

BOLD VISIONS IN EDUCATIONAL RESEARCH

# Between the 'Real' and the 'Imagined'

Professional Learning, Reflective  
Practice and Transformational  
Leadership

Leslie James Pereira



*SensePublishers*

BETWEEN THE 'REAL' AND THE 'IMAGINED'

# BOLD VISIONS IN EDUCATIONAL RESEARCH

## Volume 22

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# Between the 'Real' and the 'Imagined'

Professional Learning, Reflective Practice  
and Transformational Leadership

*by*

Leslie James Pereira

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SENSE PUBLISHERS  
ROTTERDAM / TAIPEI

A C.I.P. record for this book is available from the Library of Congress.

ISBN 978-90-8790-466-1 (paperback)

ISBN 978-90-8790-467-8 (hardback)

Published by: Sense Publishers,  
P.O. Box 21858, 3001 AW Rotterdam, The Netherlands  
<http://www.sensepublishers.com>

Cover photo by Jared Pereira

*Printed on acid-free paper*

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# DEDICATION

To Lee Jun Fan,

A real human being...

&

To teachers everywhere: a more noble calling would be hard to imagine



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# ABOUT THE CONTENTS

## SECTION 0 (P. 1)

This section provides two chapters: a context and a framework. It requires an important decision from you.

### *Chapter -1: An introduction (p. 3)*

In which I provide some background into the research. I describe how it came to be written and how it may be read. I outline its structure and provide some guidance as to how you may navigate your way through it.

### *Chapter 0: An Afterword (p. 9)*

Before reading this chapter you must decide whether you wish to experience the research in the way that I did, or engage with it at an academic distance – I would suggest leaving it until the suggested point later in the book. This chapter provides an intellectual framework

## SECTION 1: THE TALES (P. 19)

This section is made up of two chapters each containing the tales that provide the foundations upon which this research is built.

### *Chapter 1: From Imageal to 'I' (p. 21)*

In this chapter I paint a picture of the development of 'I', the person who began this research. Six vignettes, stretching over a period of nearly three decades, provide insight into the drivers behind, and assumptions underlying, this research. Each tale recollects a defining moment in the development of 'I' and foreshadows themes central to this research: On authority, On knowing, On teaching, On control and On technique.

### *Chapter 2: A year in the life (p. 31)*

The tales in this chapter recollect experiences of a year in my life as Deputy Principal of Clare Heights, a metropolitan senior high school. A number of tales are drawn together under key themes and provide the impetus behind the inquiries carried out in section two. The tales are grouped under several headings that are revisited in Section Three. Some time after the beginning, 'Experiencing the contradictions, On the nature of trust, The morality of leadership practices, The opposite ends of structural change, Beyond technique, and The ethics of leadership paint a temporal picture of a year in my life at Clare Heights.

SECTION 2: THE INQUIRIES (P. 65)

This section is composed of my inquiries into the tales of Chapter Two. Six chapters make up this section: the first two are concerned with my leadership practice and are centred on my experiences at Clare Heights – Ch3: The moral dimensions of leadership practice; Ch 4: The opposite ends of change. The next chapter, Ch 5: Beyond technique, examines the concept of technique arising from my experiences. Ch 6: Teaching as a Way inquires into the interplay between my professional life and my attempts to improve my practice. The next chapter, built on the understandings arising from the previous inquiries, examines my role as a leader – Ch 7: The ethics of leadership. Although each deals with particular issues, there is a strong coherence flowing through the progression of the inquiries. For presentation purposes, each chapter is informed by those that preceded it and all contribute toward Chapter Seven, the ethics of leadership. This is set out in Figure 2. The final inquiry in this section, Ch 8: The research that was, is an investigation into my experience of the research process. Each chapter, then, is an example of writing-for-inquiry and constitutes both the process and the product of my inquiries.

*Chapter 3: The moral dimensions of leadership practice (p. 71)*

This chapter explores issues of morality and power embedded in the way I addressed a reported case of an inappropriate teacher-student relationship. I introduce phronesis as an advisory concept for decision-making and use two forms, critical and poetic phronesis, to assist in uncovering and examining the issues embedded in this incident. I introduce fictive writing as a tool that enables me to make space for ‘the other’ while simultaneously creating a disturbance to my own perspective.

*Chapter 4: The opposite ends of change (p. 97)*

Recognising the moral dimensions of leadership practice and the significance of omnipresent power imbalances described in the previous chapter, I examine several meeting places: first, between the school and the leader using semiotics to uncover my own predispositions; second, between the change initiative with the collective using Spiral Dynamics as a tool to understand cultural values; and third, between the change initiative and the individual through an investigation of needs and professional engagement. The singular and collective experience of change further problematises the moral practice of leaders.

*Chapter 5: Beyond technique (p. 123)*

In this chapter, with a growing understanding of the complexity of bringing about change, I explore the paradox of successful decisions that contradict established wisdom and argue for a movement beyond technique. I explore the nature of intuition in guiding action using the concepts of convergent and divergent knowledge, and tacit and embodied forms of knowing. I introduce the concept of limits of applicability guided by an integral approach.

*Chapter 6: Teaching as a way – my living-theory (p. 139)*

In this chapter I survey the process of my own educational development. Against a backdrop of the lessons from earlier chapters, I use the experience of

myself as a ‘living contradiction’ to explore the causes of contradictory action-theories and suggest a significance with regard to the variation in our domains of development. I position my experience of transformatory learning with respect to three key theorists and explore the concept of reflective practice. Teaching as a Way is described as a metaphor for the philosophical summation of my living theory bringing together metaphors of teaching, knowledge constitutive interests, action theory, reflection, personal change, domains of development, and the experience of oneself as a living contradiction.

*Chapter 7: The ethics of leadership (p. 157)*

In this chapter a dilemma is created for leadership practice. Informed by my inquiries into the nature of cultures, the singularity of individual’s life-worlds, the limitations of technique and the relativity of morality, I deconstruct an incident resulting from the introduction of a change initiative. I examine the concepts of leadership and management and explore the moral position of the leader with respect to those they are required to lead. I apply the theory of patronage and brokerage to schools and suggest that the accepted concept of school leadership is a myth. Finally, I explore the implications of postmodernist assumptions on the concept of morality and develop the notion of morality-as-process that stands independent of ethical practice.

*Chapter 8: The research that was (p. 175)*

The journey that has produced my ‘claims to know’ is examined from a methodological perspective. Utilising multiple ways of knowing (Techne, Poesis, Praxis, Dialogos, Phronesis, Polis, Theoria and the voices of those from my past), I deconstruct elements of the research process as I have experienced it. I reconsider the concepts of methodology, literature reviews, research focuses, and evaluative standards. Drawing on the notion of culture introduced in Chapter Four I examine the position of this research with respect to other paradigms, while the concept of moving beyond technique from Chapter Five assists in the formulation of no-method as method.

SECTION 3: A FUTURE HISTORICITY (P. 203)

In this section I bring this ‘moment’ in my research to an end.

*Chapter 9: Pathways to more inclusive knowings (p. 205)*

In this chapter I present a tentative formulation of the understandings I have gained through my experience of this research. I relate these understandings in terms of my practice as an educator and as a researcher.



# PREFACE

I seek not to know all the answers, but to understand the questions.

Kwai Chang Caine

Somewhere between the ‘real’ and the ‘imagined’ lies the person I once was, the person I am, and the person I hope to become. In looking back on the moments that have helped to define who I have become I realise that I am committing an act of re-collection, an act of (re)construction, and that I am employing a certain level of poetic licence. It is doubtful whether these moments happened in exactly the way I have portrayed them, or indeed, in the way I remember them. As T. E. Lawrence wrote in the preface of the *Seven Pillars of Wisdom*:

It does not pretend to be impartial. I was fighting for my hand, upon my own midden. Please take it as a personal narrative pieced out of memory....And there were many other leaders or lonely fighters to whom this self-regardant picture is not fair. It is still less fair, of course, like all war-stories, to the unnamed rank and file who miss their share of credit, as they must do, until they can write the despatches. (Lawrence, 1940, p. i)

But these memories, nevertheless, shed some light on how I came to approach life in the way I have. They possibly give the reader some insight into the origin of some of my drives, my biases, and my beliefs. I hope I haven’t fallen (too far) foul of the tendency to show myself in the best possible light. I have attempted to draw out the essence of these lived experiences and if they live in my memory in the way I have presented them, it is likely they have also directed my becoming in the way that I am suggesting.



# ACKNOWLEDGEMENTS

My deepest thanks go to my daughter, Christa Pereira, who has tirelessly read and edited drafts of this book. Chapter Three, a defining moment of this research, benefited significantly from her contribution.

Peter Taylor, whose commitment to extending the boundaries of what is 'valid' has enabled me to dance on the edges of traditionalism.

To my children, Amiee-Jade, Christa, Jared, Calligan and Bethany. Our discussions continue to play a key role in enabling me to clarify the ideas that underpin much of my work.

Finally, to my partner in this journey. You have somehow managed to continue your unwavering support throughout our thirty-one years. This work is indicative of your influence and would not have happened without you.



## **SECTION 0**

**BY WAY OF EXPLANATION...**

## Samson, Hercules, Tutankhamun and friend

Theories,  
like philosophies,  
which protect, entwine and embalm, resemble  
Nets.

And nets,  
unlike pockets, consist of holes – big holes. Heavy holes.  
Shoulders grow  
Weary, sometimes, from the burden of palliative filosofies. So,  
meeting

Others,  
who cut through the twelve fabrics that bar our way, and  
mummify, some straight, some not-so, some  
Hastily, and yet all at their own pace, give respite. Not as often  
as Required. And yet

Frequently,  
one will come, to provide temporary  
Relief for those shoulders, poking holes in the bandages, the  
Wrappings. But they heal. And theories grow, one upon  
another, narcissistically. Eventually however,

Hopefully, hel<sup>2</sup>aid brings the  
Silver Plane, the  
Light comes, and the bandages  
Fall, theories  
Dissolve and the butterfly

Soars...

## AN INTRODUCTION

We have a habit in writing articles published in scientific journals to make the work as finished as possible, to cover all the tracks, to not worry about the blind alleys or to describe how you had the wrong idea first, and so on. So there isn't any place to publish, in a dignified manner, what you actually did in order to get to do the work, although, there has been in these days, some interest in this kind of thing.

Richard Feynman (Nobel Prize Lecture)

This is not a book *about* research. Rather it is an example *of* research. It is a text that wants to expose the wrong ideas in the development of knowledge, to uncover the tracks in a way that Richard Feynman chose to do in his Nobel prize acceptance speech. Long an idol of mine, I have to say that I disagree with his view that these exposures are of no value other than to make a speech more entertaining. For Richard, the significant issues of scientific value are the results of his research – but then, he was talking specifically about the development of the space-time view of Quantum Electrodynamics (QED).<sup>1</sup> And herein lies the rub. QED is a product of a science that deals with inanimate phenomena; light and matter. The significance of these results lies in their ability to predict physical outcomes – QED is open to experimental verification. On the other hand, my research can only be described in context. While Richard and I might seem to disagree, the truth of our two views is embedded within our individual contexts; his verification is dependent upon the inanimate physical world while mine lies in the animate world of human experience and social interaction – in the social sciences the *process* of coming to know *is* significant.

In this text I have not attempted to lay before you outlines of particular methods or techniques; I did not intend a 'how-to', more a 'how it was'. This is a book about knowledge and its generation. Not abstract, disconnected propositional knowledge – although that is only one step away – rather this is a book that takes seriously the warnings of a postmodern perspective. It is a book that lays bare the real-time development of knowledge for one individual embedded within a particular context. From one point of view, it is an examination and demonstration of the process and product of academic research in the social sciences. Taking the view that the dominance of the traditional view of epistemology is giving way to, what Nel Noddings (1990) might call, a post-epistemological future, this text describes a different way of working, it “adumbrates a different form of knowledge” (P. Clough, personal communication, 2006), and echoes Denzin and Lincoln's (2005) eighth moment. For those engaged in academic research it provides an example of a new way of knowing, of knowledge generation conducted under postmodern epistemological assumptions. From another point of

view, it is a book about the complexities of school leadership. While much has been written on leadership theory, on school culture, professional learning and reflective practices, there is very little in the literature that demonstrates the fragility of the advice provided by these concepts under the contextual pressures of professional practice:

In mainstream management – and educational – studies, leadership is a valorised concept associated with success, not failure or even mediocrity. Seldom is it probed in ways that reveal the conditions of its own construction. The ethics of its power dynamics are often glossed over. The interplay of unconscious as well as conscious, of irrational as well as rational dynamics in human relationships, is often overlooked. Its embodiment in gendered and raced forms and its emotional evocations are often not confronted. The macro-structural contexts within which it operates are often not considered, as is the fact that leadership is more often concerned with working within these structural contexts rather than changing them. It would be hard to find, in mainstream literature on leadership, a depiction of controlling individuals, ineptly juggling complex contexts and manipulating others to collude in shallow visions of a desired future. (Christie & Limerick, 2004, p. 3).

#### A WORD OR TWO ON PRESENTATION...

The core of this book begins in Chapter One. What follows, in both the rest of this chapter and the next, are maps to help with your reading of what begins there. In the rest of this chapter you will find an explanation of the structure of the book as well as a description of the peculiarities of the textual presentation – it would probably be beneficial to read this. The next chapter is a more ‘traditional’ introduction to the text describing several concepts that may give some background for the rest of the text. However, if you would prefer to let the story unfold, in much the same way as it did for me, you can skip this chapter and come back to it later. But if you would prefer a ‘frame’ placed around it read on...

The title, *Between the ‘Real’ and the ‘Imagined’*, provides a metaphorical pointer to the construction of the text and the central messages it contains. It is a statement of belief on the limitations of our ability to have definite knowledge of the fit between our experiences and an objective reality. Expressions of what we know find their claims to validity in our understandings of past experience and, as such, are expressions of belief; we live with a necessary day-to-day belief that the world is consistent, that life is predictable – the way things were is the way they will be. But all experience is both contextual and fragmentary, we cannot know the entirety of any situation and our ability to attend is both finite and dependent upon physiological, emotional and cognitive states. Consequently, we lack a *complete* understanding and our appreciation of an experience lies somewhere between the ‘Real’ and the ‘Imagined’.

#### *On gender neutral language*

To begin with, I have chosen not to engage in gender neutral language, I do not intend an expression of any form of gender hierarchy. Although I had begun writing using neutral terminology and phrasing, I eventually rejected this approach as inappropriate and incompatible with the aims of the text. I chose, instead, to

write using masculine pronouns as an exposure of my own gender and in recognition of the centrality of my own identity in my interpretations. The concepts and ideas that I am discussing are investigated in terms of their relationship to my use. Further, gender neutrality serves to re-establish an objective perspective by promoting the assumption that things appear the same to males and females. If interpretation is central to this research then its singularity should over-ride any assumption of collective gender-neutral thought.

### *Reading the text*

Throughout the text I have provided several layers of description to support its interpretation. The best place to start, I would suggest, is the Contents. I borrowed the idea for the layout of the contents page[s] from Paul Feyerabend. It provides an outline of the development of the story. This is supported by Figure 1 which provides a key to the various referents used throughout the research and the chapters in which they are used. The concept of a referent is discussed more fully in Chapter Eight.

Section Two: Writing-for-Inquiry contains the chapters in which the main ideas resulting from this research are presented. The chapters are sequential in their development relying on those that came before while laying the foundations for what is to come. While essentially complete as stand-alone pieces, it may complicate your interpretation of the text if the chapters are read out of order. At the beginning of each chapter in this section, you will find a ‘Story: In brief’ describing the development of the arguments within that chapter.

As you will realise, the structure of this text is different from that usually expected of ‘scientific’ research. Closely following the development of the research itself, the chapter arrangement does not match the standard approach and this is discussed in detail in Chapter Eight. I have, as far as possible, followed a diachronic arrangement so as to accurately represent the temporal development of my research but, again, I will leave a discussion of issues pertaining to the research process to Chapter Eight

### *The use of alternative fonts*

Throughout the text I have used a number of fonts to emphasise the polyvocality of the research. Each font is intended to draw the reader’s attention to the different contextual origins of the voices and effectively limit their ‘truth’ claims. The majority of the text is written using this (current) font and provides the framework for the text. Throughout the remainder:

- This font is used to represent the voice of Griot, the narrator;
- This font is used to relate the tales that provide the ‘data’ for my research;
- *This font is used to present entries from the journal I maintained and provide insight into my thoughts around the time of the tales;*
- This font is used to highlight pieces of fictive writing that are used to create alternative perspectives.

In Chapters Three and Eight you will find some additional fonts; these are explained in context.

A WORD OR TWO ON THE RESEARCH...

Throughout the research that is reported here I tried to remain cognisant of my twin roles as researcher and practitioner. My interest in epistemology led to a reflexive investigation into my professional practice as an educator and the process of coming to know through academic research. Although I believed them to be inextricably interwoven in my personhood, I positioned the reflexivity of my research in terms of me as an educator and my process as a researcher. It seemed to me that the latter would prove useful in recognising the limitations of my findings.

To begin with, then, this research is a study of the process of academic research. Much of what follows is informed by the twists and turns of my research throughout its progress. I have considered the triple crises of representation, legitimation, and praxis; their implications under postmodernist assumptions; and examined the cultural drives behind various research paradigms and ‘moments’ of qualitative research. I have explored several approaches to inquiry that are beginning to appear more frequently in the literature; i.e., the areas of writing-for-inquiry, autobiography as a research praxis, and Arts-based inquiry.

Second, this is a study into my practice as an educator. It is centred on my role as a school administrator during my first year in a large metropolitan school on the east coast of Australia, Clare Heights. For a period of one year I kept a journal of my experiences and this provided the material for my subsequent inquiries. In attempting to understand the practice of transformational leadership I came to investigate concepts of morality and ethics, management and leadership, the contributions of intuition, embodied knowing and technique toward decision-making, and the impact of change initiatives.

		<i>Introduces</i>	<i>Themes</i>	<i>Links to</i>
<i>Ch1</i>	Imageal to 'I'	Griot	Authority, knowing, teaching, control, technique	
<i>Ch2</i>	A year in the life			
<i>Ch3</i>	Moral dimensions of leadership practice	Fictive writings Phronesis	Moral relativity Power relationships Limitations of leadership models	Ch7–morality as a process Ch4 & 7–playing with lives Ch5 – limits of applicability
<i>Ch4</i>	Opposite ends of change	Cultural evolution Distribution wave Semiotics	Different concerns Power relationships Needs	Ch7–group membership of leaders Ch3 & 7–power relationships
<i>Ch5</i>	Beyond technique	Limits of applicability Integral philosophy 4Q model KCIs (1 & 2) & knowledge 3 stages of technique	4 types of understanding Convergent/divergent knowledge Limitations of technique Chaos	Ch3–limitations of leadership models Ch8-limitations of research methods
<i>Ch6</i>	Teaching as a way	Domains of development Personal change model KCIs & action, curriculum The messianic	Living contradiction (integrated person) Espoused/theories-in-use Personal growth Reflection/reflexivity	Ch4–individual change
<i>Ch7</i>	Ethics of leadership	Morality as a process Patrons and brokers KCIs (3) & leaders' action Leadership as education	Ethics and morality Derrida's messianic Playing with lives (values) Leadership & management Group membership Types of action KCIs & leaders' action	Ch3 – phronesis Ch3 – power relationships
<i>Ch8</i>	The research that was	Research as culture No-method		
<i>Ch9</i>				

*Figure 1: Key referents used throughout the research*



## AN AFTERWORD

*(If you want it at this point...)*

How you get to know is what I want to know. (Feynman, 1998, p. 28)

*The way we represent the world to ourselves is not, naturally, governed by abstract theories or constructs. We do not innately defer to a rational reconstruction of events, actions or perceptions. Rather, we experience the nexus-absolute; the boundary between the 'I' and the 'not-I'. If our experience is awkward or painful we are brought face-to-face with the finite nature of our ability to control or influence the external world; we may come to realise that the 'I' is limited. It is through our negotiations with these experiences that we develop an understanding of the world, its inhabitants, and our selves – we develop our personal knowing.*

### THE SPECTRE OF A POSTMODERN CONTEXT

Much of what I have written can be seen as sympathetic to the assumptions that underlie postmodernist thought. Indeed, I have suggested that all of our experience is clouded in the limbo between what 'is' and what we tell ourselves. But, contrary to any religious implications, I do not see this limbo as a place of abiding between heaven and hell – it is simply the way things are – or, may be. The essence of postmodernism lies in its forceful invitation to re-assess what and how we 'mean'.

Postmodernism can be understood as a reaction to the limitations of modernism (Capra, 1982; Polkinghorne, 1992; Wilber, 1998). Many of the concepts previously considered to be, in principle, understood were found to be far more complex than originally believed: e.g. matter; time; light; space; order; cause and effect. However, although the certainty that followed from the successes of Newtonian mechanics has been erased by the perspectives offered in contemporary physics, the last four hundred years has witnessed the colonisation of western culture by a mechanistic explanation of the world.

Fritjof Capra (1982) has argued that a reductionist, mechanistic model underpins the fields of biology, medicine, psychology, and economics. Our understandings of reality are underpinned by an assumption that the world is essentially a giant machine composed of separate objects that interact according to the law of cause and effect. Further, it is assumed that all complex phenomena can be understood by a process of reducing them to their smallest parts and looking for the mechanisms

through which they interact. Since the beginning of the twentieth century, however, we have seen the birth and development of a realisation in the scientific world that Newtonian laws provide only an approximation to the way the world works and, if this is so, the paradigm that underpins western culture is flawed. But how can the laws of science, verified by the science community through extensive observation and experimentation, be wrong?

The answer is, first, that the laws are not the observations and, second, that experiments are always inaccurate. *The laws are guessed laws, extrapolations, not something that the observations insist upon* [italics added]. They are just good guesses that have gone through the sieve so far. And it turns out later that the sieve now has smaller holes than the sieves that were used before, and this time the law is caught [out]. (Feynman, 1998, p. 24)

### *Postmodernist themes*

Although there is an enormous diversity, Donald Polkinghorne (1992) has isolated four basic themes common to postmodern epistemologies: foundationlessness; constructivism; fragmentariness; and neopragmatism. The theme of foundationlessness reflects the notion that unimpeachable foundations, upon which we can build knowledge, do not exist. As such, there can be no certainty in our claims to know as we cannot know that *what* we know is true. This is, perhaps, the central concern for those who reject postmodernist ideas.

Constructivism, the second theme, provides a framework for understanding why our knowledge remains forever subject to review – a point clearly made by Richard Feynman above. All knowledge is constructed by the individual through “cognitive processes...and embodied interactions with the world of material objects, others and the self” (Polkinghorne, 1992, p. 149). The world is ‘known’ through our senses and these senses are guided by what we already know. Our knowledge is thus an interpretation of any pre-existing reality rather than a one-to-one correspondence with an external world. While the particular complex of interpretative factors are peculiar to the individual, some can be identified as common to all people, i.e. historical, cultural, social, and personal environments. In any act of coming to know, the cognitive processes of the knower attempt to ‘fit’ new experiences with existing meaning patterns so as to minimise cognitive dissonance. In this, there are four main possibilities: the new experience fits as it is; it is ‘changed’ until it does fit; the pre-existing meaning pattern is changed to suit the new experience; or a new meaning pattern is created in isolation from pre-existing patterns.

The theme of fragmentariness reflects the postmodernist assumption that “the real is not a single integrated system...” but “a disunited, fragmented accumulation of disparate elements and events” (Polkinghorne, 1992, p. 148). Every happening results from the interaction of multiple and unique influences within a unique point in space and time. Consequently, postmodernist epistemologies assume that totalising discourses are inadequate for understanding contextual occurrences; and, as all occurrences are contextual, postmodernism rejects context-free general laws as unimpeachable realities.

The combination of the first three themes challenges the central assumptions of a modernist paradigm. Arguments against postmodernism are driven by the

negative epistemology that *can* result from a view that knowledge is a foundationless, fragmentary interpretation of reality. Criticisms are often couched in terms of what is seen as the rejection of an independent reality, hypocrisy, relativism and, consequently, nihilism. The first criticism conflates epistemology, which is concerned with the nature of knowledge, and ontology, which explores the nature of being. However, the concept of foundationlessness does not reject an objective reality, simply the possibility of direct access to it. The second criticism originates because of seemingly hypocritical activities such as the denial of truth claims through the generalised assertion that there is no universal truth; the use of reason while disparaging reason as a tool; and the rejection of evaluative criteria while making evaluations which must also be based on criteria. But a constructivist position would make no claim to be beyond these identified weaknesses; constructivists should reject any notions that the constructivist perspective is ‘true’. Secondly, reason is a tool for human use that may or may not be applied appropriately. Again, the claim is not that reason is of no use, simply that it is not infallible and that we can know through agencies other than reason. In a similar vein, constructivists reject the idea that criteria can be universal. All judgements are made on some basis; the essential point is that criteria are limited and thus the judgements are not universally applicable. The issue of relativism is, perhaps, exemplified by the idea that, if all knowledge is relative to the individual, the place, and the time, there can be no measure against which competing knowledge claims may be judged. This can lead to an argument that all claims are of equal merit; e.g. knowledge, value, moral and ethical positions, cultures. Neopragmatism, Polkinghorne’s fourth theme in postmodernist epistemology, speaks to this issue.

The fourth theme, neopragmatism, provides a navigational perspective through the maze created by the first three themes. It is concerned with the pragmatics of knowledge. Neopragmatism, in contrast to earlier forms of pragmatism, accepts the postmodernist concepts of foundationlessness and fragmentariness (Polkinghorne, 1992). A neopragmatic approach does not engage with ontological questions of correspondence with reality (knowing that) but assesses knowledge claims in terms of their ability to produce successful results (knowing how) – praxis. This knowing how is a collection of general summaries emerging from an individual’s successful experiences. As such, neopragmatic knowledge links successful actions with, what are perceived as, their associated contexts forming a repository from which actions may be informed.

The postmodernist themes highlighted by Donald Polkinghorne suggest three central aspects that offer a powerful guide to working with knowledge claims:

Foundationlessness and Constructivism	→	Centrality of the individual	Who is it who claims to know?
Fragmentariness	→	Significance of time and place	What was the context in which this knowledge came into existence?
Neopragmatism	→	Praxis	For what purpose is this knowledge appropriate?

From a postmodern perspective the concept of an absolute truth must always be understood in terms of the limitations of human experience. These three questions can work together to establish limits around any claim to know.

#### PERSONAL KNOWING AND THE SOLUTION OF PROBLEMS

The concept of personal knowing that I offer here (bearing some congruence with Michael Polanyi's (1962) concept of personal knowledge) is a recognition of the role of the individual in all acts of coming-to-know. I assume that all human knowing *about which we are able to speak* results from cognitive operations on experience and are organised to produce order and meaning.

The use of the verb rather than the noun asserts the fluidity of our personal *knowing* and the location of all *knowledge* in the dead past. This can be understood by recognising that personal knowing may be thought of as an I-it relationship in which any change affects both sides of the hyphen and thus modifies the relationship. Every time that we use a concept our personal understanding of its meaning is modified; our knowledge is called back into active process and it is reinterpreted according to the new situation. There is an accretion, an erosion, and a remodeling of the meaning possibilities for the concept that is brought about by the way we use it at that time and in that context<sup>2</sup>. In addition to this, the 'I' is temporally dependent: the 'I' that now uses the concept is not the 'I' that first formulated it. Furthermore, our capacities, predispositions and, at any given time, cognitive, physiological, and emotional states, combine to privilege a particular perspective and/or way of acting thus focusing attention on particular meaning possibilities. Personal knowing, then, recognises the interdependent relationship of the knower and the known. From this perspective, knowledge, far from being an independent entity, is determined by the limitations of the knower combined with the context in which the process of coming-to-know occurs. Consequently, personal knowing is neither universal nor temporally fixed.

Personal knowing seems to share many of the ideas embedded within constructivist thought. But contrary to what extreme constructivism might suggest, personal knowing is not subjective. All personal knowing, as an I-It relationship, is responsive to interaction – we are not free to construct just any belief. Rather, as I have suggested in the opening paragraph of this chapter, what we are able to know is constrained by the world around us, sometimes in uncomfortable ways. For Michael Polanyi, knowing is an act of skill; to know something requires the knower to actively comprehend. It is neither arbitrary nor passive but, rather, an intellectual commitment that he considers to be hazardous in its potentiality to be wrong: for, “Only affirmations that could be false can convey objective knowledge of this kind” (1962, p. viii).

Perhaps originating in Polanyi's training as a chemist, the provisional nature of personal knowing has a parallel within the orthodoxy of the scientific community – Karl Popper's concept of falsification. For the falsificationist, it is clear that experimental results remain contextual verifications of ideas that can not be proven in any absolute sense. In this way, there is a recognition that all knowledge is based in the past and 'proof' lies, permanently, in the future: “Whenever a theory appears to you as the only possible one, take this as a sign that you have neither understood the theory nor the problem which it was intended to solve” (Popper, 1979, p. 266).

*Attention, awareness and coming to know*

Two capacities central to the development of personal knowing are awareness and attention. Polanyi (1962) describes two types of awareness that he sees as fundamental to personal knowing: subsidiary and focal. Whereas focal awareness is directed at something, i.e. the object of our attention, subsidiary awareness plays a secondary (though no less important) role in terms of our attention. To use Polanyi's example, when we are hammering in a nail, the nail is part of our focal awareness whereas the feelings of the hammer in our palm and fingers are part of our subsidiary awareness; subsidiary awareness becomes merged into our focal awareness. In Zen terms, the hammer *becomes* part of our hand; the conscious knowing *how* becomes a knowing *what* as the separation between the knower and the known evaporates.

When our attention switches to what is normally in subsidiary awareness we create a division in our experience between ourselves as the knower and the object of our attention, the known. We thus generate the possibility of becoming caught up in the isolated detail of a fragment of the totality of our experience, making us less responsive to changes in the immediate environment. In physical terms, this can lead to the awkwardness that accompanies self-consciousness as we direct too much of our attention towards the mechanics of what we are doing.

The significance given to attention and awareness by Polanyi signals the need to explore ways of developing these facilities. In order to understand the impact of those things of which we are only subsidiarily aware, we must find ways to bring them out into the open. Reflective practice offers this possibility enabling us to consciously direct our attention towards particular aspects of our personal knowing. But this, in itself, is not enough for professional practice is embedded in a 'live', ever-changing and problem-presenting world.

*Two types of problem*

The solution of problems is central to our experience as we negotiate the I-not-I boundary. Several authors (Palmer, 1993; Schon, 1983; Schumacher, 1977) have discussed the division of problems into two distinct categories: convergent (e.g. the development of a missile guidance system) and divergent (e.g. when to use it).

Convergent problems can, in essence, be solved and are governed by the laws of the inanimate universe whereas divergent problems are subject to the conditions of the animate universe and cannot be solved in the same sense. With greater intelligent study, possible answers to a convergent problem will tend towards a more and more precise single solution that may be written down in a recipe format; the problem effectively 'dies' and anyone who subsequently attempts to solve the same problem can apply the recipe *passively*.

Contrarily, divergent problems can often involve equivocal solutions that tend to oscillate in binary opposition. Recipe type guidance cannot be provided and the user must remain an active participant in the solution of the problem. When we think we have reached a solution for a divergent problem we have often simply flipped to one of the binary opposite possibilities and effectively 'killed' the problem through a lack of perspective – the solution becomes simplistic and rejects the complexities of the problem. Divergent problems are a persistent feature of the social world and, to be handled effectively, require greater levels of awareness; it is

here that the concept of personal knowing reaches, perhaps, its greatest significance.

*Personal knowing as an existential task*

Far from being a narcissistic pursuit, the development of personal knowing is one path towards greater social responsibility. As we develop deeper understandings of the nexus-absolute and our ego-centred perspectives we begin to recognise our impact on the world. It is through an understanding of our beliefs and their formative impact on actions, our level of personal development, and the limitations of our knowledge, that we may develop a sense of humility and, through this, become better able to make space for the ‘other’ – to ‘die’ to our ego. Ernst Schumacher (1977) describes this personal development in terms of three existential tasks:

- to recognise and learn from the collective knowledge of human culture;
- to develop one’s personal knowing through an active engagement with this knowledge that utilises what is good and rejects that which is useless (individuation);
- to move beyond one’s conditioning such that one is neither externally nor internally directed.

It is perhaps important to emphasise that this last task doesn’t reject being internally or externally *informed*. Schumacher describes it as the gaining of freedom, or being “God-directed” (1977, p. 149); it can be argued that this development towards freedom is a spiritual aim – there is a strong resemblance to the teachings of the Buddha. As we develop, our ability to understand deepens and, what we are able to know and appreciate becomes greater. Schumacher (1977) refers to this as the principle of adequatio – the one who is to know must have a level of understanding and an inner capacity that is adequate to the requirements of what is to be known. If we are lacking in the requisite capacities, or we fail to use them, that aspect of the world will be beyond us and, as far as we are concerned, will not exist. In a sense, the rich tapestry of the world is reduced to our own limited capacities in a way that reduces its meaningfulness. This is often evident in simplistic, or dogmatic, responses to complex problems.

In attempting to understand our interactions with the world, the ‘data’ available is limited to those things to which we are able to attend and this is limited to those things of which we are aware. Consequently, the development of our personal knowing is an exercise in building awareness or, expanding our consciousness.

Schumacher (1977) provides a ‘philosophical map’ for developing a greater conscious awareness of our experiences in and with the world (see Figure 2). Four quadrants result from the artificial creation of two dualities: visible (outside appearance)/invisible (inner experience); and I/Others. Each quadrant raises our awareness to different aspects of the I-not-I relationship providing a stimulus that can serve to destabilise an egocentric view of experience. Quadrant one (Q1) and quadrant four (Q4) are concerned directly with one’s own access to the world whereas quadrant two (Q2) and quadrant three (Q3) are concerned with how others are processing the same experience. This real-time feedback enables the knower to adjust their actions in the moment.

	<i>Inner Experience (World of Freedom)</i>	<i>Outside Appearance (World of Necessity)</i>
<i>I</i>	Know myself – Q1	Know how others see me – Q3
	How am I processing this?	What do I look like to others? (Uncritical self observation)
<i>Others</i>	Know Others – Q2	Know how the world appears – Q4
	How are others processing this?	What do I observe in the world around me?

Figure 2: Four fields of awareness

The practicing professional is continually confronted with the task of problem solving. For Schon (1983), the capacity to take knowledge derived from convergent situations and tailor it to suit divergent situations is the hallmark of the professional and requires the use of divergent thinking skills. The professional practitioner must remain mindful of the contextual complexities that serve to make the problem unique. Perspectival understanding (Pereira, 2007) offers this opportunity but requires us to maintain a dynamic dialecticism as we expand the boundaries of our own awareness.

#### INTEGRAL CONSTRUCTIVISM: AN EPISTEMOLOGICAL STANDPOINT

Integral Constructivism (Pereira, 2002) provides a useful model for bringing together the many ways in which our awareness, and hence our personal knowing, may be constrained. A constructivist epistemology shares many of the premises that underpin the concept of personal knowing. But, as one would expect, human interpretation ensures that there are a variety of ways by which the central tenets of constructivist thought may be understood. Consequently, a brief survey of the literature will expose many different forms of constructivism, each of which share the central tenet of Personal constructivism: knowledge is *actively* constructed by the learner. From this perspective, knowledge cannot be transmitted intact from one person to another but, rather, is actively made sense of by the learner in accordance with their pre-existing knowledge. From this starting point finer and finer distinctions may be made. Figure 3 outlines a progression of five ‘faces’ of constructivism (Personal, Radical, Social, Cultural and Critical) and their relationship to the meta-construct Integral constructivism. Using Ken Wilber’s (2000) model for the development of consciousness, each face can be seen to establish different I-not-I boundaries through a process of individuation, i.e. an increasing decentring of the ego. As we have seen, individuation is Schumacher’s second developmental task.

<i>Face</i>	<i>Central aspect of face of constructivism</i>	<i>Boundary formation (adapted from Wilber, 1996)</i>
<i>Integral</i>	Recognition of the holonic nature of the world; the interconnectedness and influence of each culture and/or society on every other	Worldcentric (establishment of the planetary boundary)
<i>Critical</i>	Stepping outside one’s influences to question social and cultural norms	Can now judge own roles
<i>Cultural</i>	Cultural aspects of the environment	Establishes boundaries of group (ethnocentric and sociocentric)
<i>Social</i>	People in the environment	Establishes boundaries of emotional self
<i>Radical</i>	The environment	Establishes boundaries of the physical self
<i>Personal</i>	The individual	

*Figure 3: The ‘evolution’ of constructivism*

The progression from Personal through to Integral constructivism represents a continual boundary-shifting that begins with the individual as central in all aspects of coming-to-know. This can lead to the misunderstanding, often seen in literature critical of constructivist epistemologies, that the individual can construct any belief they want; an extreme relativism. Radical constructivism (von Glaserfeld, 1990) emphasises the role of the environment in constraining the way we construct knowledge. The environment consisting of all that is not us includes both the animate and inanimate world. As such, there is a recognition of the role of orthodox scientific ways of knowing, with its focus on the physical world, in the personal construction of knowledge. In Wilber’s terms, our consciousness develops through the establishment of a boundary around the self – what I have called the nexus-absolute. Social constructivism (Vygotsky, 1978) focuses in on the significance of social interaction for the development of our knowledge of the physical and social world. While the physical environment places a constraint on what we can assert by refusing to act according to our beliefs, social influences can restrict what we consider to be ‘okay’ through social ‘normalising’ (Driver, Asoko, Leach, Mortimer, & Scott, 1994). Again, in Wilber’s terms, this assists in developing a boundary around our emotional selves through the differentiation of the self from like others. Cultural constructivism (Cobern, 1993; Hutchison, 2006) draws attention to the impact of our cultural traditions and establishes the boundary of the group. Critical constructivism (Kincheloe, 2005; Taylor, 1998) encourages the learner to interrogate the values and assumptions inherent in our process of coming to know. Further, it acts as a referent for establishing the limitations of historical and socio-cultural knowledge. For Wilber, at this stage of development we have become aware of our own position relative to the group – we are able to step outside the historical and socio-centric boundaries that have previously served

to define knowledge and are able to make judgements about them; the fish has become aware of the water.

While a focus on these distinctions is informative and productive, that same focus can serve to restrict one's awareness through the elevation of one perspective to the status of a catch-all meta-narrative. When this happens, the theory can become the world rather than simply a pointer towards its deep, complex magnificence; e.g. the degeneration of scientific inquiry into scientism. Integral constructivism encourages a dialectic standpoint. While honouring the insights offered by each of the 'faces', it assists in the development of a perspectival approach (Pereira, 2007). In Wilber's terms, this represents a worldcentric view in which the boundaries that have been established are gradually recognised and then dissolved by a more ecological understanding of the existential position of humans in the world. Integral constructivism assumes a holonic, rather than hierarchic, structure to the world. The concept of a holon acts as a link between atomistic and holistic approaches: "...'wholes' and 'parts' in this absolute sense just do not exist anywhere" (Koestler, 1967, p. 48). As such, Integral constructivism honours the insights of each, recognises the origins of the assumptions, and reminds us that understanding exists in the integration of many ways of knowing.

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