

A Climate for Change

An exploration towards Integral Action Loops to apply our
knowledge for sustainability success

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Abstract

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A Climate for Change addresses an integration gap - how do we make sense of sustainability and the multiple perspectives on it? It does this through four major steps. First, I introduce meta-theory and a particular type of it, integral theory. Steps two and three draw on action logics then common pool resource research to examine case studies. Finally, these areas are analysed together - the results from the case study correlations, and the meta-theory analysis, are structured through integral theory with loop learning.

At the heart of the investigation are questions of appropriate interventions and theory. In the face of multiple sustainability perspectives and practices, how can we take effective action to meet the demands we face? An *Integral Action Loop* framework is proposed as a mechanism to understand important catalysts, fulcra that can be focused on.

The scales of consideration associated with sustainability are, necessarily, expansive - from politics, cultures and across institutions, to governance and multinational corporations, global, local and individual considerations. That is, the range of theory is vast. At the same time, I would argue we need practical results to assist us with sustainability transformations.

Consequently, to manage the scale, this thesis looks at sustainability through a multinational company case study and climate change framework. However, it does so using a range of approaches - meta-theory alongside correlating theory with the cases - to understand both particular theories and the relevance of each for another.

Given the scope outlined, there is an implicit reach towards integrated approaches and a search for joined up consideration, as opposed to a list of factors, to manage through the complexity. In this light, it may be unsurprising to some that I encountered integral theory at an early stage of the work. Integral theory has guided much of this inquiry and it is tested for its usefulness. It is explicitly applied, alongside a more general meta-theory methodology, to understand the paradoxes and incongruities through which we approach sustainability. Energy efficiency, and the gap between profitable opportunities and actual implementation, is used to illustrate the usefulness of these theoretical approaches.

This integral/meta-theory examination highlights significant structures. In particular, developmental hierarchies - as represented by action logics - are prominent. Action logics is

a constructive developmental theory modelling how people make sense of the world around them. I find that these discrete stage structures are strong sustainability categories. I develop theory that correlates distinct stages to how case study senior leaders describe sustainability. Similarly, organisations can be examined for collective action logics. The company leaders describe aspirations for enhanced sustainability success in a manner mirroring later organisational stages. Consequently, by being mindful of action logics we may be able to actively design sustainability interventions with a greater likelihood of success.

Human societies have, however, successfully addressed some environmental dilemmas for millennia. Research into these outcomes is relevant with respect to today's sustainability issues and organisational actions. An examination, of data in this thesis, uncovers strong parallels between principles correlated with historic success and the case study multinationals.

These parallels, the meta-analysis of sustainability and energy efficiency, and the action logics correlations, demand integration. For institutions, there are multiple theoretical lenses describing sustainability transformation. We clearly need effective frameworks to manage between different approaches and, importantly, apply the interplay of many factors to circumstances at the various scales we are operating within. For example, underpinning factors, such as action logics, are important considerations but are they key to a particular intervention? I consequently propose *Integral Action Loops*, based on the theoretical and practical research from the integral, meta-theory, and case studies correlations in this research, as a framework that may be used to bridge gaps revealed through the course of the thesis.

Integral action loops examine subjective and objective facets and theories of change. The structure considers wide ranging individual and collective influences against the depth of change – first, second and third order. These orders correspond to directly addressing problems, through to a more fundamental shift in physical structuring and subjective meaning making systems such that the whole phenomenon is reconceptualised. That is, to facilitate change we need capacity to work across the depth of theory, as well as surface circumstances. Integral action loops may deliver clarity on interrelationships, and the influences of multiple factors on each other, to assist understanding and practice for sustainability success.

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Preface and Acknowledgements

This thesis inquiry developed from a lifelong fascination and engagement in environmental issues. I can trace my interests back to early memories, as a young child captivated by science and an awareness of the atmosphere, global warming and the need for action. Throughout my adult life, topics such as these have been an abiding passion and this is a critical support for the research - when I started, I could not have imagined how all consuming, structuring and demanding a thesis, while simultaneously working in challenging and worthwhile employment, was going to be. There is more on this journey in the last chapter. However, in the context of this introduction, there is no way I would be finishing the research now without the motivation derived from sustainability issues and the exceptional assistance of many along the way.

First and foremost this has been a shared exploration. My wife, Niki, and I embarked on doctoral studies at the same time. Extraordinarily, we look likely to finish at nearly the same time and this is substantially down to the support, insight, inspiration and encouragement she provides for me. I have needed this; there have been many personal challenges during the research, such as a two year, life-threatening, illness of Niki's eldest daughter and the death of my father - both meaning numerous emergency dashes to airports, transcontinental and intercontinental flights. Throughout this, and more, her presence, whether physically close or halfway around the planet has meant the world to me. It is fundamental to this thesis and its completion. Academically, Niki has been the source of reviews and conversations, we have explored the analysis and potential for each other's theses and she profoundly influences this work. I am deeply grateful and privileged to have

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Declaration

I, Simon Divecha, certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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