality (through cinematic presentation, reflexivity and the Prezi) to show digitality has the capacity to narrate history and sustainability. Through this analysis both research questions are implicitly answered: we learn that indeed “a new green mayor and his council can shape a city’s economic development to create an expanding and sustainable future for their city”; and that “the Prezi makes a significant contribution to digital storytelling and enables the sustainability journey to be better communicated”.

The next section offers a more detailed summary of findings in response to the research questions, and the research approaches that accompanied them.

5.3 Findings in Response to the Research Questions

To summarise what this research study reveals about a city moving towards sustainability is to say leadership skills play a major role, and change is slow. By the end of the study we learn three quarters of the mayor's time has been spent seeing planning amendments (towards green density) through Council. Work involved in economic revitalisation took up an even higher proportion of time for the City's administration.¹⁵⁹ However by the end of the mayor's 4-year term, those amendments had led to \$1 billion of green redevelopment investment in Fremantle. Placemaking also played a significant role, a strategic imperative expressed through the transformation of Kings Square in the symbolic heart of Fremantle. Thus it would be true to say that the mayor and his council focused on urban planning, placemaking and the importance of redevelopment as the basic thrust of sustainability in Fremantle.

Broad findings in response to Question 1 include:

- The need for a mayor to have a coherent compelling vision that sets a direction and which is not deviated from.
- The need for a strategic plan that encompasses the sustainability agenda with achievable outcomes, and that is flexible and open to partnerships and synergies.
- The need for engagement with community through community consultation and working groups with the understanding that consensus may not be reached and 'hard decisions' may have to be made.
- The need for a 'new economics' through innovative incentive based schemes involving design and sustainability. By creating currency around 'greenness'

¹⁵⁹ In a conversation with Glen Dougall, the City of Fremantle's Manager of Corporate affairs, this prioritisation was reflected within the administration where 95% of their efforts had gone on economic imperatives. Glen told me that Brad had described what they were doing as 'triage', reflecting Fremantle as an emergency case (G. Dougall, personal communication, October 2013).

business can make money but it has to do it in a green way so development is intimately linked with social and environmental outcomes.

- That the sustainability journey is slow and incremental with steps forward but no point of arrival.

When this study began, it was seen mostly as an investigation/interrogation of a city's journey towards sustainability – how far it could go in reducing its footprint and improving its liveability – a process that would reveal value clashes between 'green pro-development' and 'green anti-development' forces. Fremantle's journey could have come to nothing but in a sense it would not have mattered; there would still have been lessons to be learned. However, what became increasingly significant as the study progressed was the practice-based approach; finding the best way to communicate the processual emergent complexity of Fremantle's sustainability journey. While this thesis represents a new kind of leadership and a different way of doing politics, the methodology plays a bigger role in asking how successful is the Prezi in communicating Fremantle's sustainability journey.

Through the ethnographic methodology of researching a living environment (living because everything is happening in the present), and then presenting the research through a living timeline (living because it is not just an archive but a developing archive), the Fremantle Prezi represents a new and innovative digital form of storytelling. It has the capacity to show the multidimensional and multi-causal process by which something happens. It is a new way of saying something – communicating knowledge about something socially interesting through an 'open' dialogue, rather than as a traditional 'closed' narrative documentary.

This section has summarised the key findings of this research study. The following two segments offer more detailed findings, firstly in regard to practice-based reflexivity in questioning digitality's capacity to communicate sustainability and secondly, in regard to this study's adaptation of the Prezi as a new form of documentary that can reflect a sustainability way of thinking.

5.3.1 Filmmaker as Mediator

Examining one's practice through self-reflexivity means the process of constructing the narrative overshadows the narrative itself. In this practice-led research study the filmmaker can be described as 'mediator' – mediating between Fremantle's journey and the Prezi. Through the Prezi I decipher and translate Fremantle's journey, with its clashes of values and institutional changes, back to the community; mediating between events unfolding in Fremantle, and how they are reflected/mirrored back within the Prezi. It is an interpretative practice. As mediator I need to discern crucial events affecting policy to transform a city. In this way I am playing a role in the sustainability journey as I help to define the steps.

Policy is about decision-making; it emerges through integrating the needs of 'economy, society, and environment'. The Prezi brings 'community, local government, and business' together on 'common ground'. In creating the Prezi, I am allowing the viewer/user to enter my space and to engage with my ideas through the power of cinematic presentation. It is how I communicate knowledge about sustainability, and what a city moving towards sustainability looks like.

Thus the author of the Prezi discourse is the mediator who translates Fremantle's sustainability journey in order to reflect it back to the community. The interactive Prezi establishes my position, my space, how I communicate my findings about sustainability in action. Mhando notes, "action research occurs at the level of discourse – the ways in which research is contemplated, inflected and represented" (Mhando, 2002). How I mirror Fremantle's journey through the Prezi represents the way in which I contemplate, inflect and represent the research I have gathered. The mediating role is a foundational concept that informs the entire thesis – that knowledge, and the position of self in relation to mediation of knowledge, are socially and formally constructed. Being a mediator involves attempting to capture the flux of life and create meaning (through the Prezi) whilst at the same time living it (inside Fremantle's journey towards sustainability). Out of 'lived meaning', through the very circumstances of its creation, new knowledge is created (Mhando, 2002). There is inherently uncertainty and risk involved: Where am I going? Do I know what I am doing? Authors Cohen and Odhiambo suggest uncertainty is

intrinsic to knowledge making: “uncertainty is the fragile formative ground of debate and critique” (Cohen & Odhiambo, 2004, p. 271).¹⁶⁰ These are uncomfortable feelings to have on a journey. British author Sam North, in commenting on the ‘road movie’ genre, notes, “leaving for the future without a map can be a daunting task” (North, 2005). However, there is the reward that comes when the ‘roadmap’ finally takes shape and one realises the journey has not been in vain. It is this process of ‘meaning making’ that allows one to create new knowledge – both in filling gaps of knowledge in the quest of and toward sustainability, and in exploring new modes of documentary that may communicate the quest more efficiently and effectively.

My practice-based journey in marrying sustainability with digitality was echoed by the mayor’s practice-based journey implementing the sustainability agenda in Fremantle. As I am the tool that stands between Fremantle’s journey and the Prezi that reflects that journey, so to is the mayor a tool in deciphering and translating sustainability into Fremantle. Through our practice-based learnings we are both revealed as fallible and uncertain, yet this ‘ordinary person’ achieved something extraordinary, what many thought could never be done. The power of the Prezi reveals the power of Pettitt as a green mayor and leader.

5.3.2 The Prezi as a New Form of Documentary

At its most basic level, the capacity of the film/digital Prezi to communicate Fremantle’s sustainability narrative is helpful since, as has been discussed, cities need models/demonstrations of how sustainability can be implemented in an urban context. At a deeper level this thesis argues we need inspiration that it is possible to choose a different future, and that shows us how to get there. We need to see what leadership towards a more sustainable future looks like. We need narratives that give us hope because they are saying it is worth making such efforts because they are intrinsically ‘good’, despite the obstacles in the way, and the uncertainty that it will work out (Van Hooft 2011, p. 139).

¹⁶⁰ When one of the attendees at a conference on practice-led methodology read out this quote there was a collective sigh of agreement around the table (Postgraduate Research in Screen Production and Creative Arts Conference, personal communication, June 29, 2013).

What makes this film inquiry unusual is the experimental way the documentary form has been shaped and structured, through the Prezi, into a new mode of documentary. Nichols states that every film has its own ‘voice’, meaning its sum is greater than its parts, and that it “orchestrates [the parts] through firstly - the recruited voices, the recruited sounds and images, and secondly - the textual voice spoken by the style of the film as a whole” (Nichols, 1991, p. 262). Depicted as an interactive ‘roadmap’, the Prezi is a coherent entity in its own right, orchestrating a multitude of ‘social voices’ with no one ‘voice’ having final authority. As ‘hitchhiker’ I am a social (and reflexive) ‘voice’ through whom the user can (but may not necessarily) experience ‘Fremantle’s journey towards sustainability’ since on the road there are many ‘voices’ to choose from. As a form of documentary storytelling, the interactive participatory Prezi subverts the notion of traditional documentary with its ‘closed’ linear form structurally fixed by the director. This is a new kind of documentary that combines ‘actuality’ with the filmmaker’s creative shaping influence through the open architecture and participatory nature of the Prezi.

The Prezi, as a whole, shows the process by which something happens not as a singular event, but as many overlapping interweaving events that evolve in an open-ended way. It allows a multidimensional and multi-causal depiction of history.¹⁶¹ It makes a visual spectacle out of the invisible and emergent complexity and networked ‘flow’ of sustainability in action. The ‘stepping-stones’ reflect the slow and incremental human-sized steps sustainability requires – the idea sustainability is a process not a destination. A regular documentary with its analytical ‘closed’ narrative form cannot reflect the open, emergent nature of sustainability. In allowing us to see how a city moves towards sustainability (how it gets to where it got), the Prezi represents a different way of thinking. The medium is the message.

In Chapter 3, narrative was defined as “the organisation of contemporaneous actions and happenings in a chronological, sequential order ‘that gives meaning to and explains each of its elements and is, at the same time, constituted by them’” (Gotham & Staples, 1996, p. 483, quoting Griffin, 1993, p. 1097). The Prezi allows organisation and control of overlapping and interwoven layers of contemporaneous

¹⁶¹ The Prezi also functions as a living archive – connecting past, present and future.

events that both give meaning to those events and is, at the same time, constituted by them. Gotham and Staples conclude their paper, which examines different forms of narrative inquiry, with the potentiality of this approach: “The search is on for new forms and techniques of representation that includes stories and storytelling ... the experiences of ordinary people at the local level ... and process-oriented theorizing” (Gotham & Staples, 1996, pp. 493).

Theoretical progress consists of asking better and better questions and revising them in terms of what emerges in the process of research. This thesis suggests that through its utilising of digitality in representing the experiences of ‘ordinary’ people at a local level, and its processual interconnected contextualisation, the Fremantle Prezi is a new innovative form of inquiry. The authors go on to note that ultimately progress in narrative analysis comes about when, “engaging with different and divergent meanings of narrative’ (Gotham & Staples, 1996, pp. 493 – 494). While the Prezi narrative presents knowledge “in a chronological, sequential order”, its participatory nature allows it to be read as a multitude of narratives that can be interacted with in any order. What is innovative about this film’s ‘voice’ is that it expresses ideas in a sequence, but without being a slave to narrative form. Rather it comprises a series of fragments and ideas; a multiplicity of voices separate and related, that can be read in a linear or non-linear fashion. What holds these fragments and ideas together is the notion of a roadmap. Here is an alternative narrative, a narrative that plays with the idea of narrative, subverting the notion of documentary as a ‘closed’ linear structure and in the process, making a new kind of documentary.

The experiential process of action research has been a powerful learning both in terms of sustainability and cities, and the role of digital media in communicating such complex open-ended processes, primarily because of personal and active involvement. This is active learning through undergoing an experience, the learner playing an active role, “which, involves making sense out of a range of phenomena” (Scahller, 2011, p. 1). It is intended that in like manner, the interactive exploratory nature of the Prezi invite that personal involvement on the part of the user who in turn becomes an active learner making sense of a range of phenomena. This is a profound difference in learning to the traditional epistemological approach that sees knowledge as fixed and objective. By its very nature, self-reflexive practice-led

methodology critiques and undermines the notion of knowledge as ‘product’. To contextualise this approach within academic modes of research inquiry is to remind ourselves investigations of an individual practice do not have the same value as more traditional forms of ‘knowledge’ (Mhando, 2002):

In the academy research based work by practicing academics does not levy the same value as the traditional and more conventional research that aims at the “advancement of knowledge”.

While conventional research is “premised on some known research methodologies and output” (Mhando, 2002), it is an entrenched view and therefore powerful. However there is also the potential power of the researchers who question it (Livingstone, 1987, p. 8):

Collective reflection by subordinate (sic) groups leads to recognition not only of the roles of dominant groups in establishing established beliefs and practices, but also of their own roles in that process and their own potential power to reconstruct such beliefs and power.

It is hoped that this research study will join other practice-led studies to release the “potential power to reconstruct” different beliefs and practices in what constitutes ‘knowledge’.

The following section evaluates the practice-led mode of this inquiry through its impact on both the researcher and the subjects of the inquiry in the context of engagement, recording and community.

5.4 Impacts of Action Based Learning through Engagement with Community

Fremantle’s journey towards sustainability can be measured through policy outcomes. Measuring whether a film is successful is through its impact on audiences. In the case of action based practice-led research, evaluation considers the impact on

the group/individual by using this particular research process. What follows are some of the impacts that have resulted from this study:

- The most powerful direct impact of the process was that it led to Pettitt and Newman having 17 conversations over two and a half years, allowing Pettitt an opportunity to reflect on his journey, Newman to be involved as mentor, and for an exchange of ideas that contributed towards all our learnings.¹⁶²
- Another powerful impact happened halfway through the study when I was commissioned by the City of Fremantle to make a YouTube film selling Fremantle's change of direction to potential investors.¹⁶³ This job was a direct outcome of my interview with the City's Economic Manager, Andrew Eastick, who features in the prologue film, *Freo Demographio*.¹⁶⁴
- The accumulated power of impact over time (gradually impacting on more people in a deeper way) led to recognition within the community of my role as a filmmaker in documenting Fremantle's sustainability journey. This growing acceptance gave me a feeling of belonging – I too was playing an active role in Fremantle's future. It also led me to a deeper understanding and appreciation of 'community media', media embedded in locality, localised through deep engagement with community and place.
- The impact of interviewing talented 'locals' and 'experts' forced me to analyse the sustainability elements in what they were doing. More significantly, by asking questions in terms of the interviewee's visions and values, I was led to a deeper understanding of my own values – something I would have found difficult to articulate before commencing this research study.

¹⁶² Bringing two such busy people together on 17 occasions was certainly a challenging task.

¹⁶³ Being paid to do necessary research, since the film involved communicating Fremantle's new economic strategy, was a very welcome impact.

¹⁶⁴ Through most of 2013 I was employed by the City of Fremantle as an 'embedded' digital filmmaker documenting the 'Freo 2029' project – a community engagement process visualising Fremantle on its 200th birthday.

- The impact of editing the many mini-documentaries also forced me to analyse for sustainability, and to prioritise what was essential to communicate and what could be left out. As a result I am now confident I can recognise the threads of sustainability within a story, and bring them to the fore to underline them. Interviewing and editing has also allowed me to grow my capacity in recognising sustainability in action. This can now be communicated to others thus building the links between digitality and sustainability.
- The impact of my filmmaking skills on the research process was significant since I was able to: (mostly) achieve a professional product with a discernable aesthetic style; discern moments of ‘aliveness’ to prioritise them; and multiply levels of meaning by integrating other media – anything in short to make the films brief and user-friendly. The impact of the study on my filmmaking and digitality skills can be discerned in the improvement of quality of the films over the period of the study.
- In terms of how useful, practicable, of value the outcome has been, it is difficult to offer an ‘objective’ assessment. However, at the least it is an historical record of Fremantle from October 2009 – July 2014.¹⁶⁵
- It can be argued the impact of the Fremantle Prezi as a visual record is more useful/accessible than a literary record. It can also be argued that communicating an idea through visual means makes it easier to learn (Thompson, 2007). There is also the impact of audio; the manner in which the word is spoken communicates more than written down words – how often do we remark how people speak. There is also value in creating an interpreted record (through editing and the Prezi) because it adds additional meanings, making sense of a visual record. These are all ways of value adding to the Fremantle sustainability project.
- Possible useful outcomes include the Fremantle Prezi contributing to the

¹⁶⁵ The Fremantle Library has added an uncut version of *Twelve Councillors Speak from the Heart* to their local history archive.

discourse around ‘sustainability and cities’ and ‘the role of mayor as key change agent’ as well as putting Fremantle ‘on the map’ as a model of a city moving towards sustainability.

To summarise, it was with a growing sense of wonder to see the emergent open-ended nature of sustainability echoed and mirrored in the emergent open-ended nature of digitality. Sustainability and digitality need each other – sustainability needs (is benefitted by) digitality for it to be seen and communicated, digitality needs (is benefitted by) sustainability to explore new modes of documentary that invite engagement and participation. Digital media is revealed as a powerful tool in the hands of ‘ordinary’ people who can play a part in creating and communicating the possibility of a different future. Through the process of constructing a narrative about sustainability, I have located myself within the history of ‘sustainable digital communication’ and ‘community media’, within the larger framework of sociohistorical inquiry in Social Science and the role of documentary in Media/Arts.

This thesis interrogated the digital media process by which history and sustainability is recorded, Fremantle’s journey being the means by which this was investigated. Through the process of action research, the Fremantle Prezi has emerged as a new narrative about sustainability through a new kind of documentary.

In the following section limitations to the study are outlined and further research is suggested, mainly the need to measure the linking of this kind of practice-led research to “application, diffusion, education and culture” (Jaanieste & Haseman, 2009, p. 12).

5.5 Limitations to Study

The difficulties of a ‘massive longitudinal study’, investigating a city over two and a half years, is that it can never cover everything. Given that approximately 83 h. of digital footage was shot to make 10 h. 45 min. of edited films, clearly much was left out. In regard to the conversations between Pettitt and Newman that form the spine of the journey, illustrative examples and ideas were necessarily edited out to reflect

the mayor's focus on urban planning, placemaking and the importance of redevelopment. This included leaving out discussion around public transport in the context of metropolitan Perth and Fremantle's role in this. These limitations are generally intrinsic to any documentary, but most particularly to one that is so ambitious. The final section to this chapter points to further research.

5.6 Further Research

A key element to practice-based research is the transferability of the understandings reached as a result of the research process. It is relatively straightforward to 'share' the Fremantle Prezi. However the big question is – does the open architecture of the Prezi enhance the stickiness/receptivity of sustainability ideas more than watching a traditional 'closed' documentary film or reading an academic paper? Does an innovative digital approach, open to the user's participation in choosing where to go, and what to interact with, create a better understanding of sustainability and cities? In their paper on practice-led research leading to innovation, Jaaniste and Haseman refer to the economic theories of Schumpeter¹⁶⁶ who perceived a three-stage trajectory "at the heart of innovation":

- knowledge production;
- knowledge application; and
- knowledge diffusion.

This thesis has produced knowledge (through practice-led research) and applied knowledge (through the production of the Prezi) however it has not gone to the next stage of 'knowledge diffusion' meaning, "the spread of new knowledge and applications across the economy and society until it is absorbed into our evolving way of life" (Jaaniste & Haseman quoting Schumpeter [OECD, 2005, p. 29] 2009, p. 5). In order for this innovative project to impact on economic and/or social development, follow-up research is needed to link this research to, "the complex network of knowledge, products, processes, people and organisations that together make innovation possible" (Jaaniste & Haseman, 2009, p.6). This requires feedback,

¹⁶⁶ Joseph Schumpeter expressed the idea innovations are usually more important than inventions (McCraw, 2007).

adaptation, and dissemination across professional and social networks around cities and sustainability. The Prezi on Fremantle's journey to sustainability now makes this possible.

APPENDIX

Films in order of appearance in the Prezi:

1. 'The Beginning of the Journey' (8:10 min.), sustainability academic and local councillor Dr. Brad Pettitt wins the mayoral election with a landslide victory, Norfolk Hotel, 17/10/09.
2. (Background on Brad) 'A Different Way of Thinking' (11:05 min.), Brad in mayoral campaign mode, X-Wray Café, 14/09/09.
3. 'The Idea of Fremantle' (12:26 min.), sustainability professor Peter Newman discusses his 37-year-old relationship with Fremantle as academic and activist, Russell St, 20/03/11.
4. (Background on Peter) 'Diamonds of Hope' (12 min.) in the context of peak oil, Peter Newman affirms each of us has a 'diamond' we can contribute to the community, Pakenham St, 14/11/07.
5. 'The Hitchhiker' (3:05 min.), author Linda Blagg gives an overview of her thesis, Monument Hill, 22/12/10.
6. 'The National Hotel' (1:43 min.), film poem about a burnt-out ruin, 18/08/07.
7. 'Freo Demographio' (6:52 min.), an overview of Fremantle's vital statistics with help from the City's economic manager Andrew Eastick, Council Building, 29/06/10.
8. (Background on Fremantle) 'Sustainability Street' (10:52 min.), locals Shani Graham and Tim Darby transform their street into a community, Hulbert St, 21/09/09.
9. 'Community Consultation on the East End Plan' (2:39 min.), Council Building, 20/11/09.
10. 'How to Say Yes' (10:28 min.), Brad Pettitt's first conversation with Peter Newman, mayoral office, 3/12/09.
11. 'Crossing Boundaries' (10:07 min.), Brad Pettitt conversation 2 with Peter Newman, mayoral office, 16/02/10. 2010a
12. 'Cross-Pollination' with The Fremantle Network (1:30 min.), Fremantle Arts Centre, 19/02/10.
13. 'Not Always a Carpark' (3:57 min.), Mayor Brad and Cr Andrew Sullivan respond to questions from members of The Fremantle Park Association regarding their issues with East End amendment plan, Leisure Centre, 18/03/10.

14. 'Green vs Green' (9:54 min.), Brad Pettitt conversation 3 with Peter Newman, mayoral office, 19/03/10. 2010b
15. 'Dancing in the Street' (4:32 min.), an Easter Saturday night during the City's Street Festival, Cappuccino Strip, 03/04/10.
16. 'What Can Fremantle Do for the Rest of the World' (7:18 min.), Bart Houwen, Chair of Fremantle Community Bank, points out differences between City of Fremantle and his own council, City of Cockburn, 23/03/10.
17. 'Fremantle Needs More People' (9:08 min.), Bruce Moriarty, property developer and Brad's mayoral campaign manager, Rose Hotel, 16/04/10.
18. 'Patience' (6:13 min.), Brad Pettitt conversation 4 with Linda Blagg, mayoral office, 23/04/10.
19. 'Community Consultation on Strategic Plan 2010 - 2015' (5:01 min.), Council building, 15/05/10.
20. 'I Want to be a Mayor Who Gets Things Done' (11:09 min.), Brad Pettitt conversation 5 with Peter Newman, mayoral office, 21/05/10.
21. 'Spirit of Fremantle' (11:08 min.), Len Collard, academic and traditional owner, presents an Aboriginal history of Fremantle and Fremantle's first building, the Round House, 06/06/10.
22. 'Fremantle 1829 – 1929' (4:13 min.), archival photographs.
23. 'Buy Local' (7:59 min.), the launch of Fremantle's farmer's market, South Fremantle Senior High School, 20/06/10.
24. 'Groundwork' (12:39 min.), Brad Pettitt conversation 6 with Peter Newman, mayoral office, 27/06/10.
25. 'Everything's in Train' (10:07 min.), Brad Pettitt conversation 7 with Peter Newman, mayoral office, 27/07/10.
26. 'Cultural Exchange' (10:41 min.), Brad Pettitt conversation 8 with Peter Newman, mayoral office, 29/09/10.
27. 'Launch of Strategic Plan' (1:32 min.), Fishing Boat Harbour, 06/10/10.
28. 'Charles Landry Comes to Fremantle' (22 min.) with Charles Landry, international planning and placemaking expert, Council building, 28/10/10.
29. 'Activation and Population' (10:09 min.), Brad Pettitt conversation 9 with Peter Newman, mayoral office, 02/11/10.

30. 'Fremantle Happening' (3:29 min.), the launch of the 105th Fremantle Festival, an event created by local artist Ian de Souza: 'Drawn Together – The Art of Life in Fremantle', Moore's Building, 04/11/10.
31. 'Fremantle Loves Bikes' (3:27 min.), siblings Lachy and Bridie Ritchie, put on their first Tweed Run, South Beach, 13/11/10.
32. 'Ngirantazire' (5:34 min.), the Burundi Peace Choir at the Global Voice Multicultural Choral Concert, Town Hall, 13/11/10.
33. 'Art of Placemaking' (11:27 min.), David Engwicht presents his ideas as part of Fremantle Festival, Notre Dame University, 13/11/10.
34. 'Freo Walkabout' (7:51 min.), a field trip with David Engwicht, Kings Square and Cappuccino Strip, 13/11/10.
35. 'A Most Significant Decision' (20:44 min.), the Council Planning Committee vote on the controversial East End Amendment, Council Chambers, 01/12/10.
36. 'The Economic Realm' (10:26 min.), Brad Pettitt conversation 10 with Peter Newman, mayoral office, 13/12/10.
37. 'Boxing Day Breakfast on the Strip' (3:57 min.), a placemaking guerilla action by the Cappuccino Strip Street Club, 26/12/10.
38. 'At Home on a Fremantle Street' (6:26 min.), the CSSC transforms Henderson St into a lounge room, 03/03/11.
39. 'Kings Square Summer' (6:01 min.), City of Fremantle youth program 'Summer Square Sounds', 25/02/11; 11/03/11; 25/03/11.
40. 'Less Red Tape' (9:27 min.), Brad Pettitt conversation 11 with Peter Newman, mayoral office, 28/02/11.
41. 'Meaningful Community Engagement' (10:06 min.), The Fremantle Network host an event for updates from each of the City of Fremantle's 'working groups', Rosie O'Grady Pub, 18/03/11.
42. 'Fremantle – Magnet for Creative Opposition' (4:36 min.), CUSP Institute plays host to many activist groups to organize Carbon Tax rally, Pakenham St/Perth Convention Centre, 23/03/11.
43. 'Magnet for Creative Opposition Part 2' (3:47 min.), protesters gather outside South Fremantle Senior High School where PM Julia Gillard and Federal Community Cabinet have gathered, 30/03/11.
44. 'Allan Jones at the Fremantle Town Hall' (7:20 min.), UK 'tri-gen' expert from City of Sydney invited to Fremantle by CUSP Institute. Panel includes Mayor Brad, Prof Peter Newman and Greens Senator Scott Ludlum, Town Hall, 19/04/11.

45. 'Intimations of Mortality' (11:16 min.), Brad Pettitt conversation 12 with Peter Newman, mayoral office, 21/04/10.
46. 'Local Talent' (8:31 min.), Geoffrey London, prof. of architecture, Victoria State Architect, and long term resident of Fremantle, is Chair of Fremantle's new Design Advisory Committee (DAC), West End, 06/06/11.
47. 'The Agenda is Expanding' (11:21 min.), Brad Pettitt conversation 13 with Peter Newman, mayoral office, 08/06/11.
48. 'Welcome to Freo' (4:17 min.), hosted by the Fremantle Greens for 'Welcome to Refugees Week' featuring the Burundi Peace Choir, Kings Square, 25/06/11.
49. 'South Fremantle – A Right Brain Neighbourhood' (8:59 min.), biophilic prof. Tim Beatley from University of Virginia connects nature and creativity on the streets of South Fremantle, 12/07/11.
50. 'The Lights of Fremantle' (3:52 min.), a night bike-ride to the Moores Building, music from local band Big Old Bears, Henry Street, 14/07/11.
51. 'City Central' (10:27 min.), commissioned by the City of Fremantle to communicate their strategic imperatives, launched at the Maritime Museum, 18/08/11.
52. 'The Rubber Hits the Road' (10:22 min.), Brad Pettitt conversation 14 with Peter Newman, mayoral office, 24/08/11.
53. 'Linda Buys a Bike' (2:28 min.), Hulbert St Sustainability Fiesta, 24/09/11.
54. 'Picking the Low Hanging Fruit' (18:45 min.), David Engwicht returns to workshop low-cost placemaking ideas for Kings Square, 07/10/11.
55. 'Side Stepping the Charging Bull' (9:43 min.), Cr Andrew Sullivan, Brad's right hand man, is an architect with an activist history, High Street Mall, 11/10/11.
56. 'Tune Up in the Square' (3:11 min.), City of Fremantle breakfast event for bike riders, Kings Square, 12/10/11.
57. 'A Coalition of Hope' (10:20 min.), Stuart Hicks, Chair of the newly formed Fremantle Union, Victoria Quay, 13/10/11.
58. 'Fremantle Local Election' (3:46 min.), Fremantle Town Hall, 15/10/11.
59. 'Fremantle Town Hall Meeting on Proposed Amendment 49' (18:52 min. Part 1; 20:56 min. Part 2), Cr Andrew Sullivan presents research on Amendment 49 with panel made up of Prof Peter Newman, Mayor Brad Pettitt and Melinda Payne from DAC, Victoria Hall, 31/10/11.

60. 'Why We Like Density' (33:31 min.), six CUSP Institute researchers talk density and sustainability in support of Amendment 49, Pakenham St, 03/11/11.
61. 'Inch by Inch' (12:22 min.), Brad Pettitt conversation 15 with Peter Newman, mayoral office, 10/11/11.
62. 'Wool Store Rising' (20:52 min.), a partnership between the owner of a neglected iconic building, the City of Fremantle and the sailing championships ISAF leads to a creative solution, 03/12/11.
63. 'Twelve Councillors Speak from the Heart' (18:19 min.), at the Council Meeting to support Amendment 49, each Councillor makes a short speech about why he or she supports the amendment. The amendment is passed unanimously, Council Chambers, 22/02/12.
64. 'Fremantle's First Transformational Move' (11:47 min.), Brad Pettitt conversation 16 with Peter Newman, mayoral office, 28/02/12.
65. 'Coda Contribution' (5:46 min.), a leading Fremantle architectural firm workshops designs for Amendment 49 sites, 24/03/12.
66. 'Postscript: No Point of Arrival' (11:19 min.), Brad Pettitt conversation 17 with Peter Newman, mayoral office, 22/07/13.
67. 'Fremantle Revitalisation Strategic Plan Scorecard' (6:55 min.), Mayor Brad Pettitt election campaign film, 09/09/13.

Bibliography

- Bakker, P. (2014, April 30). The Battle for Sustainable Development Will Be Won or Lost in Cities, *Huffington Post*. Retrieved from http://www.huffingtonpost.co.uk/peter-bakker/sustainable-development_b_5103139.html
- Barber, B. (2013a). *Why Mayors Should Rule the World*. [Video recording] Retrieved from http://www.ted.com/talks/benjamin_barber_why_mayors_should_rule_the_world
- Barber, B. (2013b). *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities*. New Haven/US: Yale University Press.
- Beatley, T. (2011). *Biophilic Cities - Integrating Nature into Urban Design and Planning*. Washington: Island Press.
- Beattie, C., & Newman, P. (2011). *The density trade-off: Does High Rise Construction contribute more than Single Dwellings to Greenhouse Gas Emissions?* Paper presented at the State of Australian Cities Conference, Melbourne 29 Nov - 2 Dec 2011.
- Berkeley Graduate School of Journalism. (2014). What is a multimedia story? University of Colombia. Retrieved from <http://multimedia.journalism.berkeley.edu/tutorials/starttofinish/multimedia/>
- Blagg, L. (2008). *The Green Building Story*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=0QZ4bgDhvYY>
- Blagg, L. (2009a). *A Different Way of Thinking*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=jWJZr5zHGyY>

- Blagg, L. (2009b). *How To Say Yes*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=Q1Fed-Rp2jg>
- Blagg, L. (2010a). *Green vs. Green*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=6RxGwKhOSyA>
- Blagg, L., (2010b). *Patience*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=EPh6XqSCX8c>
- Blagg, L., (2010c). *Groundwork*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=peQrTD5QftI>
- Blagg, L. (2011). *The Idea of Fremantle*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=-3tErfKqZWE>
- Blagg, L. (2013a). *Postscript: No Point of Arrival*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=XXjTODG7dml>
- Blagg, L. (2013b). *The Story of Dampier: 25 Years of Service*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=RrLwy3cDDZs>
- Blagg, L., (2014). Hitching a Ride on Fremantle's Journey Towards Sustainability: a Digital Media Presentation. [Web site] Retrieved from <http://prezi.com/7nxuovzee90/>
- Bloomberg, Michael. (2011). *Innovating for a Better City*. Retrieved from http://www.ssireview.org/blog/entry/innovating_for_a_better_city
- Bolleter, Julian. (2013, May 25). *The Future of Australian Cities*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=hJLe8HB0DWg>
- Brugmann, Jeb. (1996a). Planning for Sustainability at the Local Government Level. *Environmental Impact Assessment Review*(16), 363-379.

- Brugmann, Jeb. (1996b). *Local Authorities and Agenda 21* Paper presented at the Human Settlements: People Making a Difference, San Jose, Costa Rica.
- Brugmann, Jeb. (2009). *Welcome to the Urban Revolution - How Cities are Changing the World*. Queensland: University of Queensland Press.
- Bryman, Alan. (2008). *Social Research Methods*. Oxford: Oxford University Press.
- Canadian Association of Planning Students. (2010). Thursday Night Film Screening. Retrieved from <http://capsaceau2010.wordpress.com/category/2010-conference/>
- Carey, A., & Gordon, J. (2013, July 4). Abbott warns Victorian Libs: no money for urban rail, *The Age*.
- City of Fremantle. (2010). *Strategic Plan 2010 - 2015*. City of Fremantle, Fremantle, Western Australia.
- Cizek, Katerina. (2010). Filmmaker-in-Residence: The Digital Grandchild for Challenge for Change. In T. Waugh, M. B. Baker & E. Winton (Eds.), *Challenge for Change Activist Documentary at the National Film Board of Canada*. Quebec: McGill-Queen's Uni Press.
- The Climate Group. (2008). *Smart 2020: Enabling the low carbon economy in the information age: Global eSustainability Initiative*.
- Cohen, D, & Odiambo, E. (2004). *The Risks of Knowledge: Investigations into the Death of the Hon. Minister John Robert Ouko in Kenya, 1990*. Ohio: Ohio University Press.
- Commonwealth of Australia. (2007). *Tackling Wicked Problems: A Public Policy Perspective*. Canberra, Australian Capital Territory.

- Commonwealth of Australia. (2011). *Our Cities, Our Future – A National Urban Policy for a productive, sustainable and liveable future*. Canberra, Australian Capital Territory.
- David, L., Burns, S., & Bender, L. (Producers). (2006). *An Inconvenient Truth* [motion picture]. Hollywood, CA: Paramount Classics.
- Documentary Australia Foundation. (2014). *Big Stories, Small Towns Asia Pacific*. Retrieved from <http://www.documentaryaustralia.com.au/films/details/1583/big-stories-small-towns-asia-pacific>
- Dodson, Jago. (2011a). Making a Place for Policy in our Suburbs. *The Conversation* Retrieved 19/10/12, from <http://theconversation.edu.au/making-a-place-for-policy-in-our-suburbs-1831>
- Dodson, Jago. (2011b). The Carbon Devil in the Detail on Urban Density. *The Conversation*. <http://theconversation.edu.au/the-carbon-devil-in-the-detail-on-urban-density-4226>
- Dollery, B., Crase, L., & Byrnes, J. (2006). Overall Local Council Sustainability in Australian Local Government. *Working Paper Series*, Centre for Local Government, University of New England.
- Doogue, G. (Presenter). (2008). RN Saturday Extra [Radio series]. *Allan Jones: getting off the grid*. Sydney, NSW: ABC Radio.
- The Economist Intelligence Unit. (2013). Global Liveability Ranking and Report August 2013. Retrieved from https://www.eiu.com/public/topical_report.aspx?campaignid=Liveability2013
- Ellis, Jack, & McLane, B. (2005). *A New History of Documentary Film*. New York: The Continuum International Publishing Group Inc.

- Farrelly, E. (2012, May 31). Less of 'me' in planning would help the rest of us. *The Sydney Morning Herald*.
- Flyvbjerg, Bent. (2001). *Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again*. Cambridge: Cambridge University Press.
- Flyvbjerg, Bent. (2004). Phronetic planning research: theoretical and methodological reflections. *Planning Theory and Practice*, 5(3), 283-306.
- Garnaut, R. (2008). *The Garnaut Climate Change Review - Final Report*. Melbourne: Cambridge University Press.
- Gladwin, T., Kennelly, J., & Krause, T. (1995). Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research. *Academy of Management Review*, 20(4), 874-907.
- Global Footprint Network. (2010). *Ecological Footprint Atlas 2010*.
- Gotham, Kevin Fox, & Staples, William G. (1996). Narrative Analysis and the New Historical Sociology. *The Sociological Quarterly*, 37(3), 481-501.
- Government of Western Australia. (2003). *Hope for the Future: The Western Australian State Sustainability Strategy*. Department of Premier and Cabinet. Perth, Western Australia.
- Government of Western Australia. (2009). *Directions 2031 Spatial Framework for Perth and Peel*. Commission of Planning, Perth, Western Australia.
- Holland, A. (Producer), & Newby, J. (Presenter). (2008). Catalyst [Television series]. *UK Microgen*. Sydney, NSW: ABC Television.
- Hoy, G. (Producer). (2010). The 7.30 Report [Television series]. *Australian Houses amongst least affordable in the world*. Sydney, NSW: ABC Television.

Intel Study (2013) Retrieved from

<http://www.intel.com/content/www/us/en/communications/internet-minute-infographic.html>

IPCC. (2005). IPCC, Aviation and the Global Atmosphere: A Special Report of the Intergovernmental Panel on Climate Change.

Jaaniste, Luke, & Haseman, B. (2009). *Practice-led Research and the Innovation Agenda: Beyond the Postgraduate Degree in the Arts, Design and Media*. Paper presented at the ACUADS 2009 Conference: Interventions in the Public Domain, Queensland College of the Arts, Griffith University, Brisbane, Queensland.

Jackson, G. (2012). Witches and demonisation: from The Scarlet Letter to Julia Gillard. *Independent Australia*, June 25.

Jaworski, Joseph. (1996). *Synchronicity the Inner Path of Leadership* (B. S. Flowers Ed.). San Francisco: Berrett-Koehler Publishers.

kdmcBerkeley: UC Berkeley Graduate School of Journalism. (2014). Multimedia Storytelling: Learn the Secrets from Experts at Multimedia Institute 2014. Retrieved from <http://multimedia.journalism.berkeley.edu/tutorials/starttofinish/multimedia/>

Knorr, Eric. (2003, December 15). 2004: The Year of Web Services. Retrieved from http://www.cio.com/article/32050/2004_The_Year_of_Web_Services

Knowledge Networks Emergence for Innovation: Factors of Success Analysis and Comparison. *Journal of Decision Systems*. Paris: 2010, 19(1), 75 - 92.

Lee, J., Mchawala, Sieh , & Potter, Martin. (2009). Big Stories Small Towns. Retrieved from <http://www.bigstoriesmalltowns.com.au/#PA>

- Livingstone, David W. (1987). *Critical Pedagogy and Cultural Power*. South Hadley, Mass.: Bergin & Garvey.
- McKernan, J. (1998). *Curriculum Action Research: A Handbook of Methods and Resources for the Reflective Practitioner*. London: Kogan Page.
- MacLeod, Paul G. (2004). *Participatory Filmmaking and Video - building on the legacy of the Fogo Process*. Paper presented at the Celebrating Communication for Social and Environmental Change, University of Guelph. Retrieved from www.glocaltimes.k3.mah.se/viewarticle.aspx?articleID=50&issueID=5
- Mercer. (2014). 2014 Quality of Living Worldwide City Rankings – Mercer Survey. from <http://www.mercer.com/qualityoflivingpr#city-rankings>
- Mhando, M. (2002). *Post-grad Seminar: School of Media Communications and Culture*. Murdoch University.
- Mhando, M, & Petkovic, J. (2014). *CFP: Creative Practice, Context and Commentary: a Dialogue on Inspirational Production* [Press release]. Retrieved from <http://www.adsa.edu.au/news/2014/02/18/cfp-creative-practice-context-and-commentary-a-dialogue-on-inspirational-production/>
- Milne, M. J., Kearins, K., & Walton, S. (2006). Creating Adventures in Wonderland: The Journey Metaphor and Environmental Sustainability. *Organization*, 13(6), 801-839.
- Monocle. (2013). The Monocle Global Quality of Life Survey 2013. Retrieved from <http://monocle.com/film/affairs/quality-of-life-survey-2013/>
- Muniz, I, Calatayud, R., & Dobano, R. (2013). The Compensation Hypothesis in Barcelona measured through the ecological footprint of mobility and housing. *Landscape and Urban Planning*, 113(May 2013), p, 113-119.

- Murthy, D. (2008). Digital ethnography: An examination of the use of new technologies for social research. *Sociology*, 42(5), 837-855.
- National Film Board of Canada. (2014). Film Maker in Residence. Retrieved from <http://filmmakerinresidence.nfb.ca/>
- Negroponete, N. (1995). *Being Digital*. New York: Knopf.
- Neuman, M., & Hull, A. (2011). *The Futures of the City Region* (Vol. 44). Oxon: Routledge.
- Neuman, M. (2012, September 10). Sticks and Stones Will Make My Bones. [Video recording] Retrieved from <http://www.youtube.com/watch?v=pIwOGXaJB14>
- Newman, P. (1979 n.d.). Fremantle - a Place of Consequence, *Fremantle Gazette*.
- Newman, P., & Campbell, R. (1983). Energy Analysis of a City Council. *The Shire and Municipal Record* (June), 134 - 138.
- Newman, P., & Kenworthy, K. (1999). *Sustainability and Cities*: Island Press, Washington, DC.
- Newman, P. (2005). Pipe Dreams and Ideologues: Values and Planning. *People and Place*, 13(3), 41-53.
- Newman, P. (2006). Can the Magic of Sustainability Survive Professionalism? In C. Sheldon (Ed.), *Environmental Professionalism and Sustainability: Too Important To Get Wrong*. London: Greenleaf Books.
- Newman, P., & Jennings, I. (2008). *Cities as Sustainable Ecosystems*. Washington: Island Press.

- Newman, P., & Blagg, L. (2009a). *Sustainability 101 - What's It About?* [Video recording] Retrieved from <https://www.youtube.com/watch?v=2x21Mex9ZVs>
- Newman, P., & Blagg, L. (2009b). *Sustainability 101 - How Do You Do It?* [Video recording] Retrieved from <https://www.youtube.com/watch?v=bZboxb5gzCI>
- Newman, P., Beatley, T., & Boyer, H. (2009). *Resilient cities: responding to peak oil and climate change*. Washington, DC: Island Press.
- Newman, P., Beatley, T., & Blagg, L. (2012). *Singapore: Biophilic City* [Video Recording] Retrieved from https://www.youtube.com/watch?v=XMWOu9xIM_k
- Newman, P., Beatley, T., & Blagg, L. (2014). *Christchurch: Resilient City* [Video Recording] Retrieved from <https://www.youtube.com/watch?v=otv4Jwjrnl>
- Newman, P. (2014). Density: The Sustainability Multiplier, Assessing the Myths and Truths with application to Perth, Australia. *J of Sustainability* in press.
- Nichols, B. (1983, 1999). The Voice of Documentary. In B. Henderson & A. Martin (Eds.), *Film Quarterly: Forty Years - A Selection* (pp. 247 - 266). Berkley: University of California Press.
- Nichols, B. (1991). *Representing Reality: Issues and Concepts in Documentary*: Indiana University Press.
- Nichols, B. (2001). *Introduction to Documentary*. Bloomington: Indiana University Press.
- Nichols, B. (2007). What Current Documentaries Do and Can't Do. *The Velvet Light Trap*, 60, 85-86.
- Nicks, P., & Davis, L. (2014). The Waiting Room. Retrieved from

<http://www.whatruwaitingfor.com/storytelling-project/>

Nohrova, Nada. (2014, March 21). Strong city mayors advance the green agenda, *The Guardian*.

North, Sam. (2005). The Road Movie: an essay on why the road is a continuing fascination for cinema. *Hack Writers Opinion*. Retrieved 06/12/12, from <http://www.samnorth.com/roadmovie1.html>

Oharian, A. (2013). *Without their Permission: How the Twentyfirst Century will be made not managed*. NY: Hachette Book Group.

Parke, Melissa. (2010). Constituency Statements: Sustainable Living. *House Debates*. Retrieved May 20, 2014, from <http://www.openaustralia.org/debates/?id=2010-10-21.31.1>

Parnell, Matthew. (2012). *The Emergence of Sustainability Culture and the Sustainability Practitioner*. (PhD), Murdoch, Perth.

PC Magazine Encyclopedia. (2014). Definition of Flash. *PC Magazine Encyclopedia*. Retrieved from <http://www.pcmag.com/encyclopedia/term/43259/flash>

PC Magazine Encyclopedia. (2014). Definition of Cloud. *PC Magazine Encyclopedia*. Retrieved from <http://www.pcmag.com/encyclopedia/term/43259/cloud>

Perry, N., Candlot, C., & Schutte, C. (2010). Collaborative Knowledge Networks Emergence for Innovation: Factors of Success Analysis and Comparison. *Journal of Decision Systems*. Paris: 2010, 19(1), 75 - 92.

Pettitt, B, & Blagg, L. (2013). *Fremantle's Revitalisation: A Strategic Plan Scorecard*. [Video recording] Retrieved from <https://www.youtube.com/watch?v=bnWuuhoJ89A>

- Raco, M., & Flint, J. (2012). Introduction: Characterising the 'new' politics of sustainability: from managing growth to coping with crisis. In M. Raco & J. Flint (Eds.), *The Future of Sustainable Cities: Critical Reflections*. Bristol: Policy Press.
- Rahn, J. (2008). Digital Content: Video as Research. In J. G. Knowles & A. Cole, L. (Eds.), *Handbook of the Arts in Qualitative Research*. San Francisco: Sage Publications.
- Rauland, V., & P., Newman. (2011). *Decarbonising Australian Cities: A new model for creating low carbon, resilient cities*. Paper presented at the 19th International Congress on Modelling and Simulation (MODSIM), Perth, 12-16 Dec 2011.
- Roberts, L. (1997). *From Knowledge to Narrative: Educators and the Changing Museum*. Washington DC: Smithsonian Books.
- Saha, D., & Paterson, R. G. (2008). Local Government Efforts to Promote the "Three Es" of Sustainable Development: Survey in Medium to Large Cities in the United States. *Journal of Planning Education and Research*, 28(21), 21 - 37.
- Salles, W. (2007, November 11). Notes of a Theory of the Road Movie, *The New York Times Magazine*.
- Sandercock, L., & Attili, G. (Writers). (2007). *Where Strangers Become Neighbours* [DVD]. Sandercock, L. (Producer). Canada: Canadian Film Board.
- Sandercock, L., & Attili, G. (Eds.) (2009). *Multimedia Explorations in Urban Policy and Planning: Beyond the Flatlands* (Vol. 7): Springer.
- Sandercock, L., & Attili, G. (2010a). Digital Ethnography as Planning Praxis: An Experiment with Film as Social Research, Community Engagement and Policy Dialogue. *Planning Theory and Practice*, 11(1).

- Sandercock, Leonie. (2010a). From the Campfire to the Computer: An Epistemology of Multiplicity and the Story Turn in Planning. In L. Sandercock & G. Attili (Eds.), *Multimedia Explorations in Urban Planning* (Vol. 7): Springer.
- Sandercock, Leonie. (2010b). Mobilizing the Human Spirit: An Experiment in Film as Social Research, Community Engagement and Policy Dialogue. In Sandercock, L., Attili G., (Eds.), *Multimedia Explorations in Urban Planning* (Vol. 7): Springer.
- Sandercock, L., & Attili, G. (Writers). (2010b). Finding Our Way: Healing Canada's Apartheid. Sandercock, L. (Producer). Canada: Cosmopolis Laboratory.
- Sarkissian, W., Hofer, N., Shore, Y., Vajda, S, & Wilkinson, C. (2009). *Kitchen Sink Sustainability*. Sterling, VA: earthscan.
- Schaller, D. (2011). *From Knowledge to Narrative - to Systems? Games, Rules and Meaning-making*. Paper presented at the Museums and the Web 2011: Proceedings., Toronto: Archives and Museum Informatics.
http://www.museumsandtheweb.com/mw2011/programs/from_knowledge_to_narrative_to_systems_at_th.html
- Stewart, H., & Elliott, L. (2013, January 27). Nicholas Stern: 'I got it wrong on climate change – it's far, far worse', *The Guardian*.
- Taylor, A. (2010). *Using the Lever of Leadership to Drive Environmental Change: Ten Tips for Practitioners*. Paper presented at the Enviro 2010 Conference, Melbourne, Victoria.
- Taylor, A., Cocklin, C., R, Brown, & Wilson-Evered, E. (2011). An Investigation of champion-driven leadership processes. *The Leadership Quarterly*, 22, 412-433.

- Thompson, M. (2007, October 31). How can multimedia promote social change? [Video recording] Retrieved from <http://www.youtube.com/watch?v=Z3qWWa7VT0c>
- Trubka, R., Newman, P., & D., Bilsborough. (2010). The Costs of Urban Sprawl - Predicting Transport Greenhouse Gases from Urban Form Parameters. *Environment Design Guide*.
- Turner, G. (2012). On The Cusp of Global Collapse? Updated Comparison of The Limits to Growth with Historical Data. *GAIA*, 21(2), 116-124.
- United Nations. (1987). Our Common Future: Report of the World Commission on Environment and Development.
- United Nations. (1992). United Nations Conference on Environment and Development Rio de Janeiro. *Agenda 21*. United Nations Division for Sustainable Development.
- United Nations (2002). *Report of the World Summit on Sustainable Development*. Paper presented at the Plan of Implementation of the World Summit on Sustainable Development, Johannesburg, South Africa.
- United Nations (2010). Department of Economic and Social Affairs, Population Division. World Population Prospects.
- Valdez, R. (2012). Green vs. Green - Seattle would have more environmentally friendly buildings if environmentalists got out of the way. *City Journal*, 22(4).
- Vandruff, M. (2011, April 16). *Old Stories in New Boxes - Universal Form in Changing Media*. What's Your Story: Storytelling in a Digital Age. Lecture conducted from X Media Lab, Perth, WA.
- Van Hooff, S. (2011). *Hope*. Durham: Acumen Publishing Ltd.

- Wackernagel, M. (1994). *Ecological Footprint and Appropriated Carrying Capacity: A Tool for Planning Towards Sustainability*. The University of British Columbia, Vancouver, Canada.
- Wash, C. (2013). Sustainability: Chris Wash: Web and Digital Media Manager. Retrieved from <http://www.sustainability.com/team/chris-wash>
- Waugh, T., Baker, M. B., & Winton, E. (2010). *Challenge for Change Activist Documentary at the National Film Board of Canada*. Quebec: McGill-Queen's Uni Press.
- Weller, R., & Bolleter, J. (2013). *Made in Australia*. Perth: UWA Publishing.
- Wesch, M. (2008). Digital Ethnography of You Tube community. *Digital Ethnography @ Kansas State University*. Retrieved September 13, 2009, from <http://mediatedcultures.net/youtube.htm>
- Wesch, M. (2009). From Knowledgable to Knowledge-able: Learning in New Media Environments. Retrieved January 7, 2009, from <http://www.academiccommons.org>
- Wheeler, Stephen. (2011). Regions, Megaregions, and Sustainability. In M. Neuman & A. Hull (Eds.), *The Futures of the City Region* (Vol. 44). Oxon: Routledge.
- World Business Council for Sustainable Development. (1997). Exploring Sustainable Development: WBCSD Global Scenarios 2000-2050 Retrieved 24 September 2012, from <http://www.wbcd.org/pages/edocument/edocumentdetails.aspx?id=143&nosearchcontextkey=true>
- Wright, L, Kemp, S., & Williams, I. (2011). Carbon footprinting: towards a universally accepted definition. *Carbon Management*, 2(1), 61 - 72.