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Feminist Systems Theory: Learning by praxis

Abstract:

Feminist Systems Theory (FST) is an emerging theory grounded in cultural ecofeminism and critical systems theory. FST's contribution is in a set of principles that contain implications for community development and social research. FST brings to the fore the importance of valuing and considering the voices of people at the margins of social research and community development projects and is an effort towards a new ontology and language of person and nature to adequately address environmental marginalization. The 'systems' theory contribution to FST enriches to our repertoires of methods and tools with an emphasis on systems thinking characterised by the use of boundary analysis. FST is ideally situated to enhance systemic intervention practice, an application of action research and participatory research practices. This paper will examine 'process philosophy' necessary to understand the nature of boundary analysis and the implications for FST and praxis with relevant examples drawn from case studies of current applications of FST in action research settings; economic analysis and transition pathways; policy analysis of the *Close the Gap* strategy for Indigenous equality and equity in Australia; a community food distribution system; and a community health and diabetes prevention program.

Introduction

Feminist Systems Theory (FST) is an emerging theory grounded in cultural ecofeminism and critical systems theory. FST defines a set of principles which contain implications for community development and social research. It is being applied in action research settings to economic analysis and transition pathways; policy analysis of the *Close the Gap* strategy for Indigenous equality and equity in Australia; a community food distribution system, and a community health and diabetes prevention program. Described as 'feminist' systems theory, the feminist component of the theory brings to the fore the importance of valuing and considering the voices of people at the margins of social research and community development projects. Derived from eco-feminist literature in particular, the environment our need to look beyond superficial understandings of sustainability is emphasised. FST is an effort towards a new ontology and language of person and nature to adequately address environmental marginalization. The 'systems' theory contribution to FST adds to our repertoires of methods and tools with an emphasis on systems thinking particularly by the use of boundary analysis. FST is enhance systemic intervention practice, an application of action research and participatory research practices. FST is underpinned by 'process philosophy', informed by the work of Critical Systems Thinker, Gerald Midgley. Necessary to understand the nature of boundary analysis, this paper will describe process philosophy and the theoretical implications for praxis with

the FST principles, and relevant examples drawn from current applications of FST in the community development field.

Feminist systems theory

FST emerged from a two year study that systematically compared two epistemologies critical systems thinking and cultural ecofeminism. A near absence of thinking around both gender and ecological justice issues within the field of critical systems thinking motivated me to find an appropriate methodology to review and compare the theories. A set of five principles core to the emergent theory have been described and are outlined in Table 1 below.

Principle	Meaning
<i>Adopt a gender sensitive approach.</i>	Gender sensitivity is a vital consideration to help prevent writers overlooking what is distinctive about women’s experience in studies. It can be implicitly assumed that the experiences of women are either unimportant and or parallel to those of men (Forrest, 1993). Albeit its well meaning intentions, the use of non-gender specific language, conceals oppression when the underlying paradigmatic influences are not addressed (Plumwood, 2002).
<i>Value voices from the margins.</i>	Practitioners can seek to hear from and gain insight from the perspective of non ‘experts’. Harmful or naïve dualisms are challenged, as are claims of ‘value-free’ science, which is often rooted in rationalist patriarchal ideology, and serves to naturalise and sustain the political interests of privileged groups.
<i>Incorporate the environment within research.</i>	The human-centric nature of research needs to be reviewed so that interwoven and intrinsically connected oppressive states can be addressed. FST calls for the political engagement of the non-human realm.
<i>Select appropriate method/ologies.</i>	Pluralism requires researchers to use tailored and responsive methods to address multifarious problems. To deal adequately with multiple diverse people and

	contexts, requires a commitment to communication and critical reflection. It is not a superficial approach to methodology (Midgley, 1996).
<i>Undertake research that promotes plurally desirable and sustainable social change.</i>	Practice and its outcomes should seek to avoid instances of de-contextualised and inappropriate demands for change coming down ‘from above’ or led by outside ‘experts’. Research is enhanced when it is responsive, grounded and locally embedded.

These principles draw researchers’ awareness to critical issues around gender, ecological justice and their role in research that affects change. As a set, they reproach attempts to ‘study down’ others. An ethic of connectedness to and caring for the environment is called for. The principles orientate us towards heuristic and grounded methods that build long term relationships between people, communities and environments. Researchers are beholden to challenge hierarchical thinking, and to have a morally defined purpose for undertaking social interventions. The FST framework values the process of knowledge generation, built through praxis. That is, applying the principles to relevant and diverse community contexts.

Critical systems theory

FST epistemology is derived from critical systems thinking. Critical systems theory was an epistemic response to the ongoing predilection for mathematical modelling within the systems and operations research movements in the last century. Systems thinking is a product of the nineteenth and twentieth centuries’ ‘Age of Machines’ (Munro, 1999). It highlighted circular forms of causality which moved conventional science beyond the linear causal modes of traditional mechanistic thought. It led to discoveries in complex systems such as chaotic dynamics, and applications across the biological, technological and social systems. Early attempts to apply cybernetic principles to society however was mechanistic and conservative, but progressed in the 1970s and 80s as systems thinkers branched into ethics and participatory practices that sought to challenge hierarchical power structures. These ‘soft systems’ thinkers were attempting to contest the conventional, narrow applications of science, promoting the need to build shared understandings and participatory decision making. Critical systems thinking is a continuation of this evolution and in the last 20 years has focused on achieving mutual understandings and addressing issues of power and coercion in research practice with three central concerns. These are to: [1] undertake deliberate action towards

social improvement; [2] engender emancipation or liberation from oppression, with a commitment to achieving mutual understandings, and [3] address issues of power and coercion in research practice (Hammond, 2003; G. Midgley, 1996; G Midgley, 2000; Oliga, 1995). We found these concerns resonate with ecofeminist theory and are present within the FST principles.

The development of FST was motivated in part to inform critical systems practitioners' use of systemic intervention methodology which draws on participatory methods. 'Systemic intervention' assumes that everything in the universe is directly or indirectly connected with everything else. However, a 'God's eye' view of that interconnectedness is not possible, so the inevitable limits to understanding also have to be understood. These limits are boundaries. Systemic intervention is, therefore, fundamentally about how to explore those boundaries, and how to take account of the inevitable lack of comprehensiveness (Gerald Midgley & Richardson, 2007). Systemic Intervention is defined as a "purposeful action to create change in relation to reflection on boundaries" (Midgley, 2000, p.129). Central to the methodology is the process used to make boundary decisions. This is a reflection upon one's boundary judgments and a critique of the ethical consequences of different possible actions. As an absolute inclusion of all the intertwined interests in a design situation is impossible, the need to draw and critique boundaries up-front in all interventions is essential (Bausch, 2003; G Midgley, 2000). This includes the boundary around the system in focus, demarcating the system from its environment and those elements and influences that are going to be considered, and those that are not. It is also taking up the concerns of those who are involved, or who benefit, and those who are affected, but who might not benefit, or who are likely to suffer (Bawden, 2003; Burton, 2003).

Process philosophy and boundary analysis

To fully understand the process in which boundary analysis occurs, Midgley (2000) goes to some length to describe Process Philosophy (which varies from previous writers including Bergson, 1911, Whitehead, 1929, Pols, 1967, Capek, 1971, Leclerc, 1972, 1986, Mathews, 1991 and Gare, 1996) an ontological and epistemological foundations of systemic intervention practice and ultimately FST. Midgley (2000) argues that philosophy has 'exceptional significance' and cannot be overlooked when considering methodology.

Boundary decisions are crucial in the development of theory. Knowledge that is contained within boundaries is able to be examined and propositions about its nature can be made. A focus on the content within boundaries privileges particular perspectives. A focus on the process of making boundary judgments however, relies on the placement of a boundary around knowledge or data

sets. The ontological primacy of analysis is shifted away from the content, to the process in which knowledge is generated. No one theory needs to be regarded as more 'foundational' than others in describing the knowledge that is generated. All boundary judgments are made in a local context, so even epistemological theories can be viewed as contextually useful or not (G Midgley, 2011, p. 5). Where the primary boundaries are drawn attracts critical attention. It is important to note here that FST is a collection of content philosophies and, whilst it is therefore a content philosophy itself, its practical value is in the set of broad principles.

Midgley (2011) warns against affording a content theory a foundational status. Foundational theory behind an action research project, risks eliminating other content theories from the practice because they do not accord with the project's theoretical foundations. He states that, "When the only 'foundation' is a general, minimal statement about the limitations inherent in the process of knowing, all content theories are potentially allowable and remain open for critique." (p. 6)

Applying a process perspective to reflection and dialogue by researchers and agents, questions the degree of certainty that can be ascribed to the boundaries implicit in any theory. Questioning the boundaries undermines dogmatism and blind confidence that there is only one 'correct' boundary to work with (Midgley, 1996). Seemingly alternative, even incommensurate, paradigms can coexist within a process philosophy framework as process philosophy enables participants or agents to bring all manner of ontological accounts into research and interventions. The generation of new knowledge can be made explicit to provide a powerful and empowering learning opportunity for research participants. A process philosophy lens challenges the notion that knowledge is an entity or property of the powerful elite or institutions, or that endowed power structures can claim centrality, legitimacy and authority (Murphy, 1996, p. 232).

Pluralism and practice in theory

FST places great importance on action to achieve social change. It is constructivist, emergent, inductive and pluralist. FST as a 'foundation' recognises the inevitable limits to knowledge, and that all epistemological theories of knowledge production are made available to the participatory action research group for use in their local context (G Midgley, 2011). Pluralism encompasses difference rather than hegemony which may lead to a charge of 'relativism'. However, as Harding (1987) noted over 20 years ago, the problem of relativism only becomes a 'problem' when it threatens the universality of viewpoints held by dominating groups who may prefer to remain unchallenged. She stated that, "As a modern intellectual position, it emerged in the belated recognition by 19th Century

Europeans that the apparently bizarre beliefs and behaviours of non-Europeans had a rationality or logic of their own. [Relativism is a] ... response that attempts to preserve the legitimacy of androcentric claims in the face of contrary evidence.” (Harding, 1987, p 10) FST in practice encourages practitioners to draw on pluralist methodologies and theories, and to embrace interdisciplinary approaches to theory and research. As process philosophy reveals, researchers face a choice of standpoint; to work with a theory and defend it, or work with multiple theories each of which privilege particular insights (Midgley, 2000). Theories that will be seen as useful for what purposes will depend on the practitioner’s relationships with the wider systems in which s/he is embedded. Therefore, locally relevant standards for choice (as opposed to universal standards) can be defined, and their construction critiqued through reflections on the nature of the knowledge generated (G Midgley, 2011). Theoretical pluralism’s value lies in enabling a variety of purposes and values simultaneously to explain phenomena in context, therefore pluralism offers greater insights than working from one position alone. It follows then that interpretation of a single phenomenon results in multiple potential understandings.

CST and Action Researchers use participatory methods when social science researchers actively participate in their research. Further to this, that participation in the research process is initiated by a dialogue on what questions should be researched. This contrasts to the conventional paradigm-centred research or client-centred research approaches, the legacy of ‘hard’ system thinking infused through the social sciences. As a community of researchers, professionals prompt questions and promote action around emancipation. According to Levin (1994) emancipation is best understood as a process within a given context. It is therefore beholden upon researchers and professionals, to conduct interactions with participants in organizations or communities that support the emancipation process. As Levin (1994) points out, “The contradiction and real challenge in this process are how to integrate professional skill and knowledge in the participants’ struggle to develop control over their own situation. [Action research and critical systems theory] professionals can support a micro-emancipation process or they can act as suppressors. Accordingly, emancipation is linked to and cannot be separated from the process by which it is acquired.” (pp. 26-27) FST is now being used as guidelines, with a suite of tools, to make a valued contribution to theory, methodology and practice in the community development field. The next sections of this paper will focus on what this practice is revealing in the way of appropriate methodology and practice.

Feminist systems theory on the ground

Since late 2009 FST principles have been applied in practice within the context of four very different studies. Each study has been used to enable us to consider the principles from a different set of vantage points in time. A community health and lifestyle project was analysed retrospectively to find the strengths or weaknesses of the programme through an FST lens. By contrast, a regional economic development project is working to develop economic transition pathways with the considerations of the principles established at the outset of the project. Indigenous community development and the *Close the Gap* policy is under the spotlight in a project concerned with establishing *Kinship Gardens* at Yarrabah near Cairns in North Queensland. Finally a fourth project examines significant changes that come about with the introduction of a food distribution social enterprise.

Each case study is unique and three of the four studies are participant led action research/learning projects. The participants drawn for each project derive from different sectors and margins of the Far North Queensland community. The 'content' of each project engages different disciplinary and academic backgrounds. The methods are selected for each project according to each projects' context. The variety of methods and tools selected include the Most Significant Change method; Causal Loop Modelling and intervention point analysis; structured and semi-structured interviews and desk top literature reviews. My role with several of these has been as a participant/observer.

Central to each of the case studies and according to the process philosophy theory discussed above, is the importance of boundary analysis. In application to these case studies, it is a continuous and essential process. Reference to is also made to the relevant FST principles. Boundary analysis is context specific and there is not a rigid prescription as to its implementation. However the following experiences with various case studies provide insights and generalisations into the process of checking the boundaries in relation to the five FST principles.

Considering the boundaries

Firstly, I have observed that there is a constant reflection on 'what's in or what's' out of the study. Core to boundary analysis, I have observed this practice unfold and be led by participants as they examine the parameters of their study. For example, a group concerned with analysing the regional economy to find pathways towards transitioning our present systems towards a low carbon input model. The group are professional people drawn from local business, council and organisations. The group are highly motivated to design systems and educate the regions' business sector about the importance of restorative business models to enhance the integrity and sustainability of the regions' World Heritage listed natural environment. The non-conventional economic models being

developed by the group are inclusive of the environment and look beyond an instrumental regard for flora and fauna. This focus aligns with the principle: *Incorporate the environment within research*. They have a holistic perspective to enhancing the wellbeing of the regions' population through the health and genuine regard for biodiversity, protection and restoration of the regions' coral reefs, rainforests and watersheds and are determined to consult with representative of all the regions' economic sectors. To do this, they are constantly asking themselves what is in and what is out of the study. Boundary analysis is front and centre of the group's consciousness.

Another boundary consideration must be to ask the question: 'Who's in and who's out of this study?' The case study of the *Kinship Gardens* development at Yarrabah Aboriginal community is an example of a group of participants who are continually addressing this very question. The first year of this long-term project has been an exercise in finding and defining the boundaries, and bringing the *Kinship Garden* system into focus. With stakeholders and community members contributing to the elements they wish to see included in the system, it is hoped that the project will provide an alternative mechanism towards meeting the laudable concerns behind the *Close the Gap* policy. Members of the group are highly responsive to the issues of who might benefit and who might suffer. Two principles come into particular focus through this case study: *Value voices from the margins*; and *Adopt a gender sensitive approach*. At present the participants are acutely aware that most of the wide level of interest and support they have received for the project is from non-residential Indigenous and non-Indigenous people. It is the view of the participants that for the gardens' long-term sustainability the local community need to drive the project and that deepening their relationship with the community and helping the project to become better known, are boundary analysis considerations. Most of the activity of the group in 2010 was conducted in centres outside of Yarrabah, consulting with external funding stakeholders. In 2011, the participants will engage in gardening activities to ground the project in Yarrabah and widen the interest and understanding of local residents. This will assist in the development of long-term planning and actualisation of the many potential benefits that may flow to community if this project is locally driven.

Who benefits from an intervention? This is a core question of the *Redlynch Real Food Pioneers* project, a community based food distribution system operating from a high school campus. The project is galvanising a school community as local farmers provide weekly produce which is boxed and distributed to families using the school's tuck-shop. The Most Significant Change (Davies & Dart, 2005) method has been monitoring the impact of this scheme since February 2010. This simple method involves recruiting volunteers to write a story that captures an aspect of their experience

being a part of the *Real Food Pioneers* network and over time significant changes are represented. Fifteen volunteers have written 3 - 6 stories over a 10 month period. A small group of managers select the best stories of the most significant change attributable to the project. The method provides the coordinators with immediate information about: [1] The organisation and communities' values; [2] what influence and impact the project is having on the school and in participants' homes; and, [3] changes participants have not desired.

The *Real Food Pioneers* case study has adopted a method to provide continuous boundary scrutiny. The project managers also obtain regular informal feedback from other stakeholders such as the farmers supplying the food and teachers/school administrators. The monitoring method is revealing a widening boundary of beneficiaries (see Figure 1 below). Starting at the household level, many families (mostly women) are recording the benefits of receiving an affordable box of locally grown mixed produce grown (mostly organic but varies with season). At the next level, the school community receive a weekly fundraising stipend, increased parental participation in a school-based social and fundraising activity, and other supportive events including movie nights and guest speakers. A third layer of community includes the suppliers and service providers, including farmers. A fourth layer, and of immense concern to the project originator is the influence the project will have on the current cohort of enrolled students at the school. The initiative is seen as a tool to educate the children in nutrition, business enterprise, food politics, low carbon systems design and environmental stewardship. Within the entire system, new knowledge is being generated about a social and business enterprise, built on objectives that are reflected in the FST principles: *Undertake research that promotes plurally desirable and sustainable social change; value voices from the margins; and incorporate the environment within research.* The originator states that it is his hope that the *Real Food Pioneer* project will be "a catalyst for change in consumptive behaviour and the way that business is conducted." (Personal Communication, January, 2011)

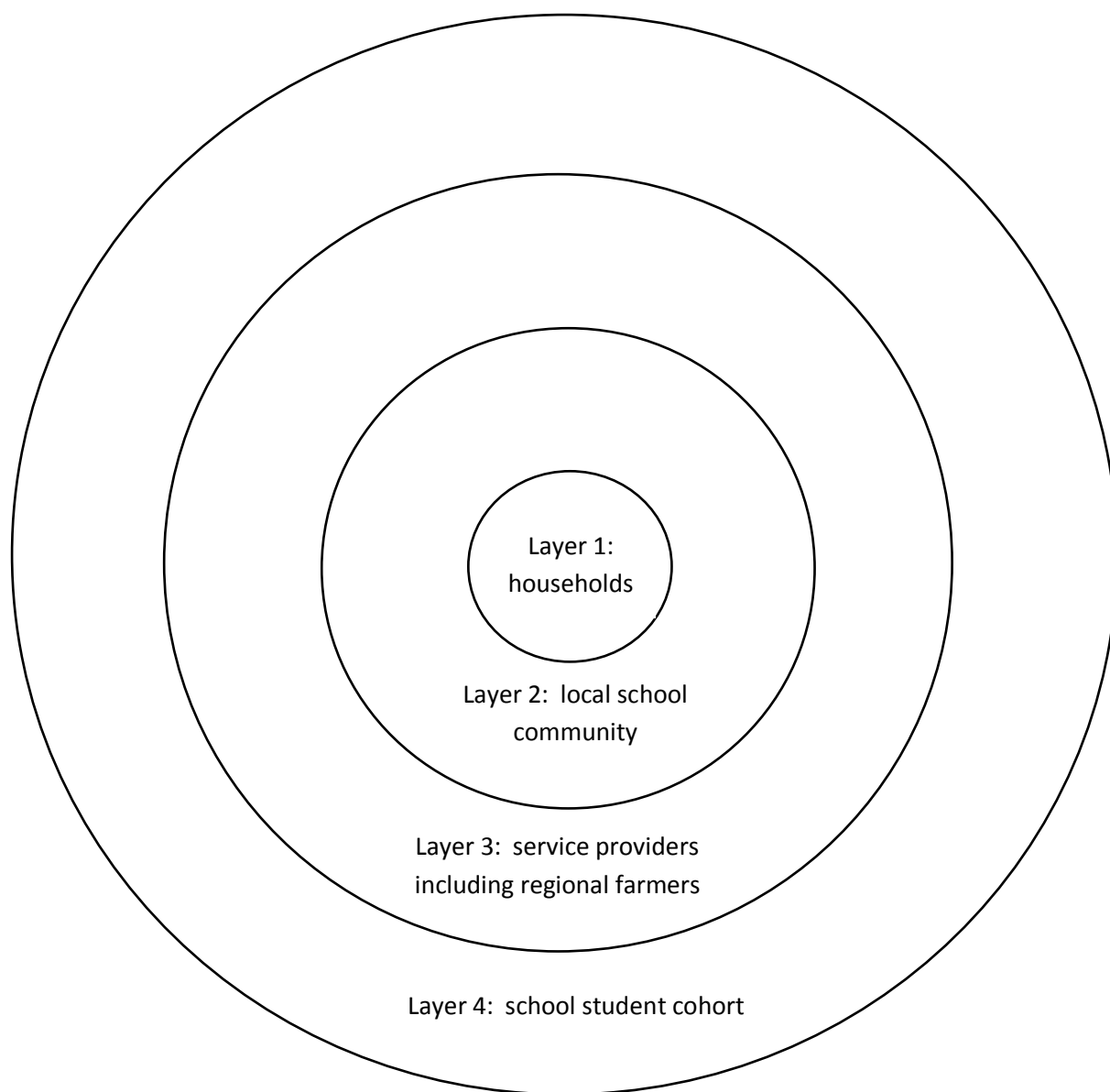


Figure 1: Beneficiaries of the Real Food Pioneer project within nested bounded systems.

In the tradition of action research method, groups are evaluating and monitoring their progress. Returning to the Yarrabah *Kinship Gardens* project, some members of the group are frustrated with the pace of change. In this case, that practical gardens have not been established over the course of a year at the community disappoints at least one Traditional Owner. She told me, *“Yes I’m a bit annoyed and angry. I don’t understand why this isn’t put into action. It should be happening. We should have somewhere to show this is what you can do/have. I feel let down...”* (Personal communication, October, 2010) Whilst this process may not always reveal a pace of change that participants would like to see happen, it is nonetheless a crucial element of boundary analysis. A

retrospective analysis of an early health intervention project, *Carrot on a Stick*, (Stephens, Jacobson, & King, 2010) revealed that in follow up interviews with participants long-lasting changes to people's attitude towards their dietary choices were having a great impact on the health of their own and their children's bodies. *Carrot on a Stick* is a weekly nutrition and lifestyle programme that seeks to engage people with a predisposition to Type 2 Diabetes onset in education and support. A whole of family approach is taken involving children in high metabolic and motor skills activity, whilst parents join a facilitator to prepare a healthy evening meal. During that time they would learn about basic nutrition, oral health, and strategies to consume more fruit and vegetables on a modest budget. Interviews conducted six months after completion of the programme revealed that some fundamental lifestyle changes had been made with one example of an interviewees' response:

"Yes. I've cut down on sugar. I loved everything to be sweet. But I've changed all that. I cut down on fizzy drinks and drink more water. I have more energy and less mood swings. I'm using more vegies; - and the kids used not to eat them and would walk all over me. But now they don't. I buy more fruit and they eat fruit to snack on. 'Carrot' has transformed my life. I'm more determined to be healthy and live healthily."

It is cautiously reasonable to suggest that the onset of habitual hyperglycaemia may have been averted or is being reversed which would reduce this lady's risk to developing Type 2 Diabetes. The *Carrot on a Stick* case study demonstrated that the FST principles, either as a set or individually can be used to undertake a retrospective analysis of an intervention which may assist with, or guide the design of new projects. *Carrot on a Stick* was interesting in that the programme was not developed with any explicit reference to FST principles, yet the analysis did signify the strengths and weakness of project implementation in terms of the FST principles: *Adopt a gender sensitive approach; value voices from the margins; select appropriate method/ologies; and undertake research that promotes plurally desirable and sustainable social change.*

Another aspect of the boundary analysis that has been an important consideration to the *Green Economy* working group is the physical geographical boundary. The group spent several sessions discussing and agreeing on the physical boundary taking into consideration the political and organisational bodies enclosed within different boundary locations proposed as these organisations impact on both the environmental policy and management within the region and will contribute to the project through collation of data and consultative expertise. This issue has been reviewed intermittently. In this way, the group have been engaged in deciding what constitutes their local context, as well as what is within and outside the group's locus of influence. Warren and Cheney

(1996) give three reasons why context matters. Firstly, as a function of where something is, context is important. Secondly, context is essential in critiquing claims of ahistorical and gender neutral conceptions of reason and rationality. Thirdly, each individual creates their own 'story' imbued with 'logic' and 'rationality'. Therefore, rationality is inflected with historicity, ecological dimensions and an individual's idiography; one's peculiar characteristics are context-dependent.

When this understanding of context is applied to the notion of sustainable development, we see the potential to reclaim the term to become meaningful and useful. The term 'sustainable' is increasingly criticised for being overused and diminished as an all too narrow to refer to the carrying capacity of natural resources to support human activity (Plumwood, 2002, 2003; Roling & Wagemakers, 1998). A redefinition accepts that agreement around the meaning of sustainability is a fundamental premise within a workable definition. A 'soft system' definition (Roling & Wagemakers, 1998) recognises that sustainability is an emergent property of a soft system, that is it is the outcome of the collective decision-making that arises from interaction among stakeholders of natural resources – anything from a paddock to the Earth itself. Secondly, this definition problematises sustainability, as externally that applied solution from outside experts or inputs, are less reliable. When actions are resolved by the stakeholders – a dynamic, systemic intervention process, the answers will be grounded within the context of the unique sets of issues or concerns. A soft system's sustainability makes explicit human's relations with nature, and fundamental obligations of resource managers to protect and support nature.

There is a principle inherent in the soft systems definition of sustainability and that is collective decision making. This principle can therefore be applied to sustainability projects that are not immediately concerned with natural systems management or agriculture as is the original intent of Roling and Wagemakers (1998). Therefore, sustainable social change will be effective by the same process. A great benefit of using methods such as systemic intervention is that there is no mechanical rulebook for practice (G Midgley & Reynolds, 2004). Practice is heuristic and grounded in the context of the problem being addressed and crucial to this process is reflective practice which will mean that practice is under continual reconceptualization. Adopting the soft systems definition of sustainability gives researchers the space to ask deeper questions to ensure that their work within the social and environmental realms move beyond a superficial or inadequate notion of sustainability.

Learning from all this boundary critique and examination has broader implications than just to the immediate participatory group. FST can also be used as a complementary tool in systemic

evaluation and analysis to determine which programme or policy may be effective. FST principles provide some indicators to critique past or present performance as was demonstrated with the programme *Carrot on a Stick*. The use of participatory action research was selected as appropriate method for the systemic intervention being undertaken at Yarrabah Aboriginal community. Alternate qualitative methodologies, such as this, may enrich research findings to represent a true picture as to the health, wellbeing and reportable outcomes of the *Close the Gap* framework, the Australian government's agenda for policy formulation, performance monitoring and the reporting of outcomes for closing the gap in Indigenous disadvantage, health status and life expectancy. The policy has been criticised for its reliance and dominance of statistics (Altman, 2009; Pholi, Black, & Richards, 2009) that dehumanise people into averages. Narrow quantitative method is unable to account for culture, racism and other points of difference between Indigenous and mainstream Australian life. That improved and increased data will close the gap, is 'wishful thinking' according to Pholi, Black, and Richards (2009). With Jon Altman Director of the Centre for Aboriginal Economic Policy Research (2009), Pholi et al. (2009), are deeply critical of the ideological roots of the policy in 'white/western ideals of scientism and positivism' (p. 7), and that despite their almost universal, unquestioning acceptance there is little evidence of the efficacy of the quantitative, goals-and-targets approach to population health. Policy settings must recognise difference, choice and self-determination. Altman (2009) states that;

"Balancing the need for a framework based on equality and difference is currently beyond the capacity of the Australian state, where the dominance of the equality approach based on neoliberal principles of individualism and unfettered economic growth is overpowering a subordinate culturalist discourse that values diverse life worlds and resistance to transformation and homogenisation." (Altman, 2009, p. 4)

FST theory itself is premised upon challenging these notions. It seeks to expose and challenge inappropriate and socially contrived dualisms that cause harm. The Close the Gap policy approach creates a dichotomy between a state of 'sickness=Indigenous' and 'whiteness=health'. The dichotomy limits their choices. One may strive to assume a set of characteristics that currently belong to the dominant, non-Indigenous ideal, or remain defined by the characteristics of disadvantage (Pholi, et al., 2009). The choice to be like a 'white fella' is one that many reject leaving vulnerable people with few places to go, particularly as the state policy and research frameworks' focus on mainstreaming and individualism, "creatively destroy distinct Indigenous institutions in the name of improvement, individualism and the market." (Altman, 2009, p. 7) The value of FST is broadened as a tool to past and present performance of policy and programmes, but also in that

methods of reflection and critique may enhance and complement qualitative methods such as those in use to monitor close the gap.

The value of systems thinking and the approach to boundary analysis through process philosophy accrues when multiple perspectives are examined. In practice, this means that participants' divergent world views are vital discussions, as they are crucial to identifying and analysing boundary issues and exploring the consequences of accepting either/or positions. A critique of boundaries is a heuristic processes and meaningful in the local context. The ongoing knowledge contained within the boundaries of each case study grows with every iterative cycle of the action research process. With each round of findings unfolding with praxis, we learn more about FST theory as a complementary theory in social and economic research contexts. Current practice is encouraging us to think about gender, marginalisation, the environment, and our moral intent behind research, in fresh ways.

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Biography of authors

Anne Stephens, BA, BEd(GE), Confirmed PhD Candidate. Anne has worked for over two decades in the non-profit community and education sectors. Anne's foundational work in developing Feminist Systems Theory was awarded the Sir Geoffrey Vickers Memorial Award at the 53rd Meeting of the International Society for Systems Sciences (ISSS). She will submit her PhD thesis in early 2011.