NEW DIRECTIONS FOR SOCIAL WELLBEING THROUGH EXTENDING DELIBERATIVE DEMOCRACY TO ENHANCE REPRESENTATION

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1.   ABSTRACT

This paper discusses a project funded by an Australian Research Council Linkage Project with the South Australian Department of Health, Flinders University, University of South Australia and Neporendi Forum Inc, an Aboriginal NGO. The co-researchers (comprising academics across a range of disciplines, service users and providers) address wellbeing in terms of their lived experiences of what works, why and how. The outcome is the development of prototype software that is co-owned and designed by the partners. We chose one of the most difficult problems in Australian context, namely social exclusion, unemployment, health, housing and addictions (gambling, alcohol and other drugs) with the hope that if we could create an interactive policy tool for a 'complex wicked problem' with many interrelated variables and with a strong value base (see Rittel et al 1973), we would be able to adapt the model to other less complex problems to inform policy on the basis of evidence of what works, why and how and on the basis of 'if then' scenarios to address the common good.

User-centric design is based on telling narratives and exploring perceived ontologies or meanings. The next step is to analyze the discourses for patterns (Christakis and Bausch 2006 and Van Gigch 1991, 2003 on meta modelling). Making sense of perceptions is through identification of patterns and making meaning/sense of the patterns based on weighting the choices. The number of times particular themes were raised or particular service choices made equals a weighting. The approach demonstrates the ability of people to design the content of the software and thus to engage in participatory design, e-governance and e-democracy which could be used to extend democracy to the marginalized and socially excluded. In the Australian context these include Aboriginal Australians, refugees and young people without the vote who will have to live with the decisions in the future. The current research is only with Aboriginal stakeholders aged 18 and above and it needs to be extended in the next phase to include younger Australians. The software can be viewed at: http://www.socsci.flinders.edu.au/av/pathways/binder.php

2. INTRODUCTION: THE LOCATION OF THE PROJECT WITHIN A PROGRAM OF RESEARCH

2.1 Wicked problems: the social inclusion challenge for democracy and governance

'Wicked problems' comprise diverse, multiple variables and have a value basis (see Rittel and Webber, 1973 Flood and Carson, 1998, McIntyre-Mills 2006, 2007, 2008 forthcoming). Addressing complex wicked problems,[2] of climate change, epidemics, security and pollution is a challenge for today's world (see Nussbaum 2006, Singer, 2002 Gore, 2007, Stern, 2007), because the problems straddle conceptual and spatial boundaries, but they also perceived very differently by people with diverse values. The global commons is under threat [3]and we need to find a way to address the challenges in such a way that we can ensure a sustainable future whilst balancing collective interests, rights and responsibilities with individual concerns, rights and responsibilities. (Held et al 1999, 2005, McIntyre-Mills et al 2006, Christakis and Bausch, 2006). Wellbeing cannot be achieved through compartmentalized thinking and practice (Fougere, 2007). To sum up, the challenge is a) to balance both centralised control to preserve the global commons and b) to involve people in policy making so that they feel engaged and committed to the policy. Seeing the connections across sustainable futures and wellbeing was understood clearly by Gro Brundtland (1987) who made the conceptual policy connection across health, sustainable development and peace. This is vital. Some leaders can think only of social or environmental justice – not both. Al Gore has made a vital contribution to understanding the links across carbon emissions and climate change in his documentary ' An Inconvenient Truth' and his recent book ' Assault on Reason' he made a case for the importance of civil society and participation to keep the market and the state honest. He stressed that participation in active debates helps to mobilise change and to sustain democracy. [4]

Furthermore, the move to more integrated approaches to governance has implications for federal–state-local relations in Australia and international relations. The decentralisation of *policy making* and accountability checks by the people will however need to be married with *centralised controls* to ensure that the common good is addressed. The challenge for governance is to understand connections across social, cultural, political, economic and environmental challenges. This means being able to hold in mind more than 'one big idea at a time' (Jones, 1990). A number of challenges face democracy and governance, these include:

- Increasingly diverse democracies in which citizens can be disengaged and passive, even if they choose to vote or are compelled by law to vote. The scale of the democracy and the distance that the people feel between themselves and the elected representatives can lead to a sense of being alienated from the institutions of government and the process of governance.
- Finding ways to enhance effective participation in deliberating policy options with local communities to establish their perceptions of need and their perceptions of what works, why and how. This is needed to inform policy makers and enable a better match of responses to needs. The challenge is that participation leads to many diverse ideas that need to be mapped and assessed in terms of 'if then' scenarios, before determining policy and governance decisions.

The purpose of this research is to explore the relationships with service users and providers in the public and private sectors, in order to enhance the policy performance match between agents and principals (Warren, 1999). Thus it :

- explores the relationships across variables more deeply with service users,
- provides a better understanding of what works, why and how,
- informs policy decisions.

Health, homelessness, poverty, alcohol misuse, gambling, family violence, unemployment, lack of skills and lack of social inclusion are the presenting problems that undermine Aboriginal wellbeing of service users. Service users are the designers of the research project on what 'works, why and how'. The case is made that by extending participation and working across sectors, wellbeing can be promoted. The research program of which the project is a part, addressed the following questions and hypothesis:

- How can individualism and collectivism be addressed in such a way that resources are perceived to be used effectively and efficiently by those who provide them and those who use them?

- Is it possible to develop ethical participatory design, democracy and governance informed by the democratic principle of subsidiarity, namely that decisions need to be taken at the lowest level possible and Ashby's (1956) Rule of Requisite Variety, namely that the complexity of a decision needs to be matched by the complexity of the decision makers? This is to ensure that the design fits the perceived needs of those who will have to live with the policy decisions.

The research spans three projects and includes namely:

1. A pilot test of trans national discursive democracy supported by information technology that allows for considering *if then* scenarios and then voting on the different options (Christakis and Bausch in McIntyre-Mills et al 2006 and 2008, forthcoming provides potential for transboundary governance).

2 An exploration of *Ethics, Boundaries and Sustainable Futures* (forthcoming 2008 as a special edition of Systems Research and Behavioural Science, Wiley), implications for democracy and ethics based on a critical and systemic approach that argues for ensuring that decisions are made based on expanded pragmatism (volumes 1-3 of the C.West Churchman Series). This means considering the consequences for self-other and the environment in this generation and the next. This approach helps to build the capability of humanity to think in terms of more than 'one big idea at a time' (to cite Barry Jones, 1990) which is essential for human rights and sustainable energy futures (Odum, 1996) that do not use vast amounts of the planet to sustain the lifestyles of the few. The Brundtland report *"Our Common Future"* (1987:20) highlights the need to work across boundaries.[5]

3. ARC linkage grant with an Aboriginal NGO and the Dept of Health to test the principle of subsidiarity and Ashby's Rule by testing out the extent to matching process can be enhanced by ensuring that the complexity of the decisions on what works why and how is matched by the complexity of the decision makers. We test[6] whether matching a response can alleviate the problem of an alienated and ill served community who vote, but feel that their diverse perceptions and needs are not addressed sufficiently by representative government and generic service delivery.[7] The process draws on the wisdom and tacit knowledge of people who are at the receiving end of policy and ensuring that they have a say in shaping the direction for the future and matching their needs with services and resources with this generation of life and the next in mind. This conclusion is the starting point for this research into public ethics in a global context where national boundaries need to be reconsidered to take into account regional and global sustainability. It tests out a how to process designed by service users and providers who wish to address an intractable problem of health, housing and social inclusion of Aboriginal Australians (Papers presented to ISSS and ISA, 2006, 2008, forthcoming Nova Science 2008).

Integrated approaches, based on working across organizations to support wellbeing are described by New Zealand Public Health as "an idea whose time has come" in opposition to efficiency approaches that have 'undermined social capital' (Gregory 1999 cited in Fougere 2007:1-2).This has implications for inter and intra governmental government and the move away from compartmentalised thinking and practice. Better, integrated governance requires overcoming 'mind traps' (1968, Vickers, 1983) and compartmentalised approaches to both thinking and practice. The point I want to make in this paper is that it is possible to do things differently and that we can make a difference to democracy and governance by enhancing the ability of people to engage actively in shaping sustainable policy, provided they are encouraged to think critically and systemically about the future. This is a vital caveat. We need to change the way we think about society, economics and the environment. According to Dr. Neil Hamilton[8], Director, WWF International Arctic Programme, within the next 5 years the polar ice cap is likely to melt, thus releasing more carbon into the atmosphere and raising the sea level by at least seven metres. The way forward, he stressed, is for us to reconceptualise the market and to reduce the emphasis on economic profit in the interests of wellbeing of the planet. He stressed that the demise of polar bears needs to be understood as relevant to urbanites, as they indicate the fragility of the Arctic. Our future and that of our grandchildren is linked with preventing the melting of ice as it impacts systemically on the future of the planet. If we act now, the cost will be lower than if we wait, until there are further catastrophes. He cites the Stern Review (2007) and argues that changes could be as low as 1% of the GDP. The opportunity costs of not acting are the loss of habitat and species:

"Climate change threatens the basic elements of life for people around the world- access to water, food, health, and use of land and the environment. On current trends, average global temperatures could rise 2-3 degrees Celsius with the next fifty years or so, leading to many severe impacts, often mediated by water, including more frequent droughts and floods….ecosystems will be particularly vulnerable to climate change…2000 million more people may become permanently displaced due to rising sea levels, heavier

floods and more intense droughts ….with one study estimating that around 15-40% of species face extinction with 2 degrees C of warming" (Stern 2007: 65).

3. THEORETICAL APPROACH

The paper is based on research[9] that makes the case for steering from above (based on global commons) and below (based on the principle of subsidiarity and Ashby's (1956) Rule of Requisite Variety (this is core to social cybernetics. It means very simply that complex decisions need to be made in such a way that the complexity of the decision is matched by the complexity of the decision makers). Subsidiarity and engagement enhance better matches between service needs and outcomes. They provide a means to address values and thus provide a process for engaging with complex, wicked problems.

How should we govern? How should democracy be enhanced?[10]Options and practical implications for democracy and governance policy (adapted from Kjaer, 2004 include:

a) Isolationism - Nationalist realist stances based on the notion of separate interests and separate world views- competition and conflict prevail.

b) Multilateralism based on diverse pluralist ideas based on bargaining despite differences. This requires communication across conceptual and spatial boundaries and it requires capability to think critically and analytically and to engage in dialogue. It could support multilateralism based on federalist regions spanning national boundaries based on commensurable shared commons, informed by subsidiarity and the notion of Ashby's Rule of Requisite Variety and an understanding of our common fate as 'one world'. Balancing individualism and collectivism requires the capability to think through 'if-then' scenarios so as to develop an understanding of shared concerns about rationality and the extent to which democracy is failing (thus addressing the concerns raised by Gore 2007 and Rosenberg 2002). Participation based on narratives and the use of 'soft systems maps'(Checkland and Scholes,1990) or 'picturing' enables not merely ownership of ideas, but enables complex variables relationships to be described and the relationships across the variables can be explained and mapped out by service users. Rhodes argues that governance needs to restore social and state responsibility to counterbalance the market or to shape the market to address social and environmental concerns (Rhodes 2000 in Pierre 2000: 54). Held et al (1999: 114) argue that the EU provides a federalist approach to decision making which could be worth considering more widely as a means to protect the commons regionally. The Maastricht Treaty of 1991:

> ".. agreed …not only to extend the scope of the economic and monetary union, but also to extend the framework of political integration to other spheres. In particular, it significantly advances the notion of EU citizenship: every national citizen of a member country of the EU is now also a citizen of the Union with a right to travel and reside anywhere within the EU and the right to vote and contest political office in the country of their residence. Accordingly, the importance of old political borders further declines and the process of deterritorialisation continues. Freedom of movement and the right to political participation wherever one resides challenges a traditional basis of loyalty to a single state (see Khan, 1996). If the Maastricht treaty were to be fully implemented , along with the social terms and conditions of the Amsterdam treaty (concerned to outlaw discrimination based on gender , race, religion, nationality, among other categories), the member states would have taken several major steps towards becoming a highly integrated supranational political association ….)."

In large diverse democracies it makes sense to ensure that policies are guided by those who are to be affected by them. Consultation is inadequate. Ideas are lost en route, because of power differences and the ability of some to set the agenda at the expense of others. Socio-cybernetics systems (based on informatics research) enables on going e-democracy and e-governance. In small homogenous democracies voting and discursive policy setting was possible. Now in large heterogenous democracies this can be facilitated to enable ongoing matching of perceived needs and service outcomes. Steering from below, above and sideways requires management based on informatics pathways. Networks are not necessarily democratic, but they can be governed by logic that finds root ideas and weights commonly selected options. This requires hierarchical sequencing. Rhodes (2000) draws on the literature on governance[11] and defines his approach to governance as being in response to the impact of New

Public Management and 'contracting out' approach under Thatcher and Reagan. He argues that this is the background to divesting responsibility from the state. The difference between NPM and the governance drawing on policy networks is value based and summed up by Kickert et al (1999), below:

	NPM	Governance in policy networks
Problem	Cost effectiveness	Interdependence
Main orientation	Intra organisational	Interorganisational
Main concern /Public Private dimension	Administrative control, business like	Facilitating co-governance/specific role for government

Table 1: New Public Management versus Governance in Policy Networks Source: Kickert et al 1999:40

The concepts employed in the research are networks for systemic governance and accountability based on considering 'if then' scenarios to build a sense of the implications for self, others and the environment. (Adapted from C.West Churchman's works 1982) and thus a sense of expanded pragmatism (see McIntyre-Mills et al 2006a, c). [12] Attempts to sum up the changes have been made by (Chambers 1997: 189) as the shift from: "Top down, blue print, measurement and standardization" to "bottom up, learning process, judgement and diversity." He contrasts a "one size fits all approach" with a "basket of options approach". Deepening democracy within and between nation states can be achieved through Systemic Governance (McIntyre-Mills et al 2006). This is a response to globalisation and the changed notion of conceptual and spatial boundaries. Systemic governance is aimed at addressing conceptual and spatial boundaries by applying a design of inquiring systems approach based on questioning and applying questions about what is the case and what ought to be the case with those who are to be affected by decisions. This is a form of critical heuristics based on the work of West Churchman (1979) and those influenced by his work, such as Werner Ulrich (1983) and Bela Banathy (1996).

• Simple categories	• Complex , overlapping domains
• Few variables	• Many variables
• Linear cause and effect	• Multiple feedback loops guide selection of options
• Experts analyze information and make decisions	• Transdisciplinary and cross cultural decisions bearing in mind the consequences for different stakeholders

Table 2: Systemic Governance Source: adapted from Banathy, 1996: 128,133

4.   RATIONALE FOR PRAXIS

The discussion will be limited to the third project within the research program. The argument that underpinned the project was that if a complex, intractable problem can be addressed in such a way that people are empowered as designers of the content of the software (that updates and grows as it is used and which enables people to make more informed choices)[13], then we would have created a useful means to enhance democracy and governance. The aim is to ensure that a) the service users build the capacity of the service providers, not the other way around (to ensure a better match between perceived needs and service outcomes). b) to enable social inclusion (building on Carson et al 2007: 113, Bourdieu 1986 and a critical reading of Putnam 1995). c) connecting with others who are from the same background (bonding) and making connections with those who are different (bridging) and creating links horizontally and vertically to bring about change strategically. The value of matching is enmeshed in the process of engaging those who have lived experience in social life. Centralisation as a governance response can be combined with decentralisation (in the sense of deconcentration) as a democratic response based on participation to enhance attachment, mobilisation, matching and ensuring that decisions are made based contextual (McIntyre-Mills et al 2008, McIntyre-Mills , 2008,forthcoming). The approach is based on complementary combinations of theory and methodologies

matched to areas of concern defined by identifying all the stakeholders. In this context service users and service providers work with (rather than within interpretive, emancipatory approaches) by 'testing out' suitable matches with stakeholders who are to be affected by policy or practice. The architecture of the knowledge base was designed to aid understanding of the perceptions of both service users and providers. As detailed in McIntyre-Mills 2007, 2008, forthcoming) the research process involved:

- Design of the content of the software through conversations, soft system mapping and weighting the number of times certain factors are closely related to each other.
- Using informatics to map pathways based on a generic computing algorithm.

Stories from co-researchers (both service users and providers) reveal domains of wellbeing described in terms of a continuum of overlapping domains with components made up of variables that need to be considered.

The data *from service users* has produced very specific recommendations about a) meeting safety concerns that go beyond just physical housing and b) the importance of social networks to support those who have complex needs. c) Throughout the very detailed stories, supported by pictures and vignettes, the informants have stressed the value of respectful interactions from service providers.

The 'in basket metaphor' refers to the aspects that people perceive they need to enhance wellbeing. The 'out basket' metaphor refers to aspects they need to discard to enhance wellbeing. 'Barriers' refer to aspects that prevent wellbeing and 'turning points' refer to positive and negative events. The data organised within the proformas highlighted the themes and the relationships between them:
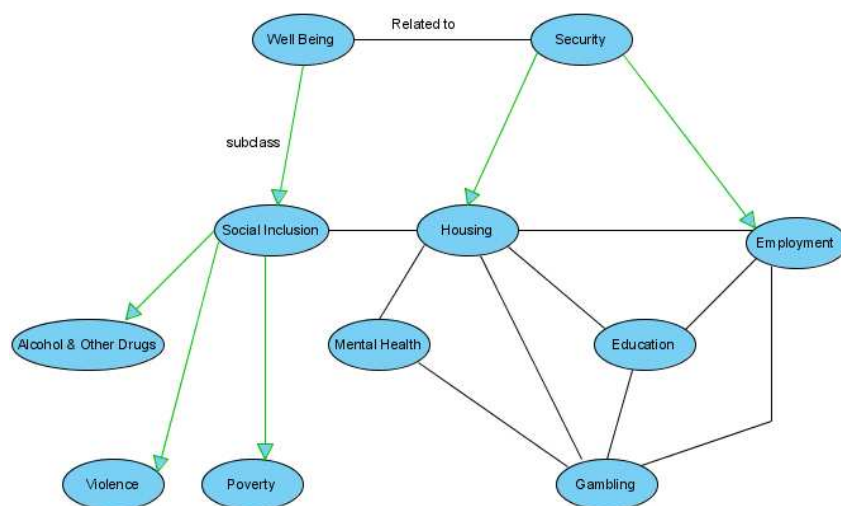

Figure 1 Graphical structure of issues and their inter-relationships (De Vries in McIntyre-Mills et al 2006: 295)

5.   THE PROCESS

Once a preliminary analysis of the confidential, de-identified data was undertaken a series of iterative workshops were held to explore the map of factors with the participants to find the shortest pathway approach to achieving wellbeing outcomes. But the pathways are based on the perceived lived experiences of the service users as to what constitutes successful, integrated outcomes. The interactive modeling process could support matching services to need as long as it is seen as an aid to decision making and an aid to e-governance- not as a means to predict and control. It could also be used to enable accountability by making the pathways of choices transparent to users and providers.

The model of the process is for the service user to tell their story to a case worker who *listens and who builds rapport over time* and then to choose which of 3 basic stories is closest to their own. They then adapt that story in detail to their own by adding factors to the map. Thus it grows to accommodate their needs. The most positive

aspects were considered to be its potential for creativity, innovation and social inclusion. Mapping ideas conceptually is important for making sense of one's life. This is important because of Miller's conjecture (1956) that human beings cannot hold more than a few variables in mind at a time, they cannot make all the connections across them. Open dynamic models can help to make sense of the issues which they face. These patterns are drawn from analysing the stories of women and men. Wellbeing can be seen as having the following dimensions, as detailed below:
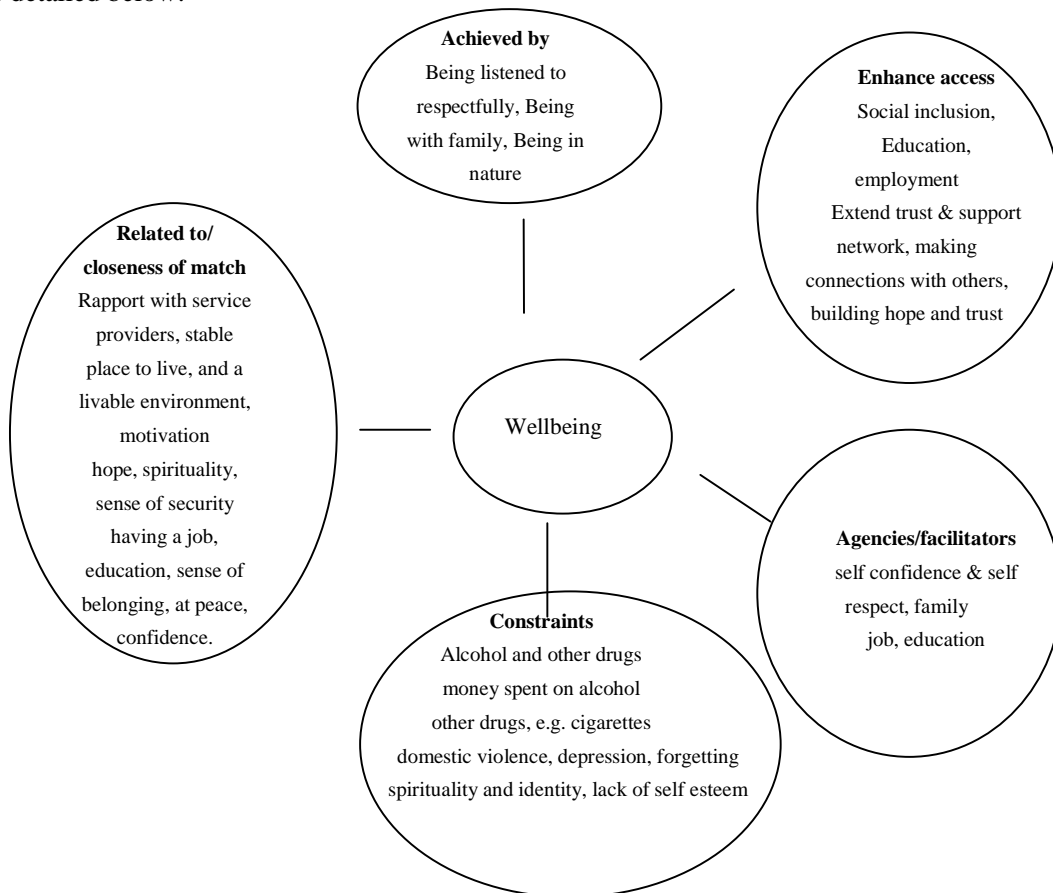

Figure.2 Map for the proforma (see McIntyre-Mills et al 2006c, 2007c and 2008 forthcoming

The words of the informants were used to summarise each theme. Typologies represent typical (but **not fixed**) overlapping **domains**. Changes from one domain to another were summarised as 6 dimensions (in baskets, out baskets, barriers, turning points and services that worked for them). As detailed elsewhere (McIntyre-Mills 2007c, 2008 forthcoming), the entry point for the user is as follows:

- Step one, please tell narrative. Then see which of the stories (based on the typologies) is closest to your own story. Select a story and explore and discuss with the service provider which story resonates and why.
- Add more information as data to enrich the knowledge base and to help the next service user.
- Walk through the interconnected and overlapping pathways and collect items for basket (based on the drawings and stories) and select items to discard (based on the drawings and stories).
- Identify the barriers on the pathway and give them a name.

Based on an analysis of the data, wellbeing for service users can be understood as a state that can be interpreted in many ways, it has many domains. For some it is:

1. *'Being employed'* and 'able to help others', because their 'life is in harmony';
2. *'Rebuilding';*
3. *'Making a transition'* by using a combination of services[14] ;
4. 'Keeping it together' after leaving a violent situation and trying to control drug and alcohol misuse – use cigarettes extensively;
5. *'Making the break' from* an unsatisfactory way of life;
6. *'Not coping'* and unable to leave or repeatedly returning to a violent situation.

Instead of using a flat continuum from 1-5/6 , we modelled a series of overlapping spirals spanning holistic, integrated service delivery to fragmented and compartmentalised delivery of services as options with many variants in between (See Downes 2006: 36). Those who are most in need require the most integrated services and the most participation in decision making. Those who are least in need require the least integrated services and are able to draw together services for themselves and act as facilitators for others, volunteers in service delivery or act as service providers for others. The challenge is to map the turning points for the a) better or b) worse that lead to changes in life and to c) identify the barriers from the point of view of both service providers and users. The metaphor of baskets is based on the women's metaphor of 'weaving together strands of meaning' (McIntyre-Mills 2006, 2007).
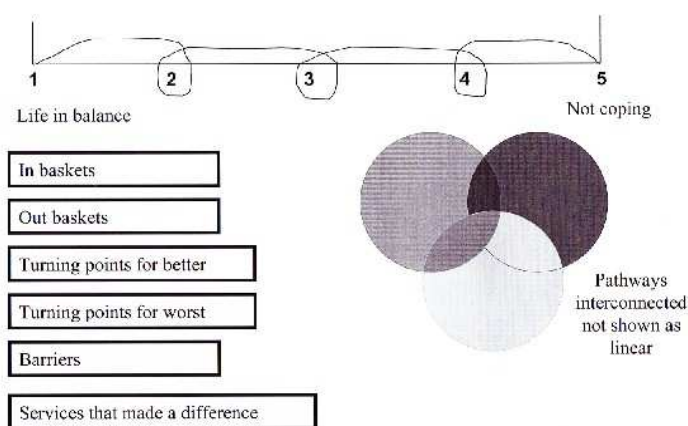
Figure -3 Healing Pathways in McIntyre-Mills et al 2006:287.

These patterns are drawn from analysing the stories of women and men. The overarching architecture for the knowledge base in this model as illustrated below:
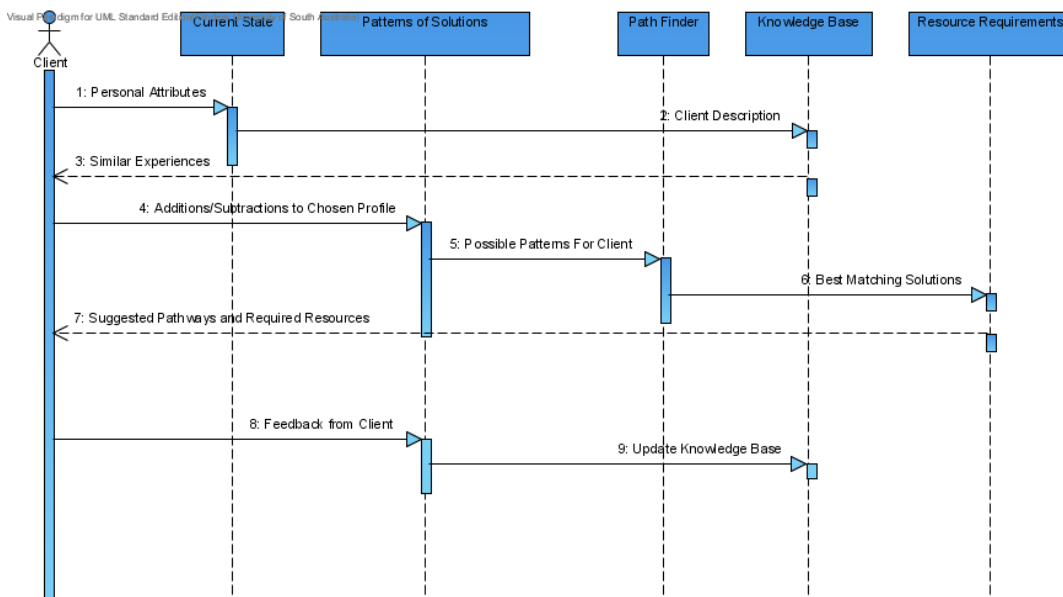
Figure 4 Sequence Diagram of System, De Vries 2006 (WIP), 2008[15].

Combinations of 5 axial factors appear important at this stage of the analysis: Home safety, Health (physical, mental and spiritual), Purpose (Formal Employment or preparation for employment /profession employment/CDEP / training / education), Connection/belonging (people and place), volunteering, community leadership and cultural spirituality, Self respect and confidence, feeling good about oneself which is linked with being able to access services, work, study, maintain a stable home for children. The inference from the analysis of the data so far is that by providing a combination of factors (safe housing, meeting basic physical needs then accessing education and employment) wellbeing becomes possible. To overcome barriers in accessing services, it is vital that service providers in mainstream and specific services are welcoming to ensure that the confidence of service users is built. The role played by holistic or (one –stop shop outreach) is important in this context as it enables rapport and relationships to be formed. Also a quickly negotiated pathway capable of dealing with 5-7 variables to ensure that the above mentioned axial themes are addressed effectively and efficiently would enable better outcomes.

6.   THE FINDINGS

The data show multiple non linear relationships across:

- Socio-economic disadvantage that cause discrimination in housing options and prevents access to a home.
- The lack of security provided by a home base equipped with electricity, white goods and essential furniture from which to get a job, training or education.
- A sense of connection with a supportive wider community supports stable relationships. A home, sense of place is a necessary, but insufficient dimension of wellbeing.
- Domestic violence results in a lack of confidence and a sense of hopelessness.
- Hopelessness and a lack of confidence (as a result of their prior experiences) lead to women accepting domestic violence, because they do not know how to escape from it.

Context is all important to the design as the perceptions expressed are based on specific experiences which will be developed into conditional scenarios to guide action.[16]

The computer program learns as different users contribute and this is achieved by positioning the factors (that the service users perceive to be important) as synonyms in response to contextual scenarios by case workers in the domains section of the software. Wellbeing is a complex and contextual outcome that must reflect individual variance. The approach is critical, links theory and practice is contextual and systemic.[17] We have concluded, however that participating in an active, constructive way in designing alternatives appears to be important as 'a

means and an end' to support wellbeing. Being 'shamed' by service providers was discussed as being one of the greatest barriers (on this also see Atkinson,2002) to healing as it creates a sense of victimhood and leads to mistrust. If the dynamics of social interactions make you feel disrespected, it undermines opportunities to build connections with others and establish pathways to wellbeing by thinking about alternative ways of living. The process of doing 'mental walk throughs' and imagining a different way of being, can be a very useful first step towards a new life[18]. It can help to 'rewire the brain' to think positively and can help to reduce the negative impacts experienced by people. The emotions felt by those who are turned away from service providers were expressed graphically as unfriendly interactions with intimidating, unsmiling service providers. What works, namely a circle of women talking as equals. This is supported by the work of Ainsworth and Bowlby (1991), Brewer and Hewstone (2004), Atkinson (2002) as well as Greenfield (2000) all of whom stress the importance of engagement that builds linkages across diverse groups , based on trust. Unfortunately negative racist, sexist communications have an opposite affect which is why supportive networks are vital for wellbeing.

The data from two men's focus groups and from two combined focus groups with men and women service users stress the importance of not only respectful communication and interactions, but warmth and friendliness. Borradori, Habermas and Derrida (2003) take up this issue and stress the implications of the quality of communication for democracy. Respect is not enough, warmth and the quality of the engagement matters. This requires building rapport through "two-way communication". Gore (2007) argues that one-way communication raises many problems for democracy and the way in which two-way communication is vital for building relationships and creating attachments between people at the individual level and also at the societal level[19].

"As Miller and Ferroggiaro (1996) have pointed out 'respect and self respect are central components of an enlarged concept of citizenship…Respect affects how we are treated , what help from others is likely, what economic arrangements others are willing to engage in ..., when reciprocity is to be expected'. Respect acts as a resource for individuals, and should be considered a component of the norms of reciprocity, trust, and social obligation that are essential for minimising the risks of poor physical, psychological, or social health (Aday1994)[20]. Indeed, mutual respect and the avoidance of inflicting humiliation on people is the central concept of Margalit's 'decent society' (Margalit 1996). …honour and shame are socially crucial to human relations and may often become issues of life and death has long been recognised…." (Wilkinson 1998: 594).

Wellbeing is a perception of quality of life that spans a number of interrelated factors, but it is underpinned by meeting not only basic needs but by being involved in one's community and having a sense that one is able to influence one's social environment . The viewpoints of service users /members of the public form an integral part of policy making to achieve a perceived sense of wellbeing. Wellbeing is more than health services. It includes interventions ranging from respectful engagement with service providers, flying the Aboriginal flag and engaging with supportive and friendly mentors at nunga lunches, to name just a few examples. Wellbeing is about 'being listened to' and includes 'a sense of belonging to the community and the land'. The interventions to enhance wellbeing and social inclusion are not specifically health oriented, they could be related to the environment, the community, to physical and mental health, education, employment and inclusion in decision making at the local level. The following are dimensions of wellbeing.

Dimensions of wellbeing	Indicators
Physical health	Safe housing (free of violence) in a safe community, regular meals, household goods to support wellbeing (stove, fridge and washing machine, furniture), clothing, dental health and physical health.
Mental health	Good interpersonal skills, a sense of respect and belonging , trust in a network of people
Socio –cultural	Routine roles to maintain a household and connections with a community Access services such as health and education
Political	Engaged in decision making outside the private sphere, Sense of rights and responsibilities
Economic	Access to employment and Learning literacy, numeracy and computer skills and confidence.
Environmental and spiritual	Connections with 'country' and connection with natural surroundings that support spiritual wellbeing

Table 3: Indicators and Dimensions of wellbeing

5. AN EVALUATION

 "Haraway rightly urges women and men, at all levels and walks of life, become better educated about and involved with technical developments, rather than being passive consumers or unthinking opponents of them." (Zimmerman 1994: 370)

    An evaluation of software designed in partnership with an Aboriginal NGO and the South Australian Department of Health and the Australian Research Council was held on the 12 February, 2008 at Flinders University entitled " User-centric Design: Pathways to Wellbeing". This was a timely date, just prior to the apology made by Prime Minister Rudd for the past injustices to Aboriginal people. The workshop was attended by Aboriginal and non Aboriginal health service providers and academics. The most positive aspects were considered to be its potential for creativity, innovation and social inclusion. The next step is to find a way to find finding to develop the generic prototype and to find ways to generalise the software to other areas such as service delivery to local government or matching the needs of diverse interests within regional areas. This would involve working within and across both conceptual and spatial (including organisational) boundaries. This is a big step and needs the support of interested groups to assist us with the process of approaching both public and selected private sector funders. We have successful modelled a conversation and pathways to match choices, interventions and services to perceived need spanning social, cultural, political, economic and environmental concerns. A key policy finding is that the pathways cluster in such a way that they demonstrate that those whose lives are 'in chaos' need one stop shop holistic approaches that honour cultural diversity. Those who are keeping it together are assisted through mentors and supportive service providers who meet in socially friendly settings and those who are coping can make use of mainstreamed generic services. Many of those whose lives are in chaos and are overwhelmed find that they **cannot** cope **unless** they are assisted to find pathways. Thus we suggest that mainstreaming software that enables choices and matches is essential, rather than a one size fits all approach. We need to continue to test the program to establish if it enables greater self knowledge and learning from others and better decisions, based on pattern recognition that could also help to make sense of the trauma and losses they have experienced.

Co-researchers test the prototype at a workshop hosted by Flinders University and Centre for Aboriginal Research on 12 February 2008

6.   SOCIAL INCLUSION FROM BELOW AND IMPLICATIONS FOR INFORMING POLICY

Open testing out of ideas is important for science and democracy and it is essential for avoiding 'polarisation of ideas' and 'group think' in small groups (Tyson, 1989). To support the common good we need mobilisation of people to support ideas and this requires active engagement, so that people can learn from one another and test out their ideas by considering 'if then' scenarios. The approach to social inclusion from below is based on:

- Encouraging an understanding of 'if then' scenarios to enhance an understanding of the consequences of different choices for individuals and groups
- Enabling a process of 'critical heuristics'(Ulrich 1983) guided by informatics software (De Vries, 2008 forthcoming)
- Matching perceived needs to services wherever possible(McIntyre-Mills,2007)

The idea that people are ignorant and ill informed is made by Caplan (2007), others such as Surowieki (2007).Caplan develops a neo-conservative argument based on the idea that democracy and science function effectively because of open systems and therefore the market should be allowed to act as an open system. It is a construct, like democracy and it should be an open system. But the argument fails, because the market is not an open system, it has favoured the powerful who have controlled it to serve the interests of the powerful. The so called invisible hand of the market is in fact controlled by vested interests that have used social, cultural, political and legal systems to shore up their interests.

Social democrats such as Held and Stern argue that it is possible to reconstruct the market to act as a more open system and that it has potential to be used to serve social and environmental concerns[21]. People are not sufficiently engaged when they vote. Liberal democracy could be effectively extended through participatory processes that enable people to give their points of view and thus design 'from below', but also to consider *the implications* of their ideas before making a choice. Then the choices can be mapped and used as a basis for informing policy making as well as informing those who are the designers. Thus it could help to develop what Banathy(2000) calls 'evolutionary consciousness' that could enable us to hold in mind more than one big idea at a time and to consider the implications for ourselves , the next generation, thus ensuring that the global commons are addressed locally by people when they make policy and governance decisions. It is possible to do things differently! Big ideas and big policy to address overarching policy directions of climate change and wellbeing require integrated approaches, such as the 2020 Summit in Australia. We do not need to avoid thinking in terms of 'either or' approaches. We need to consider both 'social inclusion and sustainability' and find ways to work with the market[22] to achieve sustainable futures' (Rudd 20 April 2008). We need both centralised controls and decentralised involvement. Participation can marry the two together allowing for social inclusion, 'creativity' and 'open government' that is responsive to ideas.

Does the Aarhus convention provide a way forward as Florini (2003) suggests? Could it help to address some of the UN Millennium Goals by holding the market to account through greater transparency and participation? According to Florini (2003:190):

> "it allows individuals and NGOs to seek redress in court when governments or corporations fail to meet these obligations to provide information. And the transparency requirements do not discriminate on the basis of citizenship or geography. An NGO or individual in one country can demand information from a government or corporation in another"[23] (she draws on Petkova and Veit, 2000).

I would argue that the Aarhus convention could help to enable people to hold the private sector to account if it were combined with digital means by which people could vote on issues of concern and if they could hold specific law breakers to account. On its own it is unlikely to make a great deal of impact on enhancing the ability of people to engage actively in shaping policy, unless it is supported by opportunities to engage in e-democracy and e-governance.

Linear thinking is systematic and supports only those ideas that can be accommodated in terms of the tests made by experts. Power is vested in recognised expertise and political association with experts. Rosenberg (2002) argues that linear logic undermines reason and argues for the need to develop more critical and analytical ability:

> "Tolerance is understood and valued in quite different terms when reconstructed within a systematic (sic read systemic) frame of reference. It is meaningful in terms of its positions relative to other values (e.g. freedom, equality, etc) and this as an element of an ideology or in germs of its function in the larger social system. Alternatively it may be understood in terms of some higher order principle (e.g., one of cooperation oriented to maintaining the systemic integrity of the actors involved. In either case, the meaning of tolerance is defined without reference to specific behaviours or particular individuals or groups. Rather it is defined in more general and abstract terms" (Rosenberg, 2002: 389)[24].

The ability to think about our thinking and to be philosophical can be cultivated in dialogue with others. But equally the potential exists to polarise and to be oppositional, unless the dialectical reasoning process is cultivated through if then thinking based on 'critical heuristic's and unless the dialogue is open to ensure that the complexity of the decision is matched by the complexity of the decision maker[25]. This is supported by Ashby's (1956) 'Rule of Requisite Variety' and also by the work of Surowieki (2004) in ' *The Wisdom of Crowds'* , which shows that if crowds of diverse and independent people are asked to give responses, the large, diverse groups are more likely to be correct more frequently than a narrow group of experts . This populist work is widely known. It is cited by Caplan (2007) who argues that collective wishes or aggregated wishes enable democracy to function, because the diverse random and open processes generate sound results. But this is where the similarity with the research of McIntyre et al (2006) and Christakis and Bausch (2006) differs. We argue for the value of discursive democracy. Not only does the participation of diverse people at the macro level *augment* this aggregative potential, it could also be carried out at the micro level and *combined with discursive dialogue* on complex needs. This could enable people to vote more responsibly and based on more informed ideas *and thus mobilise support for the global commons.*

The research program detailed in this paper a) explores the extent to which participation as *a means and an end* enhances the capability of people to make rational choices for themselves and others and b) assesses the extent to which network governance can be used to enable centralised steering and control from above and decentralised steering and design from below. Kjaer (2004: 49-58) explores the question to what extent networks are a problem for democracy. She argues:

> "The basic assumption underlying the parliamentary governance chain is one of representative democracy. The people are sovereign and enjoy the basic political and civil freedoms. The people ultimately hold political authorities (parliament and government) to account. They are able to do this as long as political authorities are responsible for policy decisions and implementation. If the political authorities no longer have full control over policy, in other words if the basic organizing principle is no longer a hierarchy, then the representatives of the people cannot be sure that their decisions are effectuated. Yet one of the characteristics of networks is that power is more diffuse and lies in relations among actors. Hence, responsibility for a particular policy or policy outcome may be difficult to place, and accountability difficult to ensure."

Power is vested in positional authority associated with hierarchy, but also vested in relational power and the power imbedded in discourses. In large nation states diverse interest groups are not necessarily able to voice their ideas effectively through aggregated majority votes or to shape agendas. They can feel alienated and detached (Gore 2007, Habermas, Derrida and Borradori, 2003). Centralised steering through government based on aggregated majority votes can be effectively supplemented by integrative dialogue based on participatory design and discursive discussion on what people perceived to be right and their rationale for making these judgements. By using votes not only for elections but to give opinions on issues, decentralised steering can

supplement centralised steering from above and it can enable greater democracy and governance. As Fishkin and Laslett stressed (2003) it is vital to ensure accountability and control (see also Fishkin 2000) and this is possible through new forms of network governance that can enable:

- Design from below through enabling people to provide design inputs and to ensure that the agenda is not controlled by others.
- Deliberate by considering 'if then' scenarios and the impact of their choices on their own lives and the lives of others so as to consider both individual and collective needs.
- Make choices on options and indicate their choices so that they are weighted.
- Mapping pathways of choices to inform policy makers of people's ideas.
- Updating the pathways as people register their choices.

Discursive or deliberative democracy(see Dryzek 1990,2000) and other forms of direct local participation or voting on issues need to be considered as completing aggregative democracy which remains 'the best worst choice option' (to use Churchill's phrase)[26] and to find ways to enable it to become more accountable to those who are excluded from the protection of citizenship rights. Age, gender, ability, income, species membership or some other constructed category pertaining to position on the continuum of life are and have been used to exclude human and sentient beings from a right to quality of life (see Nussbaum, 2006, Singer, 2002, Sharpe, 2005).

The dangers of top down decisions made on the basis of liberal democracies that are out of touch in between elections and not necessarily sufficiently responsive when elected need to be weighed against the dangers of networks that can be captured by powerful interest groups that can exclude some interest groups that do not take into account the common good. Centralised steering from above and decentralised steering from below can be achieved based on new forms of participation. The project set out to assess the extent to which it is possible to improve democratic accountability and the ability of governments to address complex needs.

Rights, not customer satisfaction, are the predetermination of social justice. Nussbaum[27] argues for supporting reason and rationality via building capabilities, if we are to sustain the 'quality of life' that is extended beyond the social contract (based on the Rawlsian, 1999 'veil of ignorance' test to include those who are unprotected as citizens and are consequently voiceless and powerless.

This seems a vain hope as we watch how decisions are steamrollered by dictators in Burma or Zimbabwe. Internationally, we need a sense of solidarity that goes beyond convenience and a concern for others based on social and environmental justice. Science, democracy and governance are enhanced when the connections across self, other and the environment are appreciated, based on non-linear, systemic logic. [28] The low road to ethical behaviour understands that poverty and pollution boomerang as war and climate change, or to express it in terms everyone understand- chickens come home to root. Understanding Ulrich Beck's 'boomerang affect' (1992, 1998) of poverty and pollution as a high risk for society and the planet is vital for a sense of wellbeing, spirituality and sustainability. If people develop the capability to understand why it is in their interests to care for themselves, others and the environment we may have a more sustainable future.

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[2] A concept originated by West Churchman, according to his colleague Emeritus Professor John P.Van Gigch, pers comm. in the early 1970's. This is likely given his poetic turn of phrase and his influence at conferences as a plenary speaker.

[3] A few weeks ago at a social gathering of academics in Adelaide, a colleague said that he was concerned that climate change was a new religion and that no one would dare to contradict the notion that carbon emissions were causing climate change, which could be a natural cyclical event, over which we have little control. But he conceded, it was worth doing whatever individuals and governments could, because 'we all need an insurance policy'. The human influences on carbon emissions is stressed by Stern (2007).

[4] But he was blinkered when he chose to ignore politically the issues of the WTO's TRIPs and its potential to undermine the affordability of generic medicines in South Africa (Hassim et al, 2007), until the Treatment Action Campaign for social justice succeeded in changing the policy on generic drugs for the treatment of AIDS. This only serves to underline the importance of thinking critically and systemically and being prepared to address so-called 'mind traps' (see Vickers 1968).

[5] ."Until recently the planet was a large world in which human activities and their effects were neatly compartmentalised within nations, within sectors (energy, agriculture, and trade) and within broad areas of concern (environment, economics, social). These compartments have begun to dissolve. This applies in particular to the various global 'crises' that have seized public concern, particularly over the last decade. These are not separate crises: an environmental crisis, a development crisis, an energy crisis. They are all one. The planet is passing through a period of dramatic growth and fundamental change. Our human world of 5 billion must make room in a finite environment for another human world. The population could stabilize at between 8 and 14 billion sometime next century, according to UN projections. More than 90 percent of the increase will occur in the poorest countries, and 90 per cent of that growth is already bursting cities"http://www.worldinbalance.net/agreements/1987-brundtland.html

[6] We test the hypothesis: The greater the use of participatory design processes to address complex problems (such as homelessness, family violence, drug use, unemployment and social inclusion issues) the better the problem solving outcomes for both human service users and providers. The rest of the paper discusses the potential of the project to address wellbeing across conceptual and spatial boundaries.

[7] It supports the recognition of diversity within the nation state and is open to explorations of the meaning of Aboriginality for wellbeing and identity. The process of engagement is in itself important for democracy, personal and public accountability for wellbeing and for

advancing scientific research by extending the testing process. The mapping process is designed for supporting sustainable design for social and environmental justice for this generation and the next, not merely to predict or control for narrow sectarian interests.

[8] Australian Broadcasting Corporation , Monday 9 June 2008 10.05am

[9] To sum up, this research program tests out the approaches that support the global commons, social inclusion and mobilisation based on attachments. Participatory democracy enables people to give discursive details about the quality of their lives and details about what works for them, how and why. Deepening democracy (Fung, Wright et. al., 2003) needs to be based or "thick description"[9] [1] that supports "thick democracy" (Edgar, 2001). This is very different from the rationalist approaches of Rawls (1993). Singer (2002) critiques Rawls as follows:

"A 'Theory of Justice', does not address the issue of justice between societies. With the more recent publication of 'The Law of Peoples', however Rawls has at last addressed himself to the issue for justice beyond the border of our own society. Rawls believes that well off societies have significant obligations towards struggling societies who are currently destitute in other countries. The book is…called the 'Law of Peoples', not for example, A theory of Global Justice…." (Singer, 2002: 193).

[10] What does David Held (2004) suggest in the 'Global Covenant'? The social democracy approach needs to address ways to ensure that the market is reconceptualised to serve the interests of society and the environment, it needs to be based on what Held (2004,2005) calls 'a global covenant' that protects the global commons. Transnational policy making, for example, needs to achieve changes to policy on biofuels and the protection of affordable food for the world's poor who now have to compete in a market inflated by higher grain costs used for fueling transport. Policy must shape the market to sustain life and to factor the externalities of poverty and pollution into all economic costs.

[11] Rhodes summarises many definitions of governance as follows: "Corporate governance, New Public Sector Management, Good Governance, International interdependence, Socio-cybernetic system, new political economy and Governance as networks".

[12] Networks comprise nodes and relationships[12]. The nodes can be people, ideas, organizations, for example. The relationships can be positive or negative and decisions can be based on considering 'if then scenarios'. The relationships across the nodes and the composition of the nodes are equally important in studying networks. Non linear logic is concerned about meanings, thick descriptions of perceptions, taking into account diversity spanning many variables and creating new emergent decisions.

[13] It considers scenarios and also enables policy makers to learn from their choices by mapping the pathways of choice

[14] Using CDEP, ASK job network, Neporendi and Cultural ties.

[15] The description of the prototype by De Vries appears in McIntyre Mills, 2008 forthcoming, Part 1. Part 2 on the architecture by De Vries operationalises the prototype.

[16] These suggestions are however, only meant to guide decisions made by service users together with a service provider, who could sit side by side and use the computer program to help identify which narratives resonate with their own experiences and explore the choices made by others and then to consider their own possible responses that could be added to the program. As each service user works with the program they will add items that they perceive to be valuable for the 'in baskets', items that need to be discarded. They will identify the turning points they have experienced for the better and the worse and the barriers (De Crespigny et al 2002) they have experienced.

[17] The systemic approaches to the management of complex problems build on the work of critical systems thinking and practice (Jackson, 2000; McIntyre, 2000, 2002a, b, c, 2003, 2004; Romm, 2001, a, b, 2002; Flood and Romm, 1996; Midgley, 2000; Churchman, 1979, 1982 and Zhu, 2000).

[18] The narratives and pictures (both abstract and concrete representations) were used to develop metaphors of weaving together strands of experience into baskets that could be used to:

- Tell their unique personal history shaped by a range of social, economic and environmental circumstances.
- Explore how it has been shaped by their experiences, for example of violence at home, homelessness, or unsafe neighbourhoods and limited networks.
- Identify with a story that others have told and explain how it is different and similar
- Assess positive life lessons and identify assets that they have and need for their 'in baskets'.
- Discard the problem areas from their lives by taking personal responsibility and
- Seek assistance to address identified needs that have been prioritized through considering their specific circumstances.

[19] Democracy is currently increasingly criticized for not representing the interests of diverse citizens and for not taking into account the social justice and environmental concerns that span national boundaries(Beer 1974,1994), Habermas, Derrida, and Borradori, 2003, Pape 2005, Devji 2005, Singer 2002 and McIntyre-Mills 2003, 2006a,b,c). As Savage (2005: 330) argues, there are many kinds of bureaucracy and current democratic forms are in need of an overhaul. Revitalizing democracy (Putnam 1995) and democratic institutions by finding new ways to engage the marginalized is the challenge (highlighted by Savage 2005) to which this research is addressed. Florini (2003: 83) sums up the challenge as follows: "…when decision making reaches the rarefied level of intergovernmental organizations or even informal multilateral rule making, the threads of democratic accountability can be stretched very thin. It is often hard to see such decision making systems as a means by which the people of the world, through the instrument of their freely chosen governments, resolve their common problems. … Accountability to the general public is at best indirect, and often, for all intents and purposes, it does not exist at all ...[The] mechanisms we have put in place to deal with large scale collective action problems seem so thoroughly inadequate when matched up against the scale of the problems…".

[20] Aday, L.A. 1994. The health status of vulnerable populations. Annual Review of Public Health. 15. 487-509.

[21] Stern (2007) and Held (2005) have argued that global markets could be guided by transnational laws and a global covenant (that underpins laws) so that a sustainable future is based on triple bottom line accounting and accountability (Elkington 1997).

"…reducing the risks of climate change requires collective action. It requires co-operation between countries, through international networks that support the achievement of shared goals. It requires a partnership between the public and private sector, working with civil society and with individuals. It is still possible to avoid the worst impacts[21] of climate change, through strong collective action starting from now" (Stern, 2007: 644). We conclude that bureaucratic and compartmentalized responses are inadequate to address complex multifaceted problems. The paradigm shift from the machine metaphor associated with lineal thinking to the complexity metaphor of interrelated systems and networks shape the research (see Christakis with Bausch 2006). People who experience the policy outcomes in their everyday lives need to fine-tune the policy through social inclusion in the design and monitoring of what works, why and how which has implications for representation and accountability. Open communication is mindful of multiple viewpoints, meanings associated with different cultural maps. It addresses ways to enhance knowledge management and decision making so as to narrow the gap between service users and providers. More profoundly, it enables the complexity of policy decisions to be matched by the complexity of the decision makers. Also to build in the rational testing process so that personal decisions are based on 'if then' scenarios, so the narrow pragmatist or ill informed decision maker is prompted to think through actions to enable decisions based on expanded pragmatism that 'sweeps in' (West Churchman 1982) social , economic and environmental considerations based on a consideration of scenarios for future. Thus it is an open system. It needs to be supported by case workers for people in clinical situations, but it can be used creatively to enable moving beyond integrated decision making (Bammer 2005) to enable critical and systemic thinking, design and practice in a range of contexts in the public and the private sector. As stressed in McIntyre-Mills (2007a, b, c, 2008), the theory of sociocybernetics (Beer 1974) stresses that understanding non linear relationships is a first step to developing policy responses.Participation enhances the capability of people to engage in the consideration of options and the implications of the different options for their lives. Could it enable large diverse nation states to enable better participation and thus address some of the concerns raised by Gore (2007) in 'Assault on Reason' and Derrida and Habermas in conversation with Borradori in *" Philosophy in a Time of Terror"?*

[22] The work of Caplan and Surowiecki supports the open market and does not make an argument for controlling the market to support social and environmental justice. Where their work (and that of neo conservatives) fails is that they do not recognise that the economy does not factor in the exerternalities of poverty and pollution (see Beck 1992).

[23] Florini cites Petkova, E. and Veit, P. 2000 Environmental Accountability beyond the Nation State. The implications of the Aarhus convention. Environmental governance note. Washington DC: World Resources Institute, April. The paper sums up the potential and pitfalls such as the access to information- needs to be less vague about the extent of access and access to technical information – copyright issues and patents Public participation by individuals and NGOs needs to be supported by protocols and they raise questions about how enforceable the notion of access to justice is in practice.

[24] Despite Rosenberg's missing the philosophical point about the difference between systemic and systematic thinking. He is correct in arguing that linear logic and an inability to think about values undermines democracy. His argument fails in so far as he argues that *systematic* linear thinking is open. If he had argued for *systemic, non linear* thinking that is informed by an awareness of socio-cybernetics (which goes beyond cause and effect to include feedback and feed forward) then he would understand that representation and the notion of representation should be the basis for all education, because it is the basis for science and democracy.

[25] The closest we can get to truth and to establishing a shared truth is through dialogue with diverse interest groups who are to be affected by the policy decisions and who are mindful of future generations. The axiom, we are free to the extent that our freedoms do not undermine the freedoms of others and we can be diverse to the extent that our diversity does not limit that of others. We need to be able to develop the capability to think in non linear and discursive ways in order to become capable of seeing the connections beyond simple cause and effect. We need to understand feedback and feed forward so as to understand the full implications of 'the risk society' we have created (See Beck, 1992) for a discussion of the 'boomerang affect' of poverty and pollution. Open debate is healthy and supports tolerance of diversity, to the extend that freedom and diversity does not undermine the freedom and diversity of others.

[26] Florini (2003) emphasised the importance of combining both centralised steering from above (in the interests of the global commons) and steering from below in the interests of holding the elites in business and the state to account and in the interests of mobilising an interest and concern about public issues. She does not favour leaving democracy in the hands of 'philosopher kings', she believes in democracy as the best worst option and cites Winston Churchill (2003: 209). Participation beyond voting in elections is supported in her vision. She cites the Aarhus convention and regional federalism as the way forward. She believes that networks that are more transparent and accountable will be part of our digital future. But she is concerned about bridging the digital divide. That is the challenge to ensure that we do not have the digital haves living in domed, safe environments whilst the rest face the worst that environmental degradation has to offer.

[27] Nussbaum (2007) does not discuss the environmental challenge in *'Frontiers of Justice'*, for this Held adds detail on social democracy and Singer (2002) on ethical implications for public policy. This goes beyond mere capacity building as suggested by Fukuyama (2004) who argues that the ability to think critically and analytically is important and for this reason that government organizations and non government organizations need to develop human capacity. As Sen (2000) argued in 'Development as Freedom', we need to be able to think critically and rationally to participate and develop society (see Sen and Nussbaum in Crocker, 1995).

[28] Unfortunately as Gore (2007) has stressed in *'Assault on Reason'*, the engagement in democracy has eroded in USA due to one- way communication and powerful control of the media and the strong influence of corporate money politics. These links have been exposed in the forthcoming election and the prospects for the Democrats seem promising, despite the bitterness of the competition between the candidates. Energy futures are however controlled by the 'big end of town' and it remains to be seen how far the current democrats candidates will move to embrace the message put forward by Gore (2007).