

**The Emergence of Sustainability Culture
and the Sustainability Practitioner**

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I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

Matthew Roy Charles PARNELL

Abstract

In this thesis, I propose that sustainability is a new emergent cultural phenomenon – a new “dreaming” - arising from our conscious and unconscious actions, our relationships and our connection to place. Such a culture of sustainability is essential to support the vision of a sustainable global society. I further propose that the way sustainability is practised, both personally and professionally, has significant potential for fostering the emergence of sustainability culture, and that a mature sustainability culture, in turn, will support our myriad actions towards sustainability. The above propositions have a significant caveat: emergence, as understood in complexity theory, is not predictable. The current unsustainable paradigm of global development is also an emergent phenomenon. Real sustainability is therefore not inevitable, simply because a vision has been articulated, and strategies and actions implemented.

I also contend that as sustainability is holistic in conception, it requires a holistic approach to practice, in addition to the mechanistic prescriptions common to much contemporary sustainability practice. To move towards a holistic approach to practice requires a different type of practitioner from the conventional practitioner: more generalist than specialist, drawing on their “inner sustainability culture” when faced with complex sustainability problems, capable of working across scales, open to discovery of new patterns, and mindful of the degree of complexity in any practice setting.

In recognition of the need for a new cultural paradigm of sustainability, and drawing on the concept of emergence as described by complexity theory, I have designed this research project to investigate the following four themes:

1. Culture as an emergent quality of complex adaptive socio-technical systems;
2. The connections between human action and emergent system qualities;
3. The prospects for the emergence of a culture of sustainability; and
4. The implications of emergent sustainability culture for the sustainability practitioner.

In this thesis, I argue that we need a model of sustainability culture that accommodates the emergence phenomenon and new ways of emergence-based sustainability practice. I therefore propose an Emergence Model of Sustainability

Culture to illustrate the relationship between sustainability, culture and the emergence phenomenon, and I articulate four Emergence Patterns for Sustainability Practice as a working framework for emergence-oriented sustainability practice across different generic practice settings in simple, complicated, complex and chaotic space. I hope that sustainability practitioners will find my Emergence Model and Emergence Patterns to be helpful in progressing to a more considered and deeper approach to sustainability practice than contemporary approaches, especially where sustainability problems are complex and difficult. In this way we may continue to develop a culture of sustainability as a new “dreaming” and the practice of sustainability will progress further to service humanity’s compelling need.

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List of Abbreviations

ARIES: The Australian Research Institute in Education and Sustainability
ATSIC: Aboriginal and Torres Strait Islander Commission
ATWORK: Aboriginal Technical Worker Program
CAT: Centre For Appropriate Technology
CCP: Cities for Climate Protection
CHCC: Coffs Harbour City Council
CDEP: Community Development Employment Program
CoP: Community of Practice
CSR: Corporate Social Responsibility
DCDSCA: Department of Community Development, Sport and Cultural Affairs,
Northern Territory Government
DK-CRC: Desert Knowledge Cooperative Research Centre
DOP: Department of Planning, New South Wales Government
EATING: Education, Action, Trust, Inclusion, Nourishment and Governance
EE: Environmental Education
EoS: Education for Sustainability
FHBH: Fixing Houses for Better Health
GECA: Good Environmental Choice Australia
GRI: Global Reporting Initiative
IAP2: International Association for Public Participation
ICLEI: International Council for Local Environmental Initiatives
IHANT: Indigenous Housing Authority of the Northern Territory
IISD: International Institute for Sustainable Development
ISSP: International Society of Sustainability Practitioners
LCA: Life Cycle Assessment
MAC: Mt Arthur Centre
MIPS: Material Intensity Per Units of Service
NABERS: National Built Environment Rating Scheme
NAHS: National Aboriginal Health Strategy
NSW: New South Wales
NTRC: National Technology Resource Centre
OLC: Our Living City Settlement Planning Process at CHCC
OR: Organizational Review at CHCC
ORT: Organizational Review Team at CHCC

PLA: Participation-Learning-Action
PME: Participatory Monitoring and Evaluation
PRA: Participation-Reflection-Action
QBL: Quadruple Bottom Line
RRA: Rapid Rural Appraisal
RTA: Roads and Traffic Authority, New South Wales Government
SCU: Southern Cross University
SA: Sustainability Assessment
SoE: State of the Environment
SRA: Sustainability Reporting Alliance
TBL: Triple Bottom Line
TNS: The Natural Step
UNDP: United Nations Development Programme
UNEP: United Nations Environment Programme
UTA: University of Tasmania, School of Architecture
WASIP: Waste and Sustainability Implementation Program
WSUD: Water Sustainable Urban Design

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