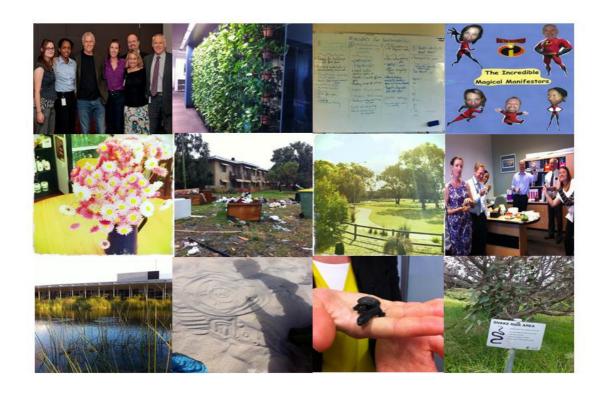
Being Human in the System: A Journey into Sustainability and Local Government in Perth, Western Australia.



Degree of Master of Science (One Year) in Human Ecology: Culture, Power and Sustainability (15 ECTS)

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Master's Thesis (one year)

Abstract

Examination:

In this thesis, sustainability is explored as it relates to local government in Perth, Western Australia. Firstly the conversation around the concept of sustainability is explored by looking at key policies, and governmental initiatives in the area, as well as the leaders and focus areas that have shaped the dialogue of sustainability in Perth. Secondly the major projects that are being undertaken within local governments to address sustainability issues are presented, such as the Integrated Planning and Reporting Framework, Metropolitan Land Use Planning, climate change initiatives, and other educational and behavioural change programs. Finally the enablers and barriers in moving local governments towards sustainability are presented and discussed, and the places within the system to find agency and power to affect change for sustainability are explored.

Key words: local government, sustainability, Perth, Theory U, leadership, Integrated Planning, Leverage Points,

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Introduction

Perth, the capital city of Western Australia has a population of 1.74 million as of June 2011 in a state of 2.35 million people. The land mass of Western Australia takes up about one third of the size of Australia, yet is home to just 10% of the population. Three out of four West Australians live in the Perth metropolitan area, and the population is expected to increase to 2.2 million by 2031 (Department of Planning 2010, 10). As cities and urban areas become the primary habitat of human beings it is "...of key importance to establish whether a sustainable relationship can be established between cities and the planet" (Girardet 2000, 1). According to Herbert Giradet (2000) three quarters of the human population are expected to become city dwellers by 2050, and Landry (2006) places the figure at two thirds of 9 billion, the estimated world population by 2050. The question of the pathways toward a sustainable future for cities such as Perth is one about which we need to know more.

Sustainability and Local Government

The original definition of "sustainable development" from the Bruntland Commission in 1987 is development that can "meet the needs of the present generation without compromising future generations" (WCDE 1987).

In 1992 with the Rio Declaration on Environment and Development a document called *Agenda 21* was produced which emphasized the need for sustainable development. In this, local government became a focal point to address issues connected to achieving this as it says that by 1996, most local authorities should have undertaken a consultative process with their population with the aim of achieving a consensus on a local *Agenda 21* for their communities (Wheeler & Beatley 2004).

In a recent study by the Australian Conservation Fund, Perth was 19th out of 19 in its inaugural "Sustainable Cities Index". The index measured environmental performance factors such as air quality, ecological footprint, water and biodiversity; quality of life measures such as health, density, subjective wellbeing, transport, and employment; and resilience indicators such as response to climate change, public participation, education, household debt and local food production (Australian Conservation Fund 2010).

In a country which has an Ecological Footprint of 2.8 times the average global Footprint according to the (Environmental Protection Authority), to be the least sustainable city measured is an indicator that there is work to be done. Studies of the processes in which cities such as Perth can become more sustainable are essential to our understanding and addressing this issue.

The Governance of Perth

The people of Perth are subject to a 3 tier political system: federal, state and local government. The local government level is the closest to the community, and is responsible for roads, rubbish, libraries, town planning, footpaths, bike paths, parks and recreation centres to name a few of the services provided. Local government consists of a Mayor and a Council usually with around 8 – 11 elected members. The Mayor employs the CEO, and the CEO employs staff to run the administration of the local government. Technically the only employee of the Council is the CEO and is the only one who can be fired by the Council. Within the Perth metropolitan area there are 30 local governments, however the power bestowed upon them is by the Western Australian State Government, specifically the Department of Local Government, and this power can just as easily be taken away. As Colin Barnett, Premiere of Western Australia, said in The West Australian Newspaper on Friday 23rd March, 2012:

"Perth's got some very big growing pains now and into the future, so we either reduce the number of local authorities so they can work better together or we reduce their powers and responsibilities." (The West Australian Newspaper 2012)

Currently there is an independent review called the Metropolitan Local Government Review Panel being conducted into the structure, boundaries and effectiveness of the current local government system in Western Australia, focusing particularly on the Perth metropolitan region, and the report with recommendations for the future will be out in July 2012. Much focus is on potential forced amalgamations and boundary changes although governance structure is also included (Department of Local Government 2011). As mentioned in the article "Local Government Reform King Implores WA", Jeff Kennett, an ex-Premiere of Victoria (another State in Australia) on a recent visit to Perth discussed how he "...sacked all of his state's 1600 elected councillors and replaced them with handpicked commissioners

within months during 1993-4. The dramatic program of forced amalgamations saw the number of councils slashed from 210 to 78, now 79" (Trenwith 2012).

It is in this context that local authorities in Perth, Western Australia are attempting to make movements towards sustainability.

Purpose of this study

I am a Perth girl, a "sustainablist", with deep ecology leanings, who sees that big, deep, profound change is needed in Perth to make it a more sustainable, resilient, wonderful, vibrant, happy place. My purpose, and as such this thesis, is to try and find the leverage points within the system to be most effective in making changes towards sustainability for my home.

In a seminar I attended on 20th January 2012 at Murdoch University called an "Endemic Sense of Place: Exploring the Social Sustainability of the State of Western Australia", one of the speakers, Alec Coles, quoting Noel Nannup, an Aboriginal Elder of the Noongar people (the people indigenous to the Perth region) said:

"If you're born in Noongar Country, this land knows you. If you've lived here more than 6 years the country knows you. If you intend to stay here, it's your responsibility to care." (Noel Nannup, quoted by Alec Coles, 2012)

This idea is mentioned in Jackson's (1995) story of the Australian Aboriginals he travelled with: "It was easy to understand the Aboriginal belief that children were born of a place as well as of human parents, that each person is an incarnation of a landscape" (Jackson 1995, 17).

I am the blue sky and the sunshine. I am the white sand and khaki bushland. I am the gum trees and the kookaburras. I am the paperbark trees and the wetlands. I am the traffic and the empty busses, the bike paths and the buildings. I am the smiles and the irreverent sense of humour. I am barefeet walking and the blue blue Indian Ocean.

I am Perth. It is my responsibility to care.

Research Questions

In my moving back to my home town, and with a clear intention to be an agent for sustainability and change in Perth, I have found myself work in sustainability in one of the 30 local governments in the metropolitan area. I want to understand how sustainability is seen, approached, understood, and tackled. I want to find the places of agency and power within this pretty crazy system. I want to know what the barriers to change are, as well as the opportunities. As such, my research questions are:

- 1. What is the conversation around sustainability in Perth, Western Australia?
- 2. What moves to address sustainability are being undertaken by local government in Perth, Western Australia?
- 3. What are the enablers and barriers in moving local governments towards sustainability in Perth, Western Australia?

Theoretical Framework

In this section I will endevour to provide an understanding for the conceptual framework within which I live my life, understand my life-world, and therefore approach this thesis. I will draw upon thinkers and authors and philosophies from leadership theory, organizational learning and change, pedagogy, future studies, sustainability and resilience theory, political ecology, systems thinking, world systems theory, post-modern theory as well as explore my thinking around agency and structure and the power within. I have grouped my thinking into three sections: In *Ways of Knowing* I explore theories around learning and change (Sillitoe 2006, Scharmer 2007), in *Sustainability* I explore different approaches and paradigms within the concept (WCED 1987, Robert et al. 2002, Hornborg 2009, Paulson 2006, Senge 2006, Hay 2005), and in *Agency, Power, Systems and Change* using Miller (2010) and Schor (1996) I will explore the places of power within the system as well as Meadows (1987) "leverage points" and Scharmer's (2007) "blind spots".

Ways of Knowing

In exploring alternative worldviews and paradigms of the many peoples they have studied around the globe, many have questioned our modern, western assumptions on learning and

ways of knowing (Sillitoe 2006, Inatayalla 1998, Hay 2005, Macy 1995). In his exploration of "local science" and "global science", Paul Sillitoe, discusses the limitations of conveying knowledge our way, most often with the written word:

"... we have to admit that there are dimensions to understanding and living in the world other than the intellectual, for human experience and knowledge encompass far more than words can convey. Academics perhaps over-intellectualize and assume that they can capture too much of the human condition in rational discourse." (Sillitoe 2006, 12)

With this in mind I would like to explain and explore more of my worldview, and my understanding of ways I learn and come to know. I would like to use Otto C. Scharmer's (2007) Theory U in more detail for this purpose. Theory U comes out of Scharmers work with systems thinker Peter Senge, and focuses on leadership within the context of organizational learning and change. There are four fundamental tenants within Theory U that reflect my worldview: One, that we can learn from the future just as the past (such as in the creative process, innovation, intuition etc); secondly, that it is the quality of our listening - the attention and intention that we bring to a situation individually and collectively - that can help us access and work with this creative process; thirdly that of the concept of "blind spots" being that which we are unaware, that we are unaware of, and their power to influence outcomes, and finally the fact that these social structures are created by our habitual ways of thinking and acting, and that alternative social structures can also be created. "The ability to move through a U process as a team, and organization, or a system requires an inner journey and intimate connection that helps to bring forth the world anew" (Scharmer 2007a, 12). This state, this place where the new is accessed and brought into the present is called "presencing" (Scharmer 2007). I will explore blind spots and social structures in more detail in the section on Agency Power Structure and Change, and will now elaborate a little more on the concepts of "learning from the future" and "listening" as presented in Theory U.

Learning from the Future: The Creative Process

Theory U brings the creative process into the forefront in solving the multitude of problems of our time, resting on Einstein's famous musing that problems cannot be solved from the

same thinking that created them, Peter Senge's (2007) introduction in the book *Theory U*, talks of our need to understand and master the creative process: "...the key to addressing the multiple unfolding crises of our time – and the future course of human development – lies in learning how to access this source of mastery collectively" (Senge 2007, in Scharmer 2007, xi). The place where one accesses this creative space of mastery is first mentioned in a co-authored book called *Presence* (Senge, et al. 2004) and is known in this work as "presencing".

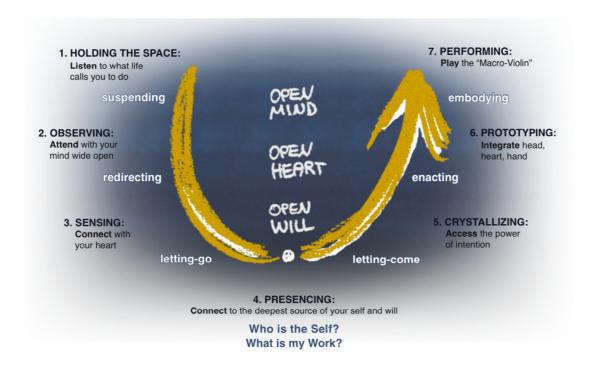


Figure 1. Theory U (Scharmer 2007a, 12)

Listening

Shifting the quality of attention and intention of our listening allows us to work with the emerging future, the creative process, and is a key to operating from future potentials and not just recreating the past. According to Scharmer (2007, 11-13) there are 4 fields of attention from which we can listen:

1. Downloading, where we are not really listening for anything new, we just want our own opinions to be validated, our thinking is habitual.

- 2. Factual, object focused listening exists with an *Open Mind*. It is where good empirical science sits.
- 3. Empathic listening, or *Open Heart* listening, is where we connect to deeper levels of ourselves and others.
- 4. Generative listening is possible with the addition of an *Open Will*. When we have reached this stage of listening we connect to a "deeper realm of emergence." (Scharmer 2007, 13)

I understand life as a conversation between past and future, and believe that to find solutions to the multitude problems of our time, we need to learn to listen to work with, access, and harness - individually and collectively - this 'highest future potential' described in Theory U as opposed to simply recreating unconsciously the past.

The creative process as I experience it is beautifully captured in the documentary 1 Giant Leap in the section on 'inspiration' when the musician describes how he writes a song, and uses the phrase: 'This is what comes through to us...' (1 Giant Leap 1999).

What is this thing which comes through? Innovation, creativity, inspiration or "learning from the future". I will now attempt to illustrate more of the theoretical framework of my lifeworld, and therefore approach to my work and this thesis.

Sustainability

Sustainability is a word that means a lot of things to many people, and so as a concept I would like to explore its origins, and some of the different understandings and approaches people have around the concept, and finally my own.

At its most basic level, sustainability refers to a human society that lives within the limits of the ecosphere now and into the future. The original definition of sustainable development comes from the United Nation's report *Our Common Future*, which says it is: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). It brings the future into the present in terms of costs and brings us as a global society into consciousness.

It is worth noting that the word "development" is in the definition, which I believe implies a "business as usual" approach to addressing this concept. In this sustainability paradigm there is the fundamental understanding that current development patterns cannot continue into the future, that change is needed, but it is often technological fixes and dematerialization within a business as usual approach that are seen as the answer (Robert et al. 2002, Hornborg 2009). In integrating the costs of the future into the present the "Triple Bottom Line" approach is mentioned and ecological economics explored as ways to explore the distribution of resources (Barcena, Bryant and Lind 2009, Escobar 2006). I liken this way of understanding sustainability as a Perth middle class mum realizing that we need to change because if we don't her children and grandchildren will be effected in the future.

I believe a more integrated understanding of sustainability is the Framework for Strategic Sustainable Development, which sheds light on the fact that the problems of the future exist in the status quo and global distribution of resources in the present. It defines four system conditions or basic principles essential for our society to be sustainable. The first three conditions address the mechanisms by which society can destroy our biosphere and its ability to sustain society, the fourth condition addresses human resource equality and distribution. It says the system conditions for sustainability state that: "...in a sustainable society nature is no longer subject to systematically increasing...

- i ... concentrations of substances extracted from the Earth's crust,
- ii ...concentrations of substances produced by society,
- iii ...degradation by physical means

And, in that society...

iv...people are not subject to conditions that systematically undermine their capacity to meet their needs." (Robèrt et al. 1997; Ny et al. 2006)

In this paradigm, the Perth mum realizes that the costs of her current lifestyle are not only going to be paid by her kids, but that there are currently children in this world, in this present time, paying the cost of her family's current lifestyle.

Political ecology, world systems theory and the idea of unequal exchange bring the inequalities of the present distribution of resources, and not just the future time into the conversation on sustainability (Paulson 2006, Hornborg 2009, Gare 1996). Within this sphere

of understanding of sustainability we see that the global financial system and globalization has led to "...the ever increasing and uneven production and consumption of capital, commodities, technologies, and imaginaries around the globe" (Sawyer 2004, 7). This unequal exchange happens on many levels, the economic, the ecological, and the cultural. The environmental or ecological inequality of both access to resources, and affliction by environmental pollution and hazards are beginning to get more scope in our consciousness through NGOs, research and activism in environmental justice. It is the economic and environmental inequality of responsibility that is reflected in this quote from the State of the World 2010:

"According to a study by Princeton ecologist Stephen Pacala, the world's richest 500 million people (roughly 7 percent of the world's population) are currently responsible for 50 percent of the world's carbon dioxide emissions, while the poorest 3 billion are responsible for just 6 percent." (Assadourian 2010, 6)

Unequal exchange in the cultural realm happens when the hegemonic culture absorbs and marginalizes the subaltern cultures (Paulson CPS lectures, March 2011, Escobar 2006). An example is an indigenous tribe being forced to use a different language to their own, such as Spanish or English, and operate in a political and legal system not their own in order to try to gain or maintain the environment to which their livelihoods depend upon, as observed in Sawyer's *Crude Chronicles* (2004). I believe there is a place here where invisible power can be held, and will explore this further in the next section on *Agency, Power, Systems and Change*.

In this paradigm the Perth mum may begin to self-reflect about her culture and assumptions and the role her lifestyle and consumption choices play on others on a global scale.

The final sphere of sustainability I'd like to address is the realm where fundamental worldviews and paradigms get explored and questioned. My first thesis in Sustainability in the Masters of Strategic Leadership towards Sustainability at Blekinge Institute of Technology was called "Sustainable Selves: Shifting paradigms within individuals as the core driver to reaching a sustainable society" (Barcena, Bryant and Lind 2009). In this thesis we illustrate an approach to sustainability that focuses on the "inner work" of sustainability and can be perfectly summed up by Peter Senge's quote in the introduction of Joseph Jawarski's

book called *Synchronicity* (1996): "Nothing will change in the future without fundamentally new ways of thinking." (Senge 1996, 9)

A decade later in his book *Learning for Sustainability* (2006), Senge discusses the problems with common approaches to sustainability:

"...[t]he focus on the triple bottom line may draw people away from the qualities and attitudes they need if they are to genuinely make a difference in developing sustainable organizations, practices, and communities... It also allows people to ignore the 'inner work' – the personal practices and disciplines that provide the perspective and internal stability needed to make a difference in the long run." (Senge et al. 2006, 96)

Another scholar that reflects this paradigm is Hay, in his article called Ecosynchronous he says:

"[t]he technological approach has proven difficult to implement effectively on a global scale, as it does not delve into the root causes – the values and ethics underlying the decisions that are made – of the environmental (and social) crisis that faces humanity. A technological approach also fails to engage the human spirit..." (Hay 2005, 311)

I believe concepts and practices of applying "eco-efficiency", "substitution" and "dematerialization" for instance, are helpful for us to approach sustainability; however, the underlying cause is not explored. This is reflected in deep ecology theory:

"The short-term shallow ecology movement relies on quick, technical fixes and pursues business as usual without any deep value questioning or long-range changes in practices and the system." (Dregson and Deval 2008, 26)

Within this paradigm is the understanding of the interconnectedness of all things, and that our own worldviews, awareness and levels of attention are a player in that. Not uncommon in previous or alternative understandings of ecology (Worster 1994, Ingold 2008), this deep ecology paradigm which talks about the interconnectedness of all things, often has a tone akin to spirituality. Perhaps as Fritjof Capra and Bart van Steenbergen (1985) say that this new worldview is "...[u]ltimately a question of spiritual consciousness". Operating from this

paradigm, the Perth mum may feel an expanded sense of interconnectedness and oneness. She *is* the child making the clothes in Vietnam, she *is* the land being cleared and developed for the ever expanding suburbia.

In my elucidation of the different approaches paradigms and understandings of sustainability it is important to address my understanding of worldviews and paradigms. In addressing the concept of a "modern" and "post-modern" worldview Hornborg (2006) states that neither is constrained to a particular locality or time, it co-exists with its polarity. He says: "...the polarity is not primarily a mode of classifying individuals but a tension that most people would recognize as running down the middle of their existence" (Hornborg 2005, 206).

Like Hornborg, I do not see paradigms or worldviews as digital constructs that one either 'has' or 'doesn't have', ideas or understandings that one 'gets' or 'doesn't get', however the moment of understanding can feel like a veil has lifted. It can be akin to learning something new. I do believe that we are continually evolving and growing, and new paradigms and previous blind assumptions are continually presented to be unpacked and explored, and I believe that in doing so there is agency and power. This we will explore more in the next section.

I believe, value, and hold all the aforementioned paradigms of sustainability. I lean towards the deep green end in my understanding of what needs to happen in this world, in my belief that I need to continually bend the telescopic lens of my research into my own assumptions and ideas about the world and my place in it, and to encourage others to do the same, but I am also aware that I am living in a world with people that sit on all different places within that, and many who still don't even believe that there is any need to change.

I see sustainability as a journey not a destination. And the common thread being the recognition that change is needed in order for human society to live within the limits of the ecosphere.

Agency, Power, Systems and Change

"...[s]tuff has a quite remarkable capacity for fading from view, and becoming naturalized, taken for granted, the background or frame to our behaviour. Indeed stuff

achieves its mastery of us precisely because we constantly fail to notice what it does." (Miller 2010, 155)

I believe there is much need to recognize the degree to which we are shaped by the invisibilities of our culture, the stuff, the systems and structures – material and immaterial – that shape us, the extent to which we are an unconscious product of our culture. Our consumption, our identity, our values, our desires are all to a large degree a product of the cultural system we find ourselves socialized into (Schor 1998, Veblen 1902, Bourdieu 1979, Urla and Swedlund 2004), and even our biology (Gravlee 2009). In her book *The Overspent American*, Schor (1998) explores how our consumption and identity are so influenced by the media: "We watch the way television families live, we read about the lifestyles of celebrities and other public figures we admire, and we consciously and unconsciously assimilate this information. It affects us" (Schor 1998, 4).

On the back cover of his book *Stuff*, Miller (2010) writes: "Things make us just as much as we make things." My point being that we are so influenced by the structures, systems and stuff of our everyday life-worlds, and that there can be such power there, simply due to their invisibility. Also, I believe that we perceive the agency and power in these systems and structures to be greater than we suppose. We human beings created these structures, systems and stuff to serve us, if they are no longer doing so, we can choose anew. In talking about being socialized in this material world, Miller says things "...guide us towards the appropriate way to behave and remain unchallenged since we have no idea that we are being so directed" (Miller 2010, 155).

Another realm of invisible power tying in with human ecological and political ecology understandings around sustainability and cultural hegemony (Paulson CPS lectures, March 2011, Escobar 2006), is Wolf's (1997) discussion on language and communication and the invisible power held within that realm. As Wolf says in his book *Europe and the People Without History:*

"The ability to bestow meanings – to "name" things, acts, and ideas – is a source of power. Control of communication allows the managers of ideology to lay down the categories through which reality is to be perceived. Conversely, this entails the ability

to deny the existence of alternative categories, to assign them to the realm of disorder and chaos, to render them socially and symbolically invisible." (Wolf 1997, 388)

In his work on Leadership, Scharmer (2007) explores a different tangent, but again with a focus on the invisible, unseen and often unexamined realm that can have profoundly different results:

"Successful leadership depends on the quality of attention and intention that the leader brings to any situation. Two leaders in the same circumstances doing the same thing can bring about completely different outcomes, depending on the inner place from which each operates." (Scharmer 2007, 2)

He explains that the quality of listening and lack of attention and intention causes a major barrier in attempts to change a system: "... success of an intervention depends on the interior condition of the intervener" (Scharmer 2007, 7). He says that these habitual ways of thinking, which are often unconscious (blind spots) inform and create the social structures within which we exist. He also maintains that alternative social structures can also be created.

It is with the intention to change social systems that I explore Donatella Meadow's (1999) work on places to intervene in a system to affect change, called "Leverage Points".

Based on her analysis of complex living systems, Donella H. Meadows developed a theory known as "Leverage Points: Places to intervene in a system" (1999). It illustrates potential ways and places to exert force a system where the impact and change will be greatest. There are leverage points, ranging from 12, the weakest in effect, and easiest to manipulate which is "constants, parameters, numbers (such as subsides, taxes, standards)" through to 1 which is the "power to transcend paradigms" which is the most powerful, but most challenging to achieve. Other examples are 6, "changing the structure of information flow" and 5 which is slightly more powerful "changing the rules of the system" (Meadows 1999).

- 12. Constants, parameters, numbers (such as subsidies, taxes, standards)
- 11. The sizes of buffers and other stabilizing stocks, relative to their flows.
- 10. The structure of material stocks and flows (such as transport networks, population age structures)
- 9. The lengths of delays, relative to the rate of system change
- 8. The strength of negative feedback loops, relative to the impacts they are trying to correct against
- 7. The gain around driving positive feedback loops
- 6. The structure of information flows (who does and does not have access to what kind of information)
- 5. The rules of the system (such as incentives, punishments, constraints)
- 4. The power to add, change, evolve, or self-organize system structure
- 3. The goals of the system
- 2. The mindset or paradigm out of which the system its goals, structures, rules, delays, parameters arises
- 1. The power to transcend paradigms

Figure 2. Leverage Points: Places to Intervene in a System in increasing order of effectiveness (adapted from Meadows 1999)

Since discovering this theory in 2008, I have found it quite interesting to explore places of power within the system. In working in local government, it has informed much of my understanding of where the blocks and barriers are, and what is not working, as well as places for opportunity. I like the metaphor of finding the places of most power to affect change. As Gezon (2005) says:

"[p]olitical and economic control is a process, never complete and always shifting. Whether in the context of ideologies or the daily practices of power and enforcement, domination is constantly threatened by the varied and multiform resistance of those whose consent it relies upon..." (Gezon 2005, 135).

It is with this framework that I look at enablers and barriers of moving the local government system towards sustainability and change.

Research Methodology

There are various methodological frameworks and methods I have used throughout this research project. My primary method of gathering data was participant observation, as an

employee in a local government of Perth in a team dedicated to sustainability for 10 months at the writing of this thesis. I used interviews and an online survey to complement this, as well as a review of relevant literature, websites, strategies and policies connected to this topic. I will now elaborate on each method in turn.

Participant Observation

As an employee of a local government in Perth, WA, I have been the living breathing experience of participant observation. In Clifford, French and Valentine's *Key Method's in Geography* book, Laurier (2010) describes Participant Observation as "... spending time being, living or working with people or communities in order to understand them", and that "...[t]he basis of this approach is to become, or stay, as close to the spatial phenomenon being studied as possible and it is thereby quite distinct from methodologies that emphasize distance and objectivity" (Laurier 2010, 117).

In June 2011, I had a meeting with a man I call the "King of Sustainability" in Perth: Peter Newman. He began the first course called Sustainability in the southern hemisphere, and has been active and vocal on the local and international stage for many years. He is a Professor and Director of CUSP (Curtin University of Sustainability Policy Institute) and I went to talk to him about the potential of doing a PhD there. I told him my intention to work in making Perth more sustainable and asked his advice. I told him that I had studies in sustainability but no experience yet working in the field, and he suggested local government. He suggested 4 that he knew of that were doing great things: the City of Canning, the City of Fremantle, the City of Stirling and the City of Greater Geralton. He wrote an email to each of those local government contacts that he had: one mayor, two CEOs and one executive introducing me as a sustainability graduate, keen, willing and able, and telling them that I'd be "...a really good trooper to help in this work."

July 2011 I took up a position at the City of Canning in the City Futures department. My initial question to my boss was "where is sustainability?" to which he answered "everywhere". There was no use of the word on the website, except in the biography of the CEO Mark Dacombe, but I had been recommended this place by the "King of Sustainability" so I trusted. My boss had a PhD in Sustainability so I trusted, my co-workers were all graduates of sustainability so I said yes.

The participant observation work of this thesis, has been in this context. I am a Strategic Projects Officer, in the City Futures department. Besides learning this new 'language' of the system, my work has been around redesigning the Canning City Centre, engaging with the community to create a Strategic Community Plan, coordinating the operation and implementation of this Plan through the Integrated Planning and Reporting Framework, working with consultants on creating a Low Carbon Strategy for the City, working with the engineering department and consultants on improving transport options in the City to be more sustainable (eg: more active transport such as walking and cycling, and public transport, as opposed to the car), and organizing and coordinating the internationally renowned sustainability author Paul Hawken to come to the City of Canning and speak to the community, amongst other things.

Bernard (2006) says that "[u]nless you are a full participant in the culture you're studying, being a participant observer makes you a freak" (Bernard 2006, 360). I have been a full participant in this world. The information used in this thesis comes from the experience of learning the language of sustainability and the local government system through: the many informal conversations, the learning by doing and being there, the vocabulary of the system, the body language, the dress code, the building, the workplace, the structure of the organization, dealing with elected members, Christmas parties, working with consultants and doing seminars with other industry people; the experience of a system in change, and recently under an enormous amount of stress. This participant observation comes from doing work in sustainability, with a sustainability team (although not named 'sustainability' – called City Futures), in the Perth local government system.

Interviews

To complement my participant observation research I decided to interview people who had more experience than I in local government, sustainability, and Perth. By January 2012 the City of Canning was having enormous issues with the working relationship between the elected members and the executive (the CEO was stood down, and in February 2012 an investigation by the Department of Local Government began into the relationship between the Council and administration at the City of Canning – see Appendix C). As an officer of the City, and for only 6-7 months at the time, I was aware that I needed to talk to people who had

been in the system longer than I, and had experience in other places, systems, structures. I also wanted to talk to some elected members, to make sure I got that perspective, and not just the view from the administration side of things. I also was aware that the exposure that I had had to elected members was not necessarily representative of all, and so I wanted to broaden my understanding.

I spoke to 9 people from 3 different local governments, and from a diverse range of experience and perspectives (see Appendix A). I interviewed the Mayors of the City of Fremantle and the Town of Vincent, and a Councillor from the Town of Vincent as the elected members to complement my own experience and informal dealings with the elected members at Canning. I was not able to formally interview elected members from the City of Canning. I interviewed two people in senior positions at the City of Canning, one with 20 years' experience at Canning plus many years at Fremantle, as well as in local government in the UK, and the other with less than 2 years at Canning but 25+ years' experience in other local governments, state government, sustainability as well as private enterprise. In addition to this I spoke to a man who had previously worked at the executive level at Canning for 10 years, but was now in the private sector. I interviewed two officers of about my level from different local governments (Fremantle and Vincent again), and the Sustainability Facilitator at WALGA, which is the West Australian Local Government Association – a body which support local government in WA.

The conversations were conducted as semi-formal, semi-structured interviews in a number of settings, mostly coffee shops. Each of these people was either known to me, or introduced to me through someone for the purpose of this project, and most were invited by email for a coffee and a conversation around local government and sustainability.

I used a digital tape recorder so I could maintain eye contact and be present to the conversation, and I wrote notes up from these interviews after (See Appendix A). I began each interview with the same basic questions:

- 1. What is sustainability in your own words?
- 2. What is your local government doing to move towards sustainability? (if appropriate)

- 3. What do you see as the greatest barriers in moving local government towards sustainability?
- 4. What do you see as the greatest opportunities?

After asking and having these answered I began a more informal, dialogic approach. William Isaacs believes in the power of dialogue as "...human beings create, refine and share knowledge through conversation." (Isaacs 1999, 2) I found that the end of the interview was often deeper and more fruitful for both of us, with insights to answers to the earlier questions often coming up.

Surveys

In March 2012 I began exploring my primary data and looking for patterns within it. In reading through my field notes from when I began work in July and August 2011 I was astounded at how much of my energy was consumed with the sustainability of me. Of managing my own energy resources in this new and trying time: the long commute to and from work every day, finding comfort in this fluorescent-lighted computer-oriented work I found myself in, building relationships and trust and ways of communicating and working together with colleagues, learning the language of this new world, and the balance between doing meaningful work in a crazy, crazy system.

I could see how my own personal sustainability journey was a reflection of all the bigger themes that had been coming out as barriers and enablers in my interview conversations and so decided to add a few more questions on to the end for my survey. I wondered how other people managed their own personal sustainability, what kept them going?

The questions for my survey were:

- 1. What is sustainability in your own words?
- 2. What is your local government doing to move towards sustainability? (if appropriate)
- 3. What do you see as the greatest barriers in moving local government towards sustainability?
- 4. What do you see as the greatest opportunities within local government and sustainability?
- 5. What do you find most challenging about working in local government?
- 6. How much of your Self can you bring to work? How much do you have to leave at home?

7. What keeps you at work?

I created a survey online using "surveymonkey.com" and emailed everyone I knew in sustainability and local government the link with a request to fill it out. I asked them to pass it on to anyone they knew in local government and sustainability. I asked over 30 people, and received 16 willing subjects with responses (see Appendix B).

Literature Review

Websites, policies, strategies, newspaper articles, magazines, electronic newspapers, emails, and other documents all informed the findings of this study.

An Iterative Process

There is a myth that a research process is linear. In Bernard's book *Research Methods in Anthropology*, he describes the ideal research process as being one where firstly the problem is defined, then the method is chosen, data is then collected and analysed, and then the hypothesis or theory is then supported or rejected. He says that "[d]espite all the myths about how research gets done, it's actually a messy process that's cleaned up in the reporting of results" (2006, 69). Maxwell (2005) describes the research process as one where in that the collecting and analysing of information, the development of theory, refining the research questions and ensuring validity are processes that occur iteratively and simultaneously (2005, 3). This has been my process.

As mentioned in the previous section, Theory U captures the conceptual framework and approach, and it is also a method that has informed this process. As described in the previous section Theory U informs the theoretical framework of this thesis, and as it is both a theory and a methodology (Scharmer 2007) it also informs my approach to this work: of staying present, and listening to what wants to come through.

Limitations of this Research

This project places itself within a very specific context: that of my personal experience of local government in Perth, Western Australia, in 2011 – 2012 and based at the City of Canning. It offers a more qualitative approach to the subject. Attempts have been made to

monitor, qualify, and triangulate research findings using interviews, surveys and literature, The scope does not include a larger, more quantifiable view of the topic.

Results

The results section is divided into four headings; the first three based around the three research questions, and the forth is an attempt to create a more detailed picture using more context specific examples of successes and failures in attempts to introduce sustainability into a local government.

Research Question 1: What is the conversation around sustainability in Perth, WA?

In this section I would like to explore the people, policies, thinking, education, legislation that are at the forefront of the conversation around sustainability in Perth, Western Australia.

Policy, legislation

Federal

The Council of Australian Governments (COAG) is Australia's peak intergovernmental forum comprising the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association. In 2009, COAG released the National Objective and Criteria for Future Strategic Planning of Capital Cities, to ensure Australian cities are globally competitive, productive, sustainable, liveable, socially inclusive and well placed to meet future challenges and growth (Council of Australian Governments 2009).

Criteria for capital city strategic planning include:

"Integrated planning encompassing land use and transport design; addressing climate change mitigation and adaptation issues; and connectivity of people to jobs, social inclusion, health, livability and community wellbeing." (Department of Transport 2012, 12)

Within the Australian federal government system, the Department of Sustainability, Environment, Water, Population and Communities was established on 14 September 2010. Some of the matters dealt with by the Department include: Environment protection and conservation of biodiversity, air quality, national fuel quality standards, land contamination, meteorology, natural, built and cultural heritage, environmental research, water policy and resources, the co-ordination of sustainable communities policy, population policy and the urban environment (Department of Sustainability, Environment, Water, Population and Communities).

The Australian Government's Department of Climate Change and Energy Efficiency is one such department with a program directly connected to aspects of sustainability. The new 'Carbon Tax' is to become a part of the day to day business of Australia in July 2012, according to the Federal Government's Clean Energy Future website of the new tax:

"A price on carbon is the most environmentally effective and economically efficient way to reduce pollution. This means our economy can continue to prosper – without our pollution continuing to grow." (Department of Climate Change and Energy Efficiency)

State

The Government of Western Australia's State Sustainability Strategy 2003 was the first in Australia, and defines Sustainability as: "... meeting the needs of current and future generations though and integration of environmental protection, social advancement and economic prosperity" (Department of Environment and Conservation 2003, 3).

This is echoed in the Western Australian Government's Local Government Act:

"... to encourage Local Government to use its best endeavours to meet the needs of current and future generations through an integration of environmental protection, social advancement and economic prosperity." (Local Government Act, 1995, Section 1.3 (3))

Local Government

Many local governments will have sustainability recognized on their website, and many will define what they mean by the word. Many local governments will have a Sustainability Officer whose job it is to promote and coordinate sustainability within the local government. The website of the City of Vincent has a link on the main page under "Your Community" called "Environment and Sustainability". This is what the website has to say:

"The City of Vincent recognizes the importance of reducing our impact on the environment, and acknowledges its leadership role in building community awareness and responsibility for the way in which we use resources. The City is committed to acting in a sustainable way and promoting sustainability within Vincent's community.

By working with our community, we aim to ensure the sustainability of the City for future generations whilst meeting our current needs." (City of Vincent)

On the City of Fremantle's website I had to do a search on sustainability but I came up with a page of information:

"The City of Fremantle has taken the following steps to protect the environment and demonstrate leadership in sustainability:

- Being the first carbon neutral local government in Western Australia. Further action, for both council and the community, is embodied in the low carbon city plan
- installing renewable wind and solar energy devices, including a 30kW solar farm at the Fremantle Leisure Centre
- Retrofitting a heritage listed sustainable house
- Being a founding partner of the International Council for Local Environmental Initiatives (ICLEI) Australia
- Being the first local government to support a CAT bus outside of the Perth CBD
- Helping to establish the award winning Living Smart program
- Sending our community's waste the South Metropolitan Regional Council's (SMRC) Regional Resource Recovery Centre (RRRC) to divert waste from landfill and save greenhouse gas emissions
- Participating in the SMRC's Climatewise program

• Free electric vehicle charging point bays in the Queensgate Carpark." (City of Fremantle)

The City of Canning has no policy on sustainability, nor page on its website (City of Canning). When searching the word it comes up in the biography of the (currently stood down) CEO Mark Dacombe. There is a team called City Futures, which is comprised of graduates of sustainability programs, and holds projects connected to sustainability, however the City Futures team has been slowly dwindling in human resources and projects since Mark Dacombe left. According to my conversations with sustainability expert Rob Weymouth, as well as informal conversations with other sustainability people in the local government sector, the placement and naming of a City Futures team to integrate sustainability across the organization was a progressive and strategic move by the former CEO. At the time of writing, however, the future of City Futures at the City of Canning is uncertain.

Leaders in Sustainability in Perth and areas of focus

Peter Newman is a Professor and Director at Curtin University Sustainability Policy Institute (CUSP), on the Board of Infrastructure Australia that is funding infrastructure for the long term sustainability of Australian cities and is also Lead Author for Transport on the IPCC. Peter has been raising awareness around "Peak Oil" for decades and invented the term "automobile dependence" to describe how we have created cities where we have to drive everywhere. In 2001-3 Peter directed the production of WA's Sustainability Strategy in the Department of the Premier and Cabinet, the first state sustainability strategy in the world. Peter began Sustainability at Murdoch University back in the early 1990s with the first course of the name in the southern hemisphere, but moved to Curtin University in 2007, to begin CUSP. Regular Thursday morning teas and free lectures are a part of the sustainability community, and so when I returned to Perth I attended regularly, met Peter Newman and many wonderful people through this. Peter invited me to be involved in developing a "Leadership in Sustainability" course at CUSP which was run in October and November 2011. This was an honour to work with an amazing array of leaders and thinkers in sustainability in Perth. Peter's most recent books are: Technologies for Climate Change Mitigation: Transport for the UN Environment Program, Resilient Cities: Responding to Peak Oil and Climate Change and Green Urbanism Down Under.

Murdoch University School of Sustainability was begun by Peter Newman in the 1988 and built an international reputation around sustainability, urbanization and cities. However, according to their website, since the appointment of the current Director, Professor Glenn Albrecht in early 2009, the now called School of Sustainability has chosen to focus on regional resilience, animal ethics, environmental change and mental health and scholarship aimed at creating a genuinely sustainable society.

Brad Pettitt is a PhD graduate of Murdoch University and is still a professor there. He is now Mayor of Fremantle and was involved in the CUSP Leadership in Sustainability course in 2011. Brad was interviewed for this thesis, and key themes for him in sustainability in Fremantle are urban development, densification in strategic locations, the quadruple bottom line (social, environmental, economic and cultural balance), and he mentioned the importance of indigenous connections.

Dialogue with the City was the largest direct democracy engagement in the southern hemisphere in 2003. It was created by Janet Hartzkarp and the Minister for Planning and Infrastructure Alannah MacTiernann and was designed to engage citizens in the future planning of metropolitan Perth. It was also the beginning of my journey into sustainability for it was at that event that I met my current best friend who was studying Sustainability at Murdoch University with Peter Newman, and had been working on the State Sustainability Strategy. My current boss Mike Mouritz, a PhD graduate of sustainability at Murdoch was working for Alannah MacTiernann at the time. Through Mike, I managed to also interview Alannah for this thesis. Her focus is very much on planning and urban design, and transport. She is responsible for massive investments in public transport over her time in office including the billion dollar rail line to Mandurah.

The indigenous connection to sustainability is prominent in Perth, and Len Collard is currently doing a PhD at CUSP on Noongar place names in the South West of Australia. He talks about how many people say that nobody speaks the aboriginal languages any more, and he laughs and says that more people speak Noongar now than ever. We speak it every day without even knowing it... with our suburbs, place names, and words: kookaburra (bird), karri, jarrah, and marri trees, suburbs and places like karinyup, mandurah, yallingup,

yunderup. This theme of indigenous connection was also explored in a seminar at Murdoch University I attended in January called an "Endemic Sense of Place."

The more creative and spiritual aspect of sustainability is also represented by voices like *Community Arts Network Western Australia* director Pilar Kasat, with her work creating community through creative projects, and Renee Newman Storer who is an actress and teacher. Mike Mouritz with his strong sense of place and connection in Perth and his indigenous connections also represents a collaborative, synergistic and synchronistic approach to leadership.

Results from surveys and interviews are not necessarily representative of the general population as my target group were working in or with sustainability.

Many responses were "Bruntland-ish", one even quoted it exactly, many paraphrased:

"...ensuring our actions do not have a net negative impact on the future of this planet that we share"

"Living, working and planning in a way that protects our resources into the future."

"Living responsibly today and using resources so they may be provided for future generations."

Some mentioned the need to reduce consumption, and recognized the interdependencies of all things:

"Sustainability is not a solution, movement or action. It is a lens which reveals the interconnections and complexities of our decisions. If offers ways to act with creativity, responsibility and intelligence."

"Sustainability=balance, synergy, connections of everything."

I first discovered the concept and ideas around sustainability in September 2003 at Dialogue with the City, and became passionate about learning more about this thing. In 2007 I applied for a Masters in Strategic Leadership towards Sustainability in Sweden, and I would say that

the general population in Perth still didn't really know what I was talking about. Climate Change was only very recently on the political agenda, after decades of a liberal government leader who denied its existence. When I returned to Perth in 2009, I found there was more acceptance and understanding of this thing, and awareness of climate change, as there is now with the carbon tax, but I would say that the word sustainability if often diminished into "trees and stuff" or climate change.

The concept, however, that there is a fundamental flaw in the way we are living and our lifestyles, and the need to change I believe has much more traction with the general community of Perth now in 2012 than it did when I began my journey. And I see that as progress.

Research Question 2: What moves to address sustainability are being undertaken by local governments in Perth, WA?

In the survey results, a common sentiment was "not enough", although the answers provided as to what is happening have informed this response combined with own work in local government, the interviews, literature review, and regular meetings and informal conversations I have had with other sustainability officers in the local government system. There are efforts being made at the local government level to address sustainability, and I would like to expand upon seven different movements or projects that I have found local governments are undertaking to address sustainability issues in Perth.

The seven I will expand upon are:

- 1. Integrated Planning Framework
- 2. Metropolitan Land Use Planning
- 3. Climate Change
- 4. Behavioural change and community education
- 5. Water Management
- 6. Waste Management
- 7. Conservation

Integrated Planning Framework

The State Government has introduced new legislation to local governments mandating strategic planning for the future, and more direct democracy in the form of community

engagement. Both Rob Weymouth from the West Australian Local Government Association, and Dr Mike Mouritz the Executive of City Futures at the City of Canning (with a PhD in Sustainability) named the new Integrated Planning Framework as "all about trying to integrate sustainability strategically into local government" (Weymouth 2012, Mouritz 2012). It was announced by the Minister for Local Government in October 2010, and local governments have until June 2013 to adhere to the new legislation.

In the introduction in the Integrated Planning and Reporting Framework and Guidelines (2010), the Minister Hon John Castrilli MLA writes:

"Adopting integrated strategic planning is potentially the most important performance improvement initiative available to local governments. Currently, more than two thirds of local governments in Western Australia do not have a strategic planning process that is linked to long term asset management and financial planning...

"...It is my intention to change the Local Government Act (Administration) Regulations to ensure each local government adopts as a minimum 10 year Strategic Community Plans. It is hoped that the sector will embrace this initiative prior to it becoming a legislative imperative." (Department of Local Government 2010b)

Integrated Planning requires the development of a 10+ year Strategic Community Plan showing the "...visions, aspirations, and objectives" of the community (Department of Local Government 2010b). Community engagement must be used to create this Plan, and this must be documented. The Plan must then be adopted by Council. A Corporate Business Plan is the document which outlines how these visions, goals, aspirations and objectives will be actioned by the organization. Other plans which must be developed include an Asset Management Plan outlining assets of the city with a maintenance and renewal plan, a Workforce Plan outlining the human resources component of achieving the community's vision and goals, a Risk Management Plan, and the Long Term Financial Plan which gives more information and detail to the financials.

Below is a figure used by the Department of Local Government to explain Integrated Planning to local governments.

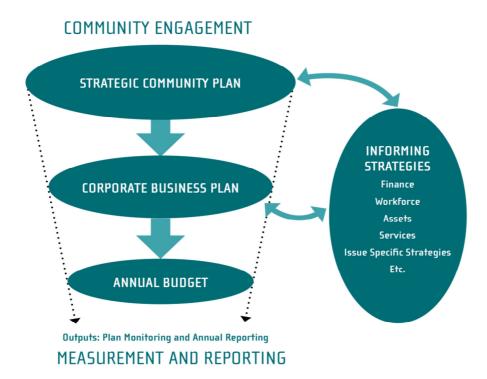


Figure 3. Integrated Planning and Reporting Framework (Department of Local Government 2011)

This is a new process for many local governments, and the Department of Local Government has only released the 'Advisory Standard' which provides guidelines for what needs to be achieved in January this year (2012). Many staff of local governments and some elected members have been to training on this. It has been my role within the City of Canning to coordinate the Integrated Planning, and my team has been particularly involved in the community engagement and the development of the Strategic Community Plan.

Metropolitan Land Use Planning

As discussed in my answer to my first research question, sustainability dialogue has focused on land use planning, urban design and creating attractive alternatives to our car dependant sprawled city (Newman and Kenworthy 1999). Every time I come back to Perth, it is the design of this city that takes my attention as I see that changing the way we live, work, play and move between those things as the greatest leverage point for becoming a more sustainable city. In my interviews, this was overwhelmingly mentioned to affirm that view, and from the literature reviewed, for example the "Western Australian Bicycle Network Plan" 2012, or *Directions 2031 and Beyond* (2010) this is confirmed.

Local governments are responsible for land use planning within their area and this takes the form of "Local Planning Schemes" and "Local Planning Strategies" for each local government. There can be numerous regulations and policies depending on which local government one is in and consistency within and between governments, and strategic future planning in this area are lacking (Devenish 2012, Metropolitan Local Government Review 2012). There is a State Authority called the Metropolitan Redevelopment Authority who can take over land in any local government's jurisdiction and override any local planning schemes and redevelop the area. Many believe this to be a more efficient way of planning and developing Perth (Devenish 2012, Metropolitan Local Government Review 2012).

In order to plan for the whole of the future of Perth, the Government of Western Australia's Department of Planning guides the local government schemes. There have been numerous plans over the years, and the most recent governing document for metropolitan urban development in Perth is *Directions 2031 and Beyond* (Department of Planning 2010).

The Vision in *Directions 2031 and Beyond* is:

"By 2031, Perth and Peel people will have created a world class livable city: green, vibrant, more compact and accessible with a unique sense of place."

It provides direction on: "...

- 1. how we provide for a growing population whilst ensuring that we live within available land, water and energy resources;
- 2. where development should be focused and what patterns of land use and transport will best support this development pattern;
- 3. what areas we need to protect so that we retain high quality natural environments and resources; and
- 4. what infrastructure we need to support our growth." (Department of Planning 2010)

The objectives presented within this document are to create a livable, prosperous, accessible, sustainable, and responsible future Perth, and it suggests three structural elements to achieve this:

 <u>Activity Centres Network</u> – more equitable distribution of jobs and amenity throughout the city

- <u>Movement Network</u> integrated system of public and private transport options to support and reinforce the Activity Centres Network
- <u>Green Network</u> a network of parks, reserves and conservation areas that support biodiversity, preserve natural amenity and protect valuable natural resources

Directions 2031 and Beyond is the governing document for land use planning within Perth. In August 2011, the Department of Transport released "Public Transport for Perth in 2030" which was in conversation with the Directions 2031 and Beyond plan. In March 2012 the "Western Australian Bike Network Plan" was released, again using the Directions 2031 and Beyond governing document. Peter Newman and many at CUSP have been working with Transit Oriented Developments (TODs) and a "Knowledge Arc Light Rail" proposal as suggestions on ways to progress this further.

The City of Canning has an Activity Centre within its region, and one of the major projects within my City Futures team has been the designing of a new Canning City Centre.

Climate Change

As of July 2012, Australia will have a Carbon Tax. Funding to support to move towards more energy efficiency technologies has been provided by the Federal Government through various funding programs many of which have been available to local governments. The most recent funding round was in March 2012 for the "Community Energy Efficiencey Program" (CEEP) grants. The City of Canning applied for partial funding for a geothermal bore which would be used to retrofit an existing indoor swimming pool and leisure centre called Riverton Leisureplex and reduce energy consumption and costs significantly.

Movements to address climate change at the local government level include reducing energy consumption of its buildings such as the Riverton Leisureplex example above, reducing energy of fleet vehicles, introducing policies and subsidy schemes for residents that might include solar photo-voltaic technology, or building efficiency codes, and behavioural change programs.

I see the biggest leverage points to deal with climate change are through effective metropolitan land use planning, and governing this through the Strategic Community Plan.

Behavioral Change and Community Education

Many educational and behavioural change programs are offered by local governments, most of which are developed and or delivered in collaboration with other government departments, NGOs or the private sector.

"Living Smart" and "TravelSmart" courses are award winning behavioural change programs developed and delivered by Department of Transport. They are offered jointly by the local and state government, and are proven to change travel behaviour and reducing water waste energy consumption (Department of Planning and Infrastructure 2006).

"Switch Your Thinking!" was originally developed by three local governments but is now used by many local governments in the Perth area. The program provides cheap deals for the community to acquire energy efficient/ water efficient technologies. It also provides education programs.

"Sustainable Living Guide" is an online tool that many local governments use to inform and educate the community about sustainability. The site is tailored to the Australian environment, and various modules can be chosen to be included on the website as appropriate. For example a local government that has a river or a regional park as a part of their region could include sections about biodiversity and conservation of that area and omit the coastal area information if they are not fronting the ocean.

Workshops such as the "Awakening the Dreamer Symposium" are used by many in Perth local governments (Town of Cambridge, Town of Vincent). The City of Canning held a "Speaker Series" for community members in 2011, and in October combined with the South East Regional Centre for Urban Landcare (SERCUL) to host world renowned sustainability thinker and author Paul Hawken.

Most of these workshops will deal with education around energy, water, waste and conservation of our natural areas.

Water Management

Strategic water management occurs at the state government level, with the Department of Water and Water Corporation as the major stakeholders in the Perth's water issues. Local governments deal with some aspects of water management. Within the City of Canning, the parks department work towards protecting our fragile river and wetland systems, reducing water use in parks and recreational areas through more efficient technology or hydrozoning (only watering key playing fields and not the whole park), and the environmental health and compliance department deal with storm water management issues and industrial waste disposal. Some local governments promote water conservation for the community though 'waterwise' gardening workshops, or policies connected to grey water use or rainwater tanks.

Waste Management

Local governments are responsible for waste disposal for the residents of the city. Approaches vary across the region, with waste going to landfill or recycling facilities. According to Bernie Bernadet our Waste Manager at the City of Canning the future needs to be approached with collaborative partnerships to manage waste. This is supported in the Metropolitan Local Government Review Draft Findings which believe that waste needs to be managed by the State Government for a more sustainable future in Perth (2012, 16).

Conservation

Within the City of Canning, the Parks department deals with many of the conservation issues through protection of natural flora, fauna, bushland areas, rivers and wetlands. Each local government department will deal with different issues depending on the region, for example the City of Subiaco, which is a very urban local government area, had verge trees and parks as a part of their Strategic Community Plan, whereas the City of Canning has a lot more focus on the protection and conservation of the regional park. The Department of Environment and Conservation and Conservation of Land Management (CALM) are the stage government agencies who are partners and stakeholders with local governments in this. There are many volunteer community groups who work collaboratively with the governments and are essential to the work done in this area. An example in the City of Canning is the aforementioned SERCUL, or the "Canning River Regional Park Volunteers Group".

Research Question 3: What are the enablers and barriers in moving local governments towards sustainability?

Wendy Sarkissian is a social planner with a PhD in Sustainability who did consulting on our community engagement process at the City of Canning in 2011. During this process we gathered input from the community on what they wanted for the future of Canning. "Lump and Split" is a method she taught us to process all the data, and this is what I used to group responses together into themes (Sarkissian et al. 2009). Predominantly interviews and surveys inform these results, as well as my participant observation from the past 9 months of working in local government. At the end of April 2012 the Metropolitan Local Government Review Draft Findings report was released, and was a great asset to check my results against. I first present the general responses to the questions from my interviews, surveys, literature review and participant observation.

Enablers in moving local governments towards sustainability

There were three major themes within the responses to this question from the surveys and interviews. The first was the fact that it's the level of local government that is closest to the people, and within that the possibilities for collaboration and partnerships with the community. Secondly were responses connected to leadership, the possibility to set the example, to educate and support the community in sustainability issues, and the third grouping was around the potential for densification with integrated land use and transport planning.

Closest to the People

Comments about local government being "at the coalface" or "work closely with their local communities" were common in my interviews and surveys, and from my understanding the local government area is where collaborations and partnerships with community members can happen most easily. Examples of this are with the City of Canning giving a community group financial support every year to help protect the Canning River Regional Park, and that same group co-financing major Sustainability leader to come to the City to talk to the community. This idea of the "closeness to the people" of local governments was disputed in the recently released findings of the Metropolitan Local Government Review, saying the Panel believes there is "an element of mythology around the much vaunted community engagement" and that "few people have interest in what local government does, how it does

it or what it actually achieves – unless they are directly and personally disaffected" (2012, 19).

Leadership

The potential for leaders within local government to set the example was mentioned by many of my sources, with ideas that they could "...lead by example – visible sustainability practices can set the precedent for the community to follow." Connected to this is education: leading, showing, teaching the community about sustainability. This was a concept mentioned as both an enabler/opportunity and the lack thereof as a barrier.

Connected to this idea, was the influence that the staff within the system can have by doing work "under the radar". An example given of this is a Park's Manager who has been "doing great work for years in an anti-green Council".

Densification and Integrated Planning of Perth

As local government decides density and zoning, potential to change the way people live and therefore reduce resource use through sustainable urban design is a key opportunity for local governments according to many people I interviewed and surveyed. Within this is the understanding of a more holistic approach to land use and transport planning. The Mayor of Fremantle is passionate about getting people "... living working and recreating in Freo... people who live here work in the city, people who work here can't live here – it's too expensive. We need to create high quality jobs in Freo, and affordable housing" (Pettitt 2012).

Stuart Devenish (2012) also talks about the need for densification and development in areas where affordability is needed, and infrastructure exists. He also believes that although this can happen at the local government level, the system is too inefficient and that planning should be taken away from local governments to be more effective. This is also reflected in the Metropolitan Local Government Review Draft Findings which state that: "By having fewer local governments, requirements can be simplified and made more consistent" and recommends that certain functions such as waste and strategic planning would be better at the state level (2012, 16).

Barriers in moving local governments towards sustainability

Power within the system is held by those who make the decisions. At the local government level this is ultimately the Council. Ideally, the person making the decision has all the relevant information necessary to make a sound decision, and the capacity to make decisions based on strategic and clear thinking for the community as a whole.

Most of the frustration around local government and the answers to my question on barriers in moving local governments towards sustainably involved the inefficiency of the system, the people in the system particularly in decision making roles, and the value placed on sustainability. The importance and role of the relationships and communication between people within the system was also mentioned.

Inefficiency of the system

I do not believe there would be many people who would argue that the current system we have of local government in Perth is an efficient, functional one. In the Local Government Reform Information Sheet released in July 2010 it says that local government in Western Australia is changing for the better:

"For almost 100 years, local government structures and boundaries in Western Australia have changed very little. Cities have grown, people have moved seaward and resource towns have boomed – yet many of our local government boundaries have stayed the same. Some areas have thrived, while others have struggled to keep pace.

One hundred years on, it's time for change. It's time to bring local government into the 21st century. It's time to make local government relevant to today's communities!" (2010a)

I do not believe this is unique to local government system in Western Australia, for as Scharmer (2007b) says:

"The same problem affects our massive institutional failure: we haven't learned to mold, bend, and transform our centuries-old collective patterns of thinking, conversing, and institutionalizing to fit the realities of today." (Scarmer 2007b, 3)

Comments from my surveys and interviews on the subject included the "amazing waste of money and resources in the system/structure". The waste to private industry, other levels of government, and ultimately the community is confirmed in the Metropolitan Local Government Review Draft Findings (Department of Local Government 2012).

The inefficiencies of the system are compounded by ineffectiveness due to the fact that "administration is more concerned with process compliance than outcomes" according to Devenish (2012).

Communication and information flow within the system I believe is an enormous barrier: "...the slow and lumbering processes of local government combined with the restrictions around communication between elected members, executive, staff and the community." In my opinion it is this last point that creates so much of the "unsustainability" and in fact is the inefficiency. Information flow within the system is not conducive to the decision makers having the best information to make the decisions with.

People

The overwhelming response to this question mentioned the human realm. There is much disillusionment with the elected members, but administration staff and community were also seen as 'barriers'. According to one source: "...there are two kinds of elected members: those that are there to do good, and those who want a line on their CV."

Other comments on the subject:

"Occasionally there is a quality elected member, but that is rare, not the majority"

"Entrenched mindsets, lack of creative thinking, personal agendas, local politics that get in the way of the bigger picture."

"Myopia, narrow-mindedness, selfishness – three monkeys syndrome= No realization of consequences of actions. No acknowledgement of other perspectives, views... noone is all knowing."

The difficulty in maintaining quality staff in the local government was also mentioned, and attributed to frustration: "Lots of administration staff can't get good stuff done, there are limits to what a professional can do in that system" and this is also reflected in the frustrations of one survey participant: "...the advice of educated professionals can be ignored by decision makers to the detriment of the community." And the "...lack of vision and knowledge at higher levels, anti-intellectual, and jaded or helplessness at lower levels"

Value

The value financially and otherwise placed on sustainability is also seen as another barrier: "The biggest barrier is cost..." or "...cost, real or perceived" of sustainability. Having "no buy in from decision-makers" is also reflected in the comment below, but which is more all-encompassing in the human problem:

"... lack of education, awareness and really a lack of caring. This both within the community and within management and council outside of the environmental departments."

Being Human in the System

The three further questions I asked in my survey were intended to get a more personal response as to the joys, frustrations and values of the human beings working in this system.

My first question was "what do you find most challenging about working in local government?" and the responses were generally frustration around the slow, lengthy processes of the system or the people in positions of decision making. To quote a few:

"Beaurocratic processes, stifling archaic mindsets, lack of focused action, lack of understanding..."

"The barriers that may exist on different levels in decision making. Currently it is predominantly at the council/elected members levels..."

"Local government has a lot of red tape associated with approvals that often suffocate projects before they have a chance to get off the ground."

"The layers of bullshit."

I then asked how much of their 'Self' they could bring to work and how much they felt they had to leave at home. Responses ranged from "not a great deal" to "I pretty much live my work". Further answers were:

"Not a great deal, I leave much of my self at home where I feel like I achieve much more for humanity... than going through beaurocratic processes (shuffling paper around my desk)."

"I bring a lot of self to work, and I think it is the self in all of us that can make the difference."

I personally agree with the second quote, and it was for that reason that I asked the question. Although I could appreciate and relate to this quote:

"Probably about half. Under the concept of professionalism frank expressions of emotions is subtly discouraged."

Finally I asked what kept people at work, and although many people did say "money" or "my mortgage", the overwhelming majority talked about the potential to do good, or the relationships with coworkers and community and the desire to work with others to make a difference:

"The team that I work with keep me coming in each day. They are very supporting and a lot of fun to work with."

"I enjoy the reward of providing services to the community, the comradeship of my peers and it also puts food on my table and a roof over my head."

"Staff and the challenge, plus daytime tv just sucks."

And one final one:

"The hope that new leadership will come [...] and create an amazing place (before or after global collapse). I come to work because I believe a sustainable world is a better, more prosperous and happier world than the current one."

Further exploration of results in context

In the results presented thus far, I have endeavored to give the reader an understanding of the terrain of this work in moving local governments towards sustainability. I have explored some different perspectives on the subject through my surveys and interviews, my literature review and observations. I have explored the dialogue, thinking and focus of sustainability that influences this world in local government in Perth. I have provided some examples of the way local government is addressing its sustainability in the world, and I have shared the general answers to my question on enablers and barriers to affect change within the current system. I would now like to share some stories and perspectives with you from my own personal experience of working in this system in a more phenomenological way, and within that offer my insights as to the enablers, barriers, and places of power and potential for change in this place.

Council Meetings

My first experience of a council meeting was on the 9th August, 2011. It was a Tuesday night and I had been at the City of Canning for about two weeks. I felt I had learnt degrees worth of material within those first few days, there was so much about working in government, and an office environment that was so new to me.

There is a very formal room called the Council Chambers, which is wood paneling and crests and pictures of the Queen. The Mayor and CEO and Executives sit up the back on a long wooden bench, and the Council face them sitting on a curved wooden bench. The seats are leather, each place has a microphone, there is water served in crystal glasses for the Councilors and Executives, and there is seating for the audience or community. The audience are facing the Mayor and Executives, but the Council has its back to the audience. The language is English, the majority of people present are white, and all the Council and Executive are. Most people in those decision making positions are over fifty and the vast majority are male (14 out of 17).

At the beginning the community can speak to the Council on matters that they are interested in. The Mayor is the chairperson for this event and grants people the opportunity to speak or denies it. I am not a dumb girl. I am white, educated, speak English fluently, but I was completely out of my depth with regards to the rules to engage in this system. I realized that I

had no idea how to "have my say" in local government, and I realized how many people must feel that way. The inaccessibility of the language of the system and therefore the ability to influence the decisions that are made was obvious. This brought to mind Wolf's (1997) point about language and communication in the ability to name things and control communication being a source of power. This was then compounded by my shock at the manner by which the those community members who did choose to speak were spoken to. I left that night feeling astounded at the realization that this is how we govern in my society. This is how we make decisions. This is the way and these are the people choosing what we do with our resources, when, why and to the benefit of whom.

The greatest realization I've had since working in local government has been the power which exists in that Council chamber, and the apathy and ignorance of the many who allow it to stay so. And I also realized the current system of language and codes and rules which keeps the balance of power in its current leaning, because to understand how to access the code and speak the language takes a keen willingness to learn and perseverance. And I have these. I'm in.

Communication and Information Flow

My first love (and first career) has been singing and songwriting, followed by teaching English as a Second Language (ESL). Both of these are around clear communication. In the singing and songwriting, the lesson for me was to be authentic, listen to myself, my truth, and communicate that as easily, succinctly and honestly as possible. In teaching ESL for 10 years, I learnt to get to the meaning of an utterance. What are we really trying to say here? Let's say it as accurately and clearly as possible, in words that are as accessible and effective as possible. Let's also check back that you've understood what I meant to say. Speaking is not communication. Listening is the other part. Tell me in your words what you understood and then we'll check that we're on the same page. The classroom is also a wonderful teacher of human beings and group dynamics. That is the background that I come with to this new work in local government.

From the beginning of my work here, I have been astounded by the inefficiencies and waste caused by what I believe to be lack of communication in this organization. I do not believe this to be unique to the place I am in now, I believe we as human beings need to relearn how

to really communicate. The barriers placed on communication between staff and Council are an addition to an already unhealthy process.

Discussion

In this section I will explore some of the gaps in the current dialogue around sustainability in Perth, and the uniqueness of the Perth situation. I will then discuss my perspectives of the places of power and agency within the system to affect change for sustainability.

Sustainability in Perth

The dialogue on sustainability in Perth WA takes on the future costs into the present. What I believe is missing from the discussion are concepts such as unequal exchange prominent in political ecology (Escobar 2006, Paulson 2006) and world systems theory (Hornborg 2009, Wolf 1997). The fact that Perth is the least sustainable city in Australia, lends to the understanding that there is a lot of work to shift the mindsets, systems and lifestyles within this place. Urban design and densification take centre stage as they are seen by many to be leverage points to reduce consumption. The dialogue extends to the future wellbeing of Perth, but rarely places itself within a global picture, having responsibility on a global scale. Perhaps it is a reflection of being the most isolated capital city on earth, but I don't feel Perth places itself as relevant or connected to others as much as it could. I see an example of this is the lack of 'fair-trade' on the sustainability agenda in Perth. As far as I know, no local governments have declared themselves as 'fair-trade' for example, unlike Lund or Malmo who have been working towards this for a long time.

In looking for examples of what is possible, I have noticed Perth looks east, to Melbourne, Sydney, Brisbane and New Zealand, or north to the USA, Canada, and the UK, but rarely to a place that is not anglo-saxon or Western European. I see this as a gap in our conversation. I believe we have much to gain from increasing diversity in the voices, human beings, and worldviews that are represented in our planning and decision making processes. I believe fundamentally the world is still seen as white, well-off, and English speaking, with the occasional indigenous negotiations. This is the paradigm from which planning and decisions

are made, and I believe better decisions and future plans could come from a more diverse and well represented place as mentioned by Inatayalla (1998), in his work on future planning.

Although climate change is now part of the debate and many policies, the concept of "peak oil" is missing from most government agendas. The City of Stirling released a "Peak Oil Strategy" in 2012 and I believe this to be the first by a Western Australian local government. Underneath the focus on urban planning and design and transport in Perth is the understanding of our automobile dependent society, but still a mature and more prominent discussion around "peak oil" and the effect of other resource depletion on a future Perth is needed.

One influence that I believe shapes the sustainability dialogue in Perth, and I believe to be an asset is the in-separateness of the human and the ecology in the Noongar worldview. The proximity of this human ecological worldview to the surface of our everyday Perth world often goes unseen and unnoticed, such as the Noongar words which pepper our speech on a daily basis. The human is the land, the land is the human being. We grow up with stories of the Wagyl (Waugal or Waagal), snakelike dreamtime creature, shaping the land and rivers of Perth and south-west Australia, and these stories in turn shape us. I believe the deep connection to the land is a blessing of this place, the gift of which I am enormously grateful.

What are the places of power to affect change in the system?

In my results, the barriers offered were often around the "systemic problem" and or the "human problem". It can be easy to focus on one or the other, but the two are so enmeshed as to render the riddle impossible to decipher.

I believe the leverage points and places of power for change within the system are in working on and with all of it, on every level possible. From taxes and subsidies (leverage point 12) to promote solar power PV cells for the community, or increasing the transparency and accessibility of the information within the system (leverage point 5). New laws and legislations such the Carbon Tax, or the Integrated Planning and Reporting Framework can have a big influence on the system (leverage point 3). Effective community engagement and a more deliberative democracy approach can be powerful places to change (leverage point 4).

See the table below, adapted from Meadows (1999) work.

- 12. Constants, parameters, numbers (such as subsidies, taxes, standards)
- 11. The sizes of buffers and other stabilizing stocks, relative to their flows.
- 10. The structure of material stocks and flows (such as transport networks, population age structures)
- 9. The lengths of delays, relative to the rate of system change
- 8. The strength of negative feedback loops, relative to the impacts they are trying to correct against
- 7. The gain around driving positive feedbk loops
- 6. The structure of information flows (who does and does not have access to what kind of information)
- 5. The rules of the system (such as incentives, punishments, constraints)
- 4. The power to add, change, evolve, or self-organize system structure
- 3. The goals of the system
- 2. The mindset or paradigm out of which the system its goals, structures, rules, delays, parameters arises
- 1. The power to transcend paradigms

Figure 4. Leverage Points: Places to Intervene in a System in increasing order of effectiveness (adapted from Meadows 1999)

What I like about Meadow's (1997) Leverage Points, is that although everything within the system is worth working on, it is the human being within the system, the one that creates the system as recognized as the most powerful place of change. The human's ability to recognize, change and transcend paradigms is the most effective lever to effect change in a system. This is reflected by Peter Senge in his book *Learning for Sustainability*:

"The answer lies in the inner work of sustainability. A reinforcing process is set in motion when people start to deliberately slow down their lives to cultivate broader awareness and reflective practices" (Senge et al. 2006, 96).

I find that at the end of this thesis I still find the value in the premise of my first thesis Sustainable Selves: Shifting paradigms within individuals as the core driver to reaching a sustainable society which is that sustainability starts with us – the human being in the system, being human, and our ability to be a 'sustainable self' (Barcena, Bryant and Lind 2009). I would add from this journey, the importance of having other "sustainable selves" to share the journey with. In this thesis I have explored taking this "sustainable self" out into the system, in order to find places of power to change it. On my journey it has become clear to me how important relationship is. How much we need to find and work with people who are also

wanting to do sustainability work in the world. As one of my interviewees put it, it's about networks. We need to be like rhizomes, which are plants with a really strong root network, that will sprout when conditions permit, but if it fails, it can lie dormant for ages until it can see its opportunity to try and survive above ground again. I also think of the Shambalah prophecy, in which a Buddhist monk tells Joanna Macy (1998) of an old prophecy, which says there will come a time when the powers that be have the world on the brink of collapse, and at that time the Shambalah Warriors will awaken. They won't wear a uniform. You won't know them by how they look, but by deed. They will hear the call, and they will work to change the system from within and from without.

I have stayed with this myth since I heard it and it is how I see my work in Perth and in the world. I am here to listen, I am here to act. And I am blessed to be surrounded by others who feel the same.

I see the places of power within the system are in me continuing to do my own 'inner work of sustainability' which is: to listen to what life calls me to do; listen to what's happening; listen to myself. As Scharmer says we must remember that:

"...these social structures are created by our habitual ways of thinking and acting, and that alternative social structures can also be created. The ability to move through a U process as a team, and organization, or a system requires an inner journey and intimate connection that helps to bring forth the world anew." (Scharmer 2007a, 12)

I see the places of power within the system include being a decision maker, and I intend to run for Council in June 2013, and encourage every other "sustainablist" I know to run for Council. There is such power there.

I see art as a leverage point able to change paradigms at the highest levels, and would love to explore this "activist art" further. I believe educating people about the how local government works, and making it more accessible to the general population is essential in us creating a more effective and sustainability-enabled system in Perth. One idea I have for doing this is to write a musical called "Local Government: The Musical" for the Fringe Festival in Perth next year, to raise awareness of the need for less apathy, and more action in the local government arena.

Conclusion

Sustainability in Perth is represented in policy and legislation at the federal, state and local levels of government. The focus of the conversation is often around integrated land use and transport planning due to the sprawled, automobile dependent nature of the city. Unique to Perth is the Noongar heritage and influence that subtly, and often invisibly influences the place.

Local governments are undertaking many different projects to advance sustainability and examples of this are, the Integrated Planning and Reporting Framework, Metropolitan Land Use Planning, addressing Climate Change, behavioural change and community education programs, water management, waste management and conservation. I believe the conversation could be enhanced by Perth placing itself on a global scale and within a global picture of relationship, as well as a more prominent conversation around peak oil and other future resource depletion.

We all could benefit by the inclusion of increased diversity (age, gender, cultural background, education) in the human beings and worldviews represented in the planning and decision making positions.

The places of power within the system rest within the human being, being human in the system, and our ability to change, learn and transcend paradigms, our ability to work together to help and support each other to do this, and finding ways into the decision making positions.

As such, I shall continue my work in and with myself and the system with my wonderful colleagues, make my "activist art", and in October 2013 I shall be running for Council, and encouraging every sustainablist I know to do the same.

I am Perth. I intend to stay. And I care.

References:

- 1 Giant Leap. 2002. DVD. Directed by Duncan Bridgeman, and Jamie Catto. London: Palm Pictures UK
- Australian Bureau of Statistics (ABS). *Population Trends*. Accessed March 22nd, 2012. http://www.abs.gov.au/websitedbs/D3310114.nsf/home/Home?opendocument
- Australian Conservation Fund. 2010. "Sustainable Cities Index 2010". Authorised by Don Henry, Australian Conservation Foundation. http://www.acfonline.org/citiesindex
- Assadourian, Erik. 2010. "The Rise and Fall of Consumer Cultures". In: *State of the World 2010: Transforming Cultures: From Consumerism to Sustainability*. 3-20. The Worldwatch Institute. W.W. Norton & Company, New York, London.
- Barcena, Zaida. Bryant, J. and Lindh, J. 2009. "Sustainable Selves: Shifting paradigms within individuals as the core driver to reaching a sustainable society". Masters Thesis in Strategic Leadership towards Sustainability, Blekinge Institute of Technology, Sweden.
- Bernard, Russell H. 2006. *Research Methods in Anthropology*. 4th ed. AltaMira Press, Oxford, UK.
- City of Canning. Western Australia. http://www.canning.wa.gov.au/ (accessed May 2, 2012)
- City of Fremantle. Western Australia. http://www.fremantle.wa.gov.au/sustainability (accessed May 2, 2012)
- City of Vincent. Western Australia. http://www.vincent.wa.gov.au/Your_Community/Environment_Sustainability (accessed May 2, 2012).
- Council of Australian Governments. 2009. "National Objective and Criteria for Future Strategic Planning of Capital Cities."

 http://www.infrastructure.gov.au/infrastructure/mcu/files/Our_Cities_National_Urban_Policy_Paper_2011_AppendixA.pdf (accessed May 2, 2012)
- Department of Climate Change and Energy Efficiency. Australian Federal Government. http://www.climatechange.gov.au/ (accessed May 4, 2012)
- Department of Environment and Conservation, Government of Western Australia. 2003. "State Sustainability Strategy." September 2003. http://www.dec.wa.gov.au/content/view/3523/2066/

- Department of Local Government, Government of Western Australia. 2010a. "Local Government Reform Information Sheet." July 2010. http://www.dlg.wa.gov.au/Content/LG/LGReform/About.aspx)
- Department of Local Government, Government of Western Australian. 2010b. "Integrated Planning Framework and Guidelines." October 2010. http://integratedplanning.dlg.wa.gov.au/Page.aspx?PID=8
- Department of Local Government, Government of Western Australian. 2011. "Towards More Effective Metropolitan Governance, Issues Paper." October 2011.
- Department of Local Government, Government of Western Australian. 2012a. "Integrated Planning Advisory Standard." January 2012.
- Department of Local Government, Government of Western Australia. 2012b. "Metropolitan Local Government Review Draft Findings." April 2012.
- Department of Planning and Infrastructure, Government of Western Australia. 2006. "The TravelSmart Story So Far." Presentation by Gary John, Travel Behaviour Strategies seminar.
- Department of Planning, Government of Western Australia. 2010. *Directions 2031 and Beyond*, August 2010.
- Department of Sustainability, Environment, Water, Population and Communities. Australian Federal Government. http://www.environment.gov.au/about/index.html (accessed April 28, 2012).
- Department of Transport, Government of Western Australia. 2012. "Western Australian Bike Network Plan 2012 2021, Draft for Consultation." March 2012.
- Dregson, Alan, and Devall, Bill. 2008. *The Ecology of Wisdom: Writings by Arne Naess*. Counterpoint, Berkley.
- Environmental Protection Authority, State Government of Victoria. http://www.epa.vic.gov.au/ecologicalfootprint/ausfootprint/default.asp (accessed May 5, 2012)
- Escobar, Arturo 2006. "Difference and Conflict in the Struggle over Natural Resources: A Political Ecology Framework." *Development*. 49(3): 6-13.
- Gare, Aron. 1995. *Postmodernism and the Environmental Crisis*. Routledge, London and New York.
- Gezon, Lisa L. 2005. "Finding the global in the local: environmental struggles in northern Madagascar." In Paulson, Susan, and Lisa L. Gezon. 2005. *Political ecology across*

- spaces, scales, and social groups. 135-153. Rutgers University Press, New Brunswick.
- Girardet, Herbert, 2000. *Cities, People, Planet*. Schumacher Lectures, Urban Sustainability, April 2000, Liverpool, UK.
- Government of Western Australia. 1995. "Local Government Act." 1995, Section 1.3 (3)
- Gravlee, Clarence, C. 2009. "How race becomes biology: embodiment of social inequality". American Journal of Physical Anthropology 139: 47-57.
- Hay, Robert. 2005. "Becoming Ecosynchronous, Part 1: The Root Causes of Our Unsustainable Way of Life." *Sustainable Development*. 13(5): 311-325.
- Hay, Robert. 2006. "Becoming Ecosynchronous, Part 2: Achieving Sustainable Development." *Sustainable Development* 14(1):1-15.
- Hornborg, Alf. 2005. "Undermining Modernity". In Paulson, Susan, and Lisa L. Gezon. 2005. *Political ecology across spaces, scales, and social groups*. 196-214. Rutgers University Press, New Brunswick.
- Hornborg, Alf. 2009. Zero Sum World. *International Journal of Compatative Sociology*. Sage Publications, Los Angeles. 50(3-4): 237-262.
- Hornborg, Alf. 2010. Lectures in Human Ecology: Culture, Power and Sustainability. HEKN01. Lund University, Sweden. September October 2010.
- Hornborg, Alf, J.R. McNeill and Joan Martinez-Alier (eds). 2007. *Rethinking Environmental History: World-System History and Global Environmental Change*. Altamira Press, UK.
- Inayatullah, Sohail. 1998. "Pedagogy, culture, and futures studies." *The American Behavioral Scientist* 42(3): 386-397.
- Ingold, Tim. 2008. "Globes and Spheres: The Topology of Environmentalism." In Dove, Michael.R. and Carpenter, Carol. *Environmental Anthropology: A Historical Reader*. Chapter 24. Blackwell Publishing, Oxford.
- Isaacs, William. N 1999. "Dialogic Leadership". Systems Thinker 10(1):1-5. Pegasus Communications.
- Jackson, Michael. 1995. At Home in the World. Duke University Press, London.
- Jaworski, Joseph.1996. *Synchronicity: The Inner Path of Leadership*. Berrett-Koehler Publishers, San Fransisco.
- Landry, Charles. 2006. The Art of City Making. Earthscan, London.

- Laurier, Eric. 2010. "Participant Observation." In Clifford, French and Valentine. *Key Methods in Geography*. 2nd ed. 116-130. Sage Publications, London.
- Macy, J. 1998. Coming Back to Life: Practices to Reconnect Our Lives, Our World. New Society Press, London.
- Macy, Joanna. 1995. "Collective Self-Interest the Holonic Shift." *World Business Academy Perspectives* 9(1): 19-22.
- Maxwell, A Joseph. 2005. *Qualitative Research Design: an Interactive Approach (2nd ed)*. Thousand Oaks, London and New Dehli.
- Meadows, Donella. 1999. "Leverage Points: Places to Intervene in a System." The Sustainability Institute, Vermont. http://www.sustainabilityinstitute.org/pubs/Leverage_Points.pdf
- Miller, Daniel. 2010. Stuff. Polity Press, UK.
- Newman, Peter, and Kenworthy, Jeff. 1999. Sustainability and Cities: Overcoming Automobile Dependence. Island Press, USA.
- Ny, Henrik, Jamie P. MacDonald, Göran Broman, Ryoichi Yamamoto, and Karl-Henrik Robèrt. 2006. "Sustainability Constraints as System Boundaries: An Approach to Making Life-Cycle Management Strategic." *Journal of Industrial Ecology* 10(1-2): 61-77.
- Paulson, Susan. 2011. CPS Lectures in "Consumption, Identity, Political Ecology." Lund University, Sweden. January 17th March 16th.
- Robèrt, Karl-Henrik, Herman E. Daly, Paul A. Hawken, and John Holmberg. 1997. "A compass for sustainable development." *International Journal of Sustainable Development and WorldEcology* 4:79-92.
- Sarkissian, Wendy, Wiwik, B.M., Cook, A., Walsh, K., Vajda, S., Umemoto, K. 2009. SpeakOut – The Step-byStep Guide to SpeakOuts and Community Workshops. Earthscan, UK.
- Sawyer, Suzana. 2004. Crude Chronicles: Indigenous Politics, Multinational Oil, and Neoliberalism in Ecuador. Duke University Press.
- Scharmer, Otto C. 2007a. "Addressing the Blind Spot of Our Time: An executive summary of the new book Theory U: Leading from the Future as It Emerges". Society for Organizational Learning, Cambridge, Massachusetts. http://mitleadership.mit.edu/pdf/Theory_U_Exec_Summary.pdf

- Scharmer, Otto C. 2007b. *Theory U: Learning from the Future as It Emerges*. Society for Organizational Learning, Cambridge, Massachusetts.
- Senge, Peter M. 1996. "Introduction." In *Synchronicity: The Inner Path of Leadership*, by Joseph Jaworski. Berrett-Koehler Publishers, San Fransisco.
- Senge, Peter M, Joseph Jaworski, Otto C. Scharmer, and Betty Sue Flowers. 2004. *Presence: Exploring Profound Change in People, Organizations and Society*. Nicholas Brealey Publishing, London.
- Senge, Peter, Joe Laur, Sara Schley, and Bryan Smith. 2006. *Learning for Sustainability*. Society for Organizational Learning, Cambridge, Massachusetts.
- Senge, Peter, Bryan Smith, Nina Kruschwitz, Joe Laur, and Sara Schley. 2008. *The Necessary Revolution: How Induviduals and Organizations Are Working Together to Create a Sustainable World.* Nicholas Brealey Publishing, London.
- Sillitoe, Paul. 2006. Global Science Vs Local Science: Approaches to Indigenous Knowledge in International Development. Berghahn Books, USA.
- Thomas, Beatrice. 2012. Premiere in New Call for Fewer Councils. *The West Australian*. March 23, 2012.
- Trenwith, Courtney. 2012. "Local Government Reform King Implores WA." WA Today

 March 8, 2012. http://www.watoday.com.au/wa-news/local-government-reform-king-implores-wa-20120307-1ukj0.html#ixzz1rG65LAij
- Urla, Jacqueline and Alan Swedlund. 2004. "Measuring up to Barbie: Ideals of the feminine body in popular culture". In C. Brettell and Sargent, C. *Gender in Cross Cultural Perspective*. 285-298. Upper Saddle River, New Jersey.
- Wheeler, Stephen, and Beatley, Timothy. 2004. *The Sustainable Urban Development Reader*. Routlege, New York.
- Wolf, Eric. 1997. Europe and the People Without History. University of California Press, USA.
- World Commission on Environment and Development (WCED). 1987. *Our Common Future*. Official Document, Oxford: Oxford University Press, UK.
- Worster, Donald. 1994. *Nature's Economy A History of Ecological Ideas*. 2d ed. Cambridge University Press, UK.

Appendices

Appendix A – Interviews

Stuart Devenish: Technical Director - Planning Planning at RPS (March 8th 2012)

'RPS is an international consultancy providing advice upon the development of natural resources, land and property, the management of the environment and the health and safety of people.' (from Stuart's business card)

Stuart has been working in planning in the Perth context for 22 years, in local government (he was at the City of Canning) from 1998 – 2007, other local governments (Kalamunda, Mandurah) as well as State Government Authorities and his current role in the private sector. *What is sustainability?*

- Environmental sustainability (asked me what I was asking about) We can't achieve it... but we can be 'less unsustainable'
- Fundamentally it's anything and everything
- Work with a lot of property developers... confronted with unbalanced views on environmet... competing objectives. Port headland extreme accommodation pressure (\$3000 week rent), he flies in and out in a day coz nowhere to stay.
- Kalamunda has done a good job at environmental sustainability water efficient urban design, maintaining hydrological balances, protecting biodiversity
- Local govts are just scratching the surface with 'recycling' etc. WATER needs to be more of a focus.

What are barriers?

- Governance counselors make decisions based on perceptions of performance.. "how appear in last council meeting"
- Not representative democracy
- Fundamental structure does limit
- Short term thinking compromises ability to achieve long term, strategic, altruistic goals
- Administration concerned with process compliance more that outcomes and elected members more concerned with short term goals, and perception of performance to be reelected.
- Elected Members often extreme sections of the community
- Professionals within admin under constant scrutiny, very risk adverse, less likely to be ambitious, or risk address longer term picture of sustainability.
- Lots of admin staff can't get good stuff done, limits to what a professional can do in that system.
- Occasionally quality EM... but rare and not majority.
- Redevelopment Authorities are Outcome oriented this is much better. Let process. More 'what have you achieved?' not 'have you followed due diligence?'
- Red Auth also has a board, with some professionals and counselors have a minority vote. Important.

- Elected Members should be done away with... keep democracy but change govt structure to be more performance based.
- Fundamentally inefficient LG. 3 times more than we need. Amazing waste of money and resources in the system/structure. Economies of scale is one way to improve this.
- Finding balance between development, economic, social and environmental concerns... trade-offs
- EPA don't look at trade-offs. (environmental protection authority)

What are opportunities?

- Urban infill density of development in Perth extremely low...
- Develop in areas where we've already changed it... where affordability is needed, where infrastructure is there... development on development...
- BUT LG can't do it. Community very conservative.. Alannah MacTiernan tried to some extent... to do 30-40%...
- If local govt was series, or capable of being serious which it's not...
- Development around stations, selling air-rights
- But need more leadership on it... takes a brave person given the amount of aversion to density
- Need to sack a whole lot of public servants, and hire a whole lot of talented, futuristic, individuals
- Amalgamation
- Take planning away from Local Governments.
- Get real... such waste of resources... focus on real value to community

Brad Pettitt: Mayor – City of Fremantle (March 16th 2012)

Brad was elected Mayor in 2009 after serving 4 years on the Council. Brad is also Associate Professor of Sustainability at Murdoch University.

What is Sustainability?

- Quadruple bottom line... integrated. Economic (meaningful work that pays well in freo), Social (places that create community people know each other), Environmental (whilst living within ecological and carbon constraints), Cultural (making sure Indigenous a part of that story)
- Density... artists... getting around without automobile

What is your LG doing to move towards Sustainability?

- Getting people living, working, recreating in Freo (people who live here work in city, people who work can't live too expensive) Need to create high quality jobs in Freo, and affordable housing in freo. Asking State Govt (decentralization policy)
- PV solar and other parts of the Low Carbon City Plan

What are the barriers?

- Economic perceptions (going against flow of natural (or this is how we have always done it in WA) business investment eg: retail malls/high streets)
- NIMBYISM density.

- Leadership... we're not gonna agree with each other, "...but I've got the opportunity to make the choice right now so I'm gonna do what I know is right"
- Barriers to cost of technologies/labor to build or retrofit.
- \$\$\$ to employ really good people (eg: Mike Mouritz)

What are the opportunities?

- Agile, flexible, able to respond, know the fine grain of our community
- Control and adapt local planning schemes
- Sustainability has to be a collaborative process, not too much top down there is wisdom in joint voices often
- Social QBL engagement to make decisions = sustainable communities
- Environmental Economic new technologies \$\$\$ and unproven
- Leadership... we're not gonna agree with each other, "...but I've got the opportunity to make the choice right now so I'm gonna do what I know is right"

Rebecca Clarkson: Community Development Coordinator – City of Fremantle (March 16th 2012)

Works in services and project development (aboriginal, healthy aging, adult community education) and placemaking for King's Square. Worked at City of Melbourne (with Rob Adams)

What is Sustainability?

- Living within current capacity of what we have (bioregion and land capacity)
- Living a good life, making good choices

What is Freo doing?

- Low carbon community plan
- Great council
- Planning strategies eg: density increased in city, housing affordability, promoting active transport.
- Living Smart, Bike awareness, promoting pathways to riding
- Solar panel farm
- Carbon neutral

Challenges? Barriers?

- BAU peoples actions don't match their stated 'green-ness' (eg: driving to work, recycling)
- Internal leadership (exec or CEO to be passionate about it),
- Education and reinforcement needed of green behaviours needed ('people just aren't aware')
- Apathy, don't care... can't see impacts of changes now, malaise around making changes
- Working across organizationally... need for outcomes dependent on others, but no accountability so doesn't get done...
- Need someone at manager/exec level pushing sustainability agenda.
- Density... people hate density.

- Density not done well here... really not done well.
- Elements of 'good' that don't make the whole which is the desirable

Overcoming Barriers?

- Accountability
- Fire arrows in every direction
- Be strategic about who you talk to and when and where
- Councils in WA/Perth too small

Opportunities?

- Addressing climate change... LG more connected to people
- State too connected to capitalism
- Amalgamation big opportunity... should be 150,000-200,000+

Rob Weymouth: Sustainability Facilitator at Western Australian Local Government Association (March 25th 2012)

30 local governments in Metro area of Perth

What is Sustainability (in your words)?

• What do I value? How do I achieve that? (asking as individual, organization, society, species) and over time...

What are LGs doing for sustainability?

- Integrated Planning requirements which is in essence making them address it sustainabilty (legislation, so everyone doing it)
- What does LG think Sustainability is? Some... sustainability within environment, Some... decision making (eg placing it within governance), Some...

Barriers? Challenges?

- 'The heart of the human problem is the problem in the human heart so the greatest barrier is the people'
- The people within the 'organism' which can be changed by changing just a few people. You can't separate 'this way of budgeting and doing meetings' as the defining factor
- Incorrect structure
- Incorrect (inadequate/inappropriate?) people (human beings)
- State IS the City in Perth...
- Equal opportunity and representation within council across age/race/sex/education etc
- Councilor are not a representative proportion of population. (they're all old white guys)
- Language of process Council meetings afraid of appearing stupid... new people takes a while to know language and procedures: shut up and watch until I get my feet here.
- Consent as opposed to majority vote every person would have to speak, not just dominant few and silence of many.
- Time required to be involved

Opportunities?

• Way LGs make decisions... looking at themselves, what do we value, how make decisions, how do we bring that into the way we operate... constantly asking that, 'is this

getting us what we want?' (presume they want sustainability) Organizational self-consciousness... that continues.

- Fund community groups..
- Do great C.Engage around Strategic planning.
- Amalgamations more efficient economically. Economy of scale 100,000 magic number for that. More than that = no more efficiency.
- Need 'high capacity people' and tell them they're making decisions for the entire city... not just your ward, your interests. (need for CE because how can one councilor be expected to represent or be aware of)
- Mandatory training of elected member

How would/could organizational self-consciousness occur? Who is doing it?

• Culture of council... they listen to each other... there aren't blocks based around political ideology...

Dudley Maier: Counsellor at Town of Vincent, and **Anita Marriott:** Sustainability Officer, Town of Vincent (informal interview at Bike Futures Seminar, RAC building West Perth) (29th March, 2012)

- Barriers staff that have been there a really long time and either don't care, or have given up... losing good staff through frustration with those in high places and inertia
- Communication to the community about what is happening
- Moving too fast not thinking strategically and long term, perhaps due to funding pressures within certain timings

Steve Atwell: Manager Parks City of Canning. (2nd April, 2012)

- "lovely to talk to someone with their head in the right place..." as I left I gestured thank you and moved my hand towards my heart "... and their heart in the right place"
- Need: Community higher socio-economic, educated to push council
- Or good Council... green (not like Canning = 'anti-green')
- Or a few key personalities/individuals internally who can just do things under the radar

Mike Mouritz: Executive – City Futures, City of Canning. (April 5th 2012)

25+ years experience in local government, state government strategic planning positions, and private sector in strategic sustainability. PhD in Sustainability from Murdoch University. *What is Sustainability?*

- Big picture thinking
- Ability to adapt to threats and vulnerabilities... resilience concept of sustainability What your LG doing towards Sustainability?
- No mature conversation around that space
- For years have been doing really good stuff in bush care and conservation (Steve Atwell's work)
- No overall coherent program
- Had hoped we'd instill it but everything is uncertain now...

Barriers?

- Leadership at the elected member level.
- Key vulnerability of organisatin...
- Chemistry between EM and Org
- Inertia of the system... existing interests in status quo, resistance to change (need GREAT communication and to understand the WHY of change)
- Democratization of technology is needed... because it becomes entrenched, part of system, people need a say in it. New technology sets up a trajectory...

Enablers?

- If you can't get sust strategy on the table, can focus on projects, and work up to it that way
- Must comprimise in the system to get any traction
- \$\$\$ are often the way to approach the conversation that everyone will get, even if they don't get/care about climate change, peak oil etc. but this is not wholistic
- Great work can be done if the leadership is there, communities are on board... many LGs have done a lot but it's a variable landscape.

Personal notes/thoughts? How do you keep going?

- "Think like a rhizome" Renee Newman Storer in the Leadership course we taught on... it's a plant with long long roots spread underground, just waits for a moment to pop up. If it gets chopped off it just goes dormant, waiting for the next opportunity to pop up somewhere else. Look for the buttons to be pushed. (the leverage points)
- Network, relationships, groups, supportive environents, angels, synchronicity, bunches of grapes... pod people who remind each other who we are and why we are here.

Alanah MacTiernan – Mayor of Town of Vincent (16th April 2012)

17 years in State Parliament (Labour Party), and 8 years Minister for Planning and Infrastructure. During her time as Minister she was responsible for doubling the size of the public transport system in Perth.

What is Sustainability?

- Future generations...
- Urban Planning... Densification and Public Transport together... can't have one without the other.
- Not being irresponsible and living for the moment... and creating a nightmare for the future
- it's about future planning. Future thinking
- reducing cars
- future generations being just as well of or even more than what we have

What's Town of Vincent doing?

- Increasing Density
- Incentives for developers to go beyond building standard, and more stories possible IF energy efficiency and star ratings better
- Greening the City more greenery in all kinds of places eg: median strips
- Renewable energy....eg geothermal at Beatty Park

- Vege based material for garbage bags eg; doggy disposal bags using that
- 'Switch your thinking' program
- Community events... street parties etc
- Public transport at local level... eg 'CAT' bus along Vincent street

Barriers?

- Much more needs to happen at State and Federal level: eg Higher Building Codes... currently not energy efficient enough. Should be policies around all retrofits and new... commercial, mandatory disclosure of energy rating of all homes when sold and water efficiency
- Current conservative governments in most places don't invest in PT
- Climate Change is off the agenda since GFC (Global Financial Crisis)
- Leadership

Opportunities at LG level?

- We should be doing sewer mining LG appropriate to do that
- Waste... cost of waste, make people aware
- Separating out costs in rates so they're not hidden
- Lead by example
- Fill in gaps in PT

Appendix B – Surveys

Q1- What is 'sustainability' in your own words?

- Sustainability is human civilization which is based on the resources of the planet (including the rate at which these resources replenish) and the health of the environment whilst allowing for the social and intellectual advancement of humanity.
- Sustainability is not a solution, a movement or an action. It is a lens that reveals the interconnections and the complexities of our decisions. It offers a way to act with creativity, responsibility and intelligence.
- ensuring that our actions do not have a net negative impact on the future of this planet that we share.
- Sustainability=balance, synergy, connections of everything. Its common sense and not new. Sustainability is not only about the environment. It's meeting the needs of current and future generations..so often we 'borrow' from the future without realising there will be a pay back=consequences. Everything is a system within a system etc, the intra and interdependence of these systems means there are always repercussions.
- Living within the means of the avaible resources, replenshing and honouring what we have, respecting each other and the earth. Acting and doing with integrity.
- Living, working and planning in a way that protects our resources into the future
- meeting the needs of the present without compromising the needs of the future.
- Sustainability to me is living clean, green and more simply but all without feeling like you are missing or going out. Clean less synthetic and harmful chemicals green more organic and natural simply less packaging, reducing the need for more production etc

- Living responsibly today and using resources so they may be provided for future generations.
- the maintenance and enrichment of what we value collectively and individually now and into the future.
- A focus on creating social, economic and cultural practices that can be repeated by each subsequent generation.
- being able to acquire, operate, repair and replace an asset or service within the City's means, without harm or risk, now and into the future.
- Sustainability is the ability to exist without impacting on our natural environment
- The ability to continue operating successfully without depleting the resources required to do so, or impeding others' ability to do the same.
- sustainability means consuming less in general ie clothes and retail purchases. Think twice before using the car and try not to let the engine idle. Use alternative transport when travelling on my own.
- Brundtland "Meeting the needs of the present without compromising the ability of future generations to meet their own needs". Sustainability is about recognising the environmental, economic and social dimensions of an issue in decision making and the development of initiatives.

Q2 - What is your local government doing to move towards sustainability?

- Not enough. Some projects include the use of geothermal power, recycling and use of more efficient vehicles.
- The City of Canning is looking at medium to large scale redevelopments. By redeveloping whole areas at once, they are able to plan for social, economic and environmental factors in the built form. There is also a sustainability group engaged in projects and advocacy for sustainability initiatives.
- Nor enough individuals are pursing sustainable initiatives but this is no where near enough to compensate for the impact that the organization and the community which represents has on the environment
- Small but segregated initiatives.
- we have a like minded group of people forming sustainability team that aims to influence the organisation and strives for the small wins that promote sustainability.
- Very little at the moment in a concerted effort. Some smaller project reliant on staff or larger initiatives from State Government are progressing sustainability in the organisation regardless.
- Our organisation has a sustainability team within the environmental department. Our team looks at water conservation, carbon mitigation, carbon adaptation, renewable energy (and another team works on NRM issues)
- Investign in renewable energy, community education, policy to ensure new housing is more eenergy and water efficient, investments in irrigation efficiency, monitoring and reporting.

- Changing procurment processes. Changing policies Constructing new infrastructure Sustainability Reporting
- Recycling
- developing its own integrated planning and reporting framework
- They have started a sustainability committee, not sure what have been any outcomes as yet
- We are reviewing our internal practices and operations and planning for change; working
 in partnership with relevant external organisations where appropriate; and educating our
 community about sustainble practices.
- Local Government is essentially conservative in its outlook and moves slowly toward change. This Council is attempting to reduce photocopier use etc. However I am not aware of any major changes in direction.
- Sustainability working party.

Q3 – What are the barriers in moving local governments towards sustainability?

- Entrenched mindsets, lack of creative thinking, personal agendas, local politics that get in the way of the bigger picture.
- Leadership. As a democratic institution, consensus is required in local government in order to advance sustainability initiatives, therefore the quality of sustainable development is dependent on the interests, intentions and education of the decision makers in Council. As sustainability is a process of managing emerging complexity in society, decision makers need to be advanced far enough in their own abilities to manage complexity, to recognise the consequences of their decisions or indecisions. The current elected officials are not able to recognise complexity or the world as other people see it which includes research, forecasts or best practice from around the world in sustainability. The system of non-compulsary voting for electing officials to local government is responsible for the low quality of leadership in the council. Another factor resulting in poor leadership is the absence of need for any formal qualifications or experience that people are required to demonstrate for other leadership positions in business and society.
- People with little appreciation of the impact of what they do or significance of the actions that can be taken to limit such impacts.
- Myopia, Narrow-mindedness, selfishness- three monkeys syndrome= No realisation of consequences of actions. No acknowledgment of other perspectives, views...no-one is all knowing. Lack of vision and knowledge at higher levels, anti intellectual, and jaded or helplessness at lower levels
- Committment individually and collectively. The education and informing of the political decision makers and getting them on board is imprtant and is the key to any a sustainability goal.
- Many elected members (councillors) have for years not kept up to pace with changes and best practice in local government around the world and if any innovative or new projects

linked to sustainability comes up they are normally not inclined to support it. Resources (mainly staff resources) in the sustainability area are limited and efforts to address this again has been opposed by Council. In some areas staff might also be reluctant to adopt sustainability approaches as it is new/foreighn/different to what they have done over the past years - however, my feeling is that this position is changing at a staff level.

- lack of partnerships with other agencies and lack prioritisation of sustainability. Also lack of communication with the community to see what the community actually expects from the council sustainability wise. As well as providing information or knowledge to the community as to what the council does provide.
- The biggest barrier is cost many local governments find it hard to find the money to implement sustainable actions. More grant funding would assist with many council being able to overcome some of the financial barriers. Another common barrier is lack of education, awareness and really a lack of caring. This both within the community and within management and council outside of the environmental departments.
- Climate change deniers at executive level, attitudes towards resource use, lack of political will at state and federal level, costs (perceived).
- Lack of capacity to understand the depth of the concept. lack of ability to influence sustainability issues that impact
- A lack of interest from the community for local action.
- political, resources (staff and \$), alignment of both.
- The attitude of the upper tier eg the Councillors and exec team
- The slow and lumbering processes of local government, complied with the restrictions around communication between elected members, executive, staff and the community.
- Self imposed barriers.
- LGs are very economic focused. Sustainability needs to be incorprated into day to day activities and operations. It should not be something that is considered in isolation liker a separate project. Changes to existing processes are slow and difficult in LG. Needs leaders and champions and strong support from Executive and Elected Members.

Q4 - What are the opportunities within local government and sustainability?

- There are opportunities for local governments to work closely with their local communities to education people, assist them in being more sustainable and setting a good example. There are also opportunities for local governments to work with schools and local businesses.
- Local governments are able to customise sustainability initiatives to their area. So far, large, centralised systems in economics, energy, water, waste and other 'soft' and 'hard' infrastructure have produced britle, inflexible systems that can't adapt to changing circumstance and are prone to collapse. Local government can (could) customise small, adaptable systems to the particular needs of the environment and the communities within it to better produce resilience.

- There are many opportunities for local governments to sponsor and promote sustainable community initiatives better cycle use, fewer cars, lower energy consumption, reduced water consumption, gray water use, low water gardens, more trees for carbon sequestration, recycling, lower waste production
- Immense on a local level, and just enough to make a difference beyond that. Influence expand from Council operations and administration and assets, education, support for the community and beyond its boundaries from positive outcomes from activities within the boundaries to setting an example for other LGAs etc
- Local Government potentially has the resources and is in a position to show leadership by taking the community on the journey.
- There are many local government are at the coalface with the community. I see the most important contributions from local government in the area of land use and transport planning and then very importantly programmes to support community sustainability projects and education.
- being linked to all aspects of the city being businesses, residents, schools, natureal landscapes, development, recreation, planning and so on. There are many oportunities to implement sustainable initiatives through all of these pathways. The council has a lot of influence in many areas within the city/community this could include a greater sustainability influence.
- I think that a lot of local governments want to make a change and implement more actions and projects around sustainability it's more a matter of funding to be able to do so. The greatest oportunity would be to combine local governments to pool funding to roll out regional sustainability programs. I think a lot of local governments have good working relationships and the combined working force and support would assist greatly in achieving greater results.
- Close connection with the community to promote sustainability, local planning policies, leadership -lead by example
- Tighter feedback loops between government and the citizenry. Local issues have greater relevance and connection to local people.
- To start grassroots sustainable activities. To make sustainability personally relevant
- co-ordination of systems and process, staff and councillors, would be an enviable, harmonious environment to be in
- Development of a more sustainable transport use ,encouragement of more effective recycling, use of alternate products such as recycled timber etc all of above witin the organisation and the community, promotion of biodiversity
- The ability to lead by example visible sustainability practices can set the precedent for the community to follow.
- Council operated bus transport service for employees who live locally. Subsidised public transport costs. Subsidised bicyle and or scooter purchases or running costs. Subsidised car pooling to encourage relatively sustainable commuting. encourage car pooling in Council owned vehicles.

• LG could develop processes to incorprate sustainability into decision making and project development, e.g. OCM reports, project development and management strategies, Council events, planning and development assessments etc.

Q5. What do you find most challenging about working in local government?

- Bureaucratic processes, stifling archaic mindsets, lack of focused action, lack of understanding and respect from local residents, egos within the political arena, local politics and generally an environment that does not encourage people to take a chance and be innovative (too much of local government is about ass covering)
- There are long time lines for decisions to be made and action to be taken. Also, the advice of educated professionals can be ignored by decision makers to the detriment of the community.
- lack of resources to implement initiatives, poor strategic planning and the very limited capacity of elected members to have any meaningful role in establishing a strategic direction for local government. Public apathy with relation to the significance of local government and the opportunities which local Govt represents.
- The processes and the time for things to happen. Council, beyond, not only in the LG I work in.
- The people and the Stauatutory Acts/ Legislation can be limiting as it can be prescriptive rather than descriptive.
- The barriers that may exist on different levels in decision making. Currently it is predominantly at the council/elected members levels, but it could also be an issue at the executive and management level in certain cases. Furthermore; when it comes to implementation it might also be a reluctance on staff level to implement.
- Things are sometimes slow.
- Local government has a lot of red tape associated with approvals that often suffocate projects before they have a chance to get off the ground. Also with such lengthy approval processes and the number of people that the approvals goes through, there is a lot of opportunity to argue the negatives with little focus left on the positives.
- Bureaucracy takes a long time for change. Older generations at top level are resistant. Also across the organisation there is a still a challenge when promotign environmental initiatives.
- The subordinate nature of LG to the State
- The layers of bullshit.
- doing lots with less. the community's \$ are always to be spent wisely.
- Having great ideas squashed....:(
- Being stuck in silo and trying to establish effective communications with those whose cooperation is required to get things done.
- Challenge is a positive and negative concept. I gain fulfillment from improving infrastructure and from giving a personal service and explanation of Council decisions to customers.

• Competing priorities, e.g. community expectations vs what is right and what is realistically achievable. Increases in LG's roles - devolution from State agencies and new policies and processes to address community expectations and liability issues can significantly increase staff workloads.

Q6 - How much of your Self can you bring to your work? How much of you do you have to leave at home?

- Not a great deal, I leave much of my self at home where I feel like I achieve much more for humanity (through contributions over the internet) than going through bureaucratic processes (shuffling paper around my desk).
- I feel very comfortable to put my self into my work. I feel an obligation to do what I can to enhance sustainability because of the training and qualifications I have even though at times I would rather just say nothing (because it is easier).
- I bring a lot of self to work, and I think it is the self in all of us that can make the difference. Without the self the poor governance effected by others would never be countered.
- On a scale of 1-100, probably 65. no space for all of Self. Like everyone, I am multidimensional and I don't think I need to bring anymore than that.
- Depends on the friends at work you cultivate and I have good friends who sustain me and are nurturing. Kahlil Gibran said "work is love made visible, if you cannot work with love but only with distaste, it is better that you should leave your work and take alms of those who work with joy"" make of that what you will.
- Most of me. Just the way I relate to the work I do; however, this will differ from person to person and dependent on their past experiences.
- I am very lucky to work in an organisation where the environmental department is very close and supportive. We are all about to be ourselves and express our feelings, thoughts and frustrations freely (within our department). When dealing with other departments, organisations etc we take on a more professional approach which at times required our personal thoughts to be suppressed to make sure that work is effectively carried out with other stakeholders.
- I can bring my own ideas however it is always a compromise. Findign how far you can go until you reach an invisable barrier is the challenge. I bring all of my Self but then have to compromise to get the best outcome.
- Probably about half. Under the concept of professionalism frank expressions of emotions is subtly discouraged.
- All of myself, the notion of a true or genuine self versus an inauthentic self is problematic
 and harks to an academic preoccupation with existentialism. I believe in mutliple self
 constructions
- i am just as much an accountant at home as I am at work. just ask my wife!!
- I work to support my family not because I haven't anyting better to do, I would prefer to not always be here
- I pretty much live my work.

- Generally my work environment is relaxed, flexible and positive enough so that I leave little if any of myself at home
- I try to completely separate work and family. At work, I am 100% committed and focused on my job and at home I try not to think about work, I am a mother and a wife first and foremost.

Q7- What keeps you at work?

- Financial goals, would not be in my current role without the financial incentive. The workplace is not conducive to outcome focused action (it is actually process focused action) making the work boring and uninteresting.
- The hope that new leadership will come in to the City of Canning and create an amazing place (before or after global collapse). I come to work because I believe a sustainable world is a better, more prosperous and happier world than the current one.
- I enjoy the reward of providing services to the community, the comradeship of my piers and it also puts food on my table and a roof over my head.
- Can't live with the alternative of doing nothing. Making a difference. Absolutely not through hope or faith, but pushing for gains forward.
- The people ... and the potential to do good, to influence and make a difference with the help of others.
- The difference that the programmes I work on can make for the benefit of the whole community.
- Satisfaction of acheiving something and contributing.

Appendix C - Investigation at the City of Canning

Perth Now

Western Australia

Mayor calls for Canning corruption inquiry

- . From: AAP
- February 09, 2012 5:36PM
- 24 comments

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City of Canning mayor Joe Delle Donne has called for an inquiry into his council. Picture: Daniel Wilkins Source: PerthNow

THE Mayor of the City of Canning has asked the Western Australian government to launch a corruption inquiry into his own council.

Local Government Minister John Castrilli said this afternoon that he had ordered the inquiry `into matters related to the governance of the City of Canning," after a request from mayor Joe Delle Donne.

Mr Delle Donne had asked the state government to initiate a review of "matters associated with staffing issues and administration."

"The information I received since that request led me to the view an authorised inquiry is necessary," Mr Castrilli said.

The investigation, which is expected to take six months, will look at:

- Governance by the elected council and relationship with executive staff
- Human resources recruitment processes
- Procurement of goods and services, including tender processes and contract management

- General performance

- "The authorised inquiry ... will thoroughly examine matters related to these issues and any other matters the investigative team discovers during its inquiry," Mr Castrilli said.
- "I have initiated this inquiry to ensure the City of Canning is operating in the best interests of its community."

The Canning City inquiry comes after a Crime and Corruption Commission investigation into the Stirling City Council.

One witness took his own life the day before giving evidence to that inquiry in September 2010, while another man receiving a suspended sentence in November for his role in \$135,000 worth of false procurements.

Mr Castrilli's office said it could not elaborate further on the Canning City inquiry at this time.

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Appendix D - Participant Observation Notes

Available upon request.