

FEMINIST SYSTEMS THINKING: THE EFFECTIVENESS OF PRACTICING THE PRINCIPLES

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1. Introduction

This paper describes the value of feminist-systems thinking (FST) developed to strengthen the practice of systemic intervention. A four year investigation led to the establishment of a set of principles, which despite the complexity of methodological birth, they are in practice simple and easy to use. They have application in community development from concept development and implementation, to evaluation, policy critique and analysis.

2. Origin of the principles

The primary purpose my investigation was to partner two vitally important strands of twentieth century thinking. Critical Systems Thinking (CST) and Cultural Ecofeminism (CEF). Both schools of thinking are born from more general bodies of knowledge. Critical systems thinking is a movement containing prominent 'soft' system thinkers, which emerged from a tradition of responsiveness to the domination of positivist, functionalist and conservative 'hard' systems approaches within the systems movement forcing a transformation in the latter half of the twentieth century towards interpretive models, subjectivity and participatory concepts. Today, Critical Systems Theory can be condensed to three crucial commitments. To conduct research that (1), emancipates or liberates; (2), achieves mutual understandings; and (3), addresses issues of power and coercion in research practice (Bausch, 2003; Burton, 2003; G. Midgley, 1996b; 2000). The third wave, as it is now known, emphasises participation and human attention to how choices between the great varieties of systems methods can be exercised in a critical and systemic manner.

Ecofeminism shares its roots in emancipatory epistemology. It is also a response to issues of power, coercion and the domination of positivist, rationalist ways of knowing. Systems and structures of oppression interlock and reinforce one another, therefore, ecofeminism positions humanity as an integral part of the physical environment. Reductionism and separation of human systems from the whole physical environment perpetuate a cultural constructed oppressive dualism. The binary constructs of 'man/culture', 'woman/nature' has its ontological root in the logic of 'value-free' science and fails to account for, or give voice to members of the underside of the dualism such as women, indigenous peoples around the world, and the environment. 'Cultural' ecofeminism de-emphasizes the 'nature-woman' connection (embraced by some alternate movements) which is seen as a social construction imposed by the patriarchal order.

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2.1. An adapted constructivist grounded theory approach

To undertake this study, a theory-building methodology was selected. I found that constructivist grounded theory, is a legitimate and systematic methodology to compare, contrast and synthesis epistemological texts. Grounded theory can be conceived as a systemic tool to generate knowledge from within a knowledge generating system. A constant comparison method gave me a procedural plan which I summarise into three steps:

[1] Step 1 was the process of abstracting the data into a purposefully designed spread sheet.

[2] Step 2 was the process of determining initial and permanent categories to conduct a thorough analysis.

[3] Step 3 was when the categories were theoretically sampled, that is, exposed to a broad literature review.

2.2. Initial findings

The process revealed a multitude of similarities between CST and CEF across a range of concepts including systems thinking language; challenges to positivist science, reason and instrumentalism; ethics and morality and praxis. Early conclusions of the constant comparison study found that grounded in the epistemologies of CST and CEF, there is an emphasis on the need to be cognizant of marginalized agents; women's voices are often overlooked, as are the perspectives of the non-human realm; and both have been treated as inferior by the dominance of the positivist-rationalist paradigms in contemporary scientific research and social organisation. Five principles emerged from the synthesis of these concepts and findings, the beginnings of a framework for Feminist-Systems Thinking.

3. Introducing the five FST principles

3.1. Adopt a gender sensitive approach.

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. Albeit its well-meaning intentions, the use of non-gender specific language, conceals oppression when the underlying paradigmatic influences are not addressed.

3.2. Value voices from the margins.

Practitioners can seek to hear from and gain insight from the perspective of non-'expert' others. Harmful or naive dualisms are challenged, as are claims of 'value-free' science, which is often rooted in rationalist patriarchal ideology, and serves to naturalize and sustain the political interests of privileged groups.

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3.3. Incorporate the environment within research/actions.

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.

3.4. Select appropriate method/ologies.

Pluralism requires researchers to use tailored and responsive methods to address multifarious problems. To deal adequately with multiply diverse people and contexts requires a commitment to communication and critical reflection. It is not a superficial approach to methodology.

3.5. Undertake research/action that promotes plurally desirable and sustainable social change.

Practice and its outcomes should seek to avoid instances of decontextualized and inappropriate change coming down 'from above' or led by outside 'experts'. Research is enhanced when it is responsive, grounded and locally embedded.

4. The principles in the real world

The durability and practical use of the FST principles were examined in four real-life community development case studies, to better understand how, and if they can improve, community development projects. Participatory action research was the qualitative methodology framework used to get 'inside' the problem, and simultaneously analyse, critique and provide recommendations on the issues I found.

4.1. Carrot on a Stick

The 18 month programme a *Carrot on a Stick* was inspired by Community Development worker Sarah Gosling. It was an early onset diabetes prevention programme targeted at communities within Cairns. I was an employee working as a Nutrition and Cooking facilitator on the program from February 2009 to January 2010. I selected this project to analyse a community health intervention programme through the FST lens in retrospect. I analysed project evaluation reports, funding applications, and conducted telephone surveys with past participants to draw conclusions on how the principles were present in the program. I also drew upon my own personal experience and observations as a participant.

4.2. Yarrabah Kinship Gardens

Analysing the principles during the implementation phase of a systemic intervention, and if they contain unique relevance to Indigenous community development, was the focus of the second case study, the *Yarrabah Kinship Gardens* a Participatory Action Research (PAR) project at Yarrabah Indigenous Community 40 minutes south of Cairns. The project seeks to plan, build and project manage community gardens and waste mitigation strategies in one holistic approach to community health, employment, harmony and

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education. I was invited by the Coordinator and Mayor of Yarrabah to work with Traditional Owners. PAR was selected as the least intrusive method of capturing events that are happening now and to allow me to reflect upon my own participation in the project.

4.3. Redlynch Real Food Network

The *Real Food Network* (RFN) social enterprise was established by Mr Chris Gloor to establish an alternative food distribution business and build community capacity within a Queensland school community near Cairns. The case study found the principles present in social change inspired by the RFN's activity. The most significant change (MSC) is a participatory monitoring and evaluation technique to gather data from field participants of the produce box scheme.

4.4. The transition to a greener economy: Mapping and identifying ways to transform an existing regional economy.

Embedding the principles explicitly into practice will be the focus of the fourth case study. Under the auspices of the Sustainable Tropical North Queensland Sustainable Region Initiative, I was invited to join the working group who endorsed the use of this project as another case study towards completion of this thesis. The group were familiarized with PAR method, as well as Causal Loop Modelling and Intervention Point Analysis. This is the only case study that has made the FST principles explicit at the outset of the project, although they did not inform the development of the projects' scope and objectives.

5. Contribution to our knowledge

Feminist Systems Thinking (FST) is a framework for researchers and agents to enhance community development projects. This framework was developed for several audiences. Primarily, it is for the systems thinking community, and in particular, those engaged in Systemic Intervention practice, Participatory Action Research and Community Operations Research. In my understandings of these broad approaches to community development, there is a 'goodness of fit' between these methodologies and tools, and FST, and my intention has been to bring environmental and ecological issues and gender analysis into sharper focus. Secondly, a broader audience has emerged in the community development and community health fields more generally. Through working with a great variety of individuals involved in the case studies, I have met project managers, social entrepreneurs, local politicians, public servants, social workers, teachers, community activists, cultural leaders and Indigenous Elders, all of whom have now engaged, at some level, with the FST principles. This has shifted my awareness of the relevance of the principles.

If the FST principles can be used like a checklist, the case studies have revealed that they have value at the design and implementation phase, during evaluation and monitoring, and in reflection and critique of socio/political policy. The FST framework also make a contribution to theoretical concepts as summarised in Table 1 below.

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Table 1. FST as practical and theoretical tools.

FST	Practical and theoretical value
Practical tool	FST can be used at different stages of project design and implementation to identify ‘gaps’ in thinking.
	FST can be used as an evaluative criteria to conduct retrospective project evaluation.
	FST enhanced project evaluation and monitoring when used to complement other techniques.
	FST can be used in reflection and critique of socio/political policy
Theoretical contribution of FST framework	FST can assist us to expose instances of harmful and naive SODs and revalue the underside of these dichotomies.
	FST calls for continuous reflection upon boundaries and, with an ontological basis in process philosophy, shifts the analysis away from content to process.
	The importance of process philosophy is in its implications for practice as a process philosophy enables participants, or agents, to bring all manner of ontological accounts into research and interventions.

5.1. FST and project design and implementation phase

The auditing exercise

The principles can help practitioners find ‘gaps’ in their thinking to design an intervention that addresses a multiplicity of often overlapping, social concerns. The change agents in the *Greening the Economy* case study, for example, were highly cognizant of the need to incorporate the environment in their research. They gave less consideration, however, to the issue of gender and marginalisation of communities of people, i.e. Indigenous communities.

Whilst the participants of this case study viewed and discussed the FST principles at the outset of the project, the principles were not used to inform the objectives of the study. As a practitioner, I have learnt that an audit of the objectives against the is a useful undertaking and could have been taken at the beginning of the project, with the participants. Two principles [1] *Gender sensitivity* and [2] *Value voices from the margins*, might have carried greater weight in informing the project’s objectives, had a more thorough analysis of the principles in the objectives development phase, been undertaken. This statement is supported by the survey feedback taken one year after the project commenced.

Could the project be enhanced if we engaged people from the margins in the process?

Good question. Yes – it’s important to appreciate what changes would make a practical difference to people’s lives and what processes might enable those changes. It’s always

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dangerous to assume, and the principle of inclusion should also be extended to the research process. (Communication., 2011)

Had I initiated an audit exercise, these gaps may have been identified sooner, and the corresponding principles might have been better represented in the intervention's goals. Facilitation and project participant/observation requires a balance between influencing a group towards producing sound outcomes, and using my leverage to do what I want the project to do. An auditing exercise may have provided a tool for me to help the group engage more closely with the principles, whilst helping me to manage my partiality and or desire to see the less prevalent principles better reflected in the outcomes and project design.

5.2 Evaluation and monitoring

We can see that the value of the principles is that they define boundaries to consider what has been made explicit and implicit in a programme. In either the project planning and design phase, or during implementation, monitoring and evaluation that is undertaken as a matter of course, during the project's progress (rather than a post-project point-in-time activity), may enhance the quality and achievable objectives of the systemic intervention.

Thinking about a project's strengths and weaknesses through the FST lens, highlights the different levels of relevance and influence some principles have over others. The principles are not all inclusive, and, I cautiously suggested that interventions may be likely to be successful if some, or all, FST principles are implicitly present. In Case Study 3, *Yarrabah Kinship Garden*, I found each principle implicitly present, offering the project a unique moral and ethical set of considerations for project managers and participants to reflect upon at regular intervals. This project further demonstrates the value of FST as an evaluative tool. The methodology selected to undertake the analysis was PAR, which accepts the ongoing and cyclical nature of evaluation. Regular reflection upon actions, and modifications to practice were made as the project unfolded. Using FST principles as a lens may help direct participants attention and focus to specific ethical issues. This approach does not require participants to wait for a point-in-time monitoring method, and, further to this, traditional monitoring techniques, such as the SMART indicators (Davies & Dart, 2005, p. 18), can be used in consort, or parallel, to FST.

The *Carrot on a Stick* retrospective evaluation demonstrates a technique to use the FST principles as post-project evaluation criteria. This case study 1 analysed a community health intervention in terms of each principle. Like the auditing of the objectives method discussed above, this technique also reveals absent or low prominence principles. In the case of *Carrot on a Stick*, the environment was not incorporated in the intervention, and that this was reasonable given the project's stated aims and objectives. Finding the weaker, or less prominent principles, gives practitioners the option to address these issues in later interventions. This technique was also used with other methods, such as the participant survey and desk-top analysis, that again reveals FST's complementary nature.

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5.3. Reflection and critique of socio-political policy

FST was found to contain great value in the realm of political and social policy. FST is essentially a political framework. FST can contribute to movements for social change. Politicising the environment informs our awareness of the interrelated power relations that extend between human and non-human nature, which lead to the exploitation of nature. The participants of several of these case studies have either explicitly or implicitly sought to challenge power structures towards an emancipation of groups or individuals, and some, like the Greening of the Economy and Real Food Network have sought an end to ecological exclusions. Redefining the notion of sustainable development, for example, as an effort to reclaim an eroded term, to become meaningful and useful, and prompt deep reflection on our impact working within the social and environmental realms.

Through the FST lens, and in particular the principle of *Select appropriate method/ologies*, insights into socio-political context can be gleaned. The use of participatory action research was selected as appropriate method for the systemic intervention being undertaken at Yarrabah Aboriginal community. Qualitative methodologies, as an alternative to the dominant quantitative and positive methods of data collection and analysis currently in use to monitor the policy, 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. Learning from boundary critique of the principles, has broader implications than just to the immediate participatory group.

5.4. Theoretical contribution of FST Framework

The important task of an FST, is to revalue the underside of harmful and naive SODs, whilst acknowledging difference and respecting what continuities between human and non-human nature exist. Perhaps the most poignant example of this theme is found in the Yarrabah Kinship Garden case study. The framing of a problem, selecting the research method, and taking action carries a responsibility to find, and address, SODs in one's methodological choices, and in the outcomes of monitoring and analysis. The PAR framework used, with an FST perspective, revealed the nature of the Close the Gap policy. The policy resides upon a racial dichotomy, epitomized through archetypes of the ideal, healthy Australian citizen. To be a healthy Indigenous man or woman means to strive towards 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). Of course, an FST perspective is not the only approach to finding harmful SODs, but the value of FST is that the principles call for rigour of reflection and critique, and a consideration of methodologies that go beyond the narrow quantitative and positivist ideologies, still at large in monitoring approaches to the Close the Gap policy.

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5.5. Praxis: Process philosophy and boundary analysis

Process philosophy has an ontological and epistemological bearing on FST practice. Process philosophy¹, requires that the boundaries containing particular perspectives be examined in a process that shifts the ontological primacy of analysis away from the *content*, to the *process* in which knowledge is generated. Knowledge can be seen to be contained within boundaries. A focus on a foundational theory enables us to examine the content of a theory, and make propositions about its nature. A focus on the process of making the boundary judgments, however, relies on the placement of a boundary around knowledge or data sets. Where the primary boundaries are drawn attracts critical attention and are crucial in the development of knowledge.

FST has been drawn from clearly bounded content philosophies. Figures 1a and 1b below, represent the growth of the study, as a knowledge generating system, from other sets of knowledge. Midgley (2000) argues, that philosophy has ‘exceptional significance’ and cannot be overlooked when considering methodology, yet, Midgley (2011) also warns against automatically affording a content theory a foundational status. Using a foundational theory in action research projects risks eliminating other content theories from the project, because, they may not accord with the project’s theoretical foundation. Midgley (2011) 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). Taking a process perspective to the case studies, we see that boundary analysis was commonly observable. The process of making boundary judgments is reflected in the questions each group asked about their project. I observed this practice unfold and be led by the participants, as they examined the parameters of their undertaking.

¹ Which varies from previous writers including Bergson, 1911, Whitehead, 1929, Pols, 1967, Capek, 1971, Leclerc, 1972, 1986, Mathews, 1991 and Gare, 1996.

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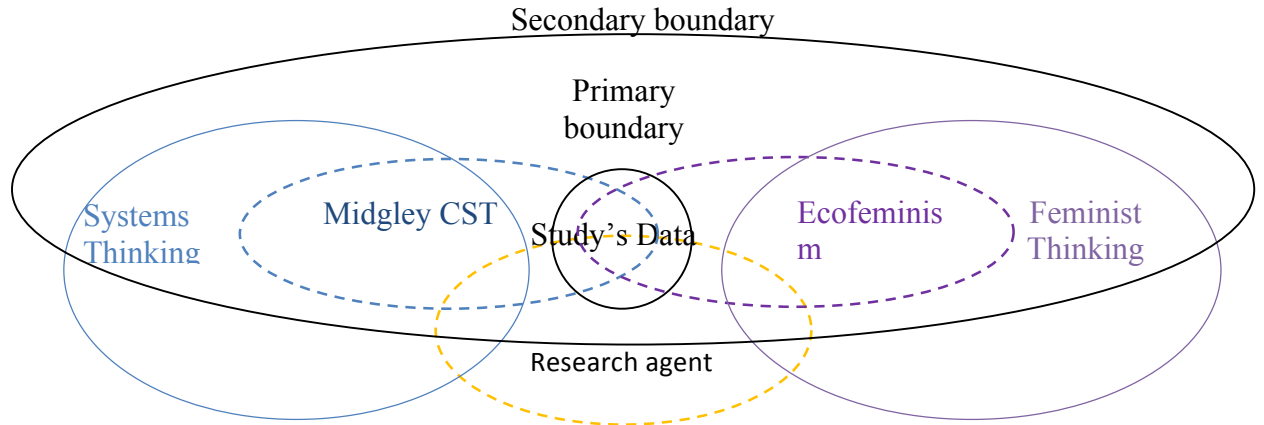


Figure 1.a. The crossover of the boundaries between Systems Thinking, Midgley CST, Feminist Thinking and Ecofeminism, at the commencement of the study.

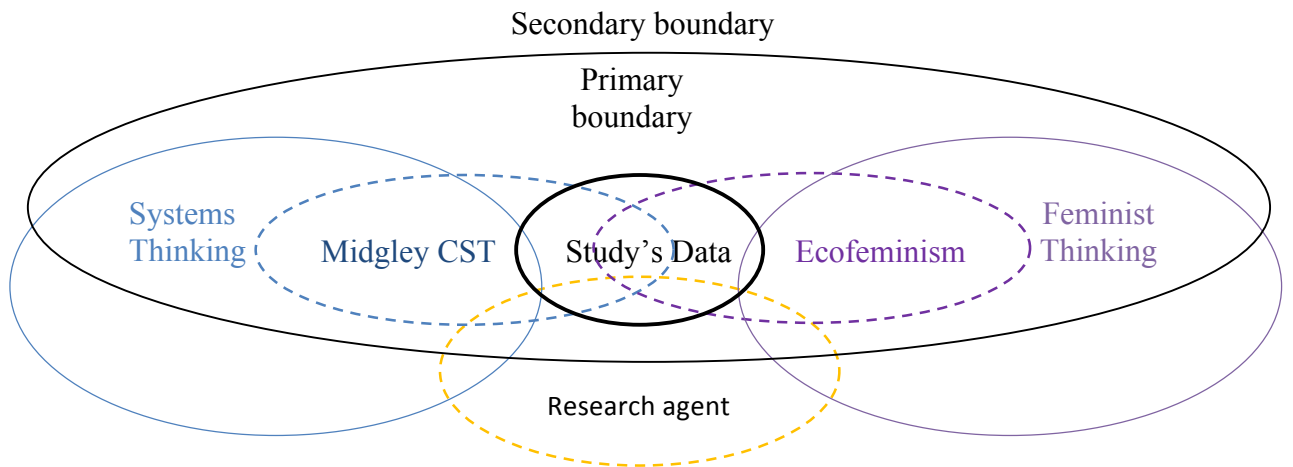


Figure 2.1.b. The crossover of the boundaries between Systems Thinking, Midgley CST, Feminist Thinking and Ecofeminism, at the completion of the study. The Primary Boundary containing the study's data has grown.

For example, the *Greening the Economy* group, were concerned to find an appropriate physical geographical boundary, around their study and regularly reviewed their decision. They considered the political and organisational bodies enclosed within different boundary locations, as these organisations impact on both the environmental policy and management and consultative expertise. In this way, the group decided what constituted their local context, as well as what is within and outside the group's locus of influence.

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Another boundary consideration asked; ‘Who’s in and who’s out of this study?’ The case study of the *Kinship Gardens* development at Yarrabah Aboriginal community continually addressed this very question. Of course there was the continuous boundary scrutiny provided by the MSC technique for the managers of the RFN.

5.6. Commensurability of discordant paradigms

The importance of process philosophy is in its implications for practice. Incommensurate paradigms can coexist within a process philosophy framework, and FST with application of the principle *Select appropriate method/ologies*. Process philosophy enables participants, or agents, to bring all manner of ontological accounts into research and interventions. Furthermore, if facilitators can make the generation of new knowledge explicit, a powerful and empowering learning opportunity is presented, which in itself, is a commitment to distributing power, as it is not being retained or withheld by the ‘scientist’ or person in an authority position.

The greening of the economy involved, at times, heated difference of viewpoints between participants. Members challenged one another’s knowledge and opinions, and the differences were captured in the modelling exercise. As the methods are facilitated within the PAR methodological approach to SI, the group critically reflect upon their models to build shared understandings, in an ongoing cyclical application of ideology to methodology.

6. Conclusions

This work stimulates a raft of further research questions. I wonder how the framework might be strengthened and embellished. Introducing analysis from Black Feminism, for example, could make a substantive contribution to our analysis of the intersectional nature of oppression, which I sense would provide more vantage points, and therefore greater nuance, in the analysis of dual or multiple intersections of oppression than ecofeminism’s treatment of gender and the environment.

The future of FST is in developing practitioners’ skills to translate the FSTs across professions and projects to look at the FST framework as a guide to planning, implementation, and monitoring and evaluation. Practitioners, project managers, bureaucrats, policy makers, researchers, and activists can consider their projects in light of the five simple principles. What is missing from their project? In the absence of a principles’ representation, is that justified? Can a project be strengthened by considering the inclusion of the ideas generated by one or more of the principles?

Embedding the principles may require the adoption of a complementary or alternative methodological starting point to ground projects within a community, if the ‘top down’ approach is otherwise suggested. The academic rationale behind FST, and the case studies presented, might convince agents unfamiliar with this research movement, of the vast potential benefits and gains to be had in terms of community involvement, distribution of leadership and empowerment, and tangible, long-term environmental gains. FST also requires of researchers and change agents that they recognise their own

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subjective sociocultural reality, gender orientations and belief systems, and the part these play in the research process.

FST principles provide a strong foci for reflective practice and for thinking about social justice ethics. I suggest that establishing the presence of FST principles may have beneficial outcomes for all species on our planet – not just humankind. Our point in time demands that we do things differently. It is my hope that FST can assist practitioners to make the transitions towards the new research paradigms.