Critical Studies of Education 3

Jennifer M. Gidley

Postformal Education

A Philosophy for Complex Futures

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About the Author

Jennifer M. Gidley, PhD, is a psychologist, innovative educator and renowned futures researcher. She is President of the World Futures Studies Federation (UNESCO and UN Partner), the global peak body founded in Paris in 1973. In this capacity, she leads expert futures researchers, teachers and professional practitioners from over 60 countries. Jennifer was awarded the Chancellor's Gold Medal for Academic Excellence for her PhD on the evolution of consciousness in 2008. She has published dozens of academic papers, and her books include *The University in Transformation* (Ed.) (2000), *Youth Futures* (Ed.) (2002) and *The Future: A Very Short Introduction* (Oxford University Press, 2017). Jennifer founded and led an innovative private school in rural Australia over ten years (1985–1994). She has held academic positions in several Australian universities (1995–2012) and currently holds visiting academic posts in Australia and Europe.

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The original version of this front matter was revised. The correct editorial board information has been updated.

Chapter 1
Introduction

1.1 Introduction

The book I offer you is about radical change. It explains why the current education model, which was developed in the 19th century to meet the needs of industrial expansion, is obsolete. It points to the need for a new approach to education designed to prepare young people for global uncertainty, accelerating change and unprecedented complexity. It argues that we need to fundamentally change our ways of thinking, and our ways of educating children and young people.

The challenges we face as human beings at the beginning of the 21st century are often intractable and increasingly "planet-sized". The overwhelming issues of global climate crisis, growing economic disparity, mass migration and the youth mental health epidemic reveal how dramatically the current education model has failed students, educators and global society as a whole, in that education is the bedrock of society and culture.

While so much has changed out of all recognition in the last hundred years, the institution of formal schooling still resembles the factory schools built to provide human fodder during the Industrial Revolution. Fundamentally, we are still educating our children as if we were living in the 19th century, albeit with a few added digital gadgets and online infotainment.

Furthermore, the type of thinking believed until the mid-20th century to be the highest form of thinking—what Jean Piaget called *formal operations*—is now known to be succeeded by other stages. Adult developmental psychologists in the USA have for decades been providing evidence that mature adult humans can develop higher-order reasoning than formal operations. They call this capacity: *postformal reasoning*.

Readers will learn about the impact on young people of both the global-societal challenges we face as a species and the failure of formal schooling to prepare them to meet those challenges. Our current ways of thinking, educating and running the world have left many young people depressed, with a loss of meaning, a sense of

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spiritual vacuum and feelings of disenchantment with the world they are inheriting. This *global youth problematique* has been discussed elsewhere (Gidley 2002a, 2011).

By reading this book, educators and others will become aware of the limitations of formal reasoning in addressing complex, systemic challenges. They will begin to appreciate the more complex, nuanced and paradoxical features of postformal reasoning and how such reasoning will help us to meet future planetary challenges with courage, imagination, wisdom, rather than relying on techno-fixes.

This book is not for the faint-hearted or those wanting to tinker with the edges of the outmoded schooling model. It raises a planet-wide call to deeply question how we actually think and how we educate. It charts a course towards a postformal education philosophy based on the most advanced and most significant developmental psychology and education research—as a foundation for educational futures.

A key question explored in this book is this: "If higher-order, more complex forms of cognition do exist, then how can we better educate children and young people so that more mature forms of reasoning appear at the appropriate life stage?"

Put simply, we cannot solve tomorrow's problems with yesterday's thinking.[1]

1.2 The Purpose of the Book

The book's main purpose is to articulate a new education philosophy designed to prepare young people for the complex futures already emerging in the 21st century. It does this by exploring the significant and intimate relationship between the evolution of consciousness and the futures of education.

A unique contribution of this book is to create a dialogue between the adult developmental psychology research on higher stages of reasoning (postformal reasoning) and today's most evolved education research and practice. The latter draws from the critical education literature on postformalism and a plethora of innovative educational approaches that support the evolution of new ways of thinking. I call these *postformal pedagogies* (Gidley 2009, 2012a, 2013).

This dialogue crosses the traditional disciplinary boundaries between adult developmental psychology research and educational research, laying foundations for a new postformal education philosophy. Such a far-reaching philosophy has the potential to awaken the creative, big-picture and long-term thinking that will help equip and future-proof young people to face tomorrow's challenges.

Early 21st-century challenges include significant global economic upheaval coupled with the dawning realisation of the potential threats to the habitability of

[1]Echoing Einstein's words of a century ago: "The significant problems we have cannot be solved at the same level of thinking with which we created them."

the earth's ecosphere posed by irreversible climatic stress. These challenges are compounded for educators and others working with children and young people. I am writing this book because I am inspired by a sense of urgency for education to evolve so that it can become a key player in meeting these challenges, which can be summarised as follows:

Challenge 1 The Global Problematique: The multidimensional planetary crises (environmental, psychological, socio-cultural and politico-economic);
Challenge 2 The Epistemological Problematique: The crisis of thinking and meaning underlying the planetary crises;
Challenge 3 The Global Youth Problematique: The psycho-social impact of the crises on young people;
Challenge 4 The Educational Problematique: The failure of the industrial, factory model of schooling to meet these challenges and the urgency for radical change.

While Challenge 1 is well beyond the scope of this book to address in detail, its influence cannot be overlooked because of its huge impact on the other three. To address these planetary crises, we need to look beneath the surface and address Challenge 2. The current crisis of thinking and meaning can only be addressed by radically and rapidly evolving our thinking. Many leading thinkers and researchers have been writing of this need for more evolved thinking. While the different disciplines push for what is needed from their own perspectives, very few have the breadth of vision to encompass the depth of change required. Educators need to know about the wide-ranging research on evolution of consciousness. This research includes the literature on planet-wide cultural evolution; the adult developmental psychology research on *postformal* reasoning; the *integral* studies literature; and the research on global mindset change or *megatrends of the mind* (Gidley 2010b). This book introduces these concepts and their importance for evolving education.

Challenge 3 refers to the alarming increases in youth mental health issues. For example, in Australia, currently one of the wealthiest nations in the world and arguably one of the least affected by the ongoing global financial turbulence, research indicates that 20–25% of young people suffer from some kind of mental health issue, including anxiety, depression and eating disorders.

While all these challenges inform my book, the primary focus is *the educational problematique* (Challenge 4). It should not be surprising that a 19th-century model of schooling cannot adequately deal with 21st-century challenges. What is surprising is that educators seem largely unaware of the research on the evolution of consciousness. Furthermore, there is a silence in educational research about the key role that education has to play in furthering the evolution of thinking and culture. Consequently, much educational research today remains trapped in the formal, modernist mindset that created the mainstream model of schooling. This disjuncture is arguably a consequence of the conceptual fragmentation that has arisen as a consequence of specialisation and conceptual territorialism.

French philosopher Edgar Morin sums up the education challenge as I do, by firmly linking it with the need to drastically change our thinking. He states:

> To articulate and organize, and thereby recognize and understand, the problems of the world, we need a reform in thinking … The education of the future is faced with this universal problem because our compartmentalised, piecemeal, disjointed learning is deeply, drastically inadequate to grasp realities and problems which are ever more global, transnational, multidimensional, transversal, polydisciplinary and planetary. (Morin 2001, p. 29)

1.3 Evolution of an Educator: A Brief Personal Narrative

> Humberto Maturana reminds us that everything that is said is said by *somebody*. (Montuori 2004, p. 353)

Since my own background, perspectives and biases are part of the tacit knowledge that comes through in this book, I want to be as transparent as I can about the various influences that may be informing my theories, even if not fully consciously. I will first provide some philosophical grounding for my decision to offer a brief personal narrative.

Philosopher David Couzens Hoy studied the history of consciousness from Kant and Hegel to Derrida and Foucault and notes the return of the subject in contemporary philosophical discourse. This is also the case in research that eschews modern scientific empiricism as a suitable research method for the social sciences. Taking a step back we need to be aware that the aim of modern scientific positivism was to arrive at "objective knowledge" not influenced by the "subjective" values of the researcher. In the process, scientific positivism effectively tried to eliminate the subjectivity of the researcher.

The emergence of post-positivism in the social sciences in the 1960s, along with critical theory, awakened the view that there is no such thing as values-neutrality in research, even in scientific positivism. This led to the claim that if the subjective values of the researcher are influencing the research, even if tacitly, then it is better to make these values and potential biases explicit.

The philosophical resurgence of interest in *subjectivity* has co-arisen with the emergence of transpersonal psychology (Zahavi 2004) and feminist literature, perhaps stimulated by Michel Foucault's seminal lectures on the *Hermeneutics of the Subject* (Foucault 1994, 2005). There is an emerging interest in the dialectical notion of *subjective-objective* ways of understanding reality (Benedikter 2005; Kegan 1994). Rudolf Steiner foreshadowed *subjective-objective* thinking over a century ago, in his *Philosophy of Freedom* (Steiner 1894/1964).

As a social science researcher, I support the idea that we cannot eliminate the subject—or self as researcher—in our research. Hence this brief personal narrative.

My first involvement with what I call evolutionary pedagogies—or postformal pedagogies—was almost forty years ago when I first encountered Rudolf Steiner's futures-oriented writings on education. The 1970s were exciting times intellectually and culturally as there was an influx of new ideas and cultural awakening. As a young psychologist-educator, I was influenced by writings from humanist and transpersonal psychologists, postmodern and feminist philosophers, and critical pedagogy theorists. There was a powerful shift of consciousness beginning to

break into the formal academic world from the periphery at this time. My professional work in educational psychology already focused on marginal voices. In the 1970s I worked with teachers of young people who did not "fit into" mainstream education, and led a women's learning centre empowering "house-bound" women to take charge of their personal futures by re-entering employment and/or education.

As a professional psychologist-educator, I was aware of the serious limitations of the mainstream model of education and, as a mother, did not consider it suitable for my children. I decided to found a Steiner school but sought to transcend the conservative, cobweb-covered, 19th-century version of Steiner education. The school I founded and pioneered for ten years (1985–1994) was a contemporary, creative interpretation of Steiner's pedagogical writings (Steiner 1909/1965, 1967, 1971, 1981, 1982) adapted to late 20th-century, sub-tropical, rural Australia. I now see this as a "reconstructive postmodern" interpretation of Steiner. Thus, my implementation of Steiner was less traditional Waldorf and more... "creative self-transcendence... radical openness to new experience and novel conditions" (Miller 2000). I worked directly and authentically from Steiner's original teachings rather than any set Waldorf curriculum. I believe this is what Steiner intended teachers to do. I became aware intuitively and experientially of what a powerful and positive educational approach it can be. However, I was frustrated on the one hand by its marginalisation by academics and mainstream educators and on the other hand by dogmatism in some of the schools applying Steiner's evolutionary ideas.

In the 1990s I decided to re-enter the academy, with the aim of both testing my intuitions and finding appropriate language to create dialogue between Steiner's evolutionary pedagogy, mainstream education and the academy. My Master's research indicated that Steiner-educated students, while holding similar fears and concerns about the future to other students, had a stronger sense of empowerment and greater capacity to envisage positive preferred futures (Gidley 1998, 2002b). Over the next ten years, I continued to broaden and deepen my reading, researching and writing about educational and youth futures (Gidley and Inayatullah 2002; Gidley 2004, 2009, 2010a, 2012a, 2012b; Gidley et al. 2004). More recently, my efforts expanded to explore the impact on education of the evolution of culture and consciousness, through my doctoral research and associated publications (Gidley 2006, 2007a, 2007b, 2010b, 2010c, 2013).

Around 2000, I (re)discovered Ken Wilber's writing and found that his philosophy really resonated with my internalised Steiner philosophy. The more I read Wilber the more I was amazed at the similarity between Wilber's ideas and what Steiner had been writing a century earlier. I was stunned that in spite of Wilber's claims to be creating an "integral theory of everything", he had pretty much ignored one of the most integral figures of the 20th century—Rudolf Steiner. I undertook doctoral research on the relationships between their works. But as I began to follow up on some of the sources that Wilber referred to, I became drawn into their original writings as well (Aurobindo 1914/2000; Gebser 1949/1985).

As I searched the literature for others who may have brought these pioneers together academically, I realised that apart from Roland Benedikter's research on Steiner and Wilber (Benedikter 2005) (most of which is in German), no one else

had undertaken any major research that incorporated the futures-oriented, integral contributions to evolution of consciousness of Steiner, Jean Gebser and Wilber.

My doctoral research, completed in 2008, provides important material for the chapters in this book, although new research has continued to inform it (Gidley 2008). As a scholar-activist—or *transformative intellectual* (Giroux 1992)—I focus on evolving education as the pragmatic ground of action for my research.

1.4 The Methodical Structure of the Book: *Difference and Repetition*

> There is no difference between what a book talks about and how it is made. Therefore a book also has no object. As an assemblage, a book has only itself, in connection with other assemblages and in relation to other bodies without organs. We will never ask what a book means, as signified or signifier; we will not look for anything to understand in it. . . Writing has nothing to do with signifying. It has everything to do with surveying, mapping, even realms that are yet to come. (Deleuze and Guattari 1987, pp. 4–5)

These words from Gilles Deleuze and Félix Guattari hint at my intention with this book. The book cannot be a final word on a new educational philosophy for the 21st century. But it can play a role in "surveying, mapping, even realms that are yet to come". I intend that the book provokes, challenges and invites new conversations on educational futures better suited to tomorrow's uncertainties.

To aid understanding I am using Deleuze's method of *difference and repetition* (Deleuze 1968/1994). The reader who takes a quick glance through the Table of Contents of the book may get the impression that in some cases two chapters are overly repetitive. For example, the sub-headings of Chapters 2 & 3, and 5 & 6 are structurally quite similar. Yet the content is significantly different. This deliberate systematic arrangement of the material reflects a postmodern presentation form creating a rhythmical pattern of difference and repetition. My aim to maximise understanding plays out in the multi-modal way that I present information, because I recognise that different readers have different cognitive and learning styles.

I try to strike a balance between organised structure and creative flow, between difference and repetition (Deleuze 1968/1994) and between breadth of overview and depth of gap-dives (Roy 2006). My writing is also multilayered and can be read at different levels of engagement.

1.5 What "Postformal Education: A Philosophy. . ." is about

The book is arranged in three interconnected parts of three/four chapters each.

Part I frames the book within the context of the evolution of consciousness. It situates contemporary education within the cultural evolution background

(Chapter 2) from which formal schooling emerged, discusses the developmental psychology notions of stage theory (Chapter 3) and outlines a brief evolution of school education (Chapter 4), pointing to the need for more conscious evolution of education.

Part II explores research by adult developmental psychologists who identify and conceptualise postformal stages beyond Piaget's formal operations (Chapter 5), examines the theories and practices of postformalism in education (Chapter 6) and undertakes a multi-faceted dialogue among the postformal reasoning features, the postformal pedagogies and key evolutionary themes, arriving at four core pedagogical values (Chapter 7).

Part III expands these four core pedagogical values—love, life, wisdom and voice—from philosophical, psycho-social and practical educational perspectives, articulating the paradox of my postformal education philosophy: while it involved quite complex theoretical analyses to develop, it is terribly simple to apply.

In Part I, I make the claim that education needs to evolve. Therefore, I need to show how education is both a product of culture and a creator of culture, and how it both contributes to psychological development as well as potentially hinders it. I do this by exploring theories of cultural evolution and individual psychological development before investigating how education is contextualised within these processes. In the first two chapters, I show how the evolution of consciousness affects both the cultural development of our human species (phylogeny) and the psychological development of the individuals within the culture (ontogeny).

In Chapter 2, I introduce the notion of the evolution of consciousness, its history and development. After discussing some of the challenges of cultural evolutionary work and why it is important to take a transdisciplinary approach, I discuss how the evolutionary discourse has been dominated by a narrow reading of Darwinian biological evolution and demonstrate why this approach is incomplete. This provides a counter-point for an exploration of the alternative evolutionary discourse with its philosophical origins in 18th-century German Romanticism and Idealism. You will meet researchers and great thinkers who since the turn of the 20th century began to re-integrate spiritual perspectives of consciousness into the biological evolution discourse. I introduce the contemporary notion that we can consciously participate in evolution and perhaps surprise you that this idea was first put forward by German romantic philosopher Friedrich Wilhelm Joseph Schelling in the late 18th century. While there are several theorists of cultural evolution, I focus on three: Steiner, Gebser and Wilber. The main body of the chapter presents cultural evolution through five stages using Gebser's model of archaic, magic, mythical, mental and integral structures of consciousness—the latter currently emerging.

Following on from the big picture of cultural evolution supported by evidence from a variety of fields, Chapter 3 offers an introduction to individual psychological development theories across childhood and adolescence. After discussing some of the challenges of consciousness research, including critiques of developmentalism, I present an overview of developmental theories from the field of psychology. This includes the concept of stage theory, in particular through the child and adolescent development theories of Jean Piaget. Following discussion on the limitations of

Piaget's stage theory, I introduce a series of complex socio-psychological phenomena that I call the *megatrends of the mind* (Gidley 2010b). Through a mapping exercise, I show that significant developments have occurred in most, if not all, of the major academic disciplines. Secondly, there is a gradual transcending of disciplinary specialisation, via inter-, multi- and transdisciplinary approaches. I demonstrate how these developments are *enactments* of new ways of thinking and new knowledge patterns that break through the limits of formal reasoning, as manifestations of the evolution of consciousness (Gidley 2007b). Finally, I introduce the notion of a transition beyond formal operations to postformal reasoning and point to adult developmental psychology theories for discussion in Chapter 5.

Chapter 4 offers what can only be mere fragments of the evolution of education so far, given the subject could easily fill not just one book but rather several volumes, particularly when you consider that education is a much broader concept than just "schooling". To take you beyond the limited framing of contemporary school education, I present education in its broader *cultural* context, as only one of the types of enculturation that adults provide for their young people. I propose three macro-historical phases of education—pre-formal, formal and postformal. Drawing on cultural evolutionary research, I trace thousands of years of informal enculturation of children (pre-formal education), speculating on how education may have been practised in these very early periods of human history. This provides the context for how education has developed from the past to the present and how it might develop into the future. I explain how universal formal education began as an integrated, human-centred, process of *bildung*—or development of the whole person—two hundred years ago in Germany and only later became influenced by the industrial era mindset whereby schools became little more than factories. Finally, I point to some 21st-century drivers of change and introduce two contrasting concepts: the *global knowledge economy* and *global knowledge futures*.

Part II focuses on adult developmental psychology research on higher stages of reasoning, today's most evolved education research and practice, and a dialogue between them. This dialogue reveals surprising links between play and wisdom, imagination and ecology, holism and love. These explorations are foundational to my postformal education philosophy and may theoretically empower contemporary educational innovations, by reframing them as postformal pedagogies.

Chapter 5 begins by introducing you to a range of theories of mature adult psychological development. You will meet several adult developmental psychologists who have been working since the 1970s in the field of positive adult development, particularly in the USA. These psychologists have been undertaking theoretical and empirical research to establish the validity of stages of reasoning beyond Piaget's formal operations. They use the term *postformal* to denote higher developmental stages beyond Piaget's *formal operations*. This chapter presents and discusses numerous features of postformal reasoning and then relates them to four evolutionary themes that emerged from my extensive research on the evolution of consciousness (Gidley 2007b).

- Theme 1 includes notions of conscious, compassionate spiritual development, via traditional religious and post-traditional approaches.
- Theme 2 includes discourses that transcend the static nature of formal thinking and promote the emergence of more fluid, life-enhancing, thinking, through process and poststructuralist philosophies, and the new sciences.
- Theme 3 involves the increasing complexification of human thinking. This includes two sub-streams that both explicitly identify new stages of consciousness: cultural evolution and developmental psychology.
- Theme 4 involves discourses that transcend disciplinary, linguistic and paradigmatic boundaries by pointing to how new thinking and reflection on language can empower multiple voices.

In Chapter 6, I begin by identifying three evolutionary waves of educational change throughout the 20th century. The third evolutionary wave suggests that education is in a transition from formal schooling to postformal pedagogies. In this chapter you will learn about a group of critical educational theorists and practitioners who have been researching what they call "post-formal" education in relation to critical and postmodern approaches to education. Leading post-formal educational researchers Joe Kincheloe and Shirley Steinberg proposed four key components of postformality that are introduced in this chapter. In addition to Kincheloe's postformalism, I introduce several other key theorists and a dozen or more postformal educational approaches. I indicate how these *postformal pedagogies* are contributing to the type of education so necessary today. I map these different approaches and explore relationships among them. I hope this chapter will reflect back to readers the diversity of approaches, thus deepening understanding among theorists and practitioners of postformal pedagogies.

Chapter 7 is where I begin to dig more deeply into the convergences and divergences between the psychology and education approaches to postformality. As a transdisciplinary boundary-worker, I work at the creative margins of a number of discourses, and in this chapter I engage in a series of dialogues among them. Firstly, I focus on the dialogue between cultural evolution and psychological development. Secondly, I undertake several dialogues among the developmental psychology literature and the education literature within the framing of educational futures. This chapter makes a very important contribution by commencing such in-depth dialogues in that I map the evolutionary themes discussed in Chapter 5 across the clusters of postformal reasoning qualities and postformal educational offerings to reveal four core pedagogical values that emerged from these intersections.

The four chapters of Part III develop and articulate the four core pedagogical values that are central to my postformal education philosophy. These four core values—love, life, wisdom and voice—arise from the cross-pollination between the evolution of consciousness themes, postformal reasoning and postformal pedagogies. The chapters show how, by building on the four core pedagogical values, education could facilitate the healthy evolution of consciousness. These values

have emerged as being crucial to a caring, revitalised, wise and empowering education.

In Chapter 8 I express my vision of educating children for and with respectful and responsible love. The chapter reflects the centrality of love, care, relationships and community as expressed in all the major religions and spiritual traditions in which human love is a reflection of Divine Love. As such, love should not be underestimated as a significant developmental and evolutionary force in education. You will learn about the approaches of several contemporary educators who emphasise the importance of love, care and teacher presence. Chapter 8 also presents many examples from both theory and practice of how love might increasingly infuse school education with evolutionary force.

Chapter 9 illuminates the early 20th-century turn from mechanistic to organic worldviews, as reflected in the new sciences and postmodern philosophical discourse. This shift from static, mechanistic thinking to organic, living process-oriented thinking has a co-evolutionary relationship with the emerging postformal, integral consciousness. This chapter discusses how educational futures depend on a deep understanding of how the creative imagination can be more fully awakened. I argue for the significance of imagination in education to revitalise thinking and indeed education itself. I introduce numerous educators and theories that stress the significance of imagination in education and demonstrate how enlivening education may even assist the resuscitation of a dying planetary ecosystem.

The focus of Chapter 10 is wisdom and how to develop it educationally. I discuss research that indicates that the most acknowledged path to wisdom is through the cultivation of multi-perspectival, versatile standpoints. I explore numerous learning modes and approaches that can be activated including engaging with multiple intelligences, creativity and complexity, which are all steps to cultivating wisdom. Finally, I introduce several other ways of knowing that have been even more subjugated in educational discourse. In the "serious business" of education and learning, squeezed on either side by the audit culture and high-stakes testing, such concepts as laughter, humour, frivolity, dancing and happiness seem remote. Yet these creative human literacies are part of wisdom's educational smorgasbord.

In Chapter 11, I propose that in this electronic age of "voice" mail, "chat" rooms and "talking" computers, the least valued of the evolutionary forces is the human voice itself. The education of the speaking voice as an expression of *living* language can potentially empower—give voice to—the marginal in society. No matter how caring, imaginative and interesting our approach to children may be, unless we can transmit our authentic *presence* to them through our choice of words, our tone of voice, the timing of our silences, we may not facilitate the transformation we would like. You will be introduced to several significant 20th-century thinkers who have drawn attention to the evolutionary significance of self-reflection and creativity in language. Although educational theory has not significantly engaged with voice and language for their empowering force, we will see that voice and its partner, silence, are being rediscovered amid a cacophony of electronic sound bytes.

Finally, in Chapter 12, I reflect on the threads of my postformal educational philosophy, pointing to ways forward for teachers and others who want to educate

young people as complete human beings rather than tools for the economic machine. I suggest that by nurturing their wholeness of being, they will find within themselves the creativity, strength and courage to face the complex futures ahead.

1.6 Personal Reflections and Concluding Remarks

Personal Reflections. *About twenty years ago, I was trekking with my family in some reasonably remote Himalayan villages in the mountains of Nepal. Some of the local children discovered that I was at that time a teacher. They took me by the hand and excitedly ran away with me to show off with pride their new school. It was a dark little square room with straight rows of seats, a blackboard and some white chalk with each child having a little piece of black slate so they could "learn to write". I tried to look happy for them. But inwardly I was wondering how it is that only the driest crumbs of the industrial educational model, already failing Anglo-European children in droves, could be being offered to these lively Nepalese children. I later wondered if that is what is meant by the World Bank's "Education for All" agenda. And I'm certainly not suggesting that their situation could be improved by giving these little schools computers as well. Having been involved for ten years in founding, pioneering and teaching in a radically contemporised Steiner school in rural Australia, I knew learning could be otherwise. As a responsible participant in their (and my) joyous learning of every imaginable subject through stories, drawing, painting, singing, movement, drama, music, poetry, mythology and play, I have guided numerous children from the age of five or six to puberty. And... perhaps as a surprise to many mainstream teachers, the children also became literate and numerate in the process. But instead of just developing a narrow, functional literacy, they developed rich and broad literacies. They learned to read for meaning, to write creatively, to share, to respect nature, to imagine worlds beyond their immediate one, to have social confidence, a passionate love of learning and the courage to be the ones to change the world.*

In summary, in this book I hope to show you how an educational integration of love and reverence, with life-giving conceptual imagination and creative multi-modal methods, transmitted through an authentic human voice, can lay a strong foundation for the emergence of postformal reasoning later in life. In these times of complexity and global distress, it is imperative that we consciously evolve education.

References

Aurobindo, S. (1914/2000). *The life divine. 2nd American edition* (Originally published in the monthly review Arya 1914–1920). Twin Lakes: Lotus Press.

Benedikter, R. (2005). *Postmodern spirituality: A dialogue in five parts*. http://www.integralworld.net/index.html?benedikter1.html. Accessed 28 June 2006.

Deleuze, G. (1968/1994). *Difference and repetition* (First published in French 1968). New York: Columbia University Press.

Deleuze, G., & Guattari, F. (1987). *A thousand plateaus* (B. Massumi, Trans.). Minneapolis: University of Minnesota Press.

Foucault, M. (1994). *Ethics: Subjectivity and choice* (The essential works of Michel Foucault 1954–1984). London: Allen Lane, The Penguin Press.

Foucault, M. (2005). *The hermeneutics of the subject: Lectures at the Collège de France 1981–1982*. New York: Palgrave MacMillan.

Gebser, J. (1949/1985). *The ever-present origin*. Athens: Ohio University Press.

Gidley, J. (1998). Prospective youth visions through imaginative education. *Futures: The Journal of Policy, Planning and Futures Studies, 30*(5), 395–408.

Gidley, J. (2002a). Global youth culture: A transdisciplinary perspective. In J. Gidley & S. Inayatullah (Eds.), *Youth futures: Comparative research and transformative visions* (pp. 3–18). Westport: Praeger.

Gidley, J. (2002b). Holistic education and visions of rehumanized futures. In J. Gidley & S. Inayatullah (Eds.), *Youth futures: Comparative research and transformative visions* (pp. 155–168). Westport: Praeger.

Gidley, J. (2004). The metaphors of globalisation: A multi-layered analysis of global youth culture. In S. Inayatullah (Ed.), *The causal layered analysis (CLA) reader: Theory and case studies of an integrative and transformative methodology*. Taipei: Tamkang University.

Gidley, J. (2006). Spiritual epistemologies and integral cosmologies: Transforming thinking and culture. In S. Awbrey, D. Dana, V. Miller, P. Robinson, M. M. Ryan, & D. K. Scott (Eds.), *Integrative learning and action: A call to wholeness* (Studies in education and spirituality, Vol. 3, pp. 29–55). New York: Peter Lang Publishing.

Gidley, J. (2007a). Educational imperatives of the evolution of consciousness: The integral visions of Rudolf Steiner and Ken Wilber. *International Journal of Children's Spirituality, 12*(2), 117–135.

Gidley, J. (2007b). The evolution of consciousness as a planetary imperative: An integration of integral views. *Integral Review: A Transdisciplinary and Transcultural Journal for New Thought, Research and Praxis, 5*, 4–226.

Gidley, J. (2008). *Evolving education: A postformal-integral-planetary Gaze at the evolution of consciousness and the educational imperatives*. PhD dissertation Southern Cross University, Lismore.

Gidley, J. (2009). Educating for evolving consciousness: Voicing the emergency for love, life and wisdom. In *The international handbook of education for spirituality, care and wellbeing* (Springer international handbooks of religion and education series). New York: Springer.

Gidley, J. (2010a). Evolving higher education integrally: Delicate mandalic theorising. In S. Esbjörn-Hargens, O. Gunnlaugson, & J. Reams (Eds.), *Integral education: New directions for higher learning* (pp. 345–361). New York: State University of New York Press.

Gidley, J. (2010b). Globally scanning for megatrends of the mind: Potential futures of "Futures Thinking". *Futures: The Journal of Policy, Planning and Futures Studies, 42*(10), 1040–1048.

Gidley, J. (2010c). Postformal priorities for postnormal times: A rejoinder to Ziauddin Sardar. *Futures: The Journal of Policy, Planning and Futures Studies, 42*(6), 625–632.

Gidley, J. (2011). From crisis to confidence: The development of social and emotional education in Australia. In B. Hey (Ed.), *Social and emotional education: International analysis II* (pp. 69–101). Santander: Fundacione Marcelino Botin.

Gidley, J. (2012a). Evolution of education: From weak signals to rich imaginaries of educational futures. *Futures: The Journal of Policy, Planning and Futures Studies, 44*(1), 46–54.

Gidley, J. (2012b). Re-imagining the role and function of higher education for alternative futures through embracing global knowledge futures. In P. Scott, A. Curaj, L. Vlăsceanu, & L. Wilson (Eds.), *European higher education at the crossroads: Between the Bologna process and national reforms*. Dordrecht: Springer.

Gidley, J. (2013). Global knowledge futures: Articulating the emergence of a new meta-level field. *Integral Review: A Transdisciplinary and Transcultural Journal for New Thought, Research and Praxis, 9*(2), 145–172.

Gidley, J., Bateman, D., & Smith, C. (2004). *Futures in education: Principles, practice and potential* (AFI Monograph Series 2004: No 5). Melbourne: Australian Foresight Institute.

Gidley, J., & Inayatullah, S. (2002). *Youth futures: Comparative research and transformative visions*. Westport: Praeger.

Giroux, H. A. (1992). *Border crossing: Cultural workers and the politics of education*. New York: Routledge.

Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.

Miller, R. (2000). Education and the evolution of the cosmos [Electronic version]. *Caring for new life: Essays on holistic education*.

Montuori, A. (2004). *Edgar Morin: A partial introduction. World Futures: The Journal General Evolution, 60*(5), 349–355.

Morin, E. (2001). *Seven complex lessons in education for the future*. Paris: UNESCO.

Roy, B. (2006). The map, the gap and the territory. *Integral Review: A Transdisciplinary and Transcultural Journal for New Thought, Research and Praxis, 3*, 25–28.

Steiner, R. (1894/1964). *The philosophy of freedom: The basis for a modern world conception (GA 4)* (M. Wilson, Trans., Rev. Ed.) (Original work published 1894). Spring Valley: The Anthroposophic Press.

Steiner, R. (1909/1965). *The education of the child in the light of anthroposophy (GA 34)* (2nd ed., G. & M. Adams, Trans.) (Original work published 1909). London: Rudolf Steiner Press.

Steiner, R. (1967). *The younger generation: Education and spiritual impulses in the 20th century (GA 217)* (R. M. Querido, Trans.) [13 Lectures Stuttgart, October 3 to 15, 1922]. New York: Anthroposophic Press.

Steiner, R. (1971). *Human values in education, lectures, 1924*. London: Rudolf Steiner Press.

Steiner, R. (1981). *The renewal of education through the science of the spirit: Lectures, 1920*. Sussex: Kolisko Archive.

Steiner, R. (1982). *The kingdom of childhood: Lectures, 1924*. New York: Anthroposophic Press.

Zahavi, D. (Ed.). (2004). *Hidden resources: Classical perspectives on subjectivity*. Exeter: Imprint Academic.

Part I
An Evolutionary Approach to Education

Chapter 2
Cultural Evolution: Past, Present and Futures

2.1 Introduction

In this chapter I offer a big picture overview of cultural history as a context for understanding our present situation in relation to education. Ever since human beings first appeared as *Homo sapiens* around 200,000 years ago, human life on earth has been in a state of continual change and gradual development. The way that human cultures and societies have evolved over macro time periods is intimately connected with individual psychological development, including degrees of consciousness and ways of knowing about the world. Furthermore, the evolution of human consciousness is deeply interwoven with the development of speech, language and art. The aesthetic sensibility of early humans, once expressed in bodily ornamentation, cave paintings, carvings and pictograms, gradually evolved over several millennia into more abstract forms of writing and, more recently, digital technology (see Chapter 4). In a similar manner, the enculturation of children was for millennia purely about cultural transmission—that is, passing on the values and traditions of the tribe or community to the next generation. I refer to this broad enculturation of children into the myths, mores and laws of their societies as pre-formal education. It is only in the last two to three hundred years that pre-formal enculturation of children by their families and tribes has been replaced by formal school education for the majority. But before we go into formal education in Chapter 4, I want to trace this fascinating story of cultural evolution for its relevance to understanding the background from which school education emerged.

After introducing the concept of evolution of consciousness and discussing the research challenges, I take a transdisciplinary approach to evolution, to overcome some of the limitations of Darwinian biological evolution. Three theorists of cultural evolution are chosen—Rudolf Steiner, Jean Gebser and Ken Wilber—with the structural framework being provided by Gebser's model. An overview of five major transitions of culture and consciousness are presented, the most recent being integral, which is emerging today.

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This chapter challenges the dominant evolution narrative by integrating perspectives beyond classical evolutionary biology. The purpose of the chapter is to lay the groundwork for creating conceptual bridges between cultural evolution and education as the book unfolds.

2.2 Evolution of Consciousness: The Cultural Dimension (Phylogeny)

> Without renewing our culture and consciousness we will be unable to transform today's dominant civilization and overcome the problems generated by its shortsighted mechanistic and manipulative thinking... The shift to a new civilization—depends on the evolution of our consciousness ... a precondition of our collective survival. (László 2006, pp. 39, 77)

Hungarian-born systems scientist, Ervin László, prefaces his comments with a nod to Einstein and his famous words of a century ago. Like many researchers from psychology, philosophy, physics and cultural history, László claims that the challenges of our times require that we *consciously* evolve our consciousness. The diverse features of the emerging new consciousness are being articulated in the literature on postformal reasoning, integral studies and planetary consciousness, which I gather under the term *evolution of consciousness*.

The interconnectedness between cultural evolution of our species as a whole and individual psychological development needs to be teased apart before it can be fully appreciated. This chapter will focus on cultural evolution, known as phylogeny, and the next chapter will focus on individual psychological development, known as ontogeny. The interrelationships between the two areas will be developed in Chapter 7.

2.2.1 What is Cultural Evolution?

To put it simply, cultural evolution is the idea that human cultures develop and evolve in much the same way that species evolve. In very broad terms, most of the cultures around the planet today are much more complex and multi-faceted than the cultures of early hunters and gatherers or agriculturalists. Some may argue that the dominant culture of today is not an improvement on early cultures, in light of the environmental damage being committed in the name of development. On the other hand, we cannot deny that human creativity and ingenuity has led to some remarkable cultural products in terms of language, art, music, architecture, science and technology and much more. We are in the midst of a new human cultural renaissance that is emerging out of the damaging impacts of hyper-industrialisation, to give birth to an infinitely creative post-industrial, postformal, integral, planetary culture.

I will begin by briefly explaining how I am using the key terms *culture* and *evolution*, before discussing more theoretical issues.

By *culture* I mean all that constitutes societies including the myths, mores, rules and laws that develop over time across the whole of humanity and yet can be quite diverse geographically at any given point in time.

My use of the term *evolution* not only refers to Darwinian biological evolution but also includes socio-cultural, philosophical and spiritual perspectives.

2.2.2 What is Evolution of Consciousness?

The idea of the *evolution of consciousness* is not new. Towards the end of the 18th century, it was a core topic of interest among those philosophers who were later referred to collectively as the German idealists and romantics. Almost a century before Charles Darwin published his *Origin of Species* (Darwin 1859/1998), Johann Gottfried von Herder published *This Too a Philosophy of History for the Formation of Humanity* (Herder 1774/2002). In it Herder claimed that "there exist radical mental differences between historical periods, that people's concepts, beliefs, sensations, etc. differ in important ways from one period to another" (Forster 2001).

Herder's seminal ideas on the evolution of consciousness were extended in many ways by Johann Wolfgang von Goethe, Georg Wilhelm Friedrich Hegel, Friedrich Wilhelm Joseph Schelling, the Schlegel brothers and Novalis. These philosopher-poets were attempting to re-unite philosophy, art, science and Spirit and were also influenced by the push to democracy and individual freedom of the synchronously occurring French Revolution. The pre-Enlightenment idea of a unity of knowledge had been superseded during the European Enlightenment, especially by Immanuel Kant's three-part theory of knowledge, expressed in his three major philosophical works: *The Critique of Pure Reason* (Plato's Truth), *The Critique of Practical Reason* (Plato's Goodness) and *The Critique of Judgment* (Plato's Beauty).

Schelling was a central figure in the conscious re-integration of knowledge. In particular, Schelling's contribution foreshadowed current notions of conscious evolution (Teichmann 2005). Although inspired by *earlier* unitive worldviews, these integral philosophers also pointed *forward*, beyond the limitations of both pre-modern (pre-Enlightenment) mythic consciousness and formal, modernist (Enlightenment) rationality, towards a more conscious awakening of a postformal, integral consciousness. Contemporary philosophers David Ray Griffin and Arran Gare refer to this as constructive or reconstructive postmodernism, which Gare traces to Schelling (Gare 2002; Keller and Daniell 2002).

Yet the world was not ready for these r/evolutionary ideas. It would take two hundred years for the integrative philosophical movement pioneered by the German idealists and romantics to begin to make its mark on the world through the contemporary integral movement. Following close on the heels of the European Enlightenment, and in parallel with the dawning of integral evolutionary thinking in the German States, the Industrial Revolution was brewing in Britain. This key

marker of early modernity was advancing its technological powers with tremendous socio-cultural force: both progressive and disruptive. Supported by the positivist worldview of scientific materialism and analytic philosophy, mechanistic notions of human nature cast a shadow on idealist and spiritual notions of human consciousness and culture, including education. Furthermore, since Darwin—and in spite of his under-appreciated writings on love and moral evolution (Loye 1998, 2004)—the dominant evolution discourse has emphasised materialistic biomechanical views of humanity, at the expense of more philosophical and spiritual views.

However, the evolution of consciousness is not just a biological concern. Swiss cultural philosopher Gebser wrote extensively about the shifts occurring in many disciplines in the first half of the 20th century, describing it as an indication of what he called a "mutation" to a new structure of consciousness (Gebser 1949/1985). Gebser's detailed examples of the features of the new consciousness—based on almost two decades of transdisciplinary research—provide a significant "academic footnote" to the extensive research on the evolution of consciousness undertaken by Steiner and Sri Aurobindo some decades earlier (Aurobindo 1914/2000; Steiner 1904/1959, 1926/1966). Steiner's research combined the history of ideas (across diverse cultures) with the evolutionary concepts of the German idealists and romantics. Sri Aurobindo's research was grounded in ancient Indian texts—contemporised by his study of German idealists (Gidley 2007; Kapoor 2007).

2.2.3 Challenges of Researching Evolution of Consciousness—Culturally

A major theoretical issue in researching cultural evolution last century was its perceived links with Auguste Comte and Herbert Spencer's contentious 19th-century models of social engineering (Comte 1855/2003; Spencer 1857). These ideologies were used to rationalise many racist and ethnocentric social abuses—including slavery, colonialism and ethnocide—and became known as *social Darwinism*.

Cultural anthropologists developed powerful critiques of these models, particularly following on from the early 20th-century shift to ethnographic field research. Their critiques include claims that cultural evolution models are ethnocentric, unilineal, too oriented towards technological materialism, privileging progress rather than preservation and speculative rather than evidence based.

For a few decades, the notion of evolution itself came under critique from anthropologists and critical social scientists. However, there has been a revival of interest as new, more integrative anthropological theories began to emerge, such as Marshall Sahlins' theory that there is both evolution of human culture in general—characterised by "growing complexity and unilinearity, with culture apparently leaping from one societal form to another", and specific evolution, "to account

for the great variety in historical developments" of particular societies (Barnard and Spencer 1996/1998).

These challenging theoretical issues are discussed elsewhere in my doctoral research, in particular how Steiner, Gebser and Wilber dealt with these challenges (Gidley 2007).

2.2.4 *Why Darwinian Biological Evolution is Incomplete: A Cultural Diagnostic*

By the end of the 19th century, the entire evolution discourse had become dominated by the biologically based Darwinian evolution theory. Many contemporary evolutionary psychologists and anthropologists still base their research on what systems theorist/psychologist David Loye calls the "narrow version" of Darwinian evolutionary theory grounded in classical biology. According to Loye, Darwin's position with regard to human evolution, and particularly moral development, is more fully addressed in *Descent of Man,* which is relatively marginalised compared to *On the Origin of Species* (Darwin 1871/2004, 1872/2005; Loye 1998, 2004; Richards 1992).

Classical Darwinian evolution theory is also contested[1] from several other academic sources, which include:

- New biological approaches—such as self-organisation and emergentism—arising from chaos and complexity science (Deacon 2003; Goodenough and Deacon 2006; Swimme and Tucker 2006; Clayton 2006; Braxton 2006; Jantsch 1980; Russell 2000; Thompson 1991);
- Integral theoretic approaches that propose a dialectic between biological *evolution* and spiritual *involution* (Aurobindo 1914/2000; Combs 2002; Davidson 1992; Gebser 1970/2005; Hocks; Murphy 1992; Steiner 1971b; Wilber 2001; Gidley 2008);
- Integrative approaches that work towards an integration of evolutionary science and theology/spirituality (Clayton 2007; Esbjörn-Hargens and Wilber 2006; Cousins 1999; Stein 2006; Rolston III 2005, 1997; DeLashmutt 2005; Carr 2005; Clayton 2006; Scott 2007; Conway Morris 2007);
- Postmodern philosophical evolution theories (Rolston III 1997; Richards 1992, 2002);
- Systems theory approaches to evolution (Bocchi and Ceruti 2002; László 2006; Loye 1998, 2004);

[1]Proponents of the religious doctrine of *creationism* clearly also contest the Darwinian evolution theory. I do not enter the *evolution versus creationism* debate that still rages in schools in the USA. This is beyond the scope of my research, which builds on the well-established scientific and philosophical basis of evolutionary theory.

- Theological and religious literature, which includes intelligent design (Grace and Moreland 2002; Boivin 2001; Moreland 2001), theistic evolution (Carr 2005; DeLashmutt 2005; Teilhard de Chardin 1959/2002, 1959/2004) and *natural* theology (Conway Morris 2007; Rolston III 1997).

It is clear that classical biology is not the most comprehensive discipline for researching the richness and complexity of the evolution of culture and consciousness. The full range of human sciences needs to be involved to develop authentically *human* epistemologies. Tensions remain today within the cultural evolution discourse between the dominance of biology and the small but significant counter-thread of philosophical and spiritual approaches that have been active throughout the last century.

2.3 A Transdisciplinary Perspective on Human Culture

Cultural evolutionary work involves deep philosophical questions of far-reaching existential import. To deal with this requires a transdisciplinary approach drawing on a range of contemporary discourses including: consciousness studies, philosophy, cultural history, futures studies, psychology, spiritual studies and education. In this book I draw from diverse disciplinary fields to inform my research on the evolution of consciousness. Notwithstanding that biological notions of human nature are an advance on mechanistic notions, the complexity of human consciousness needs to be tackled in a transdisciplinary manner.

The transition from the 20th to 21st century heralded remarkable developments in our understanding of the nature of the universe. As Newtonian physics became overshadowed by the "new sciences", several pioneering thinkers took up the challenge to reconceptualise human nature in light of these radical paradigmatic shifts (Aurobindo 1909, 1914/2000; Bergson 1911/1944; Gebser 1949/1985, 1970/2005; Steiner 1926/1966; Teilhard de Chardin 1959/2004). I explore these developments in Chapter 3 as *megatrends of the mind*.

Researchers struggled to find suitable concepts to express what they saw as emergent changes in human consciousness, while minimising association with 19th-century social Darwinism. New concepts emerged such as evolution of consciousness (Steiner 1926/1966), creative evolution (Bergson 1911/1944), integral consciousness (Aurobindo 1909, 1914/2000), structures and mutations of consciousness (Gebser 1949/1985, 1970/2005) and noosphere (Teilhard de Chardin 1959/2004). Most of this work was overlooked in the social sciences, which seemed trapped in outmoded imitations of "old sciences". Ironically, social scientists have been slow to reframe human nature and its relationship to such a radically complex and mobile universe.

In spite of the challenges involved, outstanding early 20th-century thinkers have pointed to the increasing complexity of consciousness as an evolutionary quality (Aurobindo 1914/2000; Bergson 1911/1944; Gebser 1949/1985; Steiner 1926/

use the word *integral* explicitly to characterise his work. A major strength is the education system he founded which prepares children to develop new ways of thinking. Wilber's AQAL system is a comprehensive integral conceptual framework and may be used as a framework for analysis and design.

Because of my primary focus on these three major sources, my coverage of many significant theorists is of necessity brief. Wilber has quoted extensively from many other sources, but I have not in all cases been able to analyse his interpretation as I have done with his writings on Gebser.

2.4.2 Gebser's Structures of Consciousness

Gebser's view of cultural evolution is that the human species has undergone a number of transformations of our structures or modes of consciousness from the archaic, to the magic, to the mythical, to the mental/rational mode and is now in transition from the mental mode to the integral-aperspectival mode of consciousness. The five structures of consciousness that he identified are differentiated by "differing degrees or intensity of awareness" (Gebser 1949/1985). Gebser briefly summarised them as follows:

- *Archaic*—It is antecedent to any awareness of time and space and prior to magic consciousness and inhabits a zero-dimensional world. It is spiritually embedded in nature;
- *Magic*—It corresponds to deep sleep, does not know of time and space and has its domain in a one-dimensional world. It is vegetative, instinctual and vitalistic in nature;
- *Mythical*—It corresponds to dream states, knows time but not space and inhabits a two-dimensional world. It is psychic in nature;
- *Mental*—It corresponds to wakefulness, to life in time and space in a three-dimensional world. It is essentially rational in nature;
- *Integral*—It corresponds to aperspectival consciousness, comprising a world of four dimensions. It is essentially spiritual in nature (Gebser 1949/1985, p. 84).

Elsewhere, Gebser spoke about the integral-aperspectival consciousness as follows: "This space-time freedom...is spiritual; and in this sense the fourth dimension in all its plenitude is the initial expression of a concretion of the spiritual" (Gebser 1949/1985, p. 387).

For a rich understanding of the potential of integral consciousness to better understand how education needs to change today to foster the new consciousness, Gebser's *Ever-Present Origin* is a seminal text (Gebser 1949/1985). The remainder of this chapter is organised according to Gebser's five structures of consciousness—archaic, magic, mythical, mental and integral.

While it is impossible to know how archaic humans actually enculturated their children and young people, as we move through the different cultural-historical periods, we can begin to sense how enculturation began to crystallise into more

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