



Contextualist-coaching for complex times

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Abstract

This thesis addresses the lack of empirical clarity about what coaches do, what works and what constitutes research evidence in coaching, as well as the lack of explicit theoretical perspectives upon which current coaching and its research are based. It establishes that contemporary coaching takes place in a volatile, uncertain, complex and ambiguous world, and that there is need for a contextualist-coaching approach.

In a review of the literature, Pepper's (1942) four world hypotheses are used as a lens of analysis for identifying implicit assumptions currently in use in coaching and its associated activities. Distinguishing between the systems-thinking concepts of closed, partially open, and open systems, Pepper's lens reveals that current definitions and theoretical approaches to coaching implicitly assume formistic and mechanistic closed systems. While some coaching approaches are linked to the partially open systems assumptions of organicism, no approaches uncovered in the academic literature review align to the open systems assumptions of contextualism. The implications of these findings for coaching, the industry and the way that coaching research is conducted are discussed.

Similarly, a review of the coaching industry literature reveals that the open system principles espoused by industry organisations are in contradiction to the implicit closed system assumptions of formism and mechanism belied by their governance practices, standards and approaches to accreditation and credentialing. That is, industry bodies have developed practices that operate under the assumption that the external environment is static and all variables are identifiable and controllable.

To address these problems identified in the academic and practitioner literature on coaching, a research strategy involving Peirce's triadic system of inferential logic (Hartshorne & Weiss 1935) within an analysis and synthesis dialectic framework is justified as a suitable process for forming hypotheses appropriate to the epistemic circumstances of the problem. An initial analysis and synthesis dialectic, commenced through the analysis conducted using Pepper's world hypotheses during the literature review, is completed through a process of synthesis using abduction to formulate a hypothesis of best inference.

It is hypothesised that the incompatibility between the open system environment within which coaching occurs and the closed and partially open system assumptions upon which coaching practice and theory are currently based could be addressed with a coaching approach that adopts the open system assumptions of Pepper's meta-theory of contextualism. Such a contextualist-coaching framework might be more effective than current coaching approaches within the open system external environment. Given that no contextualist-coaching approach currently exists, the following research question is formulated:

Research question: *How can the researcher-practitioner coach within the assumptions of a contextualist world hypothesis?*

An action research methodology is justified as appropriate for addressing this research question. Utilising three strategies, referred to in the thesis as the Business Action Research Cohort (BARC), the Hub and Spoke (H&S) and the Coach Training Cohort (CTC), various iterations of a contextualist-coaching approach emerge. It is argued that a strong theory base for coaching comes out of research that aligns with the assumptions of Pepper's (1942) contextualism; namely, done in the field and with others. Lynham and McDonald's (2011) model and Checkland and Holwell's (1998) FMA framework are both used to link and report the synergism between theory, research and practice. In this way, a theoretical framework is developed that represents the salient features of a contextualist-coaching approach, whereby others judge the emergent categories as sufficiently recoverable.

The strength of contextualism as a lens through which to understand coaching in a volatile, uncertain, complex and ambiguous world is that it accepts that the knowledge coaches attain will remain relative and incomplete. An argument is put forward that a contextualist-coaching approach, aligned to contextualism's radical emphasis on change, represents a needed shift in thinking.

Declaration by author

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution of jointly authored works that I have included in my thesis.

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No publications included.

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Contributions by others to the thesis

To the members of the Business Action Research Cohort at Monash University, and members of the Hub and Spoke and the Coach Training Cohort—your reflections, enthusiasm and continued involvement meant that something worthwhile emerged beyond what could have been achieved alone.

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Statement of parts of the thesis submitted to qualify for the award of another degree

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Philosophy, coaching, theory development, leadership, meta-methodology, complexity, consulting, practitioner, world hypotheses, action research, contextualism

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List of Abbreviations used in the thesis

AC (UK)—Association for Coaching

ACTP—Accredited coach training program provider

ANZIC—Australia and New Zealand Institute of Coaching

AQAL model—All-Quadrants, All-Levels model (Wilber 1996, 2006)

AQF—Australian Qualifications Framework

BARC—Business Action Research Cohort

CAMeO—Comprehensive Coaching and Mentoring Online Encyclopaedia

CIPD—Chartered Institute of Personnel and Development

CTC—Coach Training Cohort

EBP—Evidence-based practice (EBP), a process by which the best available evidence is used in making decisions, is central to the development of professionalism (Bauer 2007).

EMCC—European Mentoring and Coaching Council

FMA—framework, method and area of application

GROW model—goal, current reality, options (or obstacles) and way forward

H&S—Hub and Spoke

ICA—International Coach Academy

ICF—International Coach Federation

ICRF—International Coaching Research Forum

KPI—Key performance indicator

OST(E)—open systems theory (Emery)

VUCA—volatile, uncertain, complex and ambiguous

Chapter 1: Introduction

1.1 Background to the research

We are immersed in complexity (Boisot & McKelvey 2011) that has challenged the world economy over the last two decades and contributed to the current world crisis (Schwaninger 2004). While there is no consensus on the contributing factors, there is general agreement that new financial technologies, accounting methods and international linkages (Adams 2009) have played a part. The turn of the millennium has subsequently brought in an era of profound economic and environmental interdependence between countries (Heifetz, Grashow & Linsky 2009) and organisations being challenged in pursuit of sustainability and innovation to survive (Heifetz, Grashow & Linsky 2009).

Formulated in 1918, Adams' 'Law of Acceleration' described the great impact of the changes wrought by the industrial revolution and since then, complexity has "extended itself on immense horizons" (Sterman 1994, p. 291). Changes have occurred exponentially due to the growth of technology, production and population with the most recent global recession of 2007–2008 contributing to an environment that is now fundamentally different from that of last century. It is messy, more volatile and unpredictable with its interweave of technological, political and socio-cultural change requiring complex decision-making (Weick 2008).

While such complexity has been formerly associated with mainly large systems such as cities, due to the impact of the technology revolution of the past few decades it is now something that affects almost everything we touch. Consequently, in the current environment leadership is fundamentally different from that of last century. Executives are increasingly being faced with ambiguous information and complex situations (Sargut & McGrath 2011) where small changes can produce disproportionately large effects in the environment (Schwaninger 2004). They are finding it difficult to manage the large numbers of interacting elements within a volatile and unpredictable (Petrie 2011) environment with skills and ways of thinking more suited to the problems of the past century.

This increasing complexity being faced by executives has resulted in the development of the field of systems thinking whose proponents view the world as a complex system where everything is connected (Sterman 1994). The study of such complex systems represents an approach that investigates how relationships between parts cause the collective behaviours of a system and how the system interacts and forms relationships with its environment. Given that change accelerates as the complexity of the systems in which we live grows, so too do the “unanticipated side effects of human actions, further increasing complexity” (Sterman 1994, p. 291).

Knowledge concerning how to operate within complex systems already exists (Checkland 1999; Garvey Berger 2012; Heifetz, Grashow & Linsky 2009; Jackson 2003; Meadows 2004). Currently, managers are finding it far more difficult than when their understanding of workplaces was limited to the merely complicated levels of detail. The knowledge of how to plan and direct amid this increased complexity “hasn’t permeated the thinking of most of today’s executives or the business schools that teach tomorrow’s managers” (Sargut & McGrath 2011, p. 70). Managing within a complex organisation as if it were only complicated has caused serious and expensive mistakes because, in a complex environment, even small decisions can have surprising effects due to the increased possibility of unintended consequences.

Einstein said, “A new type of thinking is essential if mankind is to survive and move toward higher levels” (cited in *New York Times* 1946). Those who are trying to be effective in this current environment need to develop different thinking and skills. This requires moving from the limits of their current paradigm of understanding for one that is suited to this increasingly complex and challenging environment. According to McGuire and Rhodes (2009), making these advances requires that there be an awakening, an unlearning and discerning. During such awakenings, people become aware of different ways of making sense of the world and the possibility of doing things in a new way (Petrie 2011). As old assumptions are analysed and challenged, new assumptions can be experimented with and tested. Advances are made after some practice and effort. As new ideas get stronger and start to dominate, they make more sense than the old ones. New decision-

making technologies are being developed that suit the various types of uncertainty inherent in complexity (Sirbiladze 2010). They are being used to analyse the causes and consequences of growth and the integration of data with theories that produce scenarios of world development that challenge old ideas (Meadows 2004).

Executives have traditionally been educated to face political, social and financial challenges with epistemological understandings more appropriate to the past (Ardagh 2005; Eisler 2007). Yet, as the limits of growth are being reached (Meadows 2004) they are becoming increasingly aware that, to be effective, they must operate differently. The approaches of the past are proving less effective. Instead, the skills needed for effective management and leadership include more complex and adaptive thinking abilities and actionable knowledge. As a result, there has been a proliferation of learning and development approaches that assist executives in growing the skills and knowledge they are now believed to need. In response, and despite its etiology not being clearly understood (Newsom 2008), executive coaching is one industry that has emerged from practice and the marketplace, rather than from science and the academy (Grant 2008).

Sterman (1994) proposes that overcoming the multiple barriers to learning caused by complex dynamic systems requires a synthesis of many methods and disciplines. Coaching, with its history and foundations having been drawn from many disciplines including counselling, psychotherapy and organisational psychology, is such an attempt at facilitating the professional development of executives and enhancing their ability to cope with increasing complexity. As a result, coaching has emerged as a multi-billion-dollar global industry that sparks a passionate commitment in many of its recipients and practitioners.

With its history and foundations drawn from many disciplines (Hunt 2004; Underhill, McAnally & Koriath 2007), coaching has emerged as a field that is continually being informed by new ideas and thinking (Vaartjes 2005). Hooijberg and Lane (2009) caution, however, that “theorists who build models of effective coaching will need to pay more specific attention to the context within which the coaching takes place” (p. 491).

The pursuit within organisations for sustainable and innovative practices within the current complex environment requires a review of standard social and business practices and the assumptions upon which they are built (Zander & Zander 2002). Dick (2012) maintains that professional development initiatives, such as coaching, will increasingly require flexible research approaches that are aimed at resolving problems associated with developing more resilient organisations, more effective leaders and engaged workforces. It follows that a deep understanding of the frames upon which coaching approaches are based and how they are put into practice is essential.

1.2 Outline of the report

This chapter provides a summary of the background of the research and an outline of the presentation of the report.

Chapter 2: Literature review

The literature review presented in Chapter 2 identifies challenges associated with coaching practice and research. The chapter begins with a brief introduction to the history of coaching and its varied definitions. Next, the state of coaching research and its relationship to theory and practice is discussed. Pepper's (1942) world hypotheses are used as a lens of analysis to identify the implicit assumptions currently in use by coaches, industry associations, industry literature, research literature and clients within the industry. The analysis reveals that there is a lack of clarity about what coaches do and what works, what constitutes research evidence in coaching, and an absence of explicit theoretical perspectives upon which current coaching and its research is based. The findings indicate that the published academic and practitioner literature associated with coaching aligns with the closed system assumptions of Pepper's (1942) formism and mechanism and the partially open system assumptions of organicism. No approaches aligned with the open systems assumptions of contextualism were observed. A contextualism assumption is appropriate for contemporary coaching, which occurs within the open system volatile, uncertain, complex and ambiguous (VUCA) world. Accordingly, the need for taking a contextualist approach to theorising coaching is established.

Chapter 3: Methodology to formulate a hypothesis and research question

Having identified in the literature review a mismatch between the context of contemporary coaching and the assumptions underpinning contemporary coaching theory and practice, Chapter 3 presents the methodology followed in developing a contextualist aligned approach. Specifically, Peirce's (1998) triadic system of inferential logic, positioned as an analysis and synthesis dialectic, is adopted as the research strategy for developing a hypothesis for improving the effectiveness of coaching in the current environment. This strategy informs the process followed in Chapter 4 for completing the dialectic through a process of synthesis (using abduction) that began in the literature review with the analysis (through induction and deduction) conducted using Pepper's (1942) world hypotheses.

Chapter 4: Synthesis: – Hypothesis generation using abduction

In Chapter 4, a hypothesis of best inference is generated following completion of the first analysis and synthesis dialectic. The resulting hypothesis is that, within the current open system environment in which coaching takes place, a coaching framework aligned with the assumptions of Pepper's open system contextualist world hypothesis will be more effective than existing closed system and partially open system approaches. Given that contextualist-coaching practices have not been previously developed, the research question formulated and addressed in this thesis is:

Research Question: *How can the researcher-practitioner coach within the assumptions of a contextualist world hypothesis?*

Chapter 5: Methodology to address the research question

Chapter 5 justifies the use of Checkland-Mezirow's (Sarah et al. 2002) FMA action research framework. FMA is a meta-cycle of inquiry framework, where 'F' denotes Framework, 'M' denotes Methodology, and 'A' denotes Area of Application (A).

The research design developed using the FMA framework involves integration of background ideas (F), including Lynham and McDonald's (2011) theory, research and practice model and the underlying principles of Pepper's contextualism, as the

theory that informed the choice of content of the action research methodology (M), namely, the Business Action Research Cohort (BARC), the Hub and Spoke (H&S) and the Coach Training Cohort (CTC).

Lynham and McDonald's (2011) framework of the synergistic nature of research, theory and practice relates to Pepper's (1942) framework of contextualism by viewing effectiveness as a result of synergism between contextualism's notions of quality and texture, the two necessarily required for completeness. That is, within a contextualist perspective, for a theory to be effective, research needs to be interpreted as it is taking place in practice.

Chapter 5 concludes with a discussion of the role of the researcher-practitioner and ethical issues.

Chapter 6: Development of contextualist-coaching theory

With the assistance of the Business Action Research Cohort (BARC), and subsequently through a bespoke Hub and Spoke (H&S) arrangement, Chapter 6 describes how the author, as researcher-practitioner, engaged in critical reflective inquiry to examine personal coaching practice and its relationship with Pepper's meta-theory of contextualism. Through multiple cycles of critical, reflective inquiry, an initial theoretical contextualist framework for coaching emerged.

Once this contextualist-coaching theory was sufficiently developed, the H&S group assisted the researcher-practitioner in conducting further critical reflective inquiry by putting the theory into practice in an executive leadership program. Iterations of theory continued emerging with external evaluations procured by the client.

A cohort of coaches subsequently put the coaching theory developed during the executive leadership program into practice. Interested in applying contextualist-coaching theory into their coaching interactions, these members of the coach-training cohort (CTC) engaged in cycles of action research within their own coaching practice and continued the development of contextualist-coaching theory. The coaches within the CTC provided feedback to the author for the ongoing critical, reflective inquiry being undertaken within the H&S.

Chapter 7: Conclusion

Chapter 7 provides a summary of the contributions and implications for practice of this research.

1.3 Contributions

Drawing upon the implicit theoretical foundations of previous work conducted by action research groups at Monash University and Bath University this research contributes both in theoretical and practical ways.

1.3.1 Theoretical Contribution

Emerging from this research is a technique for coaches to develop theory which may be put into practice, no matter the particular circumstances or specific area of interest of their coaching clients. The approach provides distinctions around the building of an intellectual framework, or theory base, grounded in contextualist assumptions and how to put consecutive versions of theory into practice, thereby guiding the development of further iterations of theory.

The ‘point in time’ iteration of contextualist-coaching theory that emerged from this research into more effectively coaching within the volatile, uncertain, complex and ambiguous (VUCA) environment within which coaching takes place, addresses the problem that there is a lack of explicit epistemological perspectives in both the coaching literature and its research. Aligning the open systems nature of the environment with the open system assumptions of Peppers’ (1942) contextualist world hypothesis, contextualist-coaching theory developed through a synergism of theory, research and practice over a period of five years.

An implication of the philosophical underpinnings of contextualism (Pepper 1942) is that someone else using the same theory to investigate and improve their own coaching practice will likely come up with a different iteration of contextualist-coaching theory. This is because each person will necessarily be doing so from a different context.

1.3.2 Practical Contribution

A practical contribution to coaching practice is made through the development of Cohort Coaching, a group oriented approach to coaching based upon contextualist assumptions.

Cohort Coaching emerged as a way of facilitating practitioner inquiry into their practice in ways that will likely increase the effectiveness of their coaching. Its underlying assumptions support this by facilitating multiple perceptions of problems and challenges amid the volatile, uncertain, complex and ambiguous business environment. As a coaching approach cohort coaching reflects the importance of practitioners spending a lot of time thinking about theory to refine their ideas amid practice and is a shift for the consultant-practitioner towards theory as a basis for effective practice.

The emerged cohort-coaching approach is geared towards coaches being more effective at assisting people in dealing with the sorts of problems and opportunities that are more complex and difficult than anything they have known before. The functioning of the cohort, and the approach taken by cohort coaches acting according to the assumptions of contextualism within their own coaching practice, is aimed at facilitating within cohort members the creation of options about dealing with a future that is less predictable than before and with access to endless amounts of interconnected information. The approach is intended to assist them, and their clients, in getting their heads around what is possible rather than what is probable within any individual specific areas of interest.

In summary, this research contributes by developing a coaching approach proposed as a pragmatic way of attaining the outcomes so often desired by clients operating in the open-system real-world business environment. It has been developed as a way to break new ground.

1.4 Definitions

Abduction—“consists in studying facts and devising a theory to explain them” (Hartshorne & Weiss 1931, p. 270). It is an “inference to the best explanation ... a form of inference that goes from the data describing something to a hypothesis that best accounts for the data. It is a kind of theory-forming or interpretative inference and the basis to diagnose reasoning” (Josephsen & Josephsen 1994, p. 5).

Action research—Common among its various approaches is the premise that reality is interconnected, dynamic and multivariate and more complex than the theories and methods that we have at our disposal (Greenwood & Levin 2007). It is an ambiguous concept, involving a variety of practices without much unity or continuity (Eikeland 2007).

Adaptive challenges—can only be addressed through “changes in people’s priorities, beliefs, habits and loyalties” (Heifetz, Grashow & Linsky 2009, p. 20).

Analysis and synthesis dialectic—studying the available facts and engaging in cyclical processes of abduction, deduction and induction in an ongoing dialectic of development allows researchers to devise theories for explaining and making sense of the world (Hartshorne & Weiss 1935; Smith 2005).

Ashby’s Law of Requisite Variety (1956) —distinguishes between the “simplicities achieved by reductionism (equilibrium, law-like equations, linearity, and predictability) and the complexity triggered by initiating “butterfly events”—nonlinearity, scale-free causes, and power laws (PLs)” (Boisot & McKelvey 2011, p. 119).

Coaching—as a result of the eclectic origins of coaching, no universal definition currently exists. See discussion in Chapter 2.

Cohort Coaching—group coaching aligned with the assumptions of contextualism.

Contextualism—World hypothesis with root metaphor of the ongoing act in context (Hayes, Hayes & Reece 1988). Focuses on understanding the world via

subjectively interpreted particular moments (Forsyth 2010). It is a system of concepts relating to quality and texture.

Deduction—see Triadic system of inferential logic

EBP—Evidence-based practice (EBP), a process by which the best available evidence is used in making decisions, is central to the development of professionalism (Bauer 2007).

Events-patterns-structure tool—used in systems dynamics. Is a structured approach to the abduction process (Barton & Haslett 2006) and a way of distinguishing between open and closed systems. Expanded to include mental models, it uses the analogy of an iceberg for differentiating four different levels of systems thinking (Maani & Cavana 2007; Senge 1992).

FMA model—generic framework used for conducting action research. Develops a set of key frameworks of ideas (F) by engaging in action research (M) within specific areas of application (A). The methodology (M) incorporates analysis and synthesis dialectic cycles of action research whereby the relationship between various frameworks (F) and the area of application (A) are explored (Checkland & Holwell 1998).

Formism— World hypothesis based on the assumption that objects (or concepts) can be categorised with discrete boundaries based on their assigned definition or similarity to a prototype. It represents a taxonomic or classificationist approach to understanding (Hayes, Hayes & Reece 1988).

Fusion—refers to the integration of the textural details of a given event (Hayes, Hayes and Reece 1988).

Group coaching—an effective intervention technique that can be extremely successful at creating inflection points in executives' lives (Kets de Vries 2014).

GROW model—a technique for problem solving or goal setting and is the “most common basis of coaching in many organizations and universities globally” (Whitmore 2009, p. 44).

Hypothesis of best inference—generated through a process of synthesis, using abduction.

Induction—see Triadic system of inferential logic.

Mechanism—World hypothesis with a root metaphor of a machine. Promotes that relations among parts do not change the nature of the parts, because the parts exist independently of those relations. Mechanism is based upon two assumptions: the world can be understood completely and such an understanding can be obtained by analysis (Gharajedaghi & Ackoff 1984).

Mental models—is the deepest level of the systems-thinking iceberg, that relates to reflection on the “beliefs, values and assumptions that we personally hold” (Maani & Cavana 2007, p. 15).

Organicism—is a world hypothesis with the metaphor of the integrated whole that describes organic and evolutionary systems, complexity and chaos (Hayes, Hayes & Reece 1988).

Peirce’s modes of inquiry—see triadic system of inferential logic.

Pepper’s (1942) world hypotheses—see World hypotheses.

Quality—When considering present time, contextualism views all events as being comprised of two fundamental categories of quality and texture. Quality is the experienced nature of an act with texture referring to the details and relations that make up its quality (Pepper 1942).

Reference—concerns the temporal relations or interconnections among the details of an act, specifically their point of initiation, course and satisfaction. Texture viewed through the concept of reference is important as it pertains to issues of similarity and novelty as they are contextually interpreted (Hayes, Hayes & Reece 1988).

Root Metaphor—is an area of empirical observation that is the point of origin for a world hypothesis (Pepper 1963).

Strands—are the interconnections among the details of an act that directly contribute to its quality. Context is made up of the interconnections among strands, contributing indirectly to the quality of a given act. However, the two cannot be fully distinguished because each contributes to the nature of the other.

Systems thinking—concept that provides a way of thinking for understanding and managing human systems associated with complex problems (Bosch, Maani & Smith 2007).

Technical problems—those that can be resolved through the application of expertise within an organisation’s current structure, procedures and ways of doing things.

Texture—Texture can be distinguished in terms of three categories: strands, context and reference (Hayes, Hayes & Reece 1988) —see Quality.

Triadic system of inferential logic—involves three different modes of inquiry: induction, deduction and abduction. Deduction proves that something must be; Induction shows that something actually is operative; Abduction merely suggests that something may be (Hartshorne & Weiss 1931, p 171).

VUCA—Volatile, uncertain, complex and ambiguous environment.

World hypotheses—includes root metaphors called formism, mechanism, organicism and contextualism. They place importance on the interplay of inductive-deductive inferences. Pepper (1942) links each with an underlying logic: formism and mechanism showing an increase in analytical power and organicism and contextualism showing increases in synthetic power (Stephens, Barton & Haslett 2009). They are ‘hypotheses about the world itself, about the entire universe of fact. “They are theories of everything” (Davis and Millon 1994, p. 89).

1.5 Conclusion

This chapter laid the foundations for the thesis, provided an outline of the report and presented a summary of how an intellectual framework, or theory base for coaching, is developed and put into practice in the thesis. The need for a coaching framework that aligns with the volatility, uncertainty, complexity and ambiguity of the current business environment is established.

Chapter 2: Literature Review

2.1 Introduction

Chapter 2 provides an account of the literature that leads to identification of problems within coaching and its research. Sections 2.2–2.8 comprise a preliminary literature review that introduces the following:

- a brief history of coaching
- definitions of coaching in the literature
- problems of definition
- issues concerning research into coaching
- epistemological issues
- what constitutes evidence in coaching research?
- relationship between research, practice and theory.

The review reveals a lack of clarity about what coaches do and what works, and what constitutes research evidence in coaching. It also identifies a lack of explicit theoretical perspectives upon which current coaching and its research is based.

In sections 2.9–2.12 Pepper's world hypotheses are introduced as a lens of analysis for further understanding of these issues. The analytical process involves:

- justification for the selection of Pepper's (1942) four immutable world hypotheses as an appropriate lens of analysis for identifying the implicit assumptions currently in use by coaches, industry associations, industry literature, research literature and clients within the industry
- a description of the salient features of formism, mechanism, organicism and contextualism
- an account of the interpretation and use by others of Pepper's lens
- a review of the criticism's of Pepper's world hypotheses.

Subsequent sections of the chapter provide a report of the analysis with the systems concept providing a link between Pepper's world hypotheses, the coaching literature and the open systems environment within which coaching takes place.

Pepper's lens is also used for analysing the underlying assumptions of moves towards coaching as a profession. Key influencers within the industry who have moved towards the professionalisation of coaching are examined.

Chapter 2 concludes by identifying that the published academic and practitioner literature associated with coaching is aligned with the closed system assumptions of formism and mechanism and the partially open system assumptions of organicism. No approaches aligned with the open systems assumptions of contextualism could be identified. This presents a problem because contemporary coaching occurs within an open system, a volatile, uncertain, complex and ambiguous (VUCA) world.

2.2 A brief history of coaching

The etiology of executive coaching is not clearly understood (Newsom 2008). However, coaching is generally seen as having emerged largely from practice and the marketplace, rather than from science and the academy (Grant 2008). From its beginnings in areas such as counselling, psychotherapy and organisational psychology (Hawkins 2008), the term *coaching* is reported by psychologists as having been applied in the early 1980s as a less threatening way of describing consultation with business personnel, as well as by those applying sports coaching approaches to business settings (Tobias 1996). Therefore, coaches often identify with another professional identity more than those who do coaching full time (Drake 2008).

Kauffman and Bachkirova (2008b) recognise that those who are looking for an exit from the corporate world and a way of expressing self-responsibility often become coaches. Typically, they are consultants, counsellors, psychologists, speakers and trainers as well as those who do not have any specific training and expertise (Brennan 2008). In the USA, they are a mature group with 65.5% between the ages of 46 and 65, of whom 52.8% hold postgraduate qualifications and 32.4% have

graduate qualifications. They variously describe themselves as Life Coaches (18%), Executive Coaches (16%) and Leadership Coaches (17%) (Brennan 2008).

From the mid-1990s the coaching industry experienced tremendous global growth, with annual revenues of US\$1.5 billion in 2007 (Brennan 2008), increasing to \$1.9 billion in 2012 (International Coach Federation n.d.a). In Australia, it has become mainstream, self-regulating, and a thriving business sector (Grant 2008). Its growth has been driven by the recognition that learning and development are more effective when based on real-time challenges at work that involve the whole person, rather than subsets of skills (Hawkins 2008). The growing popularity of executive coaching is further reflected in the creation of coaching associations, industry bodies, university degree programs and, according to Grant and Cavanagh (2004), in the sharp increase in peer-reviewed journal publications achieved during recent years. However, many see coaching as being hampered by problems of definition.

2.3 Definitions of coaching in the literature

If a universal definition of coaching were possible, then it follows that it would need to indicate features that are present in all different types, genres and approaches. This good-enough definition would also have to allow for the *uniqueness* of coaching by including elements that would clearly differentiate it from other professional activities such as training, consulting and counselling. In other words, a universal definition would ideally resonate with all professional coaches and make the distinction between what is, and what is not, coaching.

Underlying sets of assumptions originating in the behavioural, humanistic, psychoanalytic, adult development, and experiential learning literature have guided the thinking around definitions of coaching. For example, there is peer coaching (Showers 1984), classroom management coaching (Sprick et al. 2006), content focused coaching (West & Staub 2003), blended coaching (Bloom et al. 2005), executive coaching (Stern 2004), and coaching psychology (Law 2013). These definitions have steered what coaches do and described what kinds of relationships can be constructed between coaches and their coachees. They provide information about beliefs surrounding how much people can or cannot change as well as about how people do change. Sometimes these are automatic assumptions. At other times,

they are based on thoughtful considerations of the nature of humanity. However, as a result of the eclectic origins of coaching, no universal definition currently exists.

To illustrate this, Bachkirova and Kauffman (2009), as editors of *Coaching: An International Journal of Theory, Research and Practice*, provide a range of definitions in use. These definitions vary in focus by including arrangements such as that of an external coach, internal coaching relationships between employees and their direct supervisors, ways to promote growth and development, or simply improvement and learning. The Australian Psychological Society (2005) and Stober and Grant (2006) make specific reference to collaboration being necessary to the coaching process and Peterson and Hicks (1996) emphasise the attainment of goals by equipping people with tools, knowledge and opportunities.

There are as many opinions about the best way to define coaching as there are definitions. Bachkirova and Kauffman (2009) further categorise examples based upon whether coaching is defined through a special type of conversation between two people, or whether it refers to a professional service offered by a specialist to a client under an explicit contract. Alternatively, Jackson (2005) proposes starting with a definition that reflects the breadth of coaching activity while differentiating effectively between practices. Ives (2008) proposes three dimensions for defining coaching approaches: directive and non-directive; personal development or goal focused; and therapeutic or performance driven.

This diversity of views on how to define coaching highlights the lack of transparency concerning the underlying theoretical assumptions made by authors, editors, providers of qualifications and courses. Continuing with a focus on finding a way to define coaching, Bachkirova and Kauffman's (2009) solution is to place definitions along a continuum.

At one end, they view coaching as very clearly defined, with all professional coaches agreeing on one specific definition and using it as a strong guide. Each intervention is seen as a clear expression of that definition. Coaching at this end of the continuum is therefore *manualised*, each action clearly spelled out and operationalised into specific series of behaviours. Such mechanistic notions rely upon the belief that universal prescriptions, or solutions are possible.

For example, Gregory and Levy (2010), in an attempt to improve construct clarity and establish an all-encompassing definition of employee coaching, draw upon the conceptualisations of many previous researchers, including Evered and Selman (1989), Heslin, VandeWalle and Latham (2006), Hunt and Weintraub (2002) and Kinlaw (1996), and define coaching as:

... a developmental activity in which an employee works one-on-one with his/her direct manager to improve current job performance and enhance his/her capabilities for future roles and/or challenges, the success of which is based on an effective relationship between the employee and manager, as well as the use of objective information, such as feedback, performance data and assessments (Gregory & Levy 2010, p. 111).

Illustrative of the other end of Bachkirova and Kauffman's (2009) continuum is Starr's (2003) definition of coaching as "a conversation, or series of conversations, one person has with another" (p. 109). However, coaching described in this way could encompass nearly any setting and dialogue between all sorts of different people. It abandons the criterion of universality and accepts that there could be as many types of coaching, as there are individual coaches. At this end of the continuum, Bachkirova and Kauffman visualise coaching as possibly crossing over into consulting or counselling, depending on the need of the moment and the qualifications of the coach. Every coaching encounter would be seen as unique and special, with coaches under no obligation to align with any definition. An understanding of this coaching would not be obtained by breaking it down into constituent parts.

Along the middle of Bachkirova and Kauffman's continuum lie coaching definitions that seek to differentiate coaching from other personal interventions. For example, the Australian Psychological Society (2005) provides a distinction between coaching and psychological interventions by defining coaching as relevant for those who do not have clinically significant mental health issues or abnormal levels of distress.

Grant (2001) defines coaching as "a collaborative, solution-focused, result-oriented systematic process, used with normal non-clinical populations, in which the coach

facilitates the self-directed learning, personal growth and goal attainment of the coachee” (p. 1). In support of this definition, and emphasising the relevance for non-clinical applications, Bachkirova and Kauffman (2009) also establish coaching as a de facto therapy without attaching the stigma of being a patient.

Other definitions distinguish coaching based upon the target audience. For example, definitions of business coaching and executive coaching often introduce a third party. While an understanding of what is meant by coaching for executives remains the subject of debate (see Kilburg 1996, 2000; Sperry 2008; Tobias 1996), it is variously defined:

Business coaching is the process of engaging in meaningful communication with individuals in business, organisations, institutions or governments, with the goal of promoting success at all levels of the organisation by affecting the actions of those individuals (Worldwide Association of Business Coaches cited in Bachkirova & Kauffman 2009, p. 96).

Professional coaching is an ongoing professional relationship that helps people produce extraordinary results in the lives, careers, businesses or organisations. Through the process of coaching, clients deepen their learning, improve their performance, and enhance their quality of life (International Coach Federation [ICF], cited in Bachkirova & Kauffman, 2009, p. 96).

Executive coaching has been defined and described in varied ways, but generally it is a one-on-one, confidential relationship designed to help the client improve job performance and to develop professionally... The art of creating an environment through conversation and a way of being, that facilitates the process by which a person can move toward desired goals in a fulfilling manner (Gallway [sic] 2000, cited in Bachkirova & Kauffman 2009, p. 96).

A common theme implicit in these definitions is that at their core, all coaching encounters involve a willing participant granting a coach permission to pursue a type of coaching conversation. Otherwise, as Bachkirova and Kauffman (2009)

caution, coaching would become an encounter in which a coach interferes in another's life and choices. However, this raises the issue of whether coaching relates more to compliance, rather than permission freely given by coachees.

Some coaching definitions are ambiguous concerning the issue of power during coaching interactions. For example, some imply that it is the coach who determines what the coachee needs. The foremost agenda of the coach seems to be 'fixing' the coachee.

Coaching is the process of equipping people with the tools, knowledge and opportunities they need to develop themselves and become more effective (Peterson 1996, cited in Bachkirova & Kauffman 2009, p. 96).

.... coaching process (which is) defined as a leader-initiated informal discussion designed to bring about a change in employee behaviour, attitudes or actions (Stowell 1987, cited in Bachkirova & Kauffman, 2009, p. 96).

Primarily a short term intervention aimed at performance improvement or developing a particular competence (Clutterbuck 2003, cited in Bachkirova & Kauffman 2009, p. 96).

As well as placing coaching definitions along a continuum in an attempt to gain some clarity, Bachkirova and Kauffman address the multitude of definitions by suggesting that definitions be arranged by certain criteria. These include stating what the coaching is designed to achieve, by specifying certain elements of the coaching process and relating them to the context of the coaching interaction, or by specifying the type of population that the coaching is designed to serve. Bachkirova and Kauffman also distinguish definitions according to whether the word *coaching* is applied to a special type of conversation between two people, or whether it can be identified as a professional service offered by a specialist to a client under an explicit contract. However, these two very different ways of conceptualising coaching can lead to a wide variety of misunderstandings among practitioners and the public.

For example, coaching that refers to a special type of conversation is described by The Coaching Institute as follows:

Professional life coaching is about assisting a client in closing the gap between where they are and where they want to be. It's about working with someone who wants to achieve more in their life. An effective coach will assist their client in discovering what is important to them, what is missing from their life or their business and what outcomes they are looking for. They will then ask questions, listen, and reflect back what they hear, challenging their client's thinking in such a way that the client will consider new ways of creating the transformation they are seeking (The Coaching Institute 2015).

However, when this definition is interpreted within the context of the marketing material that also appears on the website, assumptions surface. The Coaching Institute (2015) defines professional life coaching as “assisting a client in closing the gap between where they are and where they want to be”. They describe the coaching role as that of a facilitator of a process whereby they use profiling tools to identify what is wrong with the coachee and then ‘fix’ them using proven methodologies. These stated methodologies include Thought Dynamics and Meta Dynamics.

On their website (<http://thecoachinginstitute.com.au>, viewed 14 March 2016), The Coaching Institute’s coaching system, Thought Dynamics, is described as “not just a methodology” and promoted as “the ideal vehicle for any coach or consultant who wants access to a recognised, promoted and powerful brand, including a web site, logos, and marketing systems”. The Institute further states that consultants trained in Thought Dynamics gain access to “a complete methodology for assessing, coaching and training clients, including proposal templates, assessment and profiling tools, coaching session templates, coaching journal and training templates for four workshops.”

In addition, The Coaching Institute defines its Meta Dynamics™ system as the study—or the ART—of knowing how a person makes decisions so that they can create the results they want. It is characterised as a “Step-By-Step User Manual For Your Brain” with coaches trained in “the SPECIFIC steps, or blueprint, to help you

get there” (<http://www.thecoachinginstitute.com.au>, viewed 14 March 2016).

Systems grounded in such closed systems thinking, including the belief in an ideal outcome and that certain prescribed elements can be predetermined in any situation, place the coach as the powerful ‘knower’ in the coaching relationship.

2.4 Problems of definition

Like many other emerging disciplines, coaching has struggled with problems of definition (Ives 2008). This can be seen in the many and varied definitions in the academic coaching literature, industry journals and in everyday use by coaches as they speak about their work to prospective clients and develop websites and marketing collateral.

In spite of experiencing a meteoric rise over the last 20 years (Brennan 2008), coaching has been variously described as ill defined (Clegg et al. 2005) and counterproductive (Berglas 2002). This has led to scepticism within coaching that is fuelled by a lack of consensus about what constitutes quality coaching and whether there needs to be a universal definition of coaching or not.

This uncertainty has resulted in the persistence of an eclectic knowledge base with endless debates about definitions and what professionalisation should look like. To avoid a potential descent into the confusion of “quackery, faddism and pseudoscience” (Grant 2008, p. 96), attempts have been made to resolve this lack of theory and ambiguity of definition. Different definitions and approaches to defining coaching are evident in the writings of Bachkirova and Kauffman (2009), Brockbank (2008), Dagley (2006), Drake (2008), Grant and Cavanaugh (2004), Gray (2011), Hamlin, Ellinger and Beattie (2009), Hawkins (2008), Ives (2008) and Jackson (2005). However, as Bachkirova and Kauffman (2009) stress, the ambiguity regarding the defining of coaching is not just a matter of semantics.

According to Law (2013), many practitioners draw a clear boundary between coaching and mentoring while others do not. In distinguishing coaching from mentoring, some definitions describe coaching as the facilitation of a coachee’s performance (Downey 1999; Parsloe 1992; Whitmore 2009), the unlocking of a

person's potential (Whitmore 2009) and enhancing of the coachee's learning and development (Downey 1999; van Nieuwerburgh 2012). For example, Downey (1999, p. 67) defines coaching as "the art of facilitating the performance, learning and development of another". Van Nieuwerburgh (2012, p. 17) defines it as "a one-to-one conversation focused on the enhancement of learning and development through increasing self-awareness and a sense of personal responsibility, where the coach facilitates the self-directed learning of the coachee through questioning, active listening, and appropriate challenge in a supportive and encouraging climate". In contrast, the Chartered Institute of Personnel and Development (CIPD) describes both coaching and mentoring as helping behaviours that support personal development, with the difference being that coaching is for a shorter period of time than mentoring (CIPD 2015).

Other attempts at defining coaching involve differentiating between terms suggestive of certain characteristics. For example, approaches have been described as behavioural (Skiffington & Zeus 2003), cognitive behavioural (Neenan & Dryden 2002) or developmental (Laske 2000). In another categorisation, based upon the work of Burrell and Morgan (1979), Brockbank (2008) differentiates between approaches by examining purpose, process and learning outcomes. They are thus labelled functionalist (operational approaches typified by equilibrium or improvement as a learning outcome), engagement (humanist person centred approaches for achieving a functional outcome) and evolutionary (characterised by a coachee's ownership of purpose and a transformative learning outcome). In another example of distinguishing between types of coaching definitions, Barner and Higgins (2005) conclude that, whether coaches are aware of it or not, they tend to centre their coaching craft on one of four prevailing coaching models: clinical, behavioural, systems and the social constructionist model.

Dagley (2006), Grant (2008) and Spence (2007) recognise that the broad array of coaching definitions that can be found are not linked to underlying theory. The differing positions and their lack of explicit theoretical underpinnings indicate that the problems are likely to be far more complex than those able to be resolved by reaching a consensus on a definition of coaching. A review of the research literature is required to understand the current state of coaching.

2.5 Issues concerning research into coaching

The literature on coaching has significantly escalated since 1995 (English 2006; Grant 2008). Meta-reviews of research into coaching have been conducted by Kampa-Kokesch and Anderson (2001), Bennett (2006) and Passmore and Fillery-Travis (2011). Although Passmore and Fillery-Travis acknowledge that there has been an increase in the number of peer-reviewed research articles, they agree with McGovern et al.'s (2001) earlier assessment that coaching is still open to speculation and subjective opinion. To address this problem, organisations such as the Institute of Coaching, a Harvard medical school affiliate, provide research grants (Institute of Coaching 2013) for suggested research topics and conduct conferences promoting and encouraging coaching research.

As well as highlighting the scarcity of coaching research at the time, Kampa-Kokesch and Anderson's initial meta-review revealed weaknesses in methodology of coaching research. Support for this conclusion was provided two years later by Waldman (2003) who, quoting Smither et al. (2003), also criticised coaching research because of its reliance on anecdotal data and failure to assess actual coaching outcomes. Therefore, despite the existence of managers' favourable attitudes towards executive coaching, evidenced by its continued rise as a professional development intervention, very little hard evidence could yet be found that coaching really changed executives' behaviour and improved their performance.

In 2005, the number of peer-reviewed empirically sound studies was still limited, with the majority of articles on coaching having been published in industry journals (Feldman & Lankau 2005). As a result, the coaching literature mainly consisted of non-empirical and opinion-based perspectives endorsing particular approaches, likely motivated by marketing imperatives. Gyllensten and Palmer (2007) concluded that, although more peer-reviewed studies appeared, these were typically focused on coaching that involved a third party, such as the organisation that employs the coachee. Thus, the problems with research into coaching still persisted.

Recent peer-reviewed empirically based research studies include those by Lueneburger (2012), who explored how coaching enhances leadership effectiveness

by focusing on and managing the relative frequency of individual job tasks; Bozer & Sarros (2012), who investigated whether executive coaching has an impact on coachee performance outcomes, as well as individual outcomes, as manifested by self-awareness, career satisfaction, job affective commitment and job performance; and de Haan and Nieb's (2011) research that suggests the relationship between coach and line manager is a significant factor in the success of coaching. These and similar articles have appeared in dedicated coaching research journals including *Coaching: An International Journal of Theory, Research and Practice* and the *International Journal of Evidence Based Coaching and Mentoring*. However, Bozer and Sarros, in their 2012 study of the coaching research literature, conclude that there is limited support for the suggestion that coaching is having a beneficial impact. This ties in with de Haan and Nieb's (2011) conclusion that, when it comes to real, measurable improvements resulting from coaching, research results are sporadic.

A different perspective is provided by Markides (2011), who states that the research of academics is:

... (sufficiently) relevant but still not what our customers (i.e., the managers) want or need. The gap that exists is not between rigorous and relevant research; it is between relevant and useful knowledge. For (relevant) research to become managerially useful, it still needs to go through a transformation. Unfortunately, academics are not good at this transformation process. This has a serious implication on what we actually need to do to make our research more managerially useful (p. 121).

2.6 Epistemological issues

Due to its eclectic history, coaching still does not have an associated clear body of knowledge. Instead, it draws from many different ways of knowing. Consequently, views regarding what constitutes reliable knowledge remain implicit within the activities of coaches, coaching industry organisations and coach training programs. They are reflective of the more generalised debates concerning what is considered reality and the way we gain knowledge about it (Bachkirova & Kauffman 2008).

With many coaching practitioners being formally trained in schools that promote positivist assumptions, coaches have been conditioned by the broad acceptance and cultural prevalence of scientific realism and its attendant modes of analysis (Bailey, Ford & Raelin 2009). These assumptions have swayed coaches' practical applications of theory, often leading to confusion about how, and if, theory and practice should be integrated (Raelin 2007). It has also affected methodological decisions within coaching research.

According to Hawkins (2008), the generalised conflict about what constitutes knowledge is further exacerbated within the coaching industry because it has been a practitioner-led practice rather than stemming from the academy. Also, practitioner-oriented coaching industry bodies have led the move towards professionalisation of the industry, rather than academia. This has resulted in the development of a proliferation of terms and a diversity of routes towards accreditation, without the necessary depth of understanding of the assumptions made. Subsequently, the implicit decisions made by coaching industry bodies about what constitutes evidence have influenced coaches.

Carol Kauffman, a former Honorary Vice-President of the Society for Coaching Psychology and an editor of the peer reviewed journal *Coaching: An International Journal of Theory, Research and Practice*, examined how knowledge within the coaching industry has been constructed. She concludes that 'good' research needs to withstand scrutiny with authors being able to explicitly describe what principles inform their interventions (assuming that an intervention is necessary or desirable in research). She previously suggests that these steps need to be accomplished by (i) having an informed hypothesis, followed by (ii) figuring out how to measure the issue being studied and (iii) determining whether there are any clear associations, correlations or causations. After this, research studies should be (iv) replicated, with successful studies being the building blocks for further inquiry (Kauffman 2004).

However, such assumptions, with their emphasis on replicability and measurement, are aligned with the broadly accepted and cultural prevalent assumptions of scientific realism and its associated modes of analysis. This is despite there being other ways of knowing that can inform research methodologies. In mainstream research, fewer than 5% of management studies are subject to any published form

of replication because they rely on limited access idiosyncratic samples, or case studies where access requires a special relationship (Hubbard & Vetter 1996).

Social science journals have seldom published the type of controlled empirical studies that can be observed in the physical sciences, where measurement, replicability and hypothesis testing reign (Mayo 1996). This is because in the social sciences *proof* is scarcely absolute (Devinney & Siegel 2012). Scientific advancement in management within organisations is rarely achieved by way of a small set of critical experiments. Instead, intellectual progress entails more of the “nudging, pushing, competing, and convincing that mark Kuhnian-style scientific systems” (Devinney & Siegel 2012, p. 6).

2.7 What constitutes evidence in coaching research?

Within coaching there are numerous calls for coaches to adhere to evidence-based practice (Britton 2008; Kets de Vries 2010; Linder-Pelz 2010; Pederzani 2008; Stober & Grant 2006; Wildflower & Brennan 2011). This is not surprising given that “the virtues of using research evidence to inform management practice have permeated managerial writings and organisational research over the past 50 or more years” (Briner, Denyer & Rousseau 2009, p. 19). However, using research evidence to support decision-making in practice is not straightforward because of the various types of evidence available and which types are valued or understood.

There is a danger that coaches may rely on the evidence that is most familiar to them, rather than having a clear understanding of the theoretical underpinnings upon which their decision is based. For example, in the late 1990s most of what constituted evidence-based psychological practice was in the area of empirically supported treatment (Chambless 1995), so a coach who was trained in that era likely understands the construct of best evidence in the context of empiricism. According to Bauer (2007), the problem is the often mistaken belief that evidence-based practice and empirically supported treatments are synonymous. However, they are not the same: evidenced-based practice is a much broader concept, not only in providing a framework for conceptualising clinical problems, but also being suggestive of a research agenda whereby patterns of wellness and illness can be

investigated. Such experiences with evidence-based practices highlight differences in opinion about what constitutes evidence and what role it should have in practice.

Talk of what constitutes evidence within evidence-based practice segues to a discussion of science and research. In Drake's (2008) opinion, it would be naïve for coaches to turn their back on science or be opposed to a scientific methodology. However, to present coaching as a hard science is also problematic. With multiple perspectives available, Kauffman and Bachkirova (2008a) reduce this controversy to that of discerning between objective and subjective evidence.

Peer-reviewed coaching journals, such as *Coaching: An International Journal of Theory, Research and Practice*, claim to be actively seeking the advancement of education and best practice in coaching across an array of disciplines by publishing evidence-based models and techniques, backed by sound theory and practice (Tulpa 2008). Yet, the knowledge base of coaches is influenced by what the editors select for publication. For example, in the 2008 editorial of *Coaching: An International Journal of Theory, Research and Practice*, editors Kauffman and Bachkirova acknowledge research perspectives that concentrate on three different kinds of evidence or data: sensory or empirical (comes through our senses), mental or phenomenological (comes through thought or intuition) and transpersonal or spiritual (comes through contemplation or meditation).

From the sensory perspective, Bachkirova and Kauffman (2008) describe reliable information as coming from events that can be clearly observed and reliably measured. These are the types of studies that are normally associated with traditional scientific, empirical and deductive proof. However, they recognise that there are research limitations using this type of evidence, particularly relating to studies in which people are involved and for understanding complex phenomena that do not allow for the control of various influencing factors. For example, a strong feeling *in the bones* of a coach concerning a coachee has no means of being objectively supported and would not be accepted by the tradition of evidence-based or empiric-analytic studies. Such an approach ignores outcomes that cannot be measured and, as such, from a 'science' viewpoint must not exist. Such a reliance on empiric-analytic studies for generating knowledge about coaching risks reducing

it to a dry mechanical process with little resemblance to what goes on. However, it is worth noting that an *in the bones* approach alone is also insufficient.

In the second approach to research evidence, Bachkirova and Kauffman (2008) describe mental or phenomenological research perspectives as involving the creation and exploration of knowledge by looking for images, thoughts and feelings that arise from the researchers' interpretation and description of what they observe (subjective). The concept of 'proof' in this approach is seen as much more difficult than in empiric-scientific studies, as it illuminates and emphasises the role of language in the way in which data is interpreted and the historical and cultural perspectives that have an impact on these interpretations.

In a third approach to evidence, Bachkirova and Kauffman (2008) describe a much more contentious slant that is entering the coaching field, which is concerned with transpersonal or spiritual knowledge. They recognise that there are problems of proof with this type of data that are harder to overcome than those encountered in mental or phenomenological studies.

Having identified these three research perspectives and their different kinds of evidence or data, Bachkirova and Kauffman (2008) state that researchers "are meant to establish repeatability and inter-subjectivity of their findings or claims within a community of (suitably trained) observers, in this case amongst us as coaches and researchers of coaching" (p. 111). Secondly, "what we understand by science in this journal is not reduced to only empiric-analytic investigations, but includes two other realms that are also open to direct experiential observation and consensual validation" (p. 111). However, these two statements appear contradictory when viewed epistemologically. The first, with its focus on repeatability and inter-subjectivity as fundamental to good research, implies a traditional stance towards evidence, while the second denies this. Their stand on evidence is therefore not clear; it does not recognise the problem at the philosophical level from which it emerges.

2.8 Relationship between research, practice and theory

Kampa-Kokesch and Anderson's (2001) study predicted that coaching would soon emerge from an exploration and definition phase, with theory development and testing next coming to the fore in research efforts. There would be a shift from case study and uncontrolled trials to research designs appropriate for the type of research questions prompted by the generation of theory. However, a decade later, and although the number of studies published had accelerated, Passmore and Fillery-Travis (2011) noted that research had instead focused on the nature of coaching, coach behaviour, client behaviour, relationships and impact studies, rather than theory generation. During this time, research comprised a mix of interpretive phenomenological analyses, grounded theory, discourse analysis, randomised controlled trials, meta-analysis and mixed methods. It encompassed positivist work seeking to identify qualitative data with propositions that could then be tested or identified in other cases, and interpretive work seeking to combine data into systems of belief whose manifestations are specific to a case (Lin 1998).

Academics show a preference for producing knowledge over translating and disseminating it (van de Ven & Johnson 2006). According to Khurana (2007), this is because they are motivated by incentives, such as promotional opportunities and recognition, and publishing rather than engaging with practitioners. Although some researchers have proffered ways for bridging this gap, including Pfeffer and Sutton's (2000, 2006) evidence-based management, van de Ven's (2007) engaged scholarship and Bartunek's (2007) relational scholarship, concern with the gap is mainly focused on attempts at explaining why it exists, rather than on how to close it (Bansal et al. 2012).

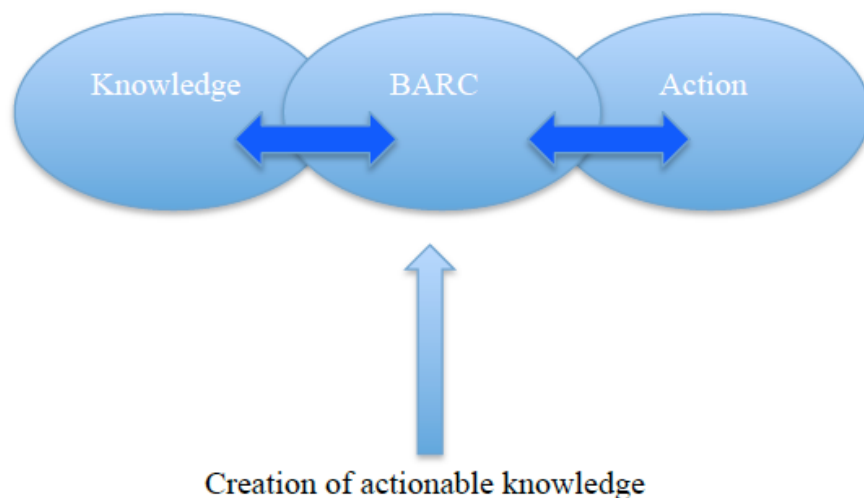
This is in contrast to practitioners who typically hold different epistemological stances than those of researchers (Rousseau, Manning & Denyer 2008). With social science research often bearing little resemblance to practice (Bansal et al. 2012), a research/practice or knowing/doing gap (Pfeffer & Sutton 2006) has emerged. Recognised within the Academy of Management, and frequently discussed by researchers such as Rynes, Bartunek and Daft (2001), Rynes (2007b) and Shapiro, Kirkman and Courtney (2007), the paradoxes underlying the relationship between

research and practice make bridging this gap difficult. Bansal et al. (2012) warn that attempting to close the gap has inherent risks if assumptions regarding the nature of knowledge are not questioned.

Practitioners use research when it connects to their practice and fits the context of their experience (Mohrman & Lawler 2012). However, what coaching researchers have chosen to study has been largely based upon their own curiosity or their personal needs and interests (Kauffman & Bachkirova 2009). Such research is often published without explanation of the context in which their knowledge is generated and the contextual elements contributing to the dynamics they observe. This has resulted in the content of coaching research being unpredictable despite attempts that have been made to gain perspective on the gaps in the research.

An approach to bridging the gap that does build upon an explicit theoretical basis was developed by a group of researchers and practitioners who met regularly at Monash University from 2002 until 2009. Called the Business Action Research Cohort (BARC), the group conceptualised a working relationship of actionable knowledge (as personified by BARC), organisations where members of the BARC worked and the university (see Figure 1). Its purpose was to develop practitioner-scholars, creating a clear relationship between methodology and the assumptions underlying actions taken by researchers within their organisations.

Figure 1: BARC's working relationship



2.9 Justification for the selection of Pepper's four world hypotheses as an appropriate lens of analysis within analysis and synthesis dialectic

The initial examination of the coaching literature, described earlier in this chapter, revealed a lack of clarity about what coaches do, what works and what constitutes research evidence in coaching, and a lack of explicit theoretical perspectives underlying the variety of eclectic approaches to coaching. However, regardless of whether proponents of coaching theories or models are explicit about their epistemological foundations and underlying assumptions or have even demonstrated their theories in practice, all approaches are necessarily based upon assumptions. Therefore, to understand the philosophical assumptions made, either consciously or unconsciously, by coaches, coach training organisations, industry bodies and researchers, requires the use of a lens of analysis that goes to these various underlying philosophical assumptions.

The use of paradigms or meta-theories is an established way for researchers to discover a means for thinking outside existing theory because they are useful for exposing implicit assumptions or as a guide to theory construction (Davis & Millon 1994). Described by Tsoukas (1994) and Hayes, Hayes and Reece (1988) as epistemologically incompatible and not able to be synthesised into an overarching world hypothesis, paradigms and meta-theories help in the understanding of the subtleties of the scholarly disagreements within literature. They provide a way for both the architects of theory and its critics to be aware of the assumptions that they are using to inform their thinking by suggesting what would otherwise remain implicit.

While the data available for analysis consists of the literature surrounding the various approaches of coaches, coach training organisations, industry magazines and journals, research into coaching and publications associated with key industry associations, such a lens must also be sensitive to the many qualities that contribute to the complex nature of coaching and its research. In this way, the complexity of coaching literature can be reduced to a point where an explanation of the sets of

assumptions becomes feasible, while not falling into what Edwards (2005) calls the “pitfalls of reductive approaches” (p. 286).

Pepper’s (1942) world hypotheses provide a useful foundation for reviewing epistemic development over time (Stephens, Barton & Haslett 2009). As worldviews, they allow people to make subjective representations of external reality (Stephens, Barton & Haslett 2009) because they are:

.... a consistent constellation of concepts, especially metaphorical concepts over one or more conceptual domains. Thus one can have philosophical, moral and political worldviews. Worldviews govern how one understands the world and therefore deeply influence how one acts (Lackoff & Johnson 1999, p. 511).

Associated with root metaphors, each of Pepper’s four world hypotheses, formism, mechanism, organicism and contextualism, place importance on the interplay of inductive-deductive inferences. Pepper links each with an underlying logic: formism and mechanism showing an increase in analytical power and organicism and contextualism showing increases in synthetic power (Stephens, Barton & Haslett 2009).

Pepper’s world hypotheses are positioned on a continuum of partial scepticism located between the two cognitive attitude extremes of utter scepticism and dogmatism (Tepe & Barton 2009). It is argued that these hypotheses are valid ways of refining common sense because they resist synthesis (Tsoukas 1994) and that these meta-theories are important because they permit an understanding of the grand scheme of philosophy, abstracted from different positions (Hayes, Hayes & Reece 1988). They reveal conceptual categories of modern behaviour and competing psychological systems as well as creating distinctions within the field of systems thinking. They do this by highlighting the different assumptions of analytical and synthetic thinking (Barton & Haslett 2007).

Pepper’s categorisation of distinct sets of philosophical assumptions about the world provides a means for interpreting and understanding the nature of competing knowledge claims (Emery 2000; Hayes, Hayes & Reece 1988). Given that one way

for conceptualising is through the use of metaphors (Morgan 2006), Pepper's epistemologically incompatible metaphors can be used as an analytical lens for obtaining a deeper understanding of the inherent mental models held by coaches, industry organisations and coach training authorities, as well as within the coaching literature.

Basseches (1984) justified and used the idea of dialectical thinking to organise theory and research about specific kinds of issues into a rich and coherent conceptual framework for the study of adult development. In the same way, engaging in an analysis and synthesis dialectic using Pepper's world hypotheses as a lens of analysis could be expected to facilitate a better understanding of the different perspectives of coaching and reveal their implicit assumptions.

2.10 Salient features of each world hypothesis

Pepper's (1963) root metaphors are areas of empirical observation that form the point of origin for formism, mechanism, organicism and contextualism. As viable deep-seated metaphors, they deeply affect how people make sense of the world and events in it. They are adequate depending on their capacity for interpreting the world with precision and scope.

A world hypothesis differs from other hypotheses only in its unrestricted scope. Other hypotheses are implicitly, if not explicitly, limited to a local problem in hand or, as in the special sciences, to a special field of subject matter. Such hypotheses may always reject certain considerations as being outside their field of inquiry. A world hypothesis never has this way out. It is responsible for the interpretation of any item or criticism proffered. It is an unrestricted hypothesis (Pepper 1963, p. 269).

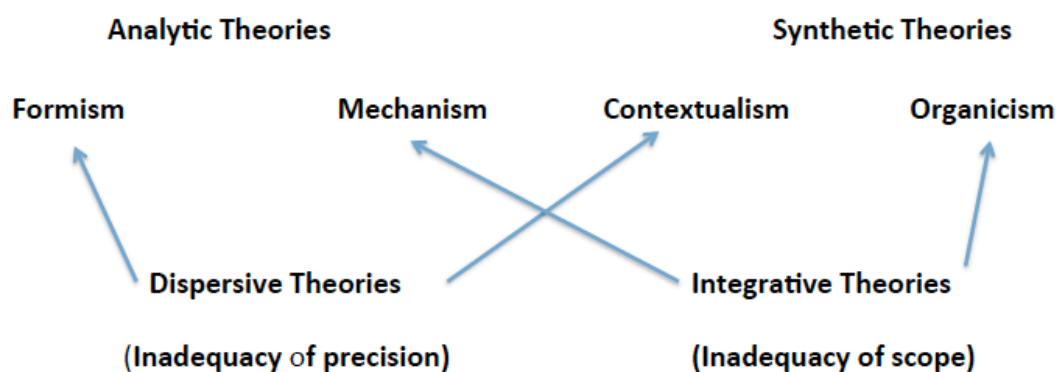
Pepper ascribes each of these four different, but legitimate, hypotheses which affect how people make sense of different pieces of knowledge, as having specific strengths and weaknesses in describing how the world works, while all being capable of describing content in any domain of knowledge. They are arranged in two groups of two, with a polarity towards being either analytical or synthetic.

Pepper uses the terms analysis (to break an idea down to its essential parts) and synthesis (to bring together the parts of a system to make consistent a whole) in describing the two processes by which the four world hypotheses investigate knowledge. While all hypotheses use both, formism and mechanism emphasise analysis while organicism and contextualism emphasise synthesis. In formism and mechanism, synthesis is secondary and in organicism and contextualism, analysis is derivative (Forsyth 2010).

Formism and contextualism are dispersive theories, mechanism and organicism, integrative theories. So, analysis is treated dispersively by formism and integratively by mechanism, and synthesis is treated dispersively by contextualism and integratively by organicism (Pepper 1942, p. 142).

Davis and Millon (1994) and Barton and Haslett (2007) maintain that understanding these polarities between analytic and synthetic evidence and between dispersive and integrative ways of organising things is fundamental for an appreciation of Pepper (see Figure 2).

Figure 2: World hypotheses according to their analytic or synthetic, dispersive or integrative assumptions



(Pepper 1942, p. 146)

The dispersive hypotheses of formism and contextualism are concerned with interpreting knowledge about the world individually. They resist systematising knowledge as they take facts “one by one from whatever source they come and are interpreted as they come and so are left” (Pepper 1942, p. 142). On the other hand,

the integrative world hypotheses of mechanism and organicism interpret knowledge as capable of being placed into one grand structure with the world appearing “literally as a cosmos where facts appear in a determinate order” (Pepper 1942, p. 142).

To facilitate an understanding of the root metaphors of each hypothesis, Pepper ascribed the correspondence theory of truth to his world hypothesis of formism, the coherence theory to organicism, the pragmatic (or operational) theory to contextualism, and causal-adjustment theory to mechanism (Hoefflin 1987). As a consequence, each can be plausibly identified with some associated common-sense questions. For example, pragmatism (or contextualism) with its root metaphor of the historical event can be equated with the question, *What should I do?* or *What should be done?* Similarly, mechanism with a distinctively inductive worldview and a root metaphor of the machine can be equated with the question, *How should I do it?* or *How should it be done?*

Mechanism and contextualism complement each other in the sense that mechanism gives a basis and a substance to contextualistic analyses, and contextualism gives a life and a reality to mechanistic syntheses. Yet, when mixed, the two categories do not work well and, as Pepper puts it, the damage they do to each other’s interpretations does not compensate for any added richness. Furthermore, formism and contextualism are dispersive theories showing inadequacy of precision, while mechanism and organicism are integrative theories, showing an inadequacy of scope (Pepper 1942).

Despite formism and contextualism being dispersive and mechanism and organicism being integrative, each is epistemologically incompatible with the other. One cannot be rejected on the basis of another; they cannot be synthesised into an overarching world hypothesis (Tsoukas 1994). This makes it difficult for proponents of different world hypotheses to communicate. Therefore, the fundamental assumptions of each hypothesis as they relate to organisations and the functioning of the social world do not stand outside of the respective hypotheses but are crucially involved in its constitution (Rosenberg 1988; Sayer 1984; Winch 1958).

Pepper's (1942) root metaphors and their corresponding schools of philosophy, characteristics and examples are summarised in Table 1.

Table 1: Pepper's Root Metaphors

World Hypothesis	School of Philosophy	Examples	Characteristics
Formism	Time of the ancient Greeks	Management classifications	Analytic theory
Metaphor is similarity	(Stephens, Barton & Haslett 2009) Realism or Platonic idealism	such as financial accountability, market segmentation and fundamental organisational structures (Stephens, Barton & Haslett 2009)	Dispersive theory Results of purposeful human behaviour (Stephens, Barton & Haslett 2009)
Mechanism	Newtonian Science	Strategic management and dynamic strategy models	Analytic theory
Metaphor is the machine	(Stephens, Barton & Haslett 2009) Naturalism or materialism	(Sterman 2000; Warren 2002)	Integrative theory Results of purposeful human behaviour (Stephens, Barton & Haslett 2009)
Organicism	Modern Era formalisation of Systems Thinking and the development of Organisational Behaviour (OB) (Stephens, Barton & Haslett 2009) Absolute Idealism	Chaos theory (Guastello 1995)	Synthetic and integrative theory Discontent with mechanistic thinking led to the formalisation of Systems Thinking in the middle 20 th century with OB progressing to become a justifiable way of securing knowledge about management practices in complex organisational systems (Stephens, Barton & Haslett 2009)
Contextualism	American pragmatism	Models may offer explanatory powers when the co-evolution of businesses and their environments produce innovative strategies (Stephens, Barton & Haslett 2009)	Synthetic and Dispersive theory Admits of human purposeful behaviour Disappointment with OB methods generated through the analysis and synthesis dialectic generated an interest in knowledge created <i>in and of</i> organisations resulting in the development of action research (Stephens, Barton & Haslett 2009)

2.10.1 Analytic World Hypothesis: Formism

Formism is based on the assumption that objects (or concepts) can be categorised with discrete boundaries based on their assigned definition or similarity to a prototype. It represents a taxonomic or classificationist approach to understanding (Hayes, Hayes & Reece 1988). Pepper (1942) described formism as giving everything a label within a system of labels to provide a sense of structural fullness that counts as understanding. Formism is often called “realism or Platonic idealism” (Pepper 1942, p. 141) and is associated with Plato, Aristotle, the scholastics, neoscholastics, neorealists, and modern Cambridge realists. White (1973) also includes the philosopher Nietzsche and the French historian Michelet as formists.

Formism is an analytic, dispersive theory with facts taken one by one from whatever source they come. By asking the question *What is it like?* formists make sense of the world by deriving meanings and definitions through classifying and categorising (Forsyth 2010). Super and Harkness (2003) describe this as a cognitive task of analytically discerning diagnostic similarities.

With a truth criterion of correspondence (Hayes, Hayes & Reece 1988), formism’s root metaphor is that of similarity (Pepper 1942). This is interpreted by Tsoukas (1994) as meaning that those who advance formistic knowledge claims are seeking to capture similarities and differences between discrete objects of study without necessarily being concerned with the underlying mechanisms that are responsible for any of the similarities and differences they identify.

Forsyth (2010) notes that, among Pepper’s world hypotheses, formism is the most neglected. However, its importance lies in its powerful simplicity. In support of this observation, Forsyth (2010) cites the research conducted by Altman and Rogoff (1987), Babbage and Ronan (2000), Overton (1984), Prawat and Floden (1994), Spiro, Feltovich and Coulson (1996), and Tudge and Winterhoff (1993).

2.10.2 Analytic World Hypothesis: Mechanism

Mechanism is often called naturalism or materialism and, by some, realism (Pepper 1942). It is associated with Democritus, Lucretius, Galileo, Descartes, Hobbes,

Locke, Berkeley, Hume and Reichenbach (Pepper 1942). With its root metaphor of a machine, mechanism promotes that relations among parts do not change the nature of the parts, because the parts exist independently of those relations. Like formism, mechanism is an analytical world theory; discrete elements or factors, not complexes or contexts, are what a mechanist is interested in. However, unlike formism, mechanism is integrative.

Mechanism is based upon two assumptions: (i) the world can be understood completely and (ii) such an understanding can be obtained by analysis. That is, mechanism involves taking apart what one seeks to understand, then attempting to explain the behaviour of the parts individually. Once the individual parts are understood, they must be re-aggregated to reach an understanding of the whole (Gharajedaghi & Ackoff 1984).

2.10.3 Synthetic World Hypothesis: Organicism

Organicism, commonly called absolute or objective idealism, first associated with Schelling, Hegel, Green, Bradley, Bosanquet and Royce, represents a holistic approach requiring synthesis to treat the whole, not constituent parts, as the focus of understanding (Pepper 1942). Its metaphor of the integrated whole is used in describing organic and evolutionary systems, complexity and chaos (Hayes, Hayes & Reece 1988). This suggests a biological bent, but this is not necessarily the case (Tsoukas 1994).

While a mechanist asks, *How does it work?* an organicist asks, *How does it develop?* (Rose 2003). To answer this question, organicists view historic processes in an essentially organic way: the unfolding of a logic that is inherent to an object of study. Tsoukas (1994) describes this process as going through a sequence of specified steps—an organic process eventually culminating in an ultimate, most inclusive structure. The process unfolds progressively in the direction of greater inclusiveness, determinateness and organicity. The world is seen as coherent and well integrated. Therefore, in an organicist perspective, it is possible to identify the manner in which things ‘hang’ together.

The organicist believes that:

Every actual event in the world is a more or less concealed organic process. He believes, therefore, that a careful scrutiny of any actual process in the world would exhibit its organic structure, though some of the processes with which we are generally familiar reveal the structure more clearly and openly than others. The categories of organicism consist, on the one hand, in noting the steps involved in the organic process, and, on the other hand, in noting the principle features in the organic structure ultimately achieved or realized. The structure achieved, or realized is always the ideal aimed at by the progressive steps of the process (Pepper 1942, p. 281).

Whereas mechanists view the world as objective and passive, organicists view the world as constructive, purposive and active and, from an ontological perspective, a world that favours change over stability and holism over elementarism (Forsyth 2010). They conceive organisations as bodies that operate as if their parts are organs, each with a function that contributes to the survival and growth of the whole (Gharajedaghi & Ackoff 1984). The role of individuals is related to that of cells that make up organs, with the whole composed of these various organs. The function of the cells is to serve the organs of the organism of which they are a part, these organs and cells being more difficult to replace than machines or machine parts. Within an organicist interpretation of an organisation, executives are viewed as the brain of the system who are linked to subordinates (the parts) by a communication network through which they receive information from a variety of sensing organs, such as marketing, research, development and accounting departments (Beer 1981). Directives issued by the brain (executives) either activate or deactivate certain parts of the system (Gharajedaghi & Ackoff 1984).

Tsoukas (1994) describes organicism as involving fragments of experience that appear with nexuses or connections or implications which spontaneously lead, as a result of the aggravation of contradictions, gaps, opposition, or counteractions, to resolution in an organic whole. This process is found to be implicit in the fragments and transcends the previous contradictions by means of a coherent totality, which economises, saves, and preserves all the original fragments of experience without

any loss. That is, the whole is not a synthesis of the parts; the whole is basic, the parts meaningless except in the context of the whole (Hayes, Hayes & Reece 1988).

Organicism embraces teleology: the doctrine that explains phenomena by the purpose they serve rather than by postulated causes. The structure achieved or realised is always the ideal aimed for by the progressive steps of the process (Pepper 1942). Tsoukas (1994) interprets this as suggesting that fragments of experience do not matter since it is their ultimate explanation of underlying structures that is cognitively important.

Rejecting the linear cause-and-effect assumptions of the mechanists for a synthetic, interactional approach to understanding the world, organicism holds that basic parts are not capable of being understood independently of one another because they work together simultaneously as a system (Forsyth 2010).

2.10.4 Synthetic World Hypothesis: Contextualism

The official origin for contextualist aesthetics can be found among early pragmatists such as Charles S. Peirce, William James, and Henri Bergson. Their concern was with the problem of truth in science, logic and ordinary human experience (Pepper 1968). Contextualist assumptions are also associated with Dewey and Mead (Pepper 1942) and Protagoras (Forsyth 2010), with Croce and Burckhardt also viewed as contextualist philosophers by White (1973).

With its root metaphor being the ongoing act in context (Hayes, Hayes & Reece 1988), rather than showing how parts of a whole fit together as in mechanism, or how processes are driven by internalised process as in organicism, contextualism focuses on understanding the world via subjectively interpreted particular moments (Forsyth 2010).

As such, contextualists seek to understand “act[s] in the moment” (Pepper 1942, p. 231) with meaning discerned from two sources: “from the history of the act and from the context and perspective of the observer. This means that objective mechanist descriptions or idealised organicist constructions that extend beyond “the moment” are given less credence” (Forsyth 2010, p. 10).

Sometimes, contextualism is referred to as the historic event, continuously changing over time (Tsoukas 1994). However, Hayes, Hayes and Reece (1988) caution that this historical reference is not to be interpreted as a dead description of something already done. Instead, contextualist thinking is concerned with ‘*doing*’ as it is ‘*being done*.’ Change and novelty are considered inherent in any moment and their meaning will be relative to the observer (Forsyth 2010). Because of this, contextualism welcomes multiple interpretations. The number of interpretations increases with additional observers. “In this view, it is impossible to arrive at a single or simple explanation of the ‘cause’ for anything... [M]ultiple perspectives are appreciated, even required” (Super & Harkness 2003, p. 6).

The root metaphor of contextualism, the historical event, can be viewed as a complex and holistic phenomenon whose parts interpenetrate and are connected in an inseparable fashion (Pepper 1942). Contextualism is intrinsically embedded in the surrounding context, which unfolds in time, and assumes that contextual and sequential processes are fundamental aspects of phenomena. Although events can be focused on from different angles, a full understanding requires recognition of the interpenetration of the different viewpoints. The whole event must be studied as a unity; studying its elements is not sufficient for understanding the whole, since the whole is not a sort of added part, like a clamp that holds things together. Understanding phenomena from a contextualist view requires descriptions of changing features and temporal processes.

Change goes on continuously and never stops. It is a categorical feature of all events; and since in this [contextualist] world theory all the world is events, all the world is continually changing in this manner (Pepper 1942, p. 243).

Insisting on the context, contextualism differs from formism, which attempts to remove the context. It is also unlike organicism because the contextualist world hypothesis does not emphasise universal and/or teleological principles that govern the functioning of phenomena. Instead, contextualist orientations allow for the possibility of unique events that are not necessarily progressing towards any specified ideal state. And each event may or may not function in accord with an ultimate ‘law’ of nature. It also emphasises the problem with mechanism’s

reductionist approach. Holding variables constant to identify a ‘law’ to explain behaviour has only limited application in the real world where, regardless of appearances, almost nothing remains constant. While it is assumed that examination of a particular event will be instructive for understanding nature in the general sense, it is not necessarily the aim within a contextualist world hypothesis to describe all events according to the same principles.

When considering present time, contextualism views all events as comprising two fundamental categories of quality and texture. Quality is the experienced nature of an act; texture refers to the details and relations that make up its quality (Pepper 1942). However, even these categories may change because nothing about our knowledge of the world is viewed as final or ultimate (Hayes, Hayes & Reece 1988). Each category is defined in terms of other categories with quality made up of spread and fusion. Spread refers to the extended presence of an act in context; the past and future of an act exists in the ongoing act. The act ‘spreads’ both backward and forward. Fusion refers to the integration of the textural details of such a given event. Hayes, Hayes and Reece (1988) assist in the understanding of this description of contextualism by relating to the quality of lemonade as a fusion of distinct ingredients so thoroughly that they can be almost indistinguishable and difficult to analyse separately.

Texture can be distinguished in terms of three categories: strands, context and reference (Hayes, Hayes & Reece 1988). Strands are the interconnections among the details of an act that directly contribute to its quality. Context is made up of the interconnections among strands, contributing indirectly to the quality of a given act. However, the two cannot be fully distinguished because each contributes to the nature of the other.

For example, a one-hour coaching session described contextually involves arranging the details and relations of the coaching act, that is, its texture, in strands of various sorts. The coaching act could comprise a strand called “developing the leadership potential of the coachee,” occurring in the context of the coachee. Alternatively, the strand could relate to the “performance of the coach” as it occurs in a context of other coaching sessions conducted by the coach. It could be a strand of “introducing a new framework into a coaching session” occurring in the context

of teaching how to be more assertive, based on a framework provided in the form of a handout called 'Eight Ways to be More Assertive,' and so on. The quality of the act in each case emerges in the interaction of the strand and its context.

Texture distinguished through reference relates to a more intimate consideration of strands (Hayes, Hayes & Reece 1988). '*Reference*' concerns the temporal relations or interconnections among the details of an act, specifically their point of initiation, course and satisfaction. The point being that texture viewed through the concept of reference is important as it pertains to issues of similarity and novelty as they are contextually interpreted (Hayes, Hayes & Reece 1988).

Similarity is not a feature of events from a contextualist viewpoint. No two events in the world are inherently similar. Rather, similarity is an attribution made when different initiations converge on one satisfaction. For example, if being a coach in a coaching session is considered as one initiation, and engaging in an informal discussion with a work colleague as another, then contextualism regards them as similar to the extent that they can produce the same outcome, such as when something is learned in both circumstances.

A consequence of the dispersive nature of contextualism can be seen when the quality of an act is necessarily threatened by examining its texture. This is because any given strand of that texture might be experienced as a quality in its own right. Just as the texture of a new quality might be examined, so one of its strands might be experienced as a quality, and so on. Were such analyses conducted, they would continue ad infinitum. However, for the contextualist, analysis can be warranted, although always for some specific purpose (Hayes, Hayes & Reece 1988). That is, analyses are true only in terms of the accomplishment of particular goals, with no provision made for the evaluation of goals themselves. Therefore, truth may exist in regard to relatively trivial goals. An example of this pragmatic view of truth, quite radically applied by Pepper (1942) and cited in Hayes, Hayes and Reece (1988), refers to the quality of blowing your nose as "just as cosmic and ultimate as Newton's writing down his gravitational formula. The fact that his formula is much more useful to many more people doesn't make it any more real" (Pepper 1942, p. 251).

2.11 Interpretation and use of Pepper's world hypotheses by other researchers

Pepper's world hypotheses have been used in examinations of behavioural analysis (Hayes, Hayes & Reece 1988), empiricism (Overton 1984) and environmental psychology (Altman & Rogoff 1987), and to gain insight into the perspectives of Bandura, Vygotsky and Piaget (Tudge & Winterhoff 1993). They have been part of research strategies into areas such as changes in human development (Lewis 2000; Super & Harkness 2003) and in personality (Babbage & Ronan 2000). They began receiving attention from psychologists in the 1970s when Reece and Overton (1970) borrowed Pepper's ideas as a means of "understanding the tensions produced by the shift from a learning-theory-based child psychology to a cognitive developmental one" (Morris 1988, p. 290). Pepper's world hypothesis distinctions further influenced psychological theory and research (Overton 1984) through their use in the development of psychological measurement tools such as those by Harris, Fontana and Dowds (1977), Johnson et al. (1988), Kramer, Kahlbaugh and Goldston (1992), Spiro, Feltovich and Coulson (1996) and Super and Harkness (2003). Hayes, Hayes and Reece (1988) further demonstrated the utility of Pepper's world hypotheses for revealing conceptual categories of modern behaviour and of competing psychological systems. Emery (2000) also added to the understanding of the use of Pepper's categorisation of distinct sets of philosophical assumptions about the world as a tool for analysis.

Pepper's world hypotheses can be used as a way for interpreting literature and enabling an appreciation and understanding of the nature of competing knowledge claims generated by social scientists through their systematic study of the social world. Tsoukas (1994) applied Pepper's framework to understanding conceptual differences in management studies. For example, he identified Beer (1981) and Sanderlands and Stahlein (1987) as organisational knowledge researchers modelling organisations on human brains or individual minds. He also relates Pepper to the research of Ryle (1949) who identified that the collective mind is manifested in the manner in which individuals interrelate their actions. Tsoukas (1994) provides an example of connectionist imagery raised by the psychologist Hutchins (1993) who, through research on the organisation of ship navigation

teams, illustrates how the knowledge that is necessary for carrying out the navigation task is distributed throughout the team. It is argued that it is this redundant distribution of knowledge, “that makes a navigation team robust enough to carry out its task even when parts of the team are temporarily inactive” (Tsoukas 1996, p. 15).

Tsoukas (1996) also highlights the relevance of Pepper to the research of Weick and Roberts (1993) who, by taking the individual mind as their metaphor, developed the notion of collective mind for explaining the exceptionally high reliability of certain complex organisations. Weick and Roberts (1993) argued that individuals construct their actions while envisaging a social system of joint actions, and interrelate that constructed action with the system that is envisaged.

The individual contributions and the collective mind which they enact are mutually constituted: a contribution helps enact the collective mind to the extent to which it is closely (or heedfully) interrelated with the imagined requirements of other contributing individuals in a situation of joint action. This is the main reason why the collective mind is an emergent joint accomplishment rather than an already defined representation of any one individual: the collective mind is constituted as individual contributions become more heedfully interrelated in time. Being an emergent phenomenon, the collective mind is known in its entirety to no one, although portions of it are known differentially to all (Tsoukas 1994, p. 15).

In education, Kilbourne (1974) used Pepper’s world hypotheses in developing a scheme for analysing a biology textbook. Building on Kilbourne’s work, Proper (1982) used this scheme to analyse the assumptions projected by teachers’ classroom discourse. More recently, the use of Pepper’s world hypotheses was expanded beyond such descriptive or comparative ways through Forsyth’s (2010) confirmation of the influence of mechanism and organicism on basic cognitive processes, concluding that they stood his test for psychology reality.

Forsyth (2010) speculated on the role of worldviews in educational research concluding that they are likely important when assessing student learning. He proposed that their effect on assessment could be that “a teacher who assesses his

students on organicist ways of thinking might see depressed test scores amongst students who do not prefer to think, or are at least less inclined to think, about the content in an organicist way” (Forsyth 2010, p. 74). Furthermore, Forsyth proposed that student test scores might possibly be affected depending on the worldview from which test items are constructed.

Interest in the role of paradigms or meta-models in developmental theory and the use of Pepper’s polarities has continued to grow. Studies, including the work of Davis and Millon (1994, p. 89) provide a “holistic, cohesive structure that facilitated the comparison and contrast of groups along fundamental axes, thus sharpening the meanings of the constructs employed”. More recently, Barton and Haslett (2007) highlighted the different assumptions of analytical and synthetic thinking using Pepper’s categorisations for creating distinctions within the field of systems thinking.

Previous doctoral dissertations have utilised Pepper’s world hypotheses as a primary focusing mechanism. In addition to Forsyth’s (2010) dissertation: “The influence of worldviews on selective recall from texts about history and physics”, are Daley’s (2000) “An image of enduring plurality in economic theory: The root metaphor of Stephen C. Pepper”, Hoeflin’s (1987) “The root-metaphor theory: A critical appraisal of Stephen C. Pepper’s theory of metaphysics through an analysis of its interpretation of the concepts of truth, beauty, and goodness”, and Monast’s (1975) “Evidence, common sense, and metaphysical systems: the philosophical methodology”.

2.12 Criticisms of Pepper’s world hypotheses

Because each world hypothesis is presumably internally consistent, these arguments ultimately boil down to arguing that the world just is not the way this or that particular world theory supposes it to be. An organicist, for example, might argue that the dispersive universe of the formist, a cacophony of traits, is absurd. For the organicist, personality change is qualitative, occurring through the operation of a final cause. Thus, whereas the formist would consider change in an individual’s standing on a single trait to represent genuine personality change, the organicist would argue that,

because only qualitative change is real, such a conception risks trivializing the concept of change, that only integrative change is truly meaningful (Davis & Millon 1994, p. 96).

While world hypotheses have been utilised within numerous research studies their use has also been criticised. For example, as theories of everything, Davis and Millon (1994) argue that Pepper's hypotheses can be used as a taxonomy for providing "a prolegomena to systematic philosophy and a complete survey of metaphysics" (p. 89). However, as Pepper predicted, a primary cause of criticism of his world hypotheses is misinterpretation. Most often, this has occurred because criticism has been expressed in terms of the categories of other world theories.

But once one has the keys of the root metaphors and their categories in his pocket, he is, I believe, able to unlock the doors of those cognitive closets which constitute the literature of structural hypotheses in philosophy and science. As far as structural refinement in knowledge goes, there will be no secrets. Some of the closets may be hard to open. It is not always clear how many locks they have, or in what sequence the keys must be used. But I am pretty sure these four keys will open any closet now built that is worth opening (Pepper 1942, p. 149).

In this way, he emphasises that his world hypotheses are different in kind from the hypotheses of the more restricted fields of knowledge that form the particular sciences, such as physics or biology where inquiry is circumscribed by their content (Davis & Millon 1994). Instead, in Pepper's world hypotheses all facts are relevant, none can be dismissed.

2.12.1 Criticisms of organicism

Organicism is more prone than other world hypotheses to explaining away empirical anomalies or dismissing 'secondary qualities' as unimportant because it strives for comprehensiveness and underlying structures. As Tsoukas (1994) states, this leaves little room for autonomous human action.

Relating to their study of personality change, Davis and Millon (1994) highlight one of the ways in which organicism has been criticised:

... because only the whole is really “real,” organicism tends to deny reality to parts or components. Thus, organicism prototypically denies true componential change, denies dimensional change. By the same reasoning, the idea of latent stages may not adequately address the complexity of organisms, representing a kind of reduction to the whole, rather than to the part, as in mechanism. Here again one sees the kind of inadequacy organicism is faced with-inadequacy of scope (Pepper 1942). The question is not so much whether the complexity of personality can be adequately modeled by some stage theory or system of types, but whether it can be explained by it (p. 100).

In today's turbulent environment typified by accelerating change, increasing uncertainty and growing complexity (Cabana, Emery & Emery 1995), this characteristic of organicism increasingly diminishes the possibility of accurate and reliable forecasting. The only hope for an organicist conceived social system lies in its ability for bringing more of its future under its own control.

2.12.2 Criticisms of contextualism

According to Forsyth (2010), scholars including Overton (1984) and Prawat and Floden (1994) believe that contextualism does not adequately represent a true worldview. They argue that this is because of its tendency for accommodating other worldviews in forming a hybrid (Prawat & Floden 1994) and because of its difficulties with respect to scientific research methods (Overton 1984). However, the truth criterion for contextualism is in the successful working of something. A very important implication of this is that, on contextualist grounds, one can adopt the analytical strategy of an alternative worldview in a given situation if doing so is useful towards some end (Hayes, Hayes & Reece 1988).

For example, in a coaching session, a coach might decide on using a framework that has been developed using a positivist research approach based upon the mechanistic assumption that the world can be known and described objectively. Such strategic integration of different world hypotheses doesn't violate

contextualism (Hayes, Hayes & Reece 1988) because Pepper's warning against the destructive effects of eclecticism doesn't hold. Therefore, no integration of the underlying root metaphors is implied. The analytical metaphors of formism and mechanism are merely used in the service of a contextualist agenda; the truth of the analysis based on that usage is evaluated against a successful working criterion. Thus contextualism's truth criterion relates to pragmatism, as it rejects the idea that the function of thought is to describe, represent, or mirror reality. That is, as pragmatists develop their philosophy around the idea that the function of thought is as an instrument or tool for prediction, action, and problem solving, and contend that most philosophical topics—such as the nature of knowledge, language, concepts, meaning, belief, and science—are all best viewed in terms of their practical uses and successes rather than in terms of representative accuracy (Haack & Lane 2006), they relate to the truth criterion of contextualism of effective working.

Another criticism of contextualism centres on whether an integrative worldview is accepted or not. That is, it depends on choosing between believing that the world is ultimately integrated or not, and if integrated, whether its structure can be fully known (Davis & Millon 1994). "Contextualism is constantly threatened with evidences for permanent structures in nature" (Pepper 1942, pp. 234–235). Whereas organicism holds that nature is integrated and thus determinate and permanent in its structure, contextualism suspends such beliefs. Any order that does exist in the contextualist's world takes the form of local regularities or mini-theories. Even these, however, are not a necessary feature of the universe; if the clock could be turned back, things might be different the second time around. Thus, there is no necessary reason or explanation that particular regularities should exist rather than others, for there are no necessary truths in contextualism. Contextualism is accordingly sometimes said to have a horizontal cosmology in contrast to other views, which have a vertical cosmology (Davis & Millon 1994).

There is no top nor bottom to the contextualistic world. In formism or mechanism or organicism one has only to analyze in certain specified ways and one is bound, so it is believed, to get to the bottom of things or to the top of things. Contextualism justifies no such faith (Pepper 1942, p. 251).

Contextualism has also been criticised as “over intellectualized eclecticism” (Lerner, Hultsch & Dixon 1983, p. 109). However, there is little doubt that the raw data of the world are transformed by how we categorise things in acts of cognition. Just as there are other constraints on epistemology of a social, genetic and cultural nature, these constraints so transform the substance of the world that it cannot be known objectively, or perhaps these biasing influences will dilute over decades of scientific discourse.

2.13 Review of literature using Pepper’s analytic world hypotheses of formism and mechanism

The thinking within organisations typically embraces the closed systems assumptions of formism and mechanism. However, where people are concerned, the world is best viewed as an open system where organisational capability for rapid and flexible responses predominate (Sheffield, Sankaran & Haslett 2012).

Problems faced by executives do not come neatly packaged as either technical (those that can be resolved through the application of expertise within an organisation’s current structure, procedures and ways of doing things) or adaptive, which can only be addressed through “changes in people’s priorities, beliefs, habits and loyalties” (Heifetz, Grashow & Linsky 2009, p. 20). Problems come mixed, with the technical and adaptive elements in systems intertwined (Heifetz, Grashow & Linsky 2009). This leads to treating adaptive challenges as if they were technical problems, which is the most common cause of failure in leadership (Heifetz, Grashow & Linsky 2009).

2.13.1 Formism

McKinney (1966) shows that the point of formistic typologies, or models, is that they act as a bridge between systematic substantive theory and relatively unstructured empirical data. Therefore, formistic approaches to coaching can be identified through their reliance on taxonomies or classifications. An example is in the use of checklists, such as itemised ways of conducting a coaching session. The practice of benchmarking, used in certification processes by coaching industry

authorities to classify coaches, is also formistic as coaches are assessed against various competencies represented in standards documents.

In Barner and Higgins' (2005) distinction between types of coaching, some coaches are identified as subscribing to a clinical coaching approach due to their use of psychometric tests to identify recognisable forms. Many coaches also use such formistic assessment tools geared to perceive a coachee through their distinctive character and particularity. Common examples of such assessment tools include those from Human Synergistics (2015) and the Myers Briggs Type Indicator (MBTI) from The Myers and Briggs Foundation (2015).

In formism, objects of study exhibit certain systematic, observer-independent similarities and differences (Tsoukas 1994). For example, coaches acting formistically would accept that there are laws of nature, and that the aim of their *science* of coaching is discovering these laws which nature "follows" (Pepper 1942) and then coaching according to these scientifically proven laws. That is, once phenomena have been classified, they can be dealt with similarly.

In their efforts to understand the coaching situations they find themselves in, formistically oriented coaches would be concerned with seeking strong evidence for their conclusions. That is, they would use inductive methods for making observations with the aim of discovering a 'law' that would hold true for different types of coaching conversations. As they seek an ultimate taxonomy, coaches acting formistically would take the same approach to social knowledge as that taken by zoologists and chemists for reaching understanding in their fields (Tsoukas 1994).

Pepper (1942) would argue that formists see descriptions of nature becoming increasingly more reliable as science progresses, thereby eventually approximating complete reliability which is not only considered attainable but a natural necessity. That is, formists rely upon progress in science as evidence for the correctness of their analysis of truth. Coaches following such a 'hard' formist approach would assume that their typologies reflect the world as it is and that their relationship with their coachees is predominantly instrumental. They would view the business environments inhabited by their coachees as a set of logically connected categories,

and they would coach accordingly. However, the composition of these logically connected categories would be viewed differently depending on the role of the coach. This produces a seemingly irreconcilable problem for formists.

Barner and Higgins' (2005) coaching typology illustrates this problem whereby a coach is variously described as a counsellor/therapist (clinical model), advisor/trainer (behavioural model), systems modeller (systems model) or ethnographer/narrative analyst (social constructionist model). While these different categories provide some level of clarity to those who subscribe to each category, they also produce a level of complexity due to the different meanings that can also be ascribed within each category of counsellor, therapist, advisor, trainer, systems modeller, ethnographer and narrative analyst. Thus, no clear typology emerges.

When coaches attempt to use their knowledge instrumentally, they usually become mechanists (Tsoukas 1994). This is because identifying only the similarities and differences between objects of study is not enough to influence social reality. In addition, it is necessary to know the mechanisms for how the similarities and differences have come about as well as the dynamic consequences of the similarities and differences. To do so, requires 'hard' formists to transcend the merely taxonomic character of their inquiry and search explicitly for causes.

2.13.2 Mechanism

When an organisation is conceptualised as a machine, its purpose is simple: make a profit for its owners. In other words, it is a machine for producing money (de Geus 1997). Relying on the same view, coaching can be utilised as a force through which predictable results can be achieved. For example, coaches are often engaged to 'fix' specific deficiencies in their coachees, such as lack of leadership capabilities and skills. Thus engaged, the coach seeks to have their coachee understand the 'truth' of established knowledge about leadership, as the coach understands it.

Clutterbuck (2010) describes how some coaches base their practice on relatively simplistic models of coaching conversations, such as the GROW model and its derivatives. Developed by Whitmore and colleagues in the 1980s, the model is described in the book *Coaching for Performance*, now in its fourth edition (2009),

and is the “most common basis of coaching in many organizations and universities globally” (Whitmore 2009, p. 44).

The GROW model (or process) is a technique for problem solving or goal setting that, not requiring any special training, is touted as easily understood, straightforward to apply and applicable to a large variety of issues. Whitmore (2009) describes the model as incorporating the coachee’s *goals*; the *reality* of the coachee’s current circumstances, resources and obstacles; the *options* available for moving toward a goal; and the *will/way forward*, that is, the personal importance of a goal that motivates a coachee and the specific action steps needed for goal achievement.

The model involves goal setting, thereby assuming that a stable endpoint can be identified before coaching around the coachee’s reality, options and possible ways forward has begun. It implies that a path towards goal achievement exists and can be specified with the basic process remaining the same along the way. That is, it is assumed that there is a knowable path towards the reality visible to the coachee and the role of a coach is to lead them through a series of prescribed steps, thereby assisting the coachee in discovering the truth ‘out there’, deal with obstacles that get in the way and realise their goals. This understanding represents a mechanistic process.

This analysis of the implicit underlying assumptions of the GROW model aligns with the view that the world is complicated, rather than complex. It represents a closed system mechanistic approach whereby solutions are possible through application of technical knowledge, implemented by current know-how and resolved through the application of authoritative expertise and through an organisation’s current culture.

This type of thinking, whereby it is assumed that processes can be known and ‘fixes’ predetermined, is further illustrated by Krayem’s (2012) description of the performance and professional development approach within Australia Post whereby the human resource function (HR) under Krayem’s control utilises a process called ‘calibration’ to assess and ‘fix’ performance problems. Through the ‘calibration’ process, direct supervisors attempt to remove subjectivity as they assess their

subordinates. That is, they assess the performance of subordinates against previously constructed key performance indicators (KPIs) relating specifically to each person's job and the role their part plays in the functioning of the organisation. When a subordinate's performance is deemed to fall short of a KPI, the subordinate is required to subject themselves to appropriately predetermined 'fixes'. These fixes, typically involving some form of competency training or coaching, are mandatory until the subordinate has been successfully 're-machined' and determined suitable to be back on the job.

This type of mechanistic conception of performance and motivation does not recognise that humans are purposeful. Instead, it deals with one part of the machine (the employee) and improves their performance as set out in their specifications (job description), before slotting them back into their role. When asked to identify any difficulties encountered in the calibration process, Krayem blamed managers for failing to produce adequate KPIs. He described how 'fixing' this problem had required the HR department becoming more forceful in trying to remove any undesired subjectivity displayed by the supervisors as they determined and then assessed their subordinates against their job role KPIs. As such, the calibration system, which was already geared towards stringent control and order, required supervisors to exert more control over employees.

Although different machines yield different variants of mechanism, Tsoukas (1994) describes six features that operate within mechanistic types of knowledge. First, objects of study are regarded as ontologically given, fully describable and made up of discrete parts whose locations can be specified. Cooper (1992) expands this by stating that the parts of objects, as well as the relations among them, can be represented in abbreviated forms. Viewed in this way, coaching consists of people and technology interacting and relating to tasks within a 'knowable' structure. Clutterbuck and Associates, in their *Comprehensive Coaching and Mentoring Online Encyclopaedia (CAMEO)*, illustrate this in their statement that coaching is a benefit for people "where they have to make a significant, usually short-term transition in a particular skill, competence or behaviour. Coaching will normally have specific goals and a set time period to achieve these within" (CAMEO 2013). Thus, they believe the task of coaching is to achieve a particular competence within

a structure. The person's skills are assumed to be describable through competencies.

Peterson and Hicks (1996) define coaching as “the process of equipping people with the tools, knowledge and opportunities they need to develop themselves and become more effective” (p. 14). Again, the coach is assumed to ‘know’ the world and their role is to impart this knowledge to the coachee. The ‘parts’ that comprise the coaches’ ‘knowing’ of the world are thus seen as fundamental to the effectiveness of the coaching, and the more refined representations that can be made of them, the better coaching can be understood and improved.

Coaching, seen through this mechanistic lens, has the ‘knower’, or coach, relating to the world, including that of the coachee, by attempting to produce for the coachee an internal copy of their view (Hayes, Hayes & Reece 1988). Preserving both the ‘knower’ and the ‘known’ intact and unchanged by the coaching relation, the ‘truth’ of the coaching situation is therefore a matter of how well the copy (mentally known by the coach) corresponds to the world, as evaluated by corroboration among independent ‘knowers’.

In coaching, these independent ‘knowers’ are the more ‘experienced’ coaches who act as supervisors. Coaching associations identify these ‘knowers’ by assessing coaches against institutionally identified competencies and standards, accrediting them in various ways and referring to them as either associate, professional or master coaches. These industry organisations then require their credentialed coaches submit to ongoing supervision by more ‘knowledgeable’ coaches to retain their status. This pattern is similar to the calibration process being undertaken at Australia Post, whereby more knowledgeable people are required to ‘fix’ the inadequate subordinates.

Such mechanistic thinking requires that coaching be continually refined as more of the world is discovered and ‘known’. This process can be seen within industry associations, coach training schools and accreditation authorities as they seek greater clarity in coaching by doing what Clutterbuck and Megginson (2005) and Hawkins (2006) describe as focusing on defining coaching and attempting to set a global standard that guides best practice and provides a foundation for research and

writing. By aiming to be more knowledgeable about the main components of coaching, they seek quality control with less fragmentation. This is the strategic path being taken by the major coaching bodies that are working together to define standards and accredit coaches and training (Hawkins 2008).

The second of Tsoukas (1994) six features relates to how parts of an object of study are re-describable in some quantitative form that is different from our common-sense perception of them. Thus, the mechanist's goal is discovering the parts and the relations among parts of the existent machine that all fit together and then place them properly into the machine (Hayes, Hayes & Reece 1988). For example, Orenstein's (2006) "Empathic Organic Questionnaire", is designed to empirically measure executive coaching efficacy by reducing coaching situations to a set of descriptions delineated by the different dimensions defined by the tool. Although Orenstein recognises that there are problems with the questionnaire, a mechanistic approach is continued, rather than examining the suitability of the underlying mechanistic assumptions upon which the tool is based.

This second assumption translates to a coach believing that it is possible to fully understand coaching *out there*. It follows that they would see themselves as an expert *knower* of their coachee's situation and needs. By holding this view, they would feel justified in offering advice, or being the holder of the truth. However, as Payne (1975) points out, even if the predictive power of mechanistic types of knowledge were adequate, the amount of data one would need to make use of them would be inordinately high.

The third feature of Tsoukas' (1994) mechanism is that there is an effective relationship between the parts of a study object (Tsoukas 1994). In the natural sciences, these are represented as equations; in organisational behaviour statistical correlations are closest to describing empirical regularities between parts. Kombarakaran et al. (2008) provide an example of research involving this type of relationship by identifying five important correlations (parts) in executive coaching:

1. *People management—executives reported that coaching has refined their people skills by increasing their insight into how colleagues perceive their actions and decisions (98%) (p. 83).*

2. *Relationships with managers—79% of executives agreed that they had established a more productive relationship with better communication and feedback (p. 85).*
3. *Goal setting and prioritisation—executives reported that coaching assisted them in balancing and prioritising their work. They were better able to define performance goals (88%) and business objectives with direct reports (80%). Coaching provided insight into the business drivers of decisions and their impact on others (76%) (p. 86).*
4. *Engagement and productivity—executives perceived coaching as contributing to their understanding of personal strengths and the company culture. Consequently, they were better able to adapt to the work environment and were more productive (78%) and satisfied (75%) (p. 86).*
5. *Dialogue and communication—68% of executives reported an increased partnership and open dialogue with them (p. 86).*

These parts are treated as independent factors, with context not seen as intrinsically important. This type of thinking is what lends mechanistic thinking its ‘scientific’ authority and its consequent capacity to authorise (in both senses of the word) courses of action.

Fourth, in mechanism, parts can be quantitatively described by making ever more complete descriptions and finer representations. However, these constituent secondary characteristics, while not directly relevant during mechanistically conceived investigations, are nevertheless related to the study object (Tsoukas 1994). Organisational culture is one such secondary quality in coaching studies and, despite mechanism’s assumption of reducible parts, the complexity of organisational cultures cannot be accounted for by closed system mechanistic assumptions.

Fifth, secondary characteristics are connected with the study object by some principle (Tsoukas 1994). This is based upon Pepper’s (1942) argument that if we were making a complete description of a machine, we should want to find out and describe the principles that keep secondary qualities attached to certain parts of the

machine. According to Barrow (1991), this illustrates the voracious appetite of mechanistic thinking for complete descriptions and finer representations, so that an abbreviated representation of the logic by which the parts of a study object hang together may ultimately be achieved. Tsoukas (1994) makes the point that the important element / factor is not whether an abbreviation may or may not be achieved at any specific moment, but that such an abbreviation is achievable. This fifth characteristic is exemplified by behaviour studies that focus on organisational culture and cognitive processes in order to discover whether and how these elements are related systematically to other organisational characteristics.

Sixth, mechanism assumes that just as there are stable relationships between primary qualities, it is possible that secondary qualities may exhibit stable relationships among themselves, expressed by secondary laws (Tsoukas 1994). This feature of mechanism suggests that, as the number of coaching research studies increases over time, there would be progressively lower percentages of variance, with increasing higher correlations reported between factors.

When work is reduced to such machine-like descriptions of behaviour and workers are treated as replaceable machine parts, adherence to rules and regulations by workers (the 'parts') is made an end in itself by those higher up in the hierarchy, either through rewarding compliance or punishing non-compliance. This reduces human responses to the level of mindless physical reactions described by Gharajedaghi & Ackoff (1984). Thus, control and coordination is reduced to tasks requiring the minimal amount of power and judgment at each organisational level. The establishment of policies that offer virtually no choice except to determine which policy applies to which situation further reduces the exercising of judgement. This reduces organisations to the status of instruments of their owners, with no purposes of their own.

Gharajedaghi and Ackoff (1984) describe the operations of an ideal machine as not varying with the system, like a vending machine. As long as input does not vary, then output will not vary. This is why controllers of mechanistically modelled social systems focus on inputs rather than outputs with the control of the output determined by the quality of input. This mechanistic description of an organisation has implications for how the work of coachees is organised and how and why

coaches are engaged. Clients often engage a coach as an instrument to fix a coachee's deficiencies that have been identified by their managers. This has implications for the types of coaching approaches valued by the purchasers of coaching services, potentially limiting the role of the coach to that of an agent of the authority who is engaged to maintain the status quo.

This *fixing* approach can be seen when human resource managers focus on supervising and controlling what is done during coaching. They make any desired goals explicit, often enforcing them through contractual agreements. Under these arrangements, coaches find themselves writing reports and being assessed through quantitative surveys conducted with their coachees by agents of the organisation. Tsoukas (1994) comments on the implications of this approach for the confidential nature of the coach-coachee relationship and issues surrounding trust, as it undermines a coach's reflexivity and potential for transforming the very reality that they have been engaged to change. Thus, coaching risks becoming inflexible as it operates with such closed system thinking.

Coaches operate within rapidly changing environments that require people to be capable of continuous adaptation and learning if they are to remain effective. And, adaptation and learning require a readiness, willingness and ability to change. However, mechanistically conceived organisations and mechanistically minded coaches lack these necessary characteristics. As Gharajedaghi and Ackoff (1984) put it, when the effectiveness of mechanistic approaches is seen as insufficient or declining, the solution is typically stronger adherence to these same mechanistic assumptions, resulting in further reinforcement of rigidity and closer adherence to the rules and regulations. The result is a vicious cycle as organisations become increasingly dysfunctional, with coaching becoming an ineffective intervention. The earlier example concerning Krayem (2012) and Australia Post illustrates an organisation on such a path.

Other analytical approaches to coaching highlight the use of stepped processes and lists. For example, Natale and Diamante's (2005) five-stage process for executive coaching involves (i) an alliance check, (ii) a credibility assessment, (iii) a likeability link, (iv) dialogue and skill acquisition and (v) cue-based action plans. Each stage is characterised by lists of tasks to be achieved, based upon the rationale

that a better understanding and execution of process will enhance practice efficacy and accelerate the necessary empirical investigations to discover the truth of a coachee's situation. Despite such analytical representations of the coaching relationship, Natale and Diamante (2005) also claim that coaching needs to be collaborative and focused on change and transformation. However, as with Krayem's (2012) calibration practices described earlier, the assumptions underlying this desire to be transformational conflict with those of the philosophical assumptions of the mechanistic ways coaches are expected to operate. Complex human behaviour cannot be accounted for within such a closed systems approach. People are not problems to be fixed.

Coaching administered mechanistically involves the coach possessing certain rules or knowledge and passing them onto the coachee. Effective coaching is determined by whether the coachee has succeeded in complying with these rules and whether the coach has succeeded in 'fixing' the coachee. The solution for non-compliance is for the coachee to be 'punished' or endure further coaching or more extreme measures. That is, human responses to stimuli are made to approximate mindless physical reactions (Gharajedaghi & Ackoff 1984).

Definitions that refer to coaching as solution-focused and involving specific goal attainment imply that solutions to problems can be known and implemented in a systematic way. However, while such definitions recognise complicatedness, they do not account for complexity and its associated adaptive challenges. Subsequently, there is the danger, identified by Clutterbuck (2010), that a coach's agenda (and that of the organisation during executive coaching) will dominate coaching interactions. This is especially true during goal setting, where research shows that fixing upon specific goals at the start of a coaching relationship can sometimes be a "crutch for the coach" (Clutterbuck 2010, p. 73) rather than provide benefit to the coachee. Approaches that assume underlying complexity as well as complicatedness would instead recognise that achievement is based upon setting goals and striving for them but knowing that, along the way, actions will necessarily shift goals and inform subsequent actions. They would view goal setting as an iterative process.

Mechanism holds that the world is 'knowable'. Therefore, all that has to be done to produce a definition of coaching is to get better and better at refining its various elements and convince others. It requires a competitive outlook; it seeks an answer to solve a problem.

While some coaches are comfortable without a clear definition of what they do, Bennett (2006) and Gregory and Levy (2010) argue that this lack of agreement on a definition of coaching is an obstacle to coaching research. Alternatively, this lack of agreement could be a sign that the underlying assumption that an analytical definition of coaching is possible is a flawed one.

Brockbank (2008) cautions that coaching may also be at risk of Argyris and Schon's (1974) discrepancy effect between espoused theory and theory in use. This is because besides a formal definition, every coach also has an internal working definition of what they offer (Bachkirova & Kauffman 2009). The problem here is that coaches, nevertheless take action based upon assumptions that, when critically examined, often contrast with espoused assumptions.

2.14 Review of literature using Pepper's analytic world synthetic world hypotheses of organicism and contextualism

Over the past twenty-five years, with the convergence of neuroscience and psychology, explanations are now being offered about how coaching practice within cognitive, behavioural and solution-focused frameworks enhance meta-cognition (self-awareness and insight), intentionality, motivation, self-regulation, goal-directed behaviour and complex decision-making (Linder-Pelz 2010). In contrast to the linear and rational thinking of the analytic world hypotheses, this movement towards holistic, nonlinear and intuitive ways of thinking has led to an interest in the interconnectedness of mind, body and spirit. Such views suggest an increasing awareness that the world is complex and make associations between biology and consciousness, resulting in changing priorities, beliefs, habits and loyalties.

Interpreting coaching through the lens of Pepper's (1942) synthetic world hypotheses of organicism and contextualism indicates the extent to which shifts in

systems thinking, or moves forward in representing complex social phenomena, are being addressed (Barton et al. 2004). It reveals that shifts in contemporary constructivist approaches, such as Ontological Coaching and Wilber's Integral Coaching, can be linked to what Barton and Haslett (2007) and Emery (2000) describe as the partially open systems assumptions of the integrative, synthetic, organicist philosophical position. While Stober and Grant's (2006) approach to coaching suggests an alignment to Pepper's open systems contextualist assumptions (Barton & Haslett 2007; Emery 2000), their self-described contextual approach instead aligns more closely to Pepper's mechanistic assumptions.

While no approaches to coaching could be found aligning with the open systems view of contextualism, Emery's (2000) approach to consulting, which is intentionally aligned directly to Pepper's contextualism, is described in this section.

2.14.1 Organicism

Many coaching approaches claim that they deal with complexity and emergence (Linder-Pelz 2010). These include Ontological Coaching (Erhard, Jensen & Granger 2011; Olalla 2010; Sieler 2007) and Wilber's Integral Coaching (1996, 2000, 2002, 2005, 2006). Each is examined using Pepper's lens to reveal any underlying organicist assumptions.

Aligned to an organicist view of the world, Ontological and Integral coaches assist their coachees in responding to their environment through diagnosing problems in terms of dysfunctions between parts of a whole (unfolding) system. That is, they seek to adapt to their environment by constructing new, more complex conceptual models of the world that allow them to handle these problems. These coherent, well-integrated and progressive stages are fundamental to how change and development occur during coaching aligned to organicist assumptions.

2.14.1.1 Ontological Coaching

Ontological Coaching represents a specific approach to understanding the world through its interpretation of language, emotions and physiology (Erhard, Jensen & Granger 2011; Olalla 2010; Sieler 2007). Fernando Flores founded Ontological

Coaching based upon on a set of core beliefs about the nature of human existence and its means of development. It was subsequently influenced by Humberto Maturana's biologically grounded ideas on perception, cognition, language and communication that are consistent with the metaphor for organicism.

Erhard, Jensen and Granger (2011) describe ontological coaching as being concerned with the ontology, the 'being' of human beings. They recognise that the context a person has for the situation they are dealing with colours the way in which that situation occurs for them. While descriptions of ontological coaching emphasise context, this understanding of context is grounded in the assumptions of organicism rather than contextualism. This difference is explained by first examining The Newfield Network's definition of ontological coaching:

Ontological Coaching® is a holistic and effective way to help people discover all that is within themselves and open their view to new ideas and possibilities... Ontological Coaching (It) taps deeply into inner awareness and potential and helps people to develop new ways of seeing life... Newfield's approach is truly "ontological" with deep and balanced learning in the domains of language, moods/emotions, and body (Newfield Network 2015).

That is, knowing the world is about discovering what is already within. The role of the Ontological Coach is therefore to assist the coachee in responding to the environment, albeit in a number of possible ways (partially open system). This is different than what happens in mechanism, in which problems are diagnosed for dysfunctions within component parts and solving problems requires the redesign or replacement of parts to eliminate such dysfunctions. Instead, in organicism, problems are diagnosed in terms of dysfunctions between parts of the whole (unfolding) system. Thus, solving problems requires redesigning the way in which parts interrelate to eliminate dysfunction (Tsoukas 1994).

2.14.1.2 Integral Coaching—Ken Wilber

While a number of Western theorists and practitioners, such as Almaas (1988), Cortright (1997), Ferrer (2002), Murphy (1992), Rowan (2005), Vaughan (2001)

and Washburn (1994, 1995) have linked spirituality with psychology, Paulson (2008) argues that the most ambitious works have come from Ken Wilber (1996, 2000, 2002, 2005, 2006). Described by Perloff (2010) as a theoretical psychologist who has attempted to join the normally segregated disciplines of psychology, philosophy, sociology, anthropology and religion in a meta-theoretical approach to include and contextualise all existing knowledge, Wilber's integral approach to coaching is difficult to place within Pepper's categories. At first, it seems that it could be based upon contextualist thinking as it draws upon frameworks offered by the other world hypotheses in the right context. However, the assumptions of Pepper's organicism seem to be most applicable when the practice of coaching is considered.

Wilber's views are pluralistic: different worldviews, beliefs and meanings are given equal value while avoiding what Taylor (2001) describes as the "insidiousness of reductionism" (p. 216). Wilber achieved this by incorporating the work of Habermas (1987) and promoting the notion of three basic worlds that humans can inhabit simultaneously: the subjective, the inter-subjective and the objective. In this way, the world can be seen as coherent and well integrated. Wilber (2000) also describes the universe as autopoietic, a self-generating, self-regulating system that simultaneously spans multiple dimensions and levels of awareness. He has traced human development from infancy to adulthood and compared and integrated major Western conventional thinkers such as Freud, Jung, Piaget and Kohlberg (Walsh & Vaughan 1994). He has also challenged the current dominant scientific culture that values both sensory and physical data for having devalued transcendental experiences by seeing them as non-existent and unknowable.

Nevertheless, Wilber incorporates traditional scientific approaches into his meta-theory. He does this by seeing such approaches as best suited for examining physical phenomenon, while hermeneutic, interpretive approaches best serve the symbolic realm (Walsh & Vaughan 1994). He attributes what he calls the enormous confusion and conflict between scientists, philosophers, theologians, theorists and researchers to their failure to realise that each method is only valid within its own realm (Wilber 2000).

Further evidence that Wilber's integral approach is aligned with organicism can be seen in his incorporation of Beck and Cowan's (1996) conception of spiral dynamics, which views human development as not fixed but moving through eight major levels or waves (memes) of existence. It sees humans as able to adapt to their environment, when forced to do so by life conditions, by constructing new, more complex, conceptual models of the world that allow them to handle new problems (Taylor 2001). This process eventually culminates in an ultimate, most inclusive structure with greater inclusiveness, determinateness and organicity.

Although Wilber refers to these as different stages, he also states that they are not really discrete stages at all, and he only describes them in that way to help others gain an initial understanding. Thus, language presents a significant limiting factor to understanding Wilber's work. According to Wilber, to fully understand his work, coaches have to meld these spiral dynamics stages into a continuum. Thus, they are really not stages at all; they are coherent, well integrated and progressive.

To help coaches understand his thinking, Wilber developed a summary of his theory in his All-Quadrants, All-Levels (AQAL) model (Wilber 1996, 2006). He created these quadrants to represent both the inside and the outside of an individual, and the inside and outside of a collective. He intended these four fundamental perspectives, or AQAL quadrants, to represent ways for looking at any object, be it individual, relationship, or social institution, and to be fundamental to how change and development occur during coaching. This approach is supported by its intuitive appeal and its analytical flexibility, which Edwards (2005) sees as an advantage as it makes Wilber's theory available for use within any multi-paradigm system. Perloff (2010) summarises Wilber's AQAL model in Figure 3.

Figure 3: Perloff's interpretation of Wilber's AQAL Four Quadrants Model

Interior	Exterior	
Upper Left Interior of Individual <i>Why I do what I do</i> Feelings interpretations Sincerity	Upper Right Exterior of Individual <i>What I do</i> Behaviours, measurements Truth	Individual
Lower Left Interior of Collective <i>Why we do what we do</i> Culture, worldview <i>Justness</i>	Lower Right Exterior of Collective <i>What we do</i> Social systems <i>Functional fit</i>	Collective

(Perloff 2010, p. 88)

Wilber proposes that to gain an understanding of any social phenomenon requires the interior-exterior and individual-collective dimensions of existence be considered (Edwards 2005). However, Deetz (1996) notes that the individual-collective dimension, which refers to the relationship between the individual world of self-agency and the collective world of social communion, has been criticised as being socially contrived rather than natural or fundamental to reality. This contrasts with the prominence of the objective-subjective distinction within many branches of philosophy and social science.

Wilber has continually built upon his theory, only rarely discarding any previous thinking (Paulson 2008). Wilber's vision is described by Taylor (2001) as representing an oscillating process marked by progressive subordination of older, lower-order behaviour systems to newer, higher order systems as an individuals' existential problems and behaviour change. Tsoukas (1994) describes this organic sequence of specified steps being undertaken as leading towards an ultimate, most inclusive structure, which unfolds in the direction of greater inclusiveness, determinateness and organicity.

2.14.1.3 Criticism of Integral Coaching

With its multiple dimensions and development stages, Wilber's integral approach risks being interpreted and implemented mechanistically by coaches.

Used too rigidly, it can become an overly mechanical process of merely downloading a canned integral program into one's internal operating system (Paulson 2008, p. 364).

Wilber's system constructs boundaries that do not actually exist, as a means of using language and the linear structure of human thought processes (Midgley 2003). However, despite coaches having sufficient depth of understanding of Wilber's intent, they risk focusing on these boundaries and not considering the meaning of an event. They assume a cause-and-effect relationship, characteristic of an analytical world hypothesis, and create "multiple distinctions out of what is seamless" (Paulson 2008, p. 368). This is due to the use of specific words that shape basic communication concepts within a general assumption of a mechanistic cause-and-effect relationship. Filtering information through such constraints would shape a coach's perspective prior to any reasoning processes.

According to Paulson (2008), it is only when Wilber's work is properly read that it is possible to identify the manner in which it comes together. Thus, the extent to which Wilber's approach is understood depends upon the philosophical paradigm of the coach who interprets and implements his framework. It is therefore important that a coach first experience a paradigm shift before they can facilitate a shift within another person. Without this shift, there is a risk that a coach will believe that they are doing one thing while they are, in practice, doing something entirely different.

Wilber's work has received harsh criticism (Odjanyk 1993; Schneider 2001; Washburn 1994, 1995, 2003). He has been criticised for taking a socially elitist and authoritarian stance (Bauwens 2005) and of subsuming the works of others as a subset of his own (Paulson 2008). Challenges to his theory have been mainly due to the paradigm clash between existential and transpersonal worldviews (Schneider 1987, 1989; Washburn 1990) and his stance on evolutionary theory. His highly

controversial views have increasingly isolated him from collegial dialogue with critics (Paulson 2008).

2.14.2 Contextualism

Pepper's (1942) contextualism is easily misunderstood. This is because assumptions can both create and distort insight. That is, ways of seeing are created, ways of not seeing also emerge. Hence, there can be no single theory or metaphor that gives an all-purpose point of view. There can be no correct theory for structuring everything that we do. Therefore, the challenge facing modern coaches, and their clients, is becoming accomplished in the art of finding appropriate ways of seeing, understanding and shaping situations within constantly changing contexts. This is quite close to practice theory whereby action research is used to change people's practices, understandings of their practices, and the conditions under which they practice (Kemmis 2009).

[Practice theory] changes people's patterns of 'saying', 'doing' and 'relating' to form new patterns – new ways of life. It is a meta-practice: a practice that changes other practices. It transforms the sayings, doings and relating that compose those other practices (Kemmis 2009, p. 463).

Misunderstandings occur when, for example, a popular publication such as a book, article or blog offers coaching advice that is based upon the context of the experience of its authors. This is then extrapolated beyond the specific context of the author/s and strictly applied to the coach's own situation. The problem is the risk that they will take action based upon unexplored assumptions, often those of the prevailing mechanistic worldview.

To address such issues surrounding contextualism, Daft and Wiginton (1979) and Weick's (1987) suggestion of interpreting literature through loose and flexible frameworks offers a way forward. To illustrate, Weick highlights how accidents happen in organisations due to a "requisite variety problem (the variety existing in the system to be managed exceeds the variety in the people regulating it)" (Weick 1987, p. 112). He proposes loose and flexible frameworks consisting of imagination, simulation, vicarious experience and stories, which provide substitutes

for trial and error, as a way to increase reliability (Weick 1987). Thus, contextualist interpretation requires consideration of how to connect personal experience to narrative in a flexible way, and how to interpret actions liberally, something that is not encouraged with formistic and mechanistic notions of benchmarking.

2.14.3 Stober and Grant's 'contextual' coaching

To incorporate the lived experience of practitioners and clients, Stober and Grant (2006) have developed what they refer to as evidence-based contextual coaching that incorporates different theoretical frameworks and practices, qualities and strengths of various approaches, models, and applicable evidence within coaching. However, instead of the philosophical meaning ascribed to contextualism by Pepper (1942), Stober and Grant's use of the term *contextual* relates to being able to choose from a variety of frameworks with their own underlying assumptions, rather than adhering to the set of assumptions of Pepper's contextualism while using these non-contextual frameworks. Stober and Grant's *meta* view consists of the coach incorporating different approaches including humanist, cognitive, and behavioural perspectives, constructive development theories in adult development and psychoanalytic theory (Stober & Grant 2006). Different perspectives arise as a coach makes sense of their client's situation using different frameworks within each context. However, inconsistencies arise when these various theories are used without application through common contextualist assumptions.

For example, a coach interpreting a situation using an adult development approach (Garvey Berger 2012) would use the framework of a particular stage of development or complexity of mind to understand their client and where their strengths, limitations, opportunities, or challenges might lie. The coach would then help the client make meaning of their experience and identify specific goals and shape coaching conversations. Coaching engagements would be seen to fail if the coach is not able, for one reason or another, to monitor and evaluate the client's progress towards these goals and appropriately address any performance shortfalls directly and promptly.

This scenario does not align with Pepper's (1942) assumptions of contextualism. This is because one of the principles of Stober and Grant's (2006) model is "that

coaching should be directed toward a specific outcome or result, and that such results orientation is the essence of good coaching” (p. 362). This reference to specific outcomes does not account for emergent outcomes. Instead, it judges outcomes by the extent they match what can be predicted. In addition, by being placed in the role of the person who makes sense of the world for the client, the coach is viewed as the knower of the world. This contrasts with the constructivist synthetic assumptions of Pepper’s contextualism where the world is dynamic and changing and known through successive and continuous interpretations by the coachee, not the coach. Subsequently, Stober and Grant’s (2006) mechanistic assumptions and associated power relationships conflict with Pepper’s (1942) meta-theory of contextualism.

2.14.4 Emery’s contextualist approach to consulting

Instead of viewing the environment as a product of Darwinian evolution or chaotic processes, contextualist thinking views environments as the product of the behaviours (adaptive or maladaptive) of members of social systems (Barton et al. 2004; Emery 2000; Emery & Trist 1965). Such thinking, which is associated with action learning, is an integral part of Emery’s (2000) contextualist open systems-thinking approach to consulting. Although not developed as a coaching approach, Emery’s (2000) approach to consulting is included because of the potential implications of its ideas and attention to contextual methods of implementation that could be applied to coaching.

Emery and Trist (1965) brought von Bertalanffy’s (1950) concept of an open system to the fore in their description of organisational environments, placing their version of open systems deliberately within Pepper’s world hypothesis of contextualism.

The version of open systems theory developed primarily by Fred Emery, OST(E), has two main purposes. The first is to promote and create change toward a world that is consciously designed by people, and for people, living harmoniously within their ecological systems, both physical and social. “Socioecology” captures the notion of people-in-environments. Included within this is the concept of open, jointly optimized, sociotechnical (and

sociopsychological) systems, optimizing human purposefulness and creativity, and the best options afforded by changing technologies (Emery 2000, p. 623).

Given that contextualism is the only world hypothesis that can deal with novelty and change (Pepper 1942), Open Systems Theory (Emery) (OST(E)) assumed that there is a 'whole' that changes over time, and that this 'whole' can be known by investigating a series of historic events within the changing context of the 'whole' (Emery 2000).

The other three adequate hypotheses assume a closed and static system. The two most relevant today are "mechanism," which assumes that everything is and works like a machine, and "organicism," which is based on constant integration of data into wholes. Neither can encompass the notions of open purposeful systems, a social field, or active adaptation. Mechanism assumes a closed, static mechanical universe inhabited by goal-seeking people (Ackoff and Emery 1972) with fragmented sensory systems who are unable to extract meaningful information about their world. Organicism is currently manifesting itself as "whole systems" (context free) and a rash of mystical "New Age" "theories" (Emery 2000, p. 638).

Emery (2000) placed OST(E) within Pepper's (1942) world hypothesis of contextualism and supported this claim with de Paoli's (2000) conclusion that "the uniqueness of human culture is expressed... by the continuous production of ideas.... This process is not mechanical nor mechanizable" (p. 638).

While understanding the importance of contextualist assumptions, Emery (1980) recognised that it is difficult to reorganise existing organisations within the assumptions of a contextualist paradigm. This is because of the unequal mechanistic relationships whereby an employee (servant) is dependent on their supervisor (master) for their job, the master viewing the servant as a redundant, replaceable part. Mutual trust is typically too far eroded by such master-servant relationships (Cabana, Emery & Emery 1995).

Exemplifying contextualistic intentions, Emery (1980) claimed that it is possible to transform maladapted bureaucratic, hierarchical autocratic organisations into highly innovative, flexible and adaptive ones. To overcome the impact of the traditional organisational master-servant relationship, Emery proposes the introduction of a paradigm of cooperative, symmetrically dependent relations that emphasise the role of practice within an open system. This approach required Emery and Trist (1965) to work out some important distinctions about systems as well as the necessary mindset required for dealing with turbulent environments. These distinctions were influenced by Bion's (1952) work at the Tavistock Institute on what happens when groups come together to do creative work and resulted in the development of what Emery and Trist (1965) called a Search Conference.

In an organisational setting, a Search Conference is achieved by a group of employees becoming a planning community that creates a future-based plan built upon shared human ideals (Rehm & Cebula 1996). They assume autonomous roles that function as learning and planning communities fully capable of adapting and fitting new strategies into the larger system and the external environment. Where top management already exists, they act in the role of Search Conference managers with the task of bringing together 20–40 of those people who carry the strategic knowledge of the organisation. That is, they collaboratively manage the design and the learning environment, the process and the structure of the process (Cabana, Emery & Emery 1995). Given the complexity of such a task, Emery and Trist (1965) recommend that, preferably, each conference should utilise two able and skilled conference consultants.

In 1959 Emery and Trist worked on the merger of two aircraft engine manufacturers in Great Britain using this notion of a search conference to produce strategies and action plans. They subsequently expanded this practice around the world (Rehm & Cebula 1996) and created active, adaptable organisations (Cabana, Emery & Emery 1995).

Cabana, Emery and Emery believed that their Search Conference method for setting new policy directions and strategies allowed participants to find common ground on difficult social conflicts and develop or reform communities, organisations or industries. Using participative planning, Search Conferences enabled people to

create plans for the most desirable future of their community or organisation, with participants taking responsibility for carrying out the plan themselves.

Emery (1980) describes his paradigm for consulting as a relation of symmetrical dependence, a relation of cooperation within work and a refusal of the role of servant in a master-servant relationship. It accepts that “workers are often able to do their work better with good management and that management can do nothing without workers” (Emery 1980, p. 19). His approach highlights the non-contextualist nature of existing cultures and the relationship between bounded systems and their larger social environment.

The conflict between these two paradigms focuses on the role of the foreman. In the old paradigm, the foreman/first-line supervisors are the essential link between managerial decision-making and the shop-floor activity but are not themselves a part of management. Neither, of course, are they accepted as a worker. They are in the unenviable role of being caught in the middle.

In the new model of work, there is no place for the role of foreman. Such a role is antithetical to the notion of cooperation on the job. It implies that the workers are not being trusted to keep their end of a relation of symmetrical dependence (Emery 1980, pp. 19–20).

Similar to the way in which the role of a foreman is viewed as central to an organisation, the implicit role expected of a coach can be inferred from the way organisational clients engage coaches. The explicit and implicit understandings in the way that coaches are contracted and monitored indicate the paradigm within which they are expected to perform. Typically, coaches are engaged to support the roles of their coachees within bureaucratic, hierarchical, autocratic organisations, despite a mandate to coach for highly innovative, flexible and adaptive leadership.

Viewing Emery’s consulting approach as a prototype for implementing a contextualist-coaching approach is beyond the intention of this chapter. However, issues faced by Emery have implications for the role of power in coaching. Emery’s work highlights the importance, and necessity, for coaches to be engaged in ongoing critical reflection.

Knowledge about Emery's consulting approach broadens the understanding of coaches who seek to apply contextualist assumptions to their coaching practice. It provides an example of working within an open system paradigm of cooperative, symmetrically dependent relations. It acknowledges a fast-changing global society, as well as those phenomena that are constantly present, such as increasing global economic development, population growth, and the technological advances in communications (Rehm & Cebula 1996).

2.15 Systems concept: open and closed systems

An advantage of using Pepper's (1942) world hypotheses as a lens of analysis is that they provide a way of differentiating between open and closed system assumptions.

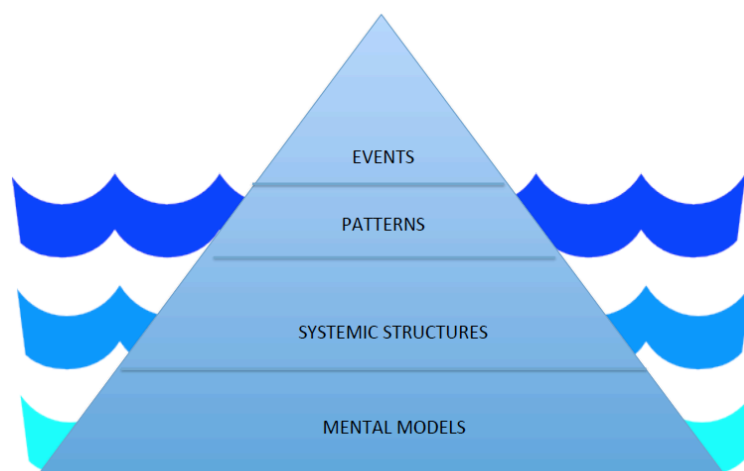
Systems concepts are generally accepted as a foundational theory within human resource development, despite 'systems' being one of the "most loosely used words both in everyday discourse and in academic literatures" (Yawson 2012, p. 56). While this can mean that practitioners and researchers do not apply systems concepts (Yawson 2012), Barton and Haslett (2007) assert that the most significant development and use of systems thinking comes from the open versus closed system dichotomy. That is, the systems concept provides a way of thinking for understanding and managing human systems associated with complex problems (Bosch, Maani & Smith 2007). It provides a useful framework for addressing contemporary human issues amid this more complex, volatile and unpredictable environment (Barton & Haslett 2007).

The defining characteristic of a system is "interconnection within a collection of things or ideas that can be regarded as having a recognisable coherence or unity" (Chick & Dow 2005, p. 364). "Systems that used to be separate are now interconnected and interdependent, which means that by definition that they are, more complex" (Sargut & McGrath 2011, p. 70). Such systems are characterised by lessened expectations of predictability, with solutions to problems emerging from the dynamics within systems, the elements and conditions operating in continual flux (Petrie 2011).

Within the systems concept, systems thinking is defined as “a group of interacting components that conserves some identifiable set of relations with the sum of their components plus their relationships (i.e., the system itself), conserving some identifiable set of relationships to other entities (including other systems)” (Straussfogel & von Schilling 2009, p. 151). Chick (2004) indicates that it is the particular set of connections, and absence of connection, that differentiates one system from another and gives it a sense of both character and order. Systems can be distinguished as either closed or open. However, differences in opinion about what this means have arisen not only because of how differently the terms are used, but also because of the confusion over the level at which openness or closure is considered. For example, according to von Bertalanffy (1950) an open system allows for interactions between its internal elements and the environment. Closed systems, on the other hand, are held to be isolated from their environment. In contrast, Chick and Dow (2005) cite research proposing that open systems and closed systems do not constitute a duality; they can be thought of as a spectrum.

The events-patterns-structure tool used in systems dynamics is a structured approach to studying facts and devising a theory to explain them (Barton & Haslett 2006) and a way to distinguish between open and closed systems thinking. Expanded to include mental models, it uses the analogy of an iceberg for differentiating four different levels of systems thinking (Maani & Cavana 2007; Senge 1992) (see Figure 4).

Figure 4: Four levels of thinking model



(Maani & Cavana 2007, p. 53)

Most decisions and interventions take place at the events level because events are the most visible part of what people consider their reality and often require immediate attention and action (Maani & Cavana 2007). When a larger set of events (or data points) can be linked to create a history of past behaviours or outcomes, patterns can be observed. However, just as with events, the thinking that occurs at this level is linear and related to short-term solutions. The closed systems thinking taking place at these levels cannot effectively address the complexity, interconnectedness or underlying structures of the current environment, due to its overreliance on the simple systems model of input-output transformation (Yawson 2012). Much of what goes on is hidden from view and best understood using the deeper levels of systemic structures and mental models.

Thinking at the event and pattern levels represents the “dominant epistemology in the field of human resource development and as such undergirds a majority of human resource development models” (Yayanti 2011, p. 101). However, while it has served human resource development interventions well in the past, this type of thinking can no longer be the dominant epistemology (Yawson 2012).

Instead, thinking related to systemic structures is required, which reveal how patterns can relate to and affect one another. At this level, the “intricate lace of relationships in complex systems” (Maani & Cavana 2007, p. 54) can be unravelled and create opportunities for broader perspectives, long-term solutions, and naturally occurring sustainability (Lazanski 2010). Thus, at the level of systemic structures, closed systems thinking must make way for thinking that can accommodate the complexity of the external environment.

The deepest level of the systems-thinking iceberg relates to the mental models that “reflect the beliefs, values and assumptions that we personally hold” (Maani and Cavana 2007, p. 15); they underlie our reasons for doing things the way we do. While mental models hardly ever come to the surface (Maani and Cavana 2007), they are present in the implicit assumptions that unconsciously guide our actions and the contradictions described by Argyris (1990) between espoused theory and theory in action. Effective observation and understanding requires *surfacing* these deeper levels of understanding. It is at this level that an understanding of the

implicit assumptions underlying coaching theory, practice and research needs to take place.

Closed systems thinking holds that the variety inherent within a system is knowable; open systems thinking assumes that as complexity increases so does the variety of responses needed to deal with complex challenges. Thus, closed system thinking can be thought of as relating to the upper levels of the systems-thinking iceberg, while open systems thinking, which requires the more complex thinking that is associated with systemic structures and mental models, is at the bottom of the iceberg. The former approach is good for classifying events and for applying classified remedies. However, once problems become complex rather than just complicated, it is necessary to move beyond this into the contextualist idea that events are part of patterns, which are themselves parts of structures that are related to the mental models that people use as a basis for their actions. Closed systems thinking becomes unable to deal with this complexity. Because of its assumptions of certainty and no environmental change (Ansoff & Slevin 1968), deductive logic is “appropriate for closed systems, but not for open systems as typically found in management decision making” (Barton & Haslett 2006, p. 1). While it is necessary, deduction alone is inadequate as a strategy within the context of this research.

2.16 Differentiating world hypotheses using the systems concept

2.16.1 Mechanism and closed systems thinking

Mechanistic orientations, similar to formist approaches, are analytic and focused on identification of the dimensions of phenomena within a closed system view of the world. Mechanists therefore assume that the functioning of physical or psychological phenomena is based on the interplay of a variety of elements that interact and influence one another (like mechanical parts that work together). Phenomena are therefore understood by describing the parts or elements of a system and by discovering the relationships between elements. They are composed of independent elements that interact according to certain laws or principles. Although context and time can be included in these approaches, they are usually treated as independent domains, not as intrinsic parts of psychological phenomena.

Mechanism, with its closed system view of the world, had been the predominant world hypothesis until the beginning of this century. This was especially the case in the field of physics (Davis & Millon 1994) and physical/engineering/hard systems, where change is slow and the variety of elements that interact and influence one another remain fairly constant (Hayes, Hayes & Reece 1988). However, adopting a closed-system mechanistic approach within an organisation ensures that internally generated rules and procedures predominate. This is an advantage in some circumstances, such as in the design of an accounting system where there is an expectation, and desire, for the system to behave predictably, but it presents problems within the social sciences.

Mechanistic closed system perspectives can be observed in the positivist approaches to the social sciences used within organisations (Hardcastle & Richardson 1993). In these situations, the world is viewed as being composed of relatively concrete empirical artefacts and relationships that can be identified, studied and measured by approaches derived from the natural sciences (Burrell & Morgan 1979). This type of thinking is illustrated by Cronbach, the 1957 president of the American Psychological Association, who stated that if all influences on an object of study could be isolated then error variance would disappear completely (Davis & Millon 1994). Houts (1991, p. 102) identified this as an “epistemic conception of error, whereby error is regarded as a reflection of our ignorance of crucial independent variables, as opposed to an ontic conception, which holds that chance is a fundamental aspect of nature”. Instead, where people are concerned, the world is best viewed as an open system where organisational capability for rapid and flexible responses predominate (Sheffield, Sankaran & Haslett 2012).

Mechanists believe that the world can be known and understood in minute detail (Tsoukas 1994) with outcomes within a system able to be predicted (Hayes, Hayes and Reece 1988). This is because, within mechanism, it is assumed that discrete parts respond to stimulation in a static system. People operating within this worldview therefore explain things by cause-and-effect relationships between the parts within a whole (Pepper 1942). That is, the world is viewed as a completely sealed vessel, made up of purposeless and passive parts that operate predictably. Any deviation from regularity produces changes that seek to restore regularity; ever

better explanations of the parts will eventually lead to an explanation of the whole (Gharajedaghi & Ackoff 1984).

Rose (2003) relates this to asking the question: *'How does it work?'* and Forsyth (2010) uses the metaphor of a clock, whereby each cause-and-effect relationship between constituent cogs, springs, levers and gears is separated out and each relationship examined, the process constituting a mechanistic understanding of how clock parts work together to make the clock perform properly. Johnson et al. (1988) describe this approach to understanding via such a stable and elementary ontology as viewing the world objectively and passively. By extension, they ascribe to mechanists the belief that a person's actions are determined externally by their environment rather than through internal purposeful intentions.

Interestingly, Gharajedaghi and Ackoff (1984) relate this characteristic reductionism of mechanism to a belief in the existence in God. They argue that for reductionism to be true there must be a first cause or some other explanation that requires acceptance on faith. This is generally taken to be God. As a consequence of this assumed comprehensibility of the world, everything other than God has to be assumed to be the effect of some cause. Such determinism leaves no room for choice, or purpose, in the natural world (Gharajedaghi & Ackoff 1984).

Whereas contextualism is "constantly threatened with evidences for permanent structures in nature" (Pepper 1942, pp. 234–235), mechanism is threatened by evidence for non-permanent structures. Despite its success in yielding many discoveries and in influencing religious thought (deism), mechanism has been consistently undermined by evidence that chance itself is fundamental to nature (Davis & Millon 1994). Even physics has moved in this direction as physicists discover that, at a quantum level, mechanistic determinism breaks down in the face of quantum statistical laws and the Uncertainty Principle (Davis & Millon 1994).

Deutsch (1951) concluded that one of the fundamental features of mechanism is that operations must be reversible across time, or time-invariant. That is, if the present is known, then the machine can be run backward or forward as desired to obtain a complete picture of the past or future. However, Nicolis and Prigogine (1989) cite numerous macro-level instances of non-mechanistic and non-reversible

change, including chaotic change and the indeterminate evolution of nonlinear dynamic systems. Accordingly, mechanism cannot fully explain past and future (Davis & Millon 1994).

2.16.2 Organicism and partially open systems thinking

An organicist approach is a systems approach to understanding, focusing on organic wholes that are more than the sum of their interacting parts. The whole system is the unit of study, although the characteristics of its elements—and, most important, the relationships between them—are essential. It is a view of the forest instead of the trees (Pepper 1942).

Organicists view phenomena as understandable through the integration of facts (Pepper 1947). That is, elements of a system are assumed to be bound to the unity by a limited number of underlying organic principles. The task for the organicist is to work with the whole, search for the underlying principles that govern the system, and treat each element in its relationship with other elements as parts contributing to the holistic unity.

In organicist systems, change is a given yet it occurs according to unchanging rules. It is stability that needs to be explained (Hayes, Hayes & Reece 1988; Reece & Overton 1970) with growth expected to move from one stage to another in an orderly way.

While organicism does not reflect open system assumptions, it can be related to the concept of a partially open system where the goal is to adapt and respond, rather than to create the environment within which it exists. According to Tepe and Barton (2009) this is because its evolutionary systems approach is unidirectional, stressing the environment's impact upon the organism rather than the organism's impact on the environment.

2.16.3 Contextualism and open systems thinking

Barton and Haslett (2007) recognise both organicism and contextualism as synthetic hypotheses capable of addressing complexity. Yet, in contrast to organicism, Tepe and Barton (2009) distinguish contextualism through its

recognition of open, purposeful and co-evolutionary human systems. That is, contextualism addresses not only the environment's impact upon the human system, but also the human system's impact upon the environment. Change is regarded as regular with every event reconfiguring an already established pattern, thus altering its character. Every moment is qualitatively different and should be treated as such (Tsoukas 1994). And, intuition is important as contextualism is about understanding events by first intuitively grasping the whole pattern (Tsoukas 1994).

2.17 Coaching as a profession

Disagreements within the coaching field range from whether coaching can be considered a profession and differing opinions among coaches over why they are hired, what they do, and how success is measured (Coutu & Kauffman 2009). For example, despite coaching not generally being viewed as a profession in the wider community (Bennett 2006; Drake 2008) due, in part, to a lack of understanding concerning when coaching is used (de Meuse, Dai & Lee 2009), the International Coach Federation's 2012 worldwide survey of coaches found that 69% of coaches describe coaching as a profession. Such disparity concerning whether coaching is a profession also arises because of the different approaches to evaluating its effectiveness (de Meuse, Dai & Lee 2009).

Another reason for differing views on whether coaching is a profession is the fact that coaching originated in the practitioner domain rather than in the traditional academic institutions that generally provides education for the professions. However, in response to its increased popularity, many tertiary institutions now offer higher degree courses in coaching. While in 2000 there was only one university postgraduate degree program in coaching in Australia, by 2008 coaching was taught in at least five Australian universities (Grant 2008).

While professional recognition for coaching has lagged, the situation does provide an opportunity for coaches to take more seriously the historic scientific requirements of a profession as well as the dynamic contextual needs of new types of practice and forms of evidence (Drake 2008). In particular, the process of the professionalisation of psychology and its accompanying assumptions provides an

opportunity for coaches to reflect on whether, or how, they wish to proceed towards becoming a profession.

Psychology faced problems as it moved towards professionalisation. Accreditation standards became overly formulaic, the concerns of its clients became subordinate to the interests of its members, and learning and responsiveness were stifled as the profession became more institutionalised (Drake 2008). This institutionalism reduced the concept of supervision to a cultural socialisation where the elders of the practice shape the behaviours, understanding, perceptions, feelings and motivations of less experienced coaches. Reflecting on the experience of the professionalisation of psychology and its potential parallels to coaching, Drake (2008) asks coaches, as they seek their own path to professionalisation, to look beyond the traditional notions of evidence as universal, static, objective, neutral and involving codified data to include the idea that coaching is also contextual, dynamic, subjective, political and socially constructed.

Coaching industry organisations such as the International Coach Federation (ICF) are very active in their efforts to professionalise the industry. They have played key roles in commissioning research on best practice and development of professional standards (Clutterbuck & Megginson 2005; Hawkins 2006, 2008; Hawkins & Smith 2006). However, in studying such coaching organisations, Tulpa (2008) concludes that in their push towards professionalisation, they generally focus on seeking to move closer to defining best practice, raising standards and encouraging a greater level of evidence-based research as the path. However, as these groups focus on studying success and best practices, it is the opinion of Christensen and Raynor (2003) that they risk not evolving.

Regardless of whether coaches seek to become credentialed or not, many approaches towards professionalisation reinforce the cultural prevalence of positivist science in Western societies (Olalla 2010). Coaches risk being caught in the epistemological trap of applying the same principles and assumptions as the clients they are trying to serve (Keedy 2005).

2.17.1 The professionalisation of coaching

Coaching has emerged largely from practice and the marketplace, rather than from science and the academy (Grant 2008). As a result, coaches have generally learned about coaching and been influenced by non-academic industry literature, training delivered by non-academic training organisations and through industry organisation professional development events. Now that coaching has become a widely accepted practice within workplaces (Bluckert 2005; Hamlin, Ellinger & Beattie 2009), there has been a push for its professionalisation driven by coaches, the corporate world, scholars and industry organisations (Brennan 2008).

Within the prevailing formistic and mechanistic external business environment, the lens of Pepper's world hypotheses reveals implicit assumptions underlying the impetus for the emergence of a coaching profession:

- In the push for professionalism, coaching industry organisations rely upon governance practices, standards and approaches to accreditation and credentialing predominantly based upon the assumptions of formism and mechanism.
- Industry bodies have developed practices that operate under the assumption the external environment is static and all variables are identifiable and controllable.
- Contradictions emerge between what is espoused by industry organisations and the implicit assumptions that drive their actions.

2.17.2 Professionalising coaching within the prevailing environment

Rostron (2009) observed that a wide range of providers and consumers have been motivated to advocate the professionalisation of the industry by their desire to safeguard the quality, effectiveness and ethical integrity of coaching services. Their actions, geared to promote coaching as a profession, are driven by current conventional business and organisational wisdom aligned with the assumptions of formism and mechanism. That is, deeply entrenched approaches utilise analysis to verify accepted reality, primarily through the traditional scientific method or positivist approaches to education and research (Checkland 2002).

Given this broadly accepted ‘reality’, current organisational models are characterised by having a completely autonomous external authority, such as a Board, centrally exerting control within a hierarchical structure (Gharajedaghi & Ackoff 1984). This allows for minimal interactions and for the ‘authority’ to affect any part of the system, without being itself affected. It deprives members of the system of information except that which they require to fulfil their predetermined, analytically described jobs. The result is that employees receive instructions about the tasks they are to undertake that are insufficient, neither explained nor justified fully. It requires them to blindly conform, particularly at the lower levels of hierarchies.

Discussion about the professionalisation of coaching within this current prevailing environment has been driven by the concern that if coaching does not move ‘forward’ as a clear-cut field of science, it will likely fail in the long run by becoming a tangle of knowledge. As a result, there has been a focus on how to identify professional coaches and who should be in charge of certifying coaches as professionals. That is, it has concentrated on how professionalisation should occur, rather than whether coaches should be certified as professionals at all. Consequently, professionalisation of the coaching industry has itself become a multi-million-dollar business in its own right, invoking a hierarchy of organisations competing for the status as the global accrediting authority.

2.17.3 Professionalisation as a hindrance to the effectiveness of coaching

In Hawkins’ (2008) opinion, and in contrast to the analytical approaches to professionalisation, those who hold a less traditional view see the professionalisation of coaching as a potential hindrance to its effectiveness. They see dangers such as accreditation standards becoming unnecessarily formulaic and professional associations being more concerned with organisational and member interests than those of coachees. They also view professionalisation as a risky endeavour because of its potential for inertia through the promotion of institutional dogma that could reduce the prospect of learning and the ability to adapt. However, advocating a non-traditional professionalisation process aligned to a non-analytic worldview would necessarily involve following a different route to

professionalisation than that of the traditional path involving standards, competencies and accreditation.

2.17.4 Path towards professionalisation

Setting aside the potential hindrance to the effectiveness of coaching that could be caused by pushes towards professionalisation, coaching has other issues that must be addressed. For example, Sherman and Freas (2004) believe that the lack of clarity about what coaching really is and what makes for an effective or reputable coach is undermining the perception of coaching as a profession. Consequently, contemporary organisational development and human resource practitioners still relegate coaching to the status of merely a component of their respective fields of study and practices, rather than a stand-alone profession (Hamlin, Ellinger & Beattie 2009). This situation poses a dilemma for those who believe a genuine coaching profession with its own identity and unique body of knowledge can be distinctly defined and delineated.

Hawkins (2008) observes that the professional practice of coaching means different things to different people with the most recent phase of its development seeing rapid growth and emergence of models and training that are informed by knowledge drawn from the areas of management, education, social sciences, philosophy and psychology. Bachkirova and Kauffman (2008) identify these approaches as being grounded in various traditions and perspectives containing their own set of assumptions about human nature, how people grow and change and how this process can be facilitated. They see potential for these varying approaches to advance the field but instead, sometimes rather than enhancing current approaches, they contradict each other.

Hamlin, Ellinger and Beattie (2009) favour the development of an empirically tested knowledge base to support professionalisation. However, as Gray (2011) states, whether someone is deemed a professional or not relies on assessing them against criteria such as professional standards, qualifications, and codes of ethics and behaviour developed from within an agreed and unified body of knowledge. This approach to professionalisation means making decisions about who would be

in and who would be out, based upon defined levels of skill and knowledge (Grant & Cavanagh 2004).

Most psychologists understand that evidence-based practice (EBP), a process by which the best available evidence is used in making decisions, is central to the development of professionalism (Bauer 2007). However, given that currently most of what constitutes evidence-based psychological practice is based upon empirically supported treatments, the danger for coaches, like psychologists, is that they may become most familiar with the construct of best evidence in the context of empiricism (Chambless 1995). That is, EBP and empiricism could be treated as synonymous (Bauer 2007). However, EBP is a much broader concept, not only providing a framework for conceptualising clinical problems, but also suggestive of a research agenda whereby patterns of wellness and illness can be investigated (Bauer 2007). A full representation of EBP in psychology requires an expansion of systematic research efforts—a seemingly intractable task, from the point of view of psychology’s exclusive reliance on quantitative research methods and controlled experiments. The obstacles for coaching are not yet as big.

The psychology profession’s experience with EBP highlights differences in opinion about what constitutes evidence and what role it should have in practice. Within the coaching industry there is therefore an urgent need to discern how evidence-based frameworks best fit with and serve coaching and how to resolve any differences. In current moves towards professionalisation, there is a gap that needs to be filled by a strong and inclusive stance on evidence.

A further complication in the discussion of the professionalisation of coaching relates to the distinction between internal and external coaches. For example, Parsloe (2004) holds that the majority of workplace coaching is, or should be, delivered by line managers. However, it is unlikely that the support these line managers would require would be “acceptable or indeed identical to something labeled 'professional supervision’” (Parsloe 2004, p. 20).

Despite these challenges, the fact that coaching has emerged out of an eclectic mix of knowledge, without its own distinct theoretical knowledge base, provides the potential for the articulation of a broader epistemology than would otherwise be

possible. Thus, coaching as a profession could be associated with a variety of different underlying epistemological and ontological inconsistencies, rather than ‘blindly’ working from a largely unexamined common paradigm.

2.18 Key influencers towards the professionalisation of coaching

Key influencers driving the trend towards the professionalisation of coaching include coach training organisations and industry groups such as the International Coach Federation (ICF), Institute for Coaching, Association for Coaching, Australia and New Zealand Institute of Coaching (ANZIC) and Standards Australia.

2.18.1 International Coach Federation (ICF)

Founded in 1995, the ICF describes itself as the largest industry association influencing coaching around the world, with membership numbers growing from around 11,000 in 2006 to more than 25,000 members and 12,000 credentialed coaches in more than 100 countries worldwide (International Coach Federation n.d.b). The ICF refers to coaching as a profession on its website with a core purpose to “Lead global advancement of the coaching profession” and to “elevate coaching to an integral part of society, with ICF Members representing the highest-quality professional coaches” (International Coach Federation n.d.c).

The goals and the activities of the ICF are aligned with other industry organisations including the European Mentoring and Coaching Council (EMCC). The EMCC has filed a self-regulated Code of Conduct for professional coaching with the European Union with the intention of setting a “benchmark standard for the coaching and mentoring professions” and “serve as a model for self-regulation in other parts of the world” (International Coach Federation n.d.d).

2.18.1.1 The ICF and the professionalisation of coaching through accreditation and credentialing

Surveys, primarily undertaken within the ICF’s membership base, indicate that the overwhelming majority (84%) of coaches believe that coaching should be regulated, and that professional coaching associations are best placed to handle this

responsibility (International Coach Federation n.d.a). The ICF identifies itself as a leader in advancing the profession of coaching, with its core purpose being to advance the art, science, and practice of professional coaching by setting 'high' standards, providing independent certification of programs and by building a worldwide network of credentialed coaches. It focuses on the ongoing development of coaching core competencies, establishing a professional code of ethics and standards, developing an international credentialing program, conducting and dispensing coaching research and establishing guidelines for coach training programs (Email to members 2013, pers. comm., 26 June).

The ICF requires coaches be compliant with their code of conduct (International Coach Federation n.d.e) and for accredited coach training program providers (ACTP) to adhere to specific Core Competencies and Ethical Standards. Through formal assessment procedures the ICF calibrates coaches and training organisations, from which it can be inferred that the ICF assumes that this process adequately reflects capability.

Such a classificationist approach to determining what constitutes good coaching through competencies is analytical. It is based on the assumption that objects (or concepts) can be categorised, with discrete boundaries based on their assigned definition or similarity to a prototype (Hayes, Hayes & Reece 1988). Much as formists ask the question 'What is it like?' (Forsyth 2010), the ICF appears to make sense of the world by deriving meanings and definitions through classifying and categorising. Super and Harkness (2003) describe this type of process as a cognitive task of analytically discerning diagnostic similarities.

As well as illustrating tendencies towards formistic assumptions, the practices of the ICF can also be interpreted as mechanistic. The ICF, by linking professionalism to lists of competencies that are perceived as describable and observable, aligns with the mechanistic assumption that any deviation from regularity produces changes that seek to restore it and that ever better explanations of the parts will eventually lead to an explanation of the whole (Gharajedaghi & Ackoff 1984). These assumptions attempt to control or eliminate factors outside its control by seeking to get better and better at describing and putting together these competency lists. Also, where coaches and coach training organisations deviate from the ICF's

prescribed and mandatory standards, such ‘deviations’ are rejected. However, these ‘deviations’ are people or groups of people. Viewed as faulty parts, these people are either re-machined (retrained) or replaced (not admitted to the organisation).

The challenge is that, by attempting to create a closed system through forcing compliance to standards through accreditation and credential laws, the ICF is trying to do something that is virtually impossible. This is because coaches work in an environment where there is a limitless array of possibilities best represented by the concept of an open system. To remain effective, coaches need to be continuously adaptive learners and adaptation and learning requires a readiness, willingness and ability to change. Gharajedaghi and Ackoff (1984) recognise that mechanism fails to account for human factors and, while the ICF acknowledges that the world is complex and talks about coaching as a transformative process, its implicit mechanistic assumptions are likely to inadvertently lock coaches and their clients (who look to the ICF for advice on what constitutes ‘good’ coaching) into mechanistic thinking.

The ICF’s tendency to deal with problems by further emphasising mechanistic thinking is demonstrated by its announcement (in February 2014) of new credentialing program updates. In this announcement, the ICF describes changes that are intended as a “measure of quality assurance to guarantee the fairness, rigor, integrity and consistency of the ICF Credentialing program,” and “protect and serve consumers of coaching services, measure and certify competence of individuals, and inspire pursuit of continuous development” (International Coach Federation n.d.f).

This stated intention emphasises the ICF’s belief that coaching can be described and that quality is simply a matter of knowing certain facts independent of context. It attributes a 25% growth in the credentialing program between 2012 and 2013 to these (mechanistic) policies and states that its continual upgrades of credentialing rules are an assurance to coaches and clients of quality coaching (International Coach Federation n.d.f).

The implicit mechanistic assumptions of the ICF cannot fundamentally produce the outcomes it espouses. For example, the ICF states:

Coaching brings a shift in corporate culture that increases productivity by changing it from command and control to collaboration and creativity (International Coach Federation n.d.g).

Despite this acknowledgment that a shift in corporate culture would increase organisational productivity by changing it from command and control to collaboration and creativity, the ICF is itself underpinned by the type of thinking characterised by a mechanistic command and control culture. This represents a ‘disconnect’ between what the ICF espouses and the mechanistic assumptions underlying how it is trying to do what it says members want. By trying to advance coaching through coaching competencies, accreditation and certification, it limits its own ability to collaborate and be creative.

There are other clues suggesting that the practices and views of the ICF are predominantly based on the assumptions of closed system formistic and mechanistic thinking. For example, in forecasting that the demand for coaches will continue to grow, the ICF predicts that in the year 2018 executive coaching will have matured as an industry; it will be characterised by more barriers to entry and increased emphasis on matchmaking between coaches and coachees; and the use of metrics will be standard practice (American Management Association 2008). These predictions illustrate a perpetuation of analytical formistic and mechanistic thinking.

The ICF in Australia provides ‘Toolbox Nights’ to assist coaches in their work. These include tools such as the Language and Behaviour (LAB) Profile—a linguistic tool used to decode communication styles—and conscious motivational drivers that allow a coach to understand, predict, and motivate behaviour for improved performance at an individual and organisational level. The individual Role Engagement Alignment Profile (iREAP) is advertised as enabling organisations to reap the rewards of having more employees who are operating at peak engagement levels (Email to members 2012, pers. comm., 7 June). In these examples, the use of words such as ‘tools’, ‘toolkits’, ‘predict’ and ‘decode’ and references to being able to motivate behaviour through understanding ‘parts’ promote mechanistic thinking. The danger arises when a coach misattributes their

success to the use of the tool. In the absence of critical reflective inquiry into the assumptions of the tool, mechanistic assumptions are perpetuated.

Further evidence of the predominance of mechanistic assumptions in practices at the ICF can be seen in how Board members are selected. The ICF provides a checklist for potential Board members against specific competency criteria (Email to members 2012, pers. comm., 26 May). This implies that success as a Board member can be broken down into a set of competencies relevant to leadership and that it is possible for a person to be objectively assessed against them. The consequence of this process is a systematic failure in acknowledging the inherent complexity of human relationships.

The implicit assumptions of the closed system analytical thinking of formism and mechanism and the open system environment within which coaching goals of personal and organisational transformation actually take place illustrate paradigm inconsistencies. Without an adequate grounding in epistemological understanding, or access to research on coaching effectiveness that is explicit about its theoretical underpinnings, coaches risk misattributing their effectiveness to the mechanistic processes that emphasise metrics, barriers, matchmaking, competencies, approaches to research and accreditation practices.

2.18.1.2 The ICF and the professionalisation of coaching through research

Research (including evaluation) is defined as any activity that involves the collection, collation, review or evaluation of data or information for the purpose of describing, maintaining or modifying activities, practices, interventions, or treatments. Research may involve the manipulation of variables or environmental factors whereas evaluation more typically involves the review of information for the purpose of providing feedback about the function, productivity or efficacy of an activity. Evaluation includes, but is not limited to, activities including needs assessments, process assessment, outcome studies, impact analysis, cost-benefit analysis, and meta-analysis (International Coach Federation n.d.h).

While this analytical definition of research suggests that the ICF equates research to gaining a better understanding of ‘parts’ within a closed system, the ICF also endorses evidence-based practice as the way to advance coaching theory (International Coach Federation n.d.h). However, the term ‘evidence-based research’, like evidence-based management, risks being “underdeveloped, misunderstood, misapplied, and implemented inconsistently” (Briner, Denyer & Rousseau 2009, p. 19). The problem is that, although the ICF explicitly endorses evidence-based research that incorporates synthesis, it omits this concept from their definition of research.

2.18.2 Institute of Coaching

The Institute of Coaching is based at McLean Hospital, which is an affiliate of Harvard Medical School. It has as its tag line: “Bridging science to best practice in leadership, health/wellness, and personal coaching” (Email to members 2012, pers. comm., 12 December). The Institute lists a number of prescribed competency models as a guide to what they determine constitutes coaching:

There are a number of prescribed competency models from general categorizations to elaborate manifestos to help guide one’s coaching practice. Here are a few competency models provided by some of the big names in coaching that might help point you in the right direction to at least get started.

We have listed out the basic outline of the competencies described by four coaching organizations. These are not complete but give a feeling of the kinds of skills coaches need to develop. The links will take you to more detailed information.

ICF Core Coaching Competencies

A. Setting the foundation

- 1. Meeting ethical guidelines and professional standards***
- 2. Establishing the coaching agreement***

B. Co-creating the relationship

1. *Establishing trust and intimacy with the client*
2. *Coaching presence*

C. Communicating effectively

1. *Active listening*
2. *Powerful questioning*
3. *Direct communication*

D. Facilitating learning and results

1. *Creating awareness*
2. *Designing actions*
3. *Planning and goal setting*
4. *Managing progress and accountability*

IAC Coaching Masteries

1. *Establishing and maintaining a relationship of trust*
2. *Perceiving affirming and expanding the client's potential*
3. *Engaged listening*
4. *Processing in the present*
5. *Expressing*
6. *Clarifying*
7. *Helping the client set and keep clear intentions*
8. *Inviting possibility*
9. *Helping the client create and use supportive systems and structures*

World Association of Business Coaches

Self-Management--Knowing Oneself and Self-Mastery

1. *Knowing Yourself--Self-Insight and Understanding*
2. *Acknowledging Your Strengths and Development Needs*

3. *Self-Mastery--Managing Your Thoughts Feelings and Behaviors in Ways that Promote Behavior Contributing to Career and Organization Success*

Core Coaching Skill-Base

1. *Creating the Foundations for Business Coaching*
2. *Developing the Business Coaching Relationship*
3. *Promoting Client Understanding*
4. *Facilitating the Personal Transformation*
5. *Professional Development*

Business and Leadership Coaching Capabilities

1. *Alignment*
2. *Leadership Knowledge and Credibility*
3. *Coach as Leader and Developer of Own Business*
4. *Creating and Maintaining Partnerships with all Stakeholders in the Business Coaching Process*
5. *Understanding Organizational Behavior and Organizational Development Principles*
6. *Assessment*
7. *Having Respect for and Knowledge about Multicultural Issues and Diversity*

The Institute of Coaching further states, “that obviously it may be easy to become lost in the myriad of descriptions of coaching. However, one should not lose sight of the fact that coaching is an art-form and there are many ways in which coaches can help” (The Institute of Coaching n.d.).

David Peterson's list is cited as a reminder of what contributes to the effectiveness of a coach:

1. *Offering an external independent objective perspective.*
2. *Creating space and time for reflection.*
3. *Identifying development goals and preparing an action plan.*
4. *Sharing ideas tips tools and models.*
5. *Facilitating an accepting positive supportive encouraging relationship*
6. *Providing follow-up conversations that foster a sense of accountability especially if the person makes a commitment to their coach to pursue a specific action*
7. *Simply asking the person what would be helpful to them and responding accordingly.*
8. *Asking questions that challenge assumptions and help reframe issues.*
9. *Offering feedback and advice including third-party feedback from interviews or multi-rater surveys*
10. *Spaced practice and repetition.*
11. *Using simple coaching formulas such as the GROW model a basic and popular framework for coaching conversations*
12. *Finally one of the most significant reasons that it is relatively easy to be a good coach—and yet one which is virtually never mentioned in the literature—is that coaches get multiple tries.*

(The Institute of Coaching n.d.)

This way of referring to coaching as a list of competencies implies that there are distinct ways of knowing and that coaching is a means of transferring the coach's knowledge to the coachee so that goals can be achieved. It follows that the coach is called upon to hold the coachee accountable for those goals, thus inferring an unequal power relationship that is characteristic of a mechanistic worldview, as it assumes a hierarchical power structure.

2.18.2.1 Promotion of coaching as a profession through its relationship to research

With the goal of enhancing the validity and acceptance of coaching and its impact on individuals and organisations, the Institute of Coaching has designed a Center for Research to help “build the scientific foundation of coaching by inspiring, supporting, and funding coaching research” (Institute of Coaching 2013). The Institute has identified that the growth of the ‘two billion dollar a year’ coaching industry is limited because only a handful of rigorous studies have been published to date. To address this lack of research, it provides grants to researchers, graduate students and coaching practitioners, in an attempt to determine not only whether coaching works, but how. The Institute states that it wants people to undertake research so that the industry will know which methods work best with which groups of people, and explore carefully which methods generate the best outcomes (Institute of Coaching 2013).

During the 2008 International Coaching Research Forum (ICRF) meeting at the Harvard Medical School, the Institute of Coaching was involved in collating one hundred research proposal abstracts (Kauffman, Russell & Bush 2008) to address the paucity of quality coaching research. These proposals were ordered into primary themes including (i) Society and Diversity, (ii) Modalities and Process, (iii) Defining Coaching, (iv) Training Development, Knowledge Base and Theoretical Frameworks, (v) Outcomes and Methodology and (vi) Coaching Style, Approach and Core Competencies.

However, a number of the research proposals suggested appear to be grounded in mechanistic thinking. For example, proposal 1 asks “Is coaching for women more effective when the coach is also female?” (Kauffman, Russell & Bush 2008, p. 19) and proposal 28 requires the researcher to design an instrument that allows for a detailed description of the coaching process including behavioural, attitudinal and relational aspects.

Some proposals espouse non-mechanistic concepts such as self-reflective practice. For example, Proposal 42 submitted under the primary theme of Business of Coaching and Policy/Ethics/Governance asks “How will the development of critical

self-reflective practice impact on the development of the emerging profession of coaching (including building the required body of professional knowledge), for example in regard to ethical issues?” Although Kauffman, Russell & Bush’s (2008) proposed methodology for addressing this question includes both quantitative and qualitative analyses to determine the nature and extent of critical self-reflection, it does so according to the analytical specific predetermined dimensions for proposal 42, as follows:

In the early years of coaching, as well as among coaches with two or more years’ experience;

Among coach practitioners who coach for a specific/certain number of hours per month, and practitioners with variable practice hours; and

Among business coaches as opposed to life coaches

(Kauffman, Russell & Bush 2008, p. 70)

While acknowledging multiple perspectives that can be obtained through critical, self-reflective practice they do so without going into depth about what they mean by critical self-reflective practice. As with the analysis of definitions of coaching, explicit theoretical underpinnings of what constitutes critical, self-reflective practice are not made.

One implication will be to understand which practitioners are beginning to work with greater knowledge, depth, skills and competence as a result of critical self-reflective practice. Other implications of this research can help to promote the need for more self reflective practice on the part of practitioners, and to encourage coach training programmes to address this issue in their education and development programmes (Kauffman, Russell & Bush 2008, p. 71).

In another example, and under the theme of modalities and process, three research proposals (numbers 17, 18 and 19) relating to furthering the understanding of what inherent assumptions, if any, are common to different coaching approaches have been grouped together.

Each proposal is required to incorporate the following beliefs:

The distinctiveness of the coaching profession lies in its unique view of man and the implication of these assumptions as it applies to professional practices. For instance, viewing man as whole and competent, allows the coaching professional to not create a hierarchical relationship with the client and to assume that the client knows the truth that is central to themselves as a person. This helps define and articulate the specific and unique relationship that is characteristic in the coaching conversation (Kauffman, Russell & Bush 2008, p. 38)

The potential implications of research concerning these three proposals are stated as:

Fundamental philosophical assumptions and principles in the coaching profession will become a core and universal aspect of coach training. Assessment through a dialectical process will help coaches in training, supervision and through continuing education examine their own underlying assumptions about people to determine the correspondence between their own beliefs and assumptions as they apply to the coaching profession and their actual professional practices as a coach. The unified coaching model will become a standard for supervising developing coaches. This philosophical narrative will help the coaching profession articulate its similarities and difference among the social sciences (Kauffman, Russell & Bush 2008, p. 38).

The methodologies for each proposal are described as follows:

Proposal 17 Methodology:

A narrative and appreciative inquiry approach is utilized with a group of senior coaches who are founders or world leaders in the coaching profession and who can articulate the underlying philosophical or categorical principals or beliefs fundamental to the coaching profession (Kauffman, Russell & Bush 2008, p. 38).

Proposal 18 Methodology:

A narrative and appreciative inquiry approach is utilized with a stratified group of practicing, certified coaches (Kauffman, Russell & Bush 2008, p. 39).

Proposal 19 Methodology:

A content analysis of “classic” books in the coaching field will identify any patterns or themes of underlying assumptions in the work under consideration. A summary of this content analysis will be used to document themes and/or patterns that exist, and to define universal assumptions within each coaching approach (Kauffman, Russell & Bush 2008, p. 40).

However, contradictions emerge when these proposals are viewed using Pepper’s lens. On the one hand, the common requirement statement recognises that truth is contextual and central to a client as a person, and that it is important that the relationship between coach and coachee is non-hierarchical. Also, the statement emphasises the importance of philosophical assumptions and of coaches engaging in a dialectic process for examining their own underlying assumptions. On the other hand, the statement that the unified coaching model will become a standard for supervising developing coaches implies mechanistic assumptions, by assuming that it is possible for a unified and standard coaching model to be developed. Also, the results of the research are hypothesised prior to the research being conducted, rather than the results, implications and hypotheses emerging from the research. While the statements made in the hypothesised results and the potential implications seem to relate to the assumptions of a synthetic world hypothesis, the latter statements contain mechanistic assumptions. Thus, paradigmatic incompatibilities exist.

As such, many research proposals focus on discovering the essential elements that define coaching (a mechanistic process), unpacking the differences between education and training (analytical), how to design (build) an instrument that allows detailed description of the coaching process as well as research that aims to uncover

what Stein (2007) describes as the typology of conversational identities that may need to be changed and/or expanded for different communities of coaches.

2.18.3 Association for Coaching

The UK's Association for Coaching (AC) defines coaching using categories as follows:

Personal/Life Coaching:

A collaborative solution-focused, results-orientated and systematic process in which the coach facilitates the enhancement of work performance, life experience, self-directed learning and personal growth of the coachee (Grant 2001).

Executive Coaching:

As for personal coaching, but it is specifically focused at senior management level where there is an expectation for the coach to feel as comfortable exploring business related topics, as personal development topics with the client in order to improve their personal performance.

Corporate/Business Coaching:

As for personal coaching, but the specific remit of a corporate coach is to focus on supporting an employee, either as an individual, as part of a team and/or organization to achieve improved business performance and operational effectiveness

Speciality/Niche Coaching:

As for personal coaching, but the coach is expert in addressing one particular aspect of a person's life e.g. stress, career, or the coach is focused on enhancing a particular section of the population e.g. doctors, youths.

Group Coaching:

As for personal coaching, but the coach is working with a number of individuals either to achieve a common goal within the group, or create an environment where individuals can co-coach each other.

(Association for Coaching 2015)

The Association for Coaching describes itself as being committed to championing standards of excellence in the coaching profession by offering accreditation to its coach members, so that potential users of coaching can see that a coach is working effectively within the Association's comprehensive AC Competency Framework (Association for Coaching 2015). It provides coaches with the "opportunity to benchmark yourself against high professional standards in a rigorous process, where the focus is on accrediting fitness to practise [sic] rather than theory and academics" (Association for Coaching 2015). Hence, with its emphasis on competencies and benchmarking, it promotes an implicit mechanistic stance.

2.18.4 Australia & New Zealand Institute of Coaching (ANZIC)

The Australia and New Zealand Institute of Coaching (ANZIC) was founded in 2006 to help coaches create viable coaching careers (ANZIC n.d). The organisation is aligned with a number of coach-training schools and key experts in Australia, some of whom participated in the 2010 Australian Standards Draft Coaching Guidelines Working Party.

ANZIC does not provide a specific definition of coaching on its website. However, its accreditation processes involve applicants being assessed for adherence to lists of competencies.

An extract of from the Institute’s list of coaching competences required for accreditation at the Professional Coach level includes the following:

Key Coaching Skills

- *Creates an effective metaphor*
- *Provides a statement or questions which effectively ‘breaks the state’ of the Client*
- *Uses third position to assist Client to see other viewpoints*
- *Reframes to assist Client to understand alternatives*

(ANZIC n.d.)

Although the Institute requires the provider to adhere to such predetermined lists of standards during the coach training program accreditation procedures, the ANZIC process is not as prescriptive as those of the ICF. Instead, ANZIC requires evidence of coherence between whatever philosophical approach is taken and the method of delivery. In this way, it has been possible for diverse approaches to be accredited using the same ANZIC standards.

2.18.5 International Coach Academy (ICA)

The International Coach Academy (ICA), a coach-training organisation that has trained over 4,000 students, refers to coaching as already a profession by stating, “coaching is an entirely new profession that draws on a range of disciplines and theories. Therefore, we don’t teach one model, rather we encourage students to explore all models and learn all theories” (International Coach Academy 2015).

You will not find traditional lectures in our school, instead we use an online classroom to give you as much ‘knowledge’ as we can upfront—then we work with you on applying that knowledge to your specific situation (International Coach Academy 2015).

Believing that coaching is an entirely new profession that draws on a range of disciplines and theories, the ICA doesn’t teach one model; it encourages students to explore all models and learn all theories. However, in contrast to this seemingly

contextual approach, the ICA illustrates mechanistic assumptions as it talks of ‘giving’ knowledge to their coach training students (see definition above). To believe that this can be done relies upon the mechanistic assumption that knowledge is ‘out there’ associated with an external reality.

2.18.6 Coaching Industry Standards

Coaching industry associations typically promote their version of professionalisation of the coaching industry by preparing sets of standards and requiring member adherence to these standards. However, standards represent labels within a system of labels, thereby creating what Tsoukas (1994) describes as a formistic, taxonomic or classification approach to providing structural fullness. Such a formistic approach attempts to eliminate context. Consequently, the benchmarking process of accrediting coaches through adherence to standards does not allow for the systematic inclusion of an understanding of how parts interact, nor of the context of coaching situations.

Through their emphasis on competency standards, industry bodies make assessments to determine whether ‘effective’ coaching, as defined by their predetermined quality framework competencies, is occurring. Members of coaching organisations who have gone through such an accreditation initiation are quick to accept the process, further validating this approach and reinforcing the ‘truths’ that ground it. Given that the ‘truth’ is already known, there are few, if any, opportunities for revisiting and/or exploring alternative views. This systematically suppresses divergent views.

Another example in which standards are used to enforce an industry body’s particular view on coaching can be seen in coach training organisations that offer government-accredited vocational programs under the Australian Qualifications Framework (AQF). The key reasons cited for coaches to seek AQF qualifications are to ensure national recognition and consistency as well as develop common understandings across Australia of what defines the qualification. Development of AQF qualifications is justified by the belief that they are necessary to ensure standards are maintained, as they describe educational outcomes and allocate titles to qualifications (Australian Qualifications Framework 2013). To enforce these

rules, extensive quality assurance arrangements are put in place to underpin AQF qualifications by organisations such as the Australian Skills Quality Authority (n.d).

2.18.7 Standards Australia

Standards Australia has published an Australian handbook called *Coaching in Organizations* (Standards Australia 2011) that offers guidelines for coaching within organisations in Australia. While recognising the cross-disciplinary nature of coaching, it was developed by representatives of universities and industry associations (including the ICF and ANZIC), as well as some coach training organisations, consultancies and organisations that use coaching as part of their learning and development programs.

The resulting Standards Australia document mentions that general definitions struggle to differentiate coaching from other interventions that share core micro-skills and that this inhibits developing a universal definition. Nevertheless, Section 4 (p. 35–43) of the handbook is dedicated to defining coaching in organisations.

Coaching can be understood as a collaborative endeavour between a coach and a client (an individual or a group) for the purpose of enhancing the life experience, skills, performance, capabilities or wellbeing of the client. This is achieved through the systematic application of theory and practice to facilitate the attainment of the coachee's goals in the coachee's context (Standards Australia 2011, p. 35).

2.19 Discussion

In the past, business and workplace environments have been treated as if they were closed systems. However, in our current rapidly changing world, inhabited by coaches and driven by human interaction, controlling a limitless array of possibilities to create a closed system is virtually impossible. As a consequence, industry associations and coaches, with their implicit mechanistic assumptions, risk producing the dehumanising consequences of mechanism (Ackoff 2002). This is because mechanism does not require an environment (the context) to explain anything (Gharajedaghi & Ackoff 1984). This interpretation renders the current

approaches to the professionalisation of coaching as fundamentally not capable of effectively dealing with the complexity of human interaction and the environment. In addition, there is a danger that other, potentially more effective frameworks for coaching will not be visible. The implications of this are that coaching can continue to become a “dangerous tool” (Clegg et al. 2005), a tool for “soft domination” (Courpasson 2000) and could possibly reinforce the problems it is supposed to treat (Berglas 2002).

An example of how mechanistic cycles have already played out in the coaching industry is provided by Griffiths and Campbell (2008), who recognise that, with the emergence of each new coaching accreditation authority and its associated set of standards, the credibility of the coaching industry is threatened. However, taking the position that internationally shared frameworks for coaching are both necessary and overdue, Griffiths and Campbell’s solution lies in the coaching industry making even more of an effort to strengthen existing coaching standards. Thus, problems are dealt with by becoming even more mechanistic in outlook. Griffiths and Campbell recognise that there is a lack of collaboration within the industry. And their solution is to call for collaboration. However, collaboration is not possible or capable of being supported within a mechanistic paradigm. Machine parts cannot collaborate; they can only work together in predetermined and centrally controlled ways.

Many believe that coaching has much to gain by developing into a profession. However, Drake’s (2008) opinion is that its evolutionary path may need to be unlike any before it. Gray (2011) suggests that perhaps what is needed for a true coaching professional is to engage in the kind of sophisticated reflection capable of producing wisdom (phronesis); that is, practical wisdom based upon insights and judgements, grounded in experience obtained by dealing with ill-structured problems and uncertainty. This is akin to knowledge in action (Schön 1987), tacit knowledge (Polanyi 1962), mindfulness (Epstein 1999) and personal knowledge (Eraut 1994). It also shifts thinking about professionalisation of the industry away from the assumptions of mechanism to those of the synthetic world hypotheses of organicism and contextualism.

New definitions of coaching surface regularly (Bachkirova & Kauffman 2009) that reflect various attitudes towards whether the world can be known (mechanistic or formistic) or whether it is inherently indefinable (contextualist). The resulting confusion in terminology and definitions is illustrated and further exacerbated by the current fragmented approach to professionalisation characterised by different standards and approaches, a proliferation of terms and their usage, a variety of routes to becoming an accredited professional and a wide variety of training programs, from very short courses to doctoral qualifications.

The effects, risks and limitations of coaching practices cannot be understood without a thorough understanding of the ideologies and theoretical assumptions brought to coaching, either through its definitions or by actively choosing not to define it (Askeland 2009). With the push for defining coaching built around formistic and mechanistic thinking, there is the risk that opportunities for broader perspectives, longer-term solutions, and the naturally occurring sustainability of coaching practice are limited, as coaching is distracted by defining itself.

Analysis of the ways that industry bodies, such as the ICF, the Institute of Coaching, and the Association for Coaching are influencing the professionalisation of coaching illustrates Argyris & Schön's (1974) theory-in-use versus theory-in-action model. That is, while coaches and industry bodies espouse organicist and contextualist understandings (theory-in-use), it is the analytical mental maps within industry organisations identified using Peppers (1942) lens that are guiding actions (theory-in-action). As a result, members who are obligated to meet credentialing standards cannot avoid being influenced not only by the prevailing formistic and mechanistic environment paradigm, but also by the views and actions of industry organisations.

2.20 Summary

Chapter 2 provided an account of an initial literature review conducted within the context of the current changing business environment and reveals a lack of clarity about what coaches do, what works, and what constitutes research evidence in coaching. It highlighted the lack of explicit theoretical perspectives upon which current coaching and its research is based. However, with such a lack of

understanding of the ideologies and theoretical assumptions brought to coaching, the effects, risks and limitations of coaching practices cannot be adequately reflected upon (Askeland 2009). Until the implicit assumptions that guide the actions of coaches and researchers are uncovered, its impact remains elusive.

A subsequent analysis of coaching approaches and research through the lens of Pepper's (1942) world hypotheses revealed the extent to which shifts in systems thinking, or moves forward in representing complex social phenomena, are currently being addressed. It was concluded that the published academic and practitioner literature aligns coaching with the closed system assumptions of formism and mechanism and the partially open system assumptions of organicism. While the analysis revealed that Ontological Coaching and Wilber's Integral Coaching could be linked to the partially open systems assumptions of the integrative, synthetic, organicist philosophical position, no coaching approaches could be found that align to the open systems view of contextualism. This is a problem because contemporary coaching is aimed at helping leaders deal with a volatile, uncertain, complex and ambiguous environment.

While coaching is seen as potentially dangerous (Fatien 2011), it is being used to address many issues (Charan 2008; Hooijberg & Lane 2009) and recognised as promising, with its impact already potentially underestimated (Waldman 2003). By acknowledging coaching and its associated research as being in an early stage of development as a profession, these fears are being addressed by key coaching industry organisations that seek recognition of coaching as an emerging profession (Brennan 2008).

In spite of occasionally espoused values suggestive of open systems thinking by such organisations, the common emphasis on accreditation, credentialing processes and governance practices to advance professionalisation of the coaching industry reveals that implicit assumptions are consistent with mechanism and formism. That is, the ways in which coaching bodies plan, implement and review their actions are aligned with a closed system view of the world.

For coaching to be recognised as something beyond a fad, it needs a theoretical foundation. While broad arrays of coaching definitions are observed, an analysis of

these definitions and their associated approaches reveals a paucity of such explicit theoretical underpinnings. However, isolating these differing positions, and their lack of explicit theoretical underpinnings indicate that the problems are far more complex than those that can be resolved by reaching a consensus on a definition of coaching. Research needs to be undertaken with explicit statements of underlying theoretical approaches with practitioners knowing the theoretical foundation (and associated epistemology and ontology) underlying their practice and capable of ensuring that practice aligns with them.

Chapter 3 justifies and describes a suitable methodology for addressing this lack of explicit theoretical perspectives upon which current coaching and its research is based.

Chapter 3: Methodology to formulate a hypothesis and research question

3.1 Introduction

The analyses reported in Chapter 2 highlighted underlying paradigm incompatibilities between the open system environment within which coaching occurs and the predominantly mechanistic, formistic and organicist assumptions upon which coaching practice are based. Amid the challenges leaders currently face, this mismatch presents a dilemma for coaches as they seek to be effective in developing complex and adaptive skills in themselves and their clients.

The open system environment within which coaching occurs requires the researcher (and coaches) to deal with intangibles, context and uncertainty. That is, as the environment operates beyond certain thresholds, social tensions and instability tend to provide unexpected outcomes not easily subjected to systematic replication and experimentation. This renders analysis, with its emphasis on 'parts', insufficient. Traditional deductive reasoning (facts determined by combining existing statements) and inductive reasoning (facts determined by repeated observations) are essential but inadequate. Therefore, addressing the research problem requires a pragmatic approach achieved by including a third mode of logical inquiry called abduction (Peirce 1998). Peirce, sometimes known as the father of pragmatism, proposed that studying available facts and engaging in cyclical processes of abduction, deduction and induction in an ongoing dialectic of development allowed researchers to devise theories that explain and make sense of the world (Smith 2005).

In this chapter, Peirce's (1998) triadic system of inferential logic within an analysis-synthesis framework is proposed. As a process for forming hypotheses (Ryan 1996), abduction is proposed as an appropriate strategy in the context of this research. In doing so, the problems of methodology that are observed when moving from the 'restricted' sciences (e.g. physics) to the 'unrestricted' sciences (e.g. biology) emerge and are addressed.

Complexity, in general, and social phenomena, in particular both pose difficult problems for science; neither has been able to tackle what we perceive as 'real world problems' (as opposed to the scientist-defined problems of the laboratory) (Lawler 1985, p. 13).

Subsequently, the analyses reported in Chapter 2 and the synthesis provided in Chapter 4 form an initial analysis and synthesis dialectic that results in the development of a hypothesis of best inference and research question to guide the research.

3.2 Choosing a research strategy

Good research requires the deployment of a research strategy appropriate to the epistemic circumstances (Boisot & McKelvey 2010). Therefore, establishing an appropriate paradigm for the circumstances of this research requires an understanding of the complexity of human interaction involved in coaching and the current external environment within which coaching occurs. There are implications in the way in which coaching is conducted, the kinds of questions asked, what is selected for study, and the criteria for evaluating knowledge claims. This is because they are all intimately connected with the different assumptions of what is valid knowledge and how it may be obtained.

The literature review conducted in Chapter 2, in attempting to position the nature and scope of knowledge in coaching within the context of the current changing environment, revealed that there is a lack of explicit theoretical perspectives upon which current coaching and its research is based. Yet, all approaches are necessarily based upon assumptions. Therefore, the first task of the research was identifying the nature and scope of the implicit theoretical assumptions underlying current coaching practice, thereby attempting to determine the extent they adhere to those of the existing paradigm of the environment within which coaching occurs. This was accomplished using Pepper's (1942) world hypotheses as a lens of analysis.

Positivist practices have been shown to be less than adequate for dealing with the complex problems of social systems research and when attempting to explain the complicated dynamics of human behaviour (Checkland 2002; Hyslop-Margison

2009). As a result, several additional, yet interrelated, movements emerged that realign ontological and epistemological assumptions that allow them to be more sensitive to human phenomena. These interpretive approaches share the view that there are few fixed objective facts in the social world (Hatch 2005). The social domain is composed of interpretations constructed and advanced by individual and collective actors (Bailey, Ford & Raelin 2009). Epistemologically, these approaches see knowledge as soft, subjective and fluid and based upon experience and insight.

We have found that people draw on a large set of abilities that are sources of power. The conventional sources of power include deductive logical thinking, analysis of probabilities, and statistical methods. Yet the sources of power that are needed in natural settings are usually not analytic at all—the power of intuition, mental simulation, metaphor and storytelling. The power of intuition enables us to size up a situation quickly. The power of mental simulation lets us imagine how a course of action might be carried out. The power of metaphor lets us draw on our experience by suggesting parallels between the current situation and something else we have come across. The power of storytelling helps us consolidate our experiences to make them available in the future, either to ourselves or to others. These areas have not been well studied by decision researchers (Klein 1998, p. 3).

Given that no clear body of knowledge exists concerning the theoretical underpinnings of coaching research and practice, the methodology for this research focuses on studying the existing facts and devising a theory to explain them. Relevant to this type of task is what Haig (2008) identifies as Peirce's pragmatist position, which includes a necessary third mode of inquiry called abduction. That is, instead of taking a traditional approach to the testing of a hypothesis, a research problem can be addressed by the process of abduction, aimed at proposing a better explanatory hypothesis than those already available. Contrary to starting with a hypothesis, or even a statement of a research problem, hypothesis development becomes part of the research process.

Chapter 2 identified a paucity of explicit theoretical perspectives upon which coaching and its research is based. The methodology chosen needs to address this problem by developing a hypothesis that is more likely to be effective as a

theoretical basis for coaching than what currently exists. Having proposed such a hypothesis, research can be conducted based upon the formulation of an appropriate research question to test this hypothesis.

3.3 Peirce's triadic system of inferential logic used as an analysis and synthesis dialectic methodology

Science has long been associated with the notion of objectivity and Danieli, Minelli and Pievani (2013), summarising the writings of Gould, describe scientists as primarily great observers and patient accumulators of information with any new and significant theory arising only from a firm foundation of facts. However, a concern with this notion of objectivity is that theories and hypotheses can bias the mind towards one direction.

It is increasingly acknowledged that people make decisions based on their best, although subjective, hypothesis at the time (Barton & Haslett 2007). Even Darwin must have at some point conducted his observations within a working hypothesis based on a hunch, and scientists have often been distinguished more by intuition and synthesis than by their skill in experimentation or observation (Danieli, Minelli & Pievani 2013).

While induction and deduction are the two modes of inquiry typically used in traditional science (Haig 2008), scientist Charles Sanders Peirce addressed the problem of how to develop a hypothesis by also including what he considered a necessary third mode of inquiry, called abduction (Haig 2008).

Peirce's contributions were largely in the fields of logic, mathematics, philosophy, scientific methodology and semiotics. In the *Dictionary of American Biography* (Malone 1934) he is acknowledged as the most original and versatile of American philosophers and America's greatest logician. According to Rodrigues (2011), Peirce's intention was to differentiate, with "conceptual rigour and logical clarity" (p. 147), the roles played by different modes of scientific inquiry.

Over his lifetime, Peirce made great efforts to distinguish three forms of inference: (a) abduction, based in Firstness, (b) deduction, of Secondness, and

(c) induction of Thirdness. Deduction has dominated western logic for over 2000 years, while induction has been a feature of philosophy and modern science for almost 700 years. Peirce's principal contribution to inferential forms, by now at least 100 years old, was his creation of the third form of inference that he eventually termed abduction, the logic of discovery (Smith 2005, p. 194).

Peirce identified four ways to establish, or fix, belief:

- (i) *tenacity* - holding onto beliefs in the face of doubt
- (ii) *authority* - accepting beliefs from credible leaders
- (iii) *a priori* - incorporating beliefs into an already existing belief structure
- (iv) *experiment* (Smith 2005, p. 195).

Peirce focused on the method of experiment, describing it as involving the collection of a sufficient number of observations, followed by the generation of hypotheses through abduction to explain perplexing data, and finally to the testing of hypotheses through deductive and inductive means (Smith 2005).

3.3.1 Abduction as the process for forming hypotheses

Largely overlooked by Western philosophers, and generally confused with induction until the late 19th century, “abduction consists in studying facts and devising a theory to explain them” (Hartshorne & Weiss 1931, p. 270). While Peirce wrote extensively on abduction, it is a mode of inference that, along with deduction and induction, dates back to Aristotle (Burks 1958; Hartshorne & Weiss 1932, 1935).

Peirce established abduction as a cornerstone of his philosophical framework, and his inferential mode of abduction is summarised in the 1998 collection of his works (Peirce Edition Project 1998) as the beginning of the whole operation of reasoning for which its occasion is a surprise when an existing belief has not been confirmed.

Your mind was filled [with] an imaginary object that was expected. At the moment when it was expected the vividness of the representation is exalted, when suddenly it should come something quite different comes instead (Peirce Edition Project 1998, p. 154).

When the mind then seeks to synthesise the modified facts, a new conception or hypothesis known as the abduction (or Firstness) is created for subsequent testing by deductive (of Secondness) and inductive (of Thirdness) means (Smith 2005, p. 197).

For Peirce, abduction represented a highly creative and perceptual act, not to be confused with induction:

Deduction proves that something must be; Induction shows that something actually is operative; Abduction merely suggests that something may be (Hartshorne & Weiss 1931, p. 171).

Abduction deals with the “private process of theory construction or innovation, the phase not open to inspection by others and indeed perhaps little understood by the originator himself” (Barton & Haslett 2006, p. 2). It is a response to the motivation of “wonder” and the “passion of comprehension” (Holton 1998, p. 31) with its ‘speculative leap’ setting it apart from induction. Consequently, abduction is associated with the process of synthesis, a foundation stone of systemic thought (Barton & Haslett 2006).

Peirce believed in the power of the human mind to originate ideas, but stated that:

... truths are almost drowned in a flood of false notions; and that which experience does is gradually, and by a sort of fractionation, to precipitate and filter off the false ideas, eliminating them and letting the truth pour on its might current (Peirce Edition Project 1998, p. 154).

Surprise and the ensuing abductive process originate and are resolved by experience (Smith 2005), which Peirce considered “our only teacher” (Peirce Edition Project 1998, p. 153).

It is true that the different elements of the hypothesis were in our minds before; but it is the idea of putting together what we had never before dreamed of putting together which flashes the new suggestion before our contemplation (Peirce Edition Project 1998, p. 227).

An abduction is a method of forming a general prediction without any positive assurance that it will succeed either in the special case or usually, its justification being that it is the only possible hope of regulating our future conduct rationally, and that induction from past experience gives us strong encouragement to hope that it will be successful in the future (Hartshorne & Weiss 1932, p. 270).

That is, abduction is an:

inference to the best explanation ... a form of inference that goes from the data describing something to a hypothesis that best accounts for the data. It is a kind of theory-forming or interpretative inference and the basis to diagnose reasoning (Josephsen & Josephsen 1994, p. 5).

Given these explanations and descriptions of abduction, Peirce's syllogistic form for abduction is described as follows:

*The surprising fact, C, is observed;
But if A were true, C would be a matter of course.
Hence, there is reason to suspect that A is true*

(Peirce Edition Project 1998, p. 231).

Note that this conclusion does not refer to truth; it refers to the plausibility of the hypothesis generated through abductive reasoning. It also highlights that instead of the traditional broader generalisability required by positivism, the intention is to seek the less restrictive requirement of anticipation. Therefore, adopting this approach addresses the issue of generalisability by seeking to achieve successive approximation or an approach to solving problems based on the concept of satisficing (Wierzbicki 1982). That is, the research decision-making strategy is aimed at achieving a satisfactory or adequate result, rather than an optimal solution.

Rodrigues (2011) emphasises that Peirce argues that no rigid temporal separation exists between the three modes of inquiry: they all naturally accompany each other. He places them as the only kinds of valid reasoning with all thought being one of these kinds, or a combination of them. However, it is only abduction that has the

power to amplify knowledge, for its meaning is to formulate hypotheses. Therefore, the "role of investigating and searching is properly played by abductive or retroductive reasoning; the role of exposing what is thus found is properly played by inductive practices; and the correct application of the general results achieved is provisionally ascertained by deductive reasoning" (Rodrigues 2011, p. 147).

Science can therefore be seen as adding to its knowledge through the abductive process of reasoning from facts to explanations ensuing both pragmatically and experimentally. That is, Peirce positions abduction as the only type of reasoning with the power to amplify knowledge through the formulation of hypotheses and by placing deduction, induction and abduction as tightly connected stages of inquiry.

Deduction is really a matter of perception and of experimentation, just as induction and hypothetical inference are; only the perception and experimentation are concerned with imaginary objects instead of with real ones (Rodrigues 2011, p. 129).

While conventional sources of power include deductive logical thinking, analysis of probabilities, and statistical methods, the power of mental stimulation relates to how a course of action might be carried out. Therefore, developing an appropriate research strategy for the circumstances of coaching that would appreciate its contextual uniqueness requires an expanded understanding that incorporates abduction, rather than adopting a traditional notion of scientific research. Thus, abduction was chosen as the way to develop various hypotheses, culminating in a 'hypothesis to the best explanation' with the rational thought processes of induction and deduction utilised for monitoring implementation and evaluating outcomes.

3.4 Summary

Chapter 3 justified a strategy appropriate for research that is aligned to the epistemic circumstances of the problems identified in Chapter 2. In providing an understanding of the complexity of human interaction involved in coaching in the current environment, it established the philosophical stance required for addressing the lack of explicit theoretical perspectives upon which current coaching and its research is based.

The methodology chosen to formulate a hypothesis and research question for addressing the disconnect between the assumptions of current coaching approaches and those of the current open systems environment is derived from Peirce's (1998) triadic system of inferential logic using an analysis and synthesis dialectic framework with abduction as the process for forming hypotheses.

Chapter 4: Synthesis: hypothesis generation using abduction

4.1 Introduction

Chapter 2, using the analytical lens of Pepper's (1942) world hypotheses, confirmed Dagley (2006), Spence (2007) and Grant's (2008) assertions that there is a lack of explicit theoretical perspectives upon which coaching and its research is based and also positioned coaching within the context of the current changing environment. Many of the assumptions underlying current coaching practices were identified as aligning with mechanism and its closed system view of the world. Two coaching approaches generally adhering to integrative, synthetic, organicist assumptions were also identified. No approaches to coaching were aligned with the open system assumptions of contextualism.

Chapter 3 outlined a structured way to approach the incompatibility between the open system environment within which coaching occurs and these closed and partially open system assumptions upon which coaching practice and theory are based by adopting an abductive inference framework to propose a hypothesis of best inference. It also addressed the problem, identified in Chapter 2, that there is a lack of theoretical underpinnings to coaching, by proposing one.

The argument presented alternates between an emphasis on the 'whole' and an emphasis on 'parts' achieved by way of a dialectic between the acts of synthesis (wholes) and analysis (parts). It rests upon a triadic research methodology response to the problematic paucity of explicit theoretical underpinnings for coaching by synthesising (using abduction) the parts identified through analysis in earlier chapters (using induction and deduction) to generate an initial explanatory hypothesis and research question. In contrast to traditional research, hypothesis formation, occurring through abductive processes, occurred prior to determination of the research question.

Using synthesis, chapter 4 proposes a hypothesis and research question.

Hypothesis: *By adopting the assumptions of Pepper's meta-theory of contextualism, a contextualist-coaching framework may be more effective than current coaching approaches within the open system external environment.*

Research question: *How can the researcher-practitioner coach within the assumptions of a contextualist world hypothesis?*

A summary of the meta-principles upon which contextualism is based is provided.

4.2 Synthesis using abduction to determine a hypothesis of best inference

The syllogistic form for abduction is:

The surprising fact, C, is observed;

But if A were true, C would be a matter of course.

Hence, there is reason to suspect that A is true (Peirce 1998, p. 231).

The following sections describe the surprising fact C and present an argument for proposing A as the hypothesis of best inference.

4.3 Surprising Fact (C)

Management science:

...must accept the world as it is, not as an idealized abstraction that fails to be meaningful. It must search for improvement, not hold out for the optimum and perfection. It must use the information that is available, all that is pertinent, but, like the manager, it cannot wait for measurement of everything that one might like to know. It must be willing to deal with "intangibles" where these are important. It must speak the language of the practicing manager (Forrester 1961, p. 4).

Traditionally, evaluation studies are conducted by making the assumptions of a closed systems laboratory involving clear, specific, achievable and rational goals that a researcher should be able to measure. Within such a system, the final state is unequivocally determined by the initial conditions and the perception that variables can be controlled. However, when people are involved, as happens in coaching, these closed system assumptions are insufficient because every living organism is essentially an open system (von Bertalanffy 1968). Instead, the environment is best understood as an open system. It follows that organisations within this open system environment need to be capable of rapid and flexible responses (Stephens & Haslett 2011); the final state is reached from different initial conditions and in different ways (von Bertalanffy 1968). In this context, and through processes of induction and deduction, earlier chapters identified the surprising fact (C) that there is an incompatibility between the underlying assumptions of the current coaching approaches and the open system environment within which coaching occurs.

4.4 Hypothesis of best inference (A)

The second part of the syllogistic argument for abduction states that if a particular hypothesis (A) were true, then the surprising fact (C) would be a matter of course. In the context of this research, this means that there would not be an incompatibility between the underlying assumptions of the current coaching approaches and the environment within which it occurs, if A were true.

The following outlines the argument that led to a statement of the hypothesis of best inference (A).

4.4.1 Systems environment

The corporation has evolved from a purposeless mechanism created by its god (the owner) to do its work, to a purposeful, animate system (an organism) with a head and distributed owners but with parts whose purposes are irrelevant to both, to a social system that is obliged to serve the purposes of its parts and its containing systems and their parts. As a social system, the corporation has begun to be viewed as a community, an organisation with no owners but which

exists primarily to serve the needs of its stakeholders, particularly its members (Ackoff 2002, p. 14).

A framework of systems thinking can be used to distinguish between Pepper's world hypotheses (Barton et al. 2004). That is, formism and mechanism can be associated with closed systems thinking, organicism with partially open systems thinking, and contextualism's assumptions that correspond with those of open systems.

The importance of this distinction can be seen in the inconsistencies that arise when a problem is understood within the context of a particular world hypothesis, yet attempts are made to fix it using an action that is generated from the assumptions of a different world hypothesis. For example, politicians have tried fixing the global world financial crisis by regulation, a formist 'fix', as opposed to addressing the problem with a contextualist approach more suited to continuous improvement within a turbulent, rapidly changing complex and complicated system. Devinney and Siegel (2012) propose that resolving such difficulties requires an emphasis on context. That is, by bringing the art of perspective into the equation and presenting accessible and relevant viewpoints.

Such a contextualist approach to coaching was not identified within the literature. Also, it was recognised that, given their epistemic underpinnings, current coaching approaches cannot provide the requisite variety of responses necessary for people to adequately deal with different contexts. That is, current coaching approaches are not capable of dealing with the challenges that emerge within an open system.

It follows that coaching needs to move beyond the current paradigm and allow coaches to operate with assumptions compatible with and appropriate for a complex environment. Pepper's (1942) contextualist world hypothesis is underpinned by such assumptions. Hence, there is reason to suspect that a hypothesis (A), which links the various ideas of Pepper's open system meta-theory of contextualism to coaching within the current open system external environment, could be true.

Hypothesis (A): *By adopting the assumptions of Pepper's meta-theory of contextualism, a contextualist-coaching framework may be more effective than current coaching approaches within the open system external environment.*

For this hypothesis to be approximately true and plausible, then:

1. a contextualist approach to coaching needs to be explicit about its epistemological perspectives;
2. the associated systems of assumptions and knowledge claims of such a contextualist approach needs to be aligned with an open system understanding of the external environment; and
3. research to develop such a contextualist-coaching framework needs to be conducted using a methodology with compatible assumptions.

Note that this logical conclusion does not refer to truth; it refers to the plausibility of the hypothesis that has been generated through abductive reasoning. Instead of the traditional broader generalisability required by positivism, the intention is to seek the less restrictive requirement of anticipation. Therefore, this research addresses the issue of generalisability by seeking to achieve successive approximation as an approach to solving problems (facing challenges). It aims to provide a recoverable framework upon which to coach, based upon contextualist assumptions.

Thinking in these ways could greatly assist attempts to move toward better managed, more humane organisations, more open and democratic societies, and more sustainable practice in economic and social development and in the use of natural resources (Barton et al. 2004, p. 33).

Barton et al. (2004) stress that the distinction between the organic and machine metaphors of human collective behaviour provides one of the most common differentiators of the paradigms held in the social sciences. However, the maturation of systems thinking, from Pepper's mechanistic to organic metaphors still requires a further movement to contextualist metaphors, in order to provide a richer framework than the current organicist approaches.

An argument has been made for Pepper's meta-theory of contextualism to present an orienting worldview from which to develop a contextualist-coaching framework that is most likely to increase coaching effectiveness. This generates the following research question:

Research question: *How can the researcher-practitioner coach within the assumptions of a contextualist world hypothesis?*

This research addresses this question within the complex external environment in which (beyond certain thresholds) social tensions and instability tend to provide unexpected outcomes that do not lend themselves to systematic replication and experimentation. It focuses on developing a recoverable contextualist-coaching framework.

4.5 Contextualism

To practice as a coach according to the assumptions of Pepper's contextualist world hypothesis requires an understanding of its core principles. Given contextualism's metaphor of the historical event, an appreciation of what Pepper (1942) meant by history through the lens of contextualism is essential.

Contextualism works from the present event outward. It is very definite about the present event and the premonitions it gives of neighboring events, but less and less definite about the wider structure of the world. It is willing to make more or less speculative wagers about the wider structures of the world. But if anyone pushes a contextualist hard, he retires into his given event and the direct verification he makes from it (Pepper 1942, pp. 278).

Contextualists describe everything that occurs in the world as complex historical acts. However, the contextualist "does not mean primarily a past event, one that is, so to speak, dead and has to be exhumed" (Pepper 1942, p. 232). They work from the present event outwards and seek to describe an act in and with its setting, in its context in its "doing, and enduring, and enjoying" (Pepper 1942, p. 232). That is, historical events are described by breaking down their interconnected activities and continuously changing patterns into constituent categories. The ineradicable

categories within contextualism are thus change and novelty, which are in turn exhibited as details within other categories (Pepper 1942).

The relations involved in a historic event are inexhaustible, and a set of contextualistic categories does not so much determine the nature of our world as lead one to appreciate fair samples of the world's events (Pepper 1942, pp. 237).

In contextualism, change is clear-cut and differ in how it is understood within the assumptions of other world hypotheses. Change is neither viewed purely through reductive processes as in mechanism and formism. Nor is it an evolutionary process, as in organicism. In contextualism, change is viewed as “categorical” (Pepper 1942, p. 234).

In describing historical events, contextualism takes a radical position that order is a categorical feature of disorder. That is, when proponents of other world hypotheses might recognise similarities as indicative of order, a contextualist would see any similarities as existing within disorder. This is because any seeming similarities will have come about through different historical acts. In this way, different categories for each discrete historical event represent disorder despite similarities.

...categories must be so framed as not to exclude from the world any degree of order it may be found to have, nor to deny that this order may have come out of disorder and may return into disorder again—order being defined in any way you please, so long as it does not deny the possibility of disorder or another order in nature also (Pepper 1942, p. 234).

Despite the inherent novelty of each and every historical event, contextualism as a worldview is constantly threatened by evidence of permanent structures in nature that other world views construe as ordered. That is, contextualism is “constantly on the verge of falling back upon underlying mechanistic structures, or of resolving into the overarching implicit integrations of organicism” (Pepper 1942, p. 235).

There are many ways of framing a set of working categories for contextualism with no definite number of concepts that must be named when describing historical events.

However, Pepper (1942) described a four-step process for developing categories of events. First, change and novelty need to be accepted as fundamental (Pepper 1942).

Second, a big picture view needs to be taken. The big picture extends to viewing and interpreting the world consciously within the events of the epoch in which the observer is living even though events may exhibit a structure that may be regarded as relatively uniform in an observer's lifetime.

Third, events in a period of time are developed through expression of quality and texture each of which Pepper (1942) elaborates through subheadings. While quality considers (1) the spread of an event, or its so-called specious present, (2) its change, and (3) its degrees of fusion, texture considers (1) the strands of a texture, (2) its context, and (3) its references which can be either linear, convergent, blocked or instrumental.

Fourth, contextualism relates to science and hypothesis formation through its production of continuous and individual objects and their control (Pepper 1942).

4.5.1 Subcategories of quality

Quality considers the spread of an event, or its so-called specious present, its change, and its degrees of fusion.

4.5.1.1 Spread

For a contextualist, the spread or range of an event is part of the basic structure of all fact. "What is present in an event is whatever contributes directly to its quality" (Pepper 1942, p. 240). Viewed through the assumptions of other world hypotheses this interpretation is paradoxical when a linear scheme of "time" is imposed upon any intuited event. However, for the contextualist, "the dimensional "time" of mechanism is a "conceptual scheme useful for the control and ordering of events, but not categorical or, in that sense, real" (Pepper 1942, p. 240).

The contextualist distinguishes between categorical qualitative time, or 'duration', and derivative schematic time. While schematic time is seen as having utility, it is inadequate for revealing the nature of an actual event. In actual events, the present is

the whole texture that directly contributes to the quality of the event. The present therefore spreads over the whole texture of the quality, and any given event can only be determined by intuiting the quality of that event.

Beyond the intuited present quality, we have evidence for events that are past and for events to come. The great function of schematic time is to order these nonactual events. But actual time is the forward-and-back spread of the quality of an event. It is the tensional spread of that quality (Pepper 1942, p. 242).

4.5.1.2 Change

Contextualism views quality as continuously changing and never stopping. Therefore, since change is a categorical feature of all events; and, all the world can be construed as events, all the world is continuously changing. Through the lens of contextualism, absolute permanence or immutability in any sense is a fiction, and its appearance is interpreted in terms of historical continuities which are not changeless (Pepper 1942).

4.5.1.3 Fusion

In contrast to the other world hypotheses, contextualism takes fusion seriously. Often mistakenly interpreted as “vagueness, confusion, failure to discriminate, or muddledness” (Pepper 1942, p. 245), contextualism interprets all simplicities as instances of fusion. For a single historical event not to break apart and become multiple unconnected events, there must be some fusion in the quality of the event. These fusions are therefore as extensive as the events of universal time.

Quality always exhibits some degree of fusion of the details of its texture (Pepper 1942, p. 243).

In other words, fusion is the contextualist’s way of qualitatively simplifying and organising and is the “ultimate cosmic determinant of a unit” (Pepper 1942, pp. 244). The tighter the fusion, the greater the unification. Consequently, the unity of an event is actually defined and determined by that quality. As an event quality extends, so does the event extend, and the actual present.

4.5.2 Subcategories of texture

While the analysis and practical control of events goes on in terms of the categories of texture including its strands, context, and references, they are inexplicable except on the assumption of the categories of quality. The converse is equally true.

4.5.2.1 Strands and contexts of texture

Contextualism views the actual structure of an event as ultimately determined by its qualitative structure. Within this view, texture and its first two categories, namely strand and context, are interlocked. It is the connections of the strands that determine the context, and vice versa. Strands provide detail in a texture, but they also extend into a context while bringing some of the quality of the context into the texture.

But by way of definition we may say that whatever directly contributes to the quality of a texture may be regarded as a strand, whereas whatever indirectly contributes to it will be regarded as a context (Pepper 1942, p. 246).

This distinctive method of supporting elemental analysis and analytical theories generally contrasts to the other worldviews. For a contextualist, such processes are intrinsically distortive.

The implications here are revolutionary from the standpoint of the analytical theories, formism and mechanism. In these theories it is assumed that any object or event can be analyzed completely and finally into its constituents. There is disagreement respecting what the constituents are, but none respecting the aim or the theoretical possibility of achieving that aim (Pepper 1942, pp. 248–249).

Conversely, in contextualism, no final or complete analysis of anything is possible.

The reason for this is that what is analyzed is categorically an event, and the analysis of an event consists in the exhibition of its texture, and the exhibition of its texture is the discrimination of its strands, and the full discrimination of its strands is the exhibition of other textures in the context of the one being analyzed—textures from which the strands of the texture being analyzed gain

part of their quality. In the extended analysis of any event we presently find ourselves in the context of that event, and so on from event to event as long as we wish to go, which would be forever or until we got tired. The quality of an event is the fused quality of its strands, and the qualities of its strands come partly out of its context, and there we are outside the event. All contextualistic analysis has this sheering effect. As we work down into the constituents of a texture, we presently find ourselves in textures quite different from the one from which we started, and somewhere in its context (Pepper 1942, pp. 249).

Contextualism holds that there are many equally revealing ways of analysing an event, depending simply on what strands you follow from the event into its context. Each stage of analysis (that is, in each new texture into which you have been led) requires choice of what strand to follow. Such choices come up again and again, with every strand more or less relevant. With choice at each stage of analysis, the contextualist is always either directly or indirectly practical (hence the term “pragmatism”).

If from one texture you wish to get to another, then analysis has an end, and a direction, and some strands have relevancy to this end and others not, and the selections of strands to follow are determined from stage to stage, and the enterprise becomes important in reference to the end. But there is no importance in analysis just for analysis (Pepper 1942, pp. 250–252).

Formists, mechanists and organicists conduct analysis to get to either the bottom or to the top of things. Contextualism justifies no such faith in the ability to arrive at the whole truth or an arrival at the ultimate nature of things. It does not support a search for a distant truth, since every present event is viewed as giving it as fully as it can be given. A contextualist seeks to recognise how a thing/event exists in the ‘here and now’ and whatever happens to be going on. The contextualist requires some sort of philosophical purpose for classifying things by attempting to name different sorts of references among strands. Consequently, a contextualist does not expect their analysis of experience to be true of all experience.

4.5.2.2 References of strands

The third category of texture is references, which consist simply of the strands more intimately considered. They are distinguished as linear, convergent or instrumental. References are further subcategorised according to whether they are blocked or not blocked.

(i) Linear references

Pepper (1942) refers to the simplest and most basic references as linear and describes them as having a point of initiation, a transitive direction, and achieving an ending or satisfaction. They have an intrinsically “forward-and-back, future-and-past, initiation-and-satisfaction activity” (Pepper 1942, p. 253).

(ii) Convergence reference

Convergence references represent the contextualists’ description of the common experience of similarity. While having the essential characteristics of linear convergences, they are complex in that there are either several initiations converging upon one satisfaction or several satisfactions derived from one initiation. In the absence of convergent references, similarities are not seen to exist.

No two things in the world are, in other words, inherently similar, but only become so when they initiate convergent references. Such references may, indeed, be predicted, but the objects are literally similar only when the strands converge. Before the convergence, they can only be said to be potentially similar (Pepper 1942, pp. 254–255).

An implication of this understanding is that physical properties of objects, such as weight, length and temperature changes, which can all be described as convergent references, do not represent permanent inherent properties of natural objects.

Physical properties are simply predictable convergences of references in physical textures (Pepper 1942, p. 255).

Subcategory of blocking

When references are not blocked and strands are smooth running, contextualists construe order. In contrast, the metaphorical textual subcategory of blocking occurs when linear and convergent references are initiated but fail to achieve satisfaction. This occurs when conflicting action from one strand cuts across another causing a blockage to the strand being able to reach satisfaction. It causes disorder and brings a degree of intrusive or emergent novelty to the strand.

Intrusive novelty arises when the past history of an intrusive strand can be accounted for relative to the strand intruded upon. “After the conflict or blockage has occurred, it is theoretically possible to account for it in terms of the past history of each strand and show how their references led to a conflict” (Pepper 1942, p. 256).

While all textural novelties can be seen as intrusive novelties and “are, accordingly, explicable as strands entering a texture from some distant context”, such explanation in contextualism is “never to be assumed, but only to be discovered”. It is always possible that a strand should be initiated or blocked absolutely and without explanation. Such occurrences are called “emergent novelties” (Pepper 1942, p. 256).

As to the qualitative side of an event, nothing is more empirically obvious to a contextualist than the emergence of a new quality in every event. He notes the fact immediately, for one thing (Pepper 1942, p. 256).

(iii) Instrumental references

When a desired end has been blocked and it is necessary to take another linear action between the beginning of the initial action and its end of satisfaction to remove, neutralise or circumvent this blocking, the action is called an instrumental action. The references involved in this secondary action are called instrumental references.

The result is often a texture of very extended and complicated integration. What holds it together is a linear reference that persists from lack of satisfaction. This is the positive dynamic factor in the integration. The negative factor is the blocking in the form of an intrusive novelty. Such a

blocking sometimes effectively brings the linear reference to an end without satisfaction. But at other times it initiates one or more subsidiary references or instruments, which in their turn either effectively block off the intrusive reference or switch the action around it or actually integrate it into a more complicated texture that carries through the original linear reference to its satisfaction (Pepper 1942, pp. 261).

As a linear reference in its own right with its own initiation and satisfaction, an instrumental reference is highly connected through being dependent upon the satisfaction of the original reference which it serves. It is thus a texture in its own right, but guided on the one side by the supervening terminal action which it serves and on the other by the blocking action which it neutralizes. The connections of instrumental references are so close that, when an instrumental action is thoroughly integrated with its end and its obstacle, all three work together as one total texture.

The obstacle no longer appears as an obstacle, nor the instrument as an interpolated action, but all as simply articulations of a total complex action (Pepper 1942, pp. 262).

Thus instrumental references tend gradually to turn into articulated linear references.

In coming upon individual textures we are thus stepping out of the immediacy of present given events into the evidence for a widely extended universe in which myriads of given events are interlocked and march forward arm and arm into the future with great strides (Pepper 1942, p. 264).

4.5.2.3 Individual textures

Individual textures are not a category, but are derivative, as we have seen, from the categories of contextualism through the subcategory of instrumental references (Pepper 1942, pp. 264–265).

Pepper (1942) argues that contextualism's strength lies in that all its categories are derived from the immediacy of any given present event. The public world is directly derived from the derivations of these categories and therefore does not need to be inferred or assumed in the manner of mechanism. Instead, contextualism assumes that

quality outside of perception cannot naturally be known since what we intuit relies on perception.

Where textures cannot be intuited, relational knowledge comes about through satisfaction of predictions. Instruments of prediction include maps, diagrams, formulas, functional equations, and symbolic systems that have been developed on the basis of past social experience.

Predictions within a certain period constitute the science of that period. Consequently, they change over time. However, while physical nature may well change in different epochs, “there is no reason in contextualism to identify the structure of nature at a period with “the science” of that period, any more than we must identify the evolution of tree forms with the evolution of saws and axes” (Pepper 1942, p. 267).

4.5.2.4 Operational theory of truth of contextualism

Truth, viewed contextually, relates to the seeking of a solution to a problem through analysis conducted by following out the strands of any blocking conditions in the context of a blocked strand. When a problem is complex, analysis leads into various relational schemes. The relations, or strands, of these schemes are studied in their relation to the blocked strand. This is followed by the construction of a hypothesis that is an instrumental texture with definite references for action. Verification of the hypothesis involves following these references. When the problem (the original strand) is not satisfied, the hypothesis is said to be blocked and the operation is said to be false. The whole process of analysis, construction of hypothesis, and verification has to then start all over again. Truth is reached when the following of a hypothesis leads to the satisfaction of the blocked strand and to the solution of the problem. In other words, truth is the result of an instrumental texture that removes a blocking and integrates a terminal texture (Pepper 1942).

To address the ambiguity of this operational theory of truth for contextualism there exist three distinct specifications of the theory that both elaborate it and indicate steps in the development of pragmatism.

(i) Successful working

The narrowest specification of truth in contextualist theory relates to its utility or successful functioning.

Taken literally, this theory [contextualism] asserts that the hypothesis is neither true nor false when it is framed, since as yet it is not either successful or unsuccessful. For how can you know how it works before it is carried into operation? But after it is carried into operation and success has been attained, the hypothesis cannot be called true, because it is past and gone. So, a hypothesis can never be successful when it is framed, nor can success ever be hypothetical when it comes (Pepper 1942, p. 272).

By excluding hypotheses from truth it also excludes the important function of references without which the operations could not ensue from the hypotheses. This is addressed by the next specification of truth that incorporates hypotheses and references into operational theory. It is called ‘verified hypothesis’ theory.

(ii) Verified hypothesis

The verified hypothesis view of truth is more complex than the ‘successful working’ view. It provides a final factor for constituting truth and is established when a hypothesis leads to a successful act. It is not the successful act that is true, but the hypothesis that leads to the successful act. Without a hypothesis, neither truth nor falsity exists. There is just successful or unsuccessful activity. Its truth is not the quality of an act as successful or unsuccessful, but a relation between a hypothesis and its eventuality.

To verify truth involves three pronouncements. First, a hypothesis needs to be expressed as a verbal statement. Second, the symbolic references (operations) need to be followed out until third, a satisfaction or blocking of these references (the verification proper) is observed.

Operational differences in attribution of truth emerge. For example, trial-and-error behavior, would produce true and false judgments according to the ‘successful working’ theory, but not according to the ‘verified hypothesis’ theory (Pepper 1942).

This interpretation is more closely in conformity with the common-sense meaning of the term and with what other world theories mean by it, and carries one much further into the structure and spirit of contextualism. Most of the paradoxes of the pragmatic or operational theory of truth vanish on this interpretation (Pepper 1942, p. 274).

(iii) Qualitative confirmation

Qualitative confirmation theory relates to the act of hypothesis formulation found in science and philosophy. Where hypotheses are directly verifiable, insight into the texture and the qualities of the events referred to can be gained. Where hypotheses are not directly verifiable, something about the texture or relational structure of the events referred to is implied, but the qualities of the events are not directly verifiable.

4.6 Summary

This chapter utilises an analysis and synthesis dialectic to formulate an initial explanatory hypothesis and a research question to guide the testing of this hypothesis.

Hypothesis: *By adopting the assumptions of Pepper's meta-theory of contextualism, a contextualist-coaching framework may be more effective than current coaching approaches within the open system external environment.*

Research question: *How can the researcher-practitioner coach within the assumptions of a contextualist world hypothesis?*

Drawing on Pepper (1942) a summary of the assumptions of Pepper's meta-theory of contextualism is provided.

Chapter 5: Methodology to address the research

5.1 Introduction

Considering the open systems nature of organisations and the environment, it was hypothesised in Chapter 4 that coaching practice aligned with the assumptions of Pepper's meta-theory of contextualism may be more effective than the closed or partially open system assumptions underlying current coaching practice and its research. Subsequently, this research is concerned with developing a contextualist-coaching framework.

Chapter 5 justifies the use of action research as an appropriate methodology for addressing the question of how a researcher-practitioner can coach within the assumptions of a contextualist world hypothesis. Fundamentally, this is because action research embodies the pragmatism of Pepper's (1942) contextualism and Peirce's triadic modes of inquiry.

In this research, action research involves the researcher engaging with participants using three distinct strategies; the Business Action Research Cohort (BARC), the Hub and Spoke (H&S) and the Coach Training Cohort (CTC). The distinctions between the reflective processes undertaken in each are described. Checkland and Holwell's (1998) FMA framework is utilised to report on results by providing links between theory, research and practice.

5.2 A philosophical basis for action research

It was identified that the predominant sets of assumptions made within coaching (formism and mechanism) were most suited for addressing problems where standardised solutions and relevant structures and relationships are likely to remain stable (Bailey, Ford & Raelin 2009). However, the current environment is not stable and organisations are increasingly viewed as open systems. Consequently, the dominant paradigm of professional knowledge and training with its positivist assumptions of technical rationality (Schön 1983) does not allow coaching practice

to deal effectively with the volatile, uncertain, complex and ambiguous nature of the current internal and external environments where perceptions of a common reality cannot be accepted as a given (Raelin 2005). Instead, interpretivist methods (associated with open systems thinking) are better suited for eliciting and managing change (Bailey, Ford & Raelin 2009).

Whichever methodology was ultimately chosen for responding to the research question, it needed to be a 'natural fit' with the assumptions of contextualism. That is, it had to generate more than the technical knowledge produced within what Guba (1990) calls the positivist bounds of the 'disinterested/disengaged' researcher. A synergism of research, theory and practice was therefore necessary for a critical, systemic description and explanation of a contextualist theory of coaching to emerge. An effective method was needed for providing a path to deliberative excellence, practical wisdom, or practical reason, as contextualist assumptions are put into coaching practice.

The world of business is messy and complex, making a traditional hands-off social science methodology, in which there is an acceptance of the divisions between researchers and the research or between the 'knowers' and the 'known', unlikely to be suitable (Eikeland 2007; Rynes 2007a). Instead, a hands-on methodology is appropriate, with its focus on understanding the world by way of subjectively interpreted particular moments and the understanding of acts in the moment.

Such a methodology, or group of approaches, which is gaining eminence in times of crisis and enormous change, is action research (Greenwood & Levin 2007). Common among its various approaches is the premise that reality is interconnected, dynamic and multivariate and more complex than the theories and methods that are currently available.

For research into social phenomena there is increasing interest in "action research" in various forms. In this process the researcher enters a real world situation and aims both to improve it and to acquire knowledge (Checkland & Holwell 1998, p. 9).

Despite the numerous variations of action research, there is an overarching reason why the assumptions underlying action research are consistent with those of contextualism: action research and contextualism share the assumption that the aspiration of achieving a purely rational understanding of the world is illusory. Human understanding is never simply a given but is prejudiced by an interpretive element that determines how perceptions and observations are understood. Because it is different from most other social research approaches and disciplines, action research has activity or experimentation as part of its methodological repertoire. And, unlike sociology, anthropology, political science and economics, action research does not involve distance between the researcher and the objects of study. Instead, it allows researchers and practitioners to experiment together.

Action research is an ambiguous concept, involving a variety of practices without much unity or continuity (Eikeland 2007); there is as much variation across action research traditions as there is between action research and some traditional approaches (Herr & Anderson 2005).

Somekh (1995) describes it as being underpinned by:

... a set of democratic values, which endow the action researcher with the right to take control of the research process and to make decisions about the full range of methodological issues on the basis of careful judgement and contextual knowledge; and that, since life's contexts are richly varied, this autonomy of the researchers precludes the development of schools of action research in the sense of adherents to a single, clearly defined methodology (p. 340).

The existence of the many variations of action research does not cause a problem for contextualism, for in contextualism, diversity is assumed. Variables arise from the data based on interactive dialectic logic rather than a dichotomy of 'subjective' or 'objective' truth. This contrasts with the formist perspective that seeks universally applicable solutions resting upon the assumption of some universal form of classification.

Carr (2006) relates action research to the pre-modern tradition of practical philosophy emerging from Aristotle's analysis of phronesis and praxis by describing it, like praxis, as an inexact science not able to yield knowledge that can be applied universally and unconditionally. However, such conditions do not prevent action research practitioners from progressively improving their practical knowledge and develop their understanding of how to identify and eliminate the inadequacies and limitations of the practical knowledge sustaining their practice (Carr 2006).

A legitimate rigorous action research methodology requires an explicit methodological framework. Yet, according to Checkland (1992), most action research ignores this requirement. Different approaches are not equally applicable or defensible in either the same degree or the same ways (Eikeland 2007). Hence, the technique chosen for this research needs specific clarity and its justification must be aligned with its purpose. A historical summary of action research provides a background to distinguish between approaches.

5.2.1 Action research: a brief history

The origins of action research have been connected to Lewin's (1890–1947) observation of the limitations of studying complex real social events in a laboratory and the artificiality of separating single behavioural elements from an integrated system. It has been part of the pivotal Anglo-American philosophical debate of the 20th century, positioned within a different research paradigm and philosophical understanding than traditional approaches (Chalmers 1990).

Despite much that has been written about the many different forms of action research drawn from a variety of theoretical frameworks, including in three editions of the Handbook of Action Research (Reason & Bradbury 2008), no clear definition has been settled upon (Checkland & Holwell 1998; Reason & Bradbury 2008) and in general there is no articulation of a shared set of values (Brydon-Miller, Greenwood & Eikeland 2006). Possible reasons for this depend upon one's underlying philosophical position. The assumptions of formism and mechanism insist that it is possible to define coaching while contextualism does not limit itself to a single definition.

Eikeland (2007) assists in understanding its roots by identifying it as having emerged in two waves. Inspired by Dewey (1933), the first wave began in the 1940s when Lewin (1946) and Collier (1945) initiated action research as an "attempt at expanding and relocating experimentation and a "scientific attitude" from laboratories to field settings like local communities, work places and schools" (Eikeland 2007, p. 345). This type of action research (see Chein, Cook & Harding, 1948a, 1948b; Collier 1945; Corey 1953; Lewin 1946; Lippitt 1949; Marrow 1964; Shumsky 1958; Whyte & Hamilton 1964) lasted until the middle of the 1960s when, among social science disciplines, it gained its greatest acceptance in applied fields (Herr & Anderson 2005) by initiating branches of inquiry such as community work, group dynamics, encounter groups and organisational development. The interconnecting of Systems Thinking and Organisational Behaviour with action research at this time "gave substance to a paradigm shift about how research might be conducted in and about organisations" (Stephens, Barton & Haslett 2009).

... by drawing upon the full variety of systems ideas, we should be able to produce a more rounded understanding of people, organisations, societies and the world we live in, than could emerge from any of the traditional deterministic scientific disciplines (Midgley 2003, p. xvii).

During this time, and despite psychology's marginalisation of most non-positivist approaches, the relationality that action research built among researchers and participants was seen by some as an advantage rather than as a threat (Herr & Anderson 2005). However, this first wave of action research was subsequently absorbed (Eikeland 2007) by the USA-led program evaluation industry of the mid-1960s (Campbell 1978; Sanford 1970). Despite its position as a powerful form of learning, action research subsequently struggled for legitimacy until the late 1980s (McNiff 2013).

Emerging during the 1970s, the second wave of action research grew in independent and uncoordinated ways, segregated from, and indifferent to, established science (Eikeland 2007). Retaining an activity orientation, it focused more on reflection rather than experimenting. No longer seen as "promoting and diffusing an established and unified scientific attitude", action research "grew as part of the anti-authoritarian "new left", highly critical of the scientific

establishment in general and of “positivism” trying to unify science, and as part of liberation movements in the third world more concerned with letting people develop knowledge together, from below, in and on their own terms than with scientific requirements” (Eikeland 2007, p. 346).

This second wave of action research was quite unlike any other research approach of the time with its self-reflective problem-solving characteristic enabling practitioners to better understand and solve pressing problems in social settings (McKernan 1988). Definitions were focused on action research as a “systematic inquiry that is collective, collaborative, self-reflective, critical and undertaken by the participants of the inquiry. The goals of such research are the understanding of practice and the articulation of a rationale or philosophy of practice in order to improve practice” (McCutcheon & Jung 1990, p. 148).

Whereas most research still attempted to record and analyse phenomena of interest without affecting the phenomena, action research took as its *raison d’être* that it was an active element of the phenomena being researched (Somekh 2006). It enabled first-hand interactions between researchers and participants and generated powerful ideas or modifications of existing ones (Maital, Prakhya & Seshadri 2008). It involved intervention whereby the process of change could be researched while also acting as an agent for the very change being researched (Somekh 2006).

A variety of practices existed. These included those grouped into participatory action research (Marshall & Rossman 1989; Whyte 1991; Zuber-Skerritt 1992), action science (Argyris, Putnam & Smith 1985; Argyris & Schön 1974, 1978; Senge 1992) and soft systems methodology (Checkland & Scholes 1990; Davies & Ledington 1991; Patching 1990). Common among these approaches was that they involved undertaking deliberately and systematically reflective processes, as opposed to isolated, spontaneous reflection (Dick 1993). They were differentiated by being either group- or individual-oriented, participatory to varying degrees, and done by insiders, or by outsider change agents in collaboration with insiders.

Action researchers sought both the explicit, codified knowledge that is transmittable in formal, systemic language (expressed in symbols, words, and numbers) and the tacit or personal, context-specific knowledge that is difficult to

formalise and communicate, such as mental models, schema, and technical knowledge (Nonaka 1994). They cycled through both. Theory was situated in and developed by recognising patterns of relationships among constructs and their underlying logical arguments; the test of any theory thus generated was how well it worked in practice. The importance of this pragmatic slant is that it relates to contextualism's truth criterion of effectiveness (Eisenhardt & Graebner 2007).

During this time, action research was viewed as emancipatory as it led not just to new practical knowledge, but new abilities to create knowledge (Reason & Bradbury 2008). It involved the creation of new knowledge through continual and rapid cycling from one form of knowledge conversion to another (Nonaka & Takeuchi 1995). It consisted of collaborative, critical and self-critical inquiry by members of participant groups who felt responsible and accountable for 'owning' their research problem, and assumed that existing assumptions, values and mental models would evolve, through an action process, to become new knowledge, assumptions and guiding values. These assumptions would in turn be re-examined, renewed and revised, thereby evolving into new theories of practice. Such problem solving involved cycles of hypothesis forming, implementation of action plans and observation. Evaluation and self-evaluation, achieved through critical and self-critical reflection on the results, thus providing the foundation for the next cycle of action research.

As part of the flourish of activity during this second wave of action research, various handbooks and anthologies were published. Contributions were made by O'Hanlon (1996), Toulmin and Gustavson (1996), Hollingsworth (1997), McTaggart (1997), Reason and Bradbury (2008), Winter and Munn-Giddings (2001) and Day et al. (2002). Reason and Bradbury's 2008 description still resonates with the views held within this second wave of action research being that action research is "a family of practices of living inquiry that aims, in a great variety of ways, to link practice and ideas in the service of human flourishing" (p. 1). Consequently, action research is currently positioned as "not so much a methodology as an orientation to inquiry that seeks to create participative communities of inquiry in which qualities of engagement, curiosity and question

posing are brought to bear on significant practical issues” (Reason & Bradbury 2008, p. 1).

Flood (2010) describes action research as a collaborative process between researchers and others engaged in a deliberate process of critical inquiry with a focus on social practice and reflective learning. Describing it in this way requires the declaration ‘in advance’ of an intellectual framework of ideas for defining and expressing what is seen as constituting knowledge. Viewed as interdisciplinary and heuristic it is also seen as drawing on and evaluating the perspectives of multiple stakeholders. Other common descriptors include action research involving learning-by-doing within a systematic framework, involving cyclical and iterative processes of acting, observing, analysing and evaluating in the field. It involves the tracking of the ways in which bodies of theory, policy and practice interact with and influence each other so that learning can take place through constant reflection on the role of the scholar-practitioner-researcher in the design process.

More recently, and while still a label covering many different approaches to relating knowledge and action (Eikeland 2007), action research has recently experienced a “remarkable growth” (Noffke 2009, p. 10) in acceptability as a methodology for knowledge creation and generation. It is now included in work-based professional development and higher education accredited degree courses. It has spread across professions and sectors with increasing levels of publication in textbooks and scholarly journals. However, despite this acceptance, the field is still not without difficulties concerning whether, and for how long, it will last (Kuhn 1996). In response, McNiff (2013) calls for continuous critical evaluation within the action research community.

Describing action research generally as “research, somehow concerned with practice and with some kind of social and personal change”, Eikeland (2007, p. 40) provides some of the clarity called for by McNiff (2013) by distinguishing between two practical approaches to current action research based upon divisions of labour. First, Eikeland (2007) describes action research as “primarily a collaborative effort between professional researchers based in research and educational institutions, and practitioners in real life” (p. 346). Although there is cooperation under these circumstances, there are nevertheless divisions of labour between professional

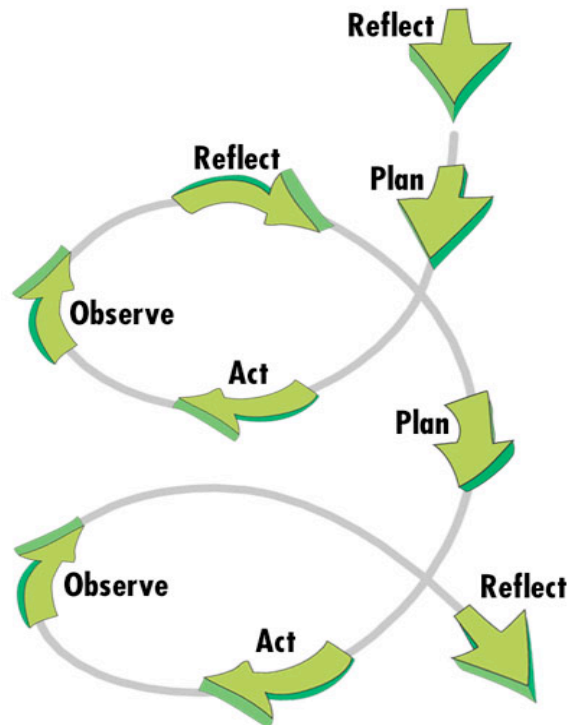
researchers and the natives or practitioners. Second, Eikeland (2007) contrasts this with how “the native practitioners have taken over the research tasks themselves, sometimes merely doing applied social research by themselves, but at other times doing research as radical reflection on their own practice” (p. 346).

Both types of approaches to understanding action research can be seen in various publications. For example, Zuber-Skerritt (2012) offers a collection of stories and reflections on the specific works of the key proponents and participants in the action research/action learning world communities. McNiff (2013) provides a commentary on the contribution action researchers are making to the global epistemological shifts currently taking place in relation to what counts as knowledge, how it is produced, where, and by whom.

Despite differences in ideology, contexts and approaches, practical examples show how action research has retained a focus over time on the relationship and interaction between action and knowledge. While the nature of the ‘turn’ to practice (reflected by Eikeland’s (2007) distinctions concerning the divisions of labour within individual studies) has been diverse, action researchers have continued showing an overriding interest in knowledge being closely connected to practice; variants of action research cycles appear to be common to most approaches.

Kolb (1984) indicates that, although many ways to describe action research or learning cycles have emerged, they are generally seen as consisting of four elements; plan, act, observe, reflect (Kemmis & McTaggart 1988) (see Figure 5: Action research cycles). These elements share the purpose of allowing for the development of an understanding of a problem situation that can inform action either within a research setting and/or within the researchers themselves (Dick 1993). Schön (1983, 1987) argues strongly that the most effective way for practitioners to learn is through such cycles of systematic reflection, involving the researcher planning, acting, reflecting on their findings and their method and reflecting at the end of each cycle, which feeds into the planning stage for the next cycle.

Figure 5: Action research cycles



(Center for Enhanced Learning and Teaching 2014)

A typical action research cycle involves deciding upon a question to be answered, deciding whom to ask, how to ask, asking, checking the subsequently collected information and then devising ways of testing emergent hypotheses in subsequent cycles (Dick, 1993). It involves reflecting upon the adequacy of the choice of participants, the ways of collecting information, and the checking of data and interpretations against relevant literature, before returning to the first step of the next cycle with an improved methodology, questions, and sample of participants, based upon learning from the previous cycle.

Within each cycle, Dick (1993) describes action research as taking its questions, puzzles, and problems from the perceptions of practitioners within particular, local practice and contexts. This confining of episodes of research according to the boundaries of the local context allows for the building of theory from within the practice context itself. Subsequent action research cycles can then allow for the

testing and refinement of continually emergent theory through experiments that both test the hypothesis of each cycle and affect some desired change in the situation. Therefore, the dual impact of action research is that it is concerned with both action—through the improvement of practice—and research, by creating valid knowledge about that practice.

A single cycle of action research, with its focus on the collection and analysis of data, and interpretation and reporting, can be thought of as resembling a complete conventional research experiment. However, there are multiple cycles in any action research study. Therefore, there are multiple interpretations to be recorded as the research continues. Iterations of interpretations and any data relevant to the confirmation or invalidation of these interpretations thus converge as more detailed information is collected in subsequent cycles. These emerging interpretations subsequently supersede those of the earlier data. In addition, some action research involves engaging in cycles within cycles. For example, when using interviews for data collection, each interview can be viewed as a cycle. The sequence of interviews forms another cycle, as do the other forms of data collection that can be used. In turn, they are part of the still larger cycle of the overall research.

5.3 Action research as an analysis and synthesis dialectic

As a professional development activity, coaching currently falls into what Markides (2011) describes as concern with helping people know the best available conceptual models with which to map an external reality. This type of thinking is consistent with the prevalent epistemological perspective whereby actionable knowledge involves theory and practice being treated as separate (Raelin 2007). The resulting gap between knowledge of conceptual models and putting them into operational management practice has persisted within this paradigm (Pfeffer & Sutton 2000).

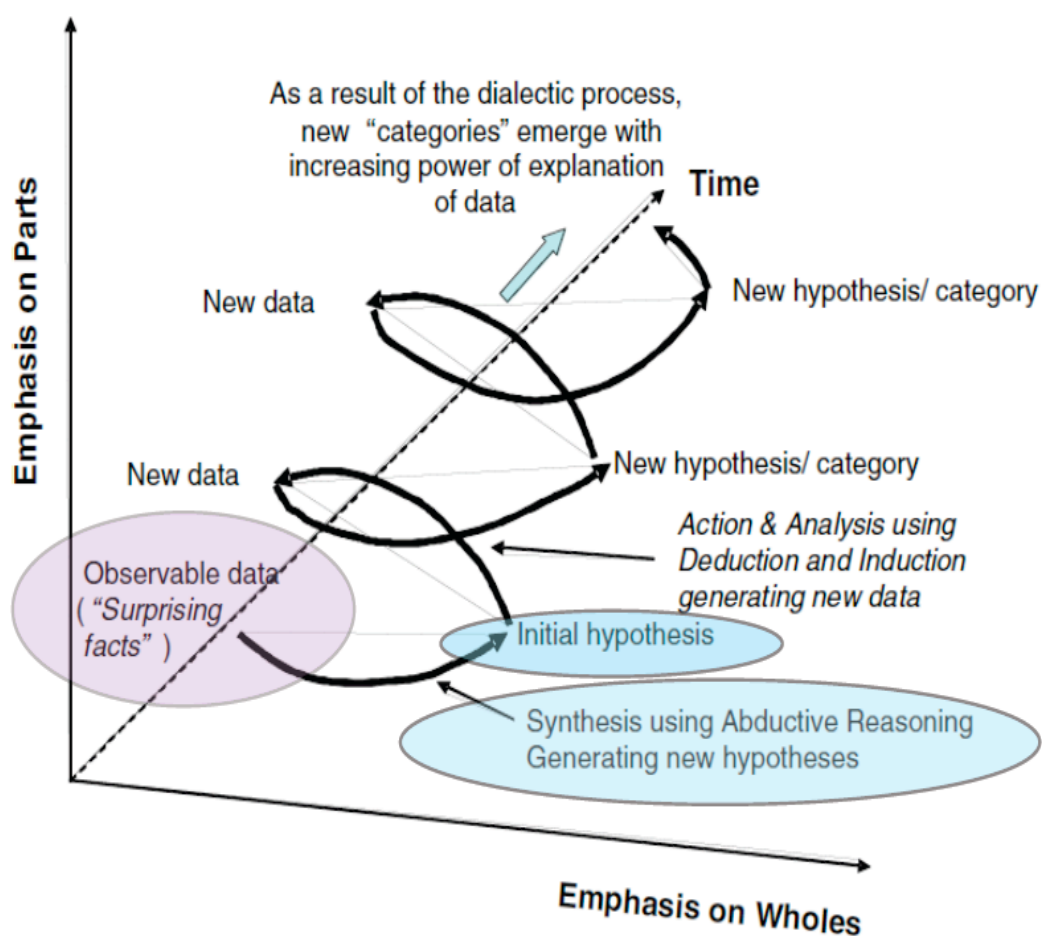
This research attempts to develop a different paradigm whereby theory and practice are not treated as completely separate. Conducting action research in this way is therefore about practice and theory (Dick, Stringer & Huxham 2009a, 2009b) being interlinked dialectically (Cassell & Johnson 2006; Whitehead & McNiff 2006). Approaching action research in this way builds upon the understanding of the three

different modes of inquiry (induction, deduction and abduction) that can be combined within an analysis and synthesis dialectic.

In Chapter 2, the literature review involved the use of inductive and deductive modes of inquiry to identify and refine the research problem(s). Chapter 4 utilised a process of synthesis, using abduction, to propose an explanatory hypothesis that forms the basis for the statement of a research question. Supported by the inferential logic of Peirce, Barton and Haslett (2007), this process of alternating between analysis (Chapter 2) and synthesis (Chapter 4) as a framework defines the dialectic action research approach used to address the research question.

This initial dialectic is represented by the coloured shape overlays in Barton and Haslett's (2007) diagram (Figure 6). It illustrates the alternating emphasis between a focus on analysis of the parts and on a synthesis of the whole to reach an expression of a hypothesis of best inference and research question. This represents a first cycle of action research with research continuing as an analysis and synthesis dialectic.

Figure 6: Dialectic cycles of analysis and synthesis



(Barton & Haslett 2007, p. 148)

5.4 Research strategies

Dick (1993) describes data collection in more traditional research as involving the use of varied informants, several different methods, different ways of asking the same question, with comparison between methods providing part of the check on their adequacy. This represents what Jick (1979) refers to as triangulation. In action research this type of checking is accomplished by working with multiple, preferably independent or partly independent, information sources (Dick 1993). In this way, the similarities and differences between data sources can be used to increase the accuracy of information. Thus, action research methods need to be capable of

providing a variety of data sources and recognising the synergism between research, theory and practice.

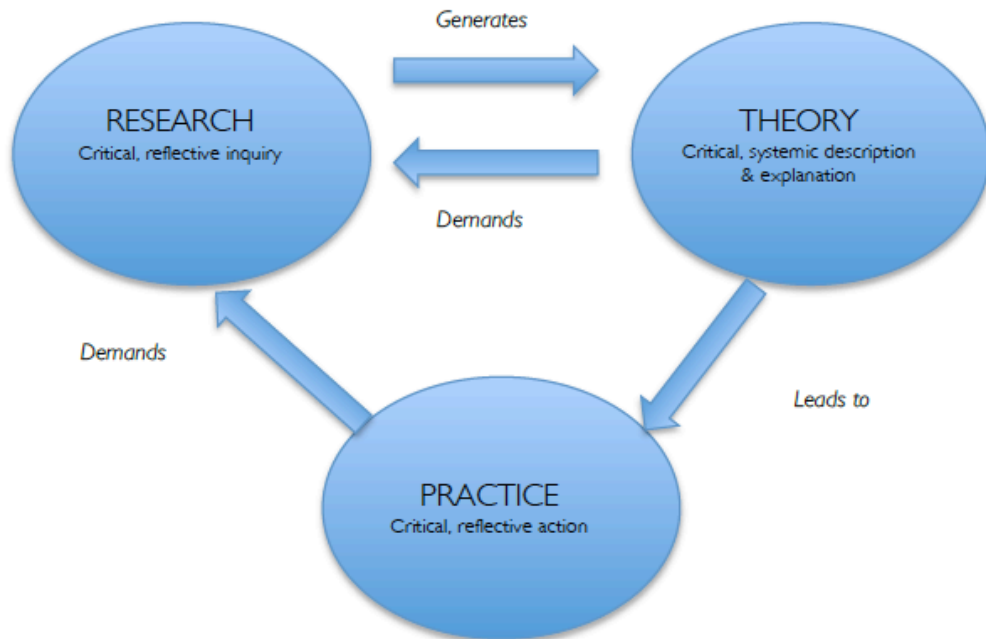
One of the main purposes of theory is to inform practice (Raelin 2007). However, research that addresses both theory and practice is still not the predominant orientation of the fields of management and organisational sciences (Mohrman & Lawler 2012). This is due to the strong differences among academy members regarding what constitutes data or evidence (Klimoski 2007) and disagreements over assumptions, logical development, methodology, representations of data and recommendations (Aldag 2012; Stewart & Barrick 2012). The paucity of explicit epistemological positions within coaching is an example of this.

5.4.1 Synergistic nature of research, theory and practice

It has been established that the assumptions underlying the methodology chosen for conducting this research need to align with those of contextualism. The methodology needs to recognise that theory, practice and research are not separate. By incorporating multiple strands of quality and texture, as described by Pepper's (1942) contextualism, it needs to be capable of understanding acts as occurring in and within their settings, evidenced through their quality and texture.

Building on the work of Topp (2000), Lynham and McDonald's (2011) model of the synergistic nature between research, theory, and practice (see Figure 7) recognises that theory (critical, systemic descriptions and explanations), practice (critical, reflective action) and research (critical, reflective inquiry) are not separable. Thus, this model relates to Pepper's (1942) notion of contextualism by viewing effectiveness as a result of synergism between notions of quality and texture, the two necessarily required for completeness. That is, within a contextualist perspective, for a theory to be effective, it needs to be interpreted as it is taking place in practice.

Figure 7: Synergistic nature between research, theory and practice



(Lynham & McDonald 2011, p. 132)

The synergy between research, theory and practice in Lynham and McDonald's (2011) model is represented as continuous cycles. The top loop refers to the cyclical interaction between research and theory. It represents the process whereby research generates theory that in turn places demands on research and so on. The bottom loop incorporates cycles of critical, reflective action as theory is put into practice and how this places demands on research to generate further iterations of theory. This is aligned with the contextualist assumption that theory is always incomplete and continuously emergent. As context shifts in the environment, theory unfolds in the pursuit of effectiveness through the feedback loops between theory, practice and research. The critical reflective inquiry of the top loop is as important as the critical reflective action of the bottom loop.

The research techniques utilised in this research are constructed to address this distinction. The top loop of Lynham and McDonald's (2011) model is concerned with the process of generating contextualist-coaching theory through critical reflective inquiry into existing coaching theory. As each version of an emerging theory comes forth, critical reflection continues generating systemic descriptions

and explanations. However, while this process is aligned to the research question of developing a systemic description and explanation of theory associated with coaching according to the assumptions of Pepper's contextualist world hypothesis, by itself it is insufficient.

The inclusion of the bottom loop in Lynham and McDonald's (2011) model is necessary as it recognises the importance of practice to theory development. The bottom loop, with its focus on critical reflective action, provides feedback into the theory building process of the top loop; it provides a way of collecting data on the theory in action. It is concerned with what a particular person needs to do right now, in the particular circumstances they find themselves (Schwandt 2007) and provides feedback for completing the synergism between research, theory and practice. This is necessary for the continual generation of a systemic description and explanation of contextualist-coaching theory that aligns with contextualist principles.

This approach contrasts with the ways that others have previously undertaken research into coaching. Instead, they have focused exclusively on activities pertaining to the bottom loop of Lynham and McDonald's (2011) model. That is, coaching research has typically been focused upon applying existing, or unexamined, theory rather than generating new theory. The focus of this prior research, typical of what contributes to the existence of the relevance gap between science and practice, comes about because of the linear assumption of knowledge transfer between science and practice (Rasche & Behnam 2009). This linearity is characteristic of formism, mechanism and closed systems thinking which neglects the top loop. It explains why unexpected results are often attributed to improper application of theory, rather than to deficient theory generation.

In contrast, this research is concerned with incorporating feedback from the bottom loop into the critical reflection occurring within the top loop, thereby generating an emergent contextualist-coaching framework that emphasises the development of theory, rather than focusing on testing an 'existing' theory. Therefore, the research needs to address both the top and bottom loops to represent the whole. This represents a synergism between research, practice and theory. The chosen methodology and associated methods need to be aligned with viewing the offered

knowledge [contextualism] as relevant and then focus on modifying and extending it “according to the idiosyncrasies of the system” (Rasche & Behnam 2009, p. 243) as the theory is put into practice.

5.5 Action research to address the research question

5.5.1 Background of the researcher

The researcher possesses operational leadership experience, including as the former Managing Director of an information technology company. As an accredited master coach she has accumulated over 2,000 hours of executive coaching and facilitated both small and large leadership development programs in a range of industries including government, insurance, health, education, utilities, retail, consulting and engineering.

Table 2 provides a summary of the qualifications and experience of the researcher.

Table 2: Researcher qualifications and accreditations

Qualifications	Accreditations
Master of Business Administration	Accredited Master Coach (ANZIC)
Bachelor of Education	Human Synergistics Tools
Certificate IV in Training and Assessment (TAE 40110)	The Leadership Circle
Graduate Certificate of Professional Writing	Certificate in Ontological Coaching
	Growth Edge Coaching
	Myers Briggs Type Indicator (MBTI)
	GeneSys Psychological Assessments

5.5.2 Top loop action research: Business Action Research Cohort (BARC) and the Hub and Spoke (H&S)

Two action research techniques were used to conduct research according to the top loop of Lynham and McDonald's (2011) model. The first, used by the Monash University Business Action Research Cohort or BARC (Schell & Haslett 2007), provided a forum for critical examination of the assumptions underlying contextualist theory as described by Pepper (1942) and others who have used these distinctions in their research. This BARC arrangement involved the researcher meeting on a monthly basis with a cohort of academics and practitioners engaged in, or having completed, higher degrees of research at Monash University using action research. When the work of this group was discontinued, the researcher established a new group in its place, called the Hub and Spoke (H&S), to assist with data collection and confirmation and/or disconfirmation of emerging interpretations.

Within both the BARC and H&S groups, the idea was to develop theory specific to coaching through joint participation in ongoing cycles of critical, reflective inquiry built upon contextualist assumptions. Through this process, it was anticipated that an initial contextualist-coaching framework would emerge. Subsequent cycles of critical reflective inquiry would generate further interpretations until the contextualist-coaching framework would be developed to a point at which its systemic description and explanation could be recoverable. It was intended that the research would then incorporate action research cycles geared towards the bottom loop of Lynham and McDonald's (2011) model.

During this process it was inevitable that different theoretical frameworks would be hypothesised as the research progressed. Their usefulness would become apparent by testing them during subsequent action research cycles, upon which they would be discarded, modified or kept. It was not possible to know beforehand which of the theoretical frameworks visited would stand the test of multiple cycles; the research would be a work in progress as new theory was developed and tested. The nature of the research would necessarily involve emergent knowledge about theory and

theory development, and about practice. As a result, frameworks have emerged in Chapter 6 that have not been referred to earlier.

5.5.2.1 Monash University Business Action Research Cohort (BARC)

The Monash University Business Action Research Cohort, hereafter referred to as BARC, originally came together in 2000 with a cohort of seven doctoral students and a single supervisor with the desire to establish connections between the theoretical knowledge embodied in their shared studies and the practicalities of their professional lives (Schell & Haslett 2007). All members of the original cohort were at similar stages in their work. They met once a month and there were very few absences over its nine years of existence. During this time, these BARC members presented and published fifty-five refereed articles that established links between theory and practice.

By 2009, membership had stabilised around 18 members with significant business experience and a common desire to conduct, or continue to conduct, action research within organisations. It was at this time that I joined the group and was subsequently provided many opportunities to speak about my work and be exposed to various frameworks that expanded my thinking.

5.5.2.2 Personal participation in the BARC cohort

A number of big ideas were central to the thinking within the cohort. These included Pepper's (1942) world hypotheses and Checkland's (1985) FMA framework, which concerns the role and relationship of action researchers as they undertake action research. In such an academic circle, my research was monitored through a process of peer review. The many and significant discussions about ideas expanded my thinking about coaching and exposed me to mental models that had not been part of my MBA studies or development as a coach.

However, the BARC cohort dissolved in 2009. Four doctoral students continued to meet until it was eventually agreed that without the experienced academic mentors of the larger group, the student cohort lacked the philosophical, theoretical and

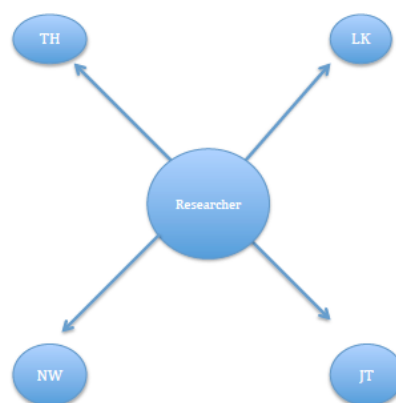
methodological knowledge necessary for the desired level of continued learning and reflection.

This left a significant gap in the research. The process of confirmation and disconfirmation of emerging interpretations, which was critical to effective reflection, now lacked the involvement of significant others. However, within a short time, the critical reflective inquiry of the top loop of Lynham and McDonald's (2011) model was continued by bringing together a new network of people dedicated specifically to this research. This arrangement was called the Hub and Spoke.

5.5.2.3 Hub and Spoke (H&S)

The newly formed Hub and Spoke arrangement, hereafter referred to as H&S, consisted of me as the central hub, assisted by four others (spokes) engaged in multiple cycles of action research relating specifically to the development of contextualist-coaching theory (see Figure 8). From its inception, the spokes consisted of my PhD supervisor (TH), a former lecturer from Monash University (LK) who is also a Master Coach, a world expert in natural science (JT), and a successful international IT business owner with significant interest in the scientific method and matters of truth and proof (NW). The composition of this Hub and Spoke arrangement remained the same throughout the entirety of the rest of the research. Hereafter each spoke is referred to as a personal Learning Facilitator.

Figure 8: Hub and Spoke arrangement



The different backgrounds and interests of the Learning Facilitators within this reference group allowed for a variety of lenses to be applied to the research challenges and my interpretations. Both TH and LK had PhD qualifications and possessed significant experience in the supervision of higher degree students. JT and NW had advanced degrees. JT had published two critically acclaimed textbooks on natural science that can be found in many university libraries around the world; NW founded and built up a successful international IT business. Each had a different perspective that assisted me in my understanding of the nuances of contextualism. Their varied and specific skills and knowledge challenged my interpretations and informed the collection and integration of further data as they interacted with me dialogically, an essential element to my learning (Rossman & Rallis 2000).

Following each significant action research cycle, and at least once a month, I met with each Learning Facilitator on an individual basis. These conversations were often spirited and diverse. However, during top loop research they focused clearly on critical reflective inquiry into Pepper's meta-theory of contextualism and how it could be used within coaching. These continuous cycles of action research within the H&S arrangement facilitated the emergence of theory pertaining to a contextualist-coaching approach that could subsequently be utilised during research involving bottom loop action.

5.5.3 Bottom loop action research: Coach Training Cohort (CTC)

Cycles of top loop action research within the H&S continued for two years until it was considered that the systemic description and explanation of a contextualist approach to coaching was sufficient to be what Checkland (1998) refers to as a recoverable process. The contextualist-coaching framework that had emerged was then introduced to a coach-training cohort, hereafter referred to as the CTC.

The CTC comprised four (female) participants who had specifically chosen to become involved in this research. Participant 1 was a human resource contractor who had previously undertaken coach training yet was dissatisfied with what had been presented. She was looking for a deeper understanding of coaching to guide her coaching practice. Two participants expressed interest in changing careers

beyond their current roles as the general manager of an advertising agency and a recruitment consultant. The fourth participant had recently emigrated from Canada and was seeking to establish a successful coaching practice in Australia.

The goal of the CTC participants was to better understand coaching from a philosophical perspective, and how to put contextualist-coaching theory into practice. This CTC arrangement allowed for the generation of data that would be used in subsequent action research cycles within the CTC to further refine and generate theory pertaining to coaching that aligns with contextualist assumptions.

Thus began cycles of action research pertaining to the bottom loop of Lynham and McDonald's (2011) model whereby practice guided by the theory developed through cycles of participation within the BARC and H&S was put into practical use and critically reflected upon.

... the existence of abstract theory has no practical utility in itself... In this context action research provides a refreshing and highly productive alternative. Action research commences with problems or challenges in the world of everyday life. While there may be strong theoretical forestructures in place, the ultimate attempt is to generate change in existing conditions of life (Gergen & Gergen 2008, p. 167).

From this point onwards, data and interpretations relating to the bottom loop of Lynham and McDonald's (2011) model were incorporated into the theory generating process of the top loop. The H&S and the CTC were involved in cycles of action research concerning the top loop that were operating at the same time as the CTC was addressing the bottom loop. Thus, a synergism between research, theory and practice was established.

While the reflective activities represented in the top loop were focused on generating theory, reflection relating to the bottom loop was concerned with placing the emerging contextualist-coaching theory in a practical context and reflecting on what happened in ways that could contribute to the further development of contextualist-coaching theory. As members of the CTC introduced their developing contextualist understanding into their coaching practice, critical reflection on their

actions provided feedback into the top loop action research that was being conducted within the H&S arrangement. CTC participants were introduced to the contextualist-coaching frameworks that had been developed by the researcher working with BARC and the H&S. CTC members committed to testing the emerging contextualist framework in their own coaching practice. Thus, a feedback loop was established that facilitated the continual emergence of contextualist-coaching theory.

The whole CTC cohort met weekly for nine months and engaged in critical reflection on the contextualist-coaching frameworks they had put into practice during the previous week. The CTC provided a forum for continuing the emergence of a contextualist approach by putting the developing frameworks into practice in multiple situations. New data from the CTC was incorporated into the ongoing action research cycles of the H&S arrangement that continued the cycles of research aimed at generating a critical, systemic description and explanation of a contextualist-coaching approach. That is, action research cycles occurring in the CTC became part of an act component of the research being conducted within the H&S arrangement. Examples of how this occurred in practice are provided in Chapter 6.

In summary, the H&S and the CTC arrangements provided forums for unique information provided by one person (a researcher in the H&S or a cohort member in the CTC) to be brought forward and discussed and for subsequent multiple interpretations to be considered. This is in contrast to what generally happens during qualitative research, whereby the large amount of data that accumulates is difficult to adequately deal with it. Instead, this methodology offered an economy in that interpretations could be carried from one cycle to the next.

Checkland and Holwell's (1998) FMA framework, first encountered during the BARC, was used to focus both the H&S and the CTC on evaluating the emerging contextualist-coaching theory. By documenting the emerging contextualist-coaching framework using this FMA framework, various ideas could be linked in such a way that they could be recoverable between the two groups. Thus, the contextualist-coaching framework, as it stands at the conclusion of the writing of this document, is reported using FMA distinctions.

5.6 FMA data collection framework

While there are many descriptions of the FMA model (Checkland & Howell 1998; Checkland & Scholes 1990), it fundamentally sets out a generic framework for conducting action research with the intention of developing a set of key frameworks of ideas (F) as a result of engaging in action research (M) within specific areas of application (A).

My knowledge about Checkland's FMA (Checkland & Howell 1998; Checkland & Scholes 1990) model originated through my participation in the BARC. The group had adopted it as a way of linking into systemic thinking and learning and to allow for documentation of the common patterns, observations and conclusions that emerge during research (Sarah et al. 2002). Interactions within the BARC were concerned with critical reflection on the outcomes of actions taken by its members within their specific areas of application. Thus, discussions emphasised various frameworks (F) and the methods (M) of applying these frameworks. Despite the diversity of each BARC researcher's area of application (A), a small group of theories emerged as the intellectual core of the work performed by the group. In particular, the suitability of the FMA process as a way of collecting data and presenting it within a structure was reflected upon.

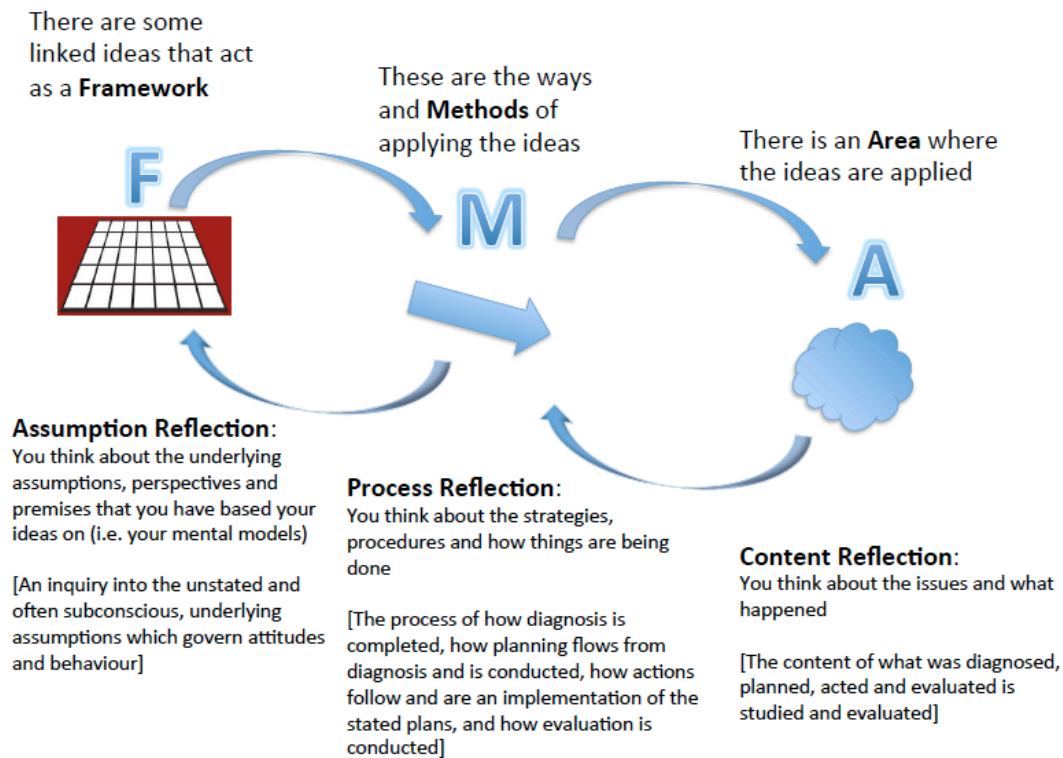
The action research methodology (M) used in this research incorporates the analysis and synthesis dialectic cycles of action research whereby the relationship between various frameworks (F) and the area of application (A) are explored. As a result, it allows for different types of learning occurring within any particular areas of application (A) (West & Stansfield 2001).

Particular linked ideas F are used in a methodology M to investigate an area of interest A. Using the methodology may then teach us not only about A but also about the adequacy of F and M (Checkland & Holwell 1998 p. 13).

Members of the BARC augmented Checkland's model by integrating the work of Mezirow (1991) to include three forms of reflection; content reflection, process reflection and premise reflection (Sarah et al. 2002). This integrated FMA framework thus provided the means of reporting on cycles of action and reflection

(see Figure 9) within the meta-cycle of inquiry (Coghlan & Brannick 2001) of the research.

Figure 9: Checkland-Mezirow's meta-cycle of inquiry



(Sarah et al. 2002, p. 538)

Although incorporating synthesis within the action research method (M), the FMA model overall is analytical in nature and therefore in danger of being implemented mechanistically. To avoid this problem and align the methodology with contextualist assumptions, research cycles of action and learning need to be continuous. That is, during the course of inquiry, various iterations of the emerging contextualist-coaching framework (F) were intended to represent “a statement at a point in time of one’s awareness of the theoretical underpinning of the methodological approach being adopted in the research” (West & Stansfield 2001, p. 254).

Through continuous cycles of action research, the BARC continually revisited and refined their central ideas and theories. Members expressed the importance of both

developing these frameworks and the associated intellectual stimulation relating to discussions surrounding their individual areas of application. Such discussions were the main reason participants regularly attended and remained members of the cohort.

The FMA framework provides a way to easily distinguish between what typically occurs in the everyday practice of non-reflective, mechanistic, closed system practitioners, where external situations are generally the primary focus (Ison 2010), and that of reflective practitioners. With an external focus, practitioners give prominence to the area of application (A) over the theoretical frameworks (F) and the method (M) being used. This implies an underlying assumption that the world is out there, knowable and independent of the observer. However, contextualist assumptions allow for the inside world of the practitioner to be of equal importance. That is, it is assumed that reality is perceived, rather than ‘out there’ to be discovered. In these circumstances, a different emphasis is required. The theoretical frameworks and methods of application become prominent.

5.7 Quality Criteria for Action Research

A first quality principle is to be aware of choices being made and their consequences (Bradbury & Reason 2003). This is especially important in action research, precisely because it defines itself as a social change process that can make a difference in people’s lives. Power and responsibility are therefore unavoidable issues. To live up to a shared set of values, action researchers need to pay particular attention to how relations of power might influence practice.

Despite the importance of ethics in action research, there is a scarcity of literature on the topic and a “failure of most action researchers to include in-depth examinations of the ethical dilemmas they encounter in their discussions of their work” (Brydon-Miller, Greenwood & Eikeland 2006, p. 7).

Further, being located in the non-positivist paradigm of reflective rationality, issues such as validity and rigour necessarily have different meanings for action research than in traditional science (Zuber-Skerritt 2001) and potential conflicts need to be

resolved. For example, in traditional social science, ethics disallow intervening in any way in the research setting, whereas action research requires intervention.

While validity is assured in the positivist paradigm, the contextualist belief that knowledge is socially constructed and created from within changes the researcher's role to that of creating understanding, making improvements or changing a situation or context for the benefit of those involved in and affected by the results of the inquiry (Zuber-Skerritt 2001). Validity is therefore more personal and interpersonal than methodological and based upon interactive dialectic logic (Reason & Rowan 1981).

This dichotomy between subjective and objective truth can be overcome by not relying on the perspective of a personal view but upon an interactive dialectic using multiple data sets, respondents and co-inquirers (Zuber-Skerritt 2001). As such, the dialectical relationship between action and research becomes the focus rather than that of obtaining the traditional 'truth'. This is congruent with the notion of truth in contextualism, which is that of 'effective working'.

Traditional research values generalisability, which is sometimes called external validity (Dick 1993). However, this is not achievable in action research (Heller 1986) as the researcher actively participates. Lincoln and Guba (1985) propose that a comparable standard for generalisability within naturalistic or qualitative inquiry is that of trustworthiness. This involves the demonstration that the researcher's interpretations of the data are credible, or ring true, to those who provided the data. That is, for validity, the findings of an action research project need to be pragmatic; the people who must put those findings into action ultimately decide validity.

Checkland and Holwell (1998) state that it is essential that a researcher keep their intellectual bearings in a changing situation, in which the adequacy of F and M and the appropriateness of A are likely to be tested, by declaring in advance the elements of F, M and A.

Without that declaration, it is difficult to see how the outcome of AR can be more than anecdotal. Many literature accounts of AR leave the reader wondering about the status of that account: How is it to be distinguished

from novel writing? To avoid this trap it is essential to define the epistemology in terms of which what will count as knowledge from the research will be expressed. It is the neglect of this principle which leaves AR vulnerable to positivist critics resolutely hanging on to hypothesis testing as a way of researching social phenomena (Checkland & Holwell 1998, p. 14).

Therefore, to avoid this research becoming nothing more than anecdotal, the BARC, H&S and CTC groups were developed to build critical reflexivity into the research process, thereby providing clear processes for recognising any unique perspectives and biases. Audio journaling, the writing of field notes and the many iterations of this document have formed the record of the evolving perspectives of this research. To ensure that my perceptions as the researcher have not distorted any outcomes, I have consciously developed the skills and habits of self-reflexivity necessary for effective action research. I have been involved in both formal and informal validation meetings in which my findings have been defended and discussed with critical friends and Learning Facilitators. Within my network of contacts, I have actively sought out additional people to serve as devil's advocates for my work. I wanted my ideas to face as much criticism as possible so that I could both test them and be able to defend them when challenged by those operating within a different paradigm of understanding of the world. Specifically, I drew upon contacts with traditional scientific ideas that up front dismissed the idea of abduction. They challenged my thinking, presented alternative points of view, pointed out inconsistencies in my arguments and made problematic the assumptions that I have taken for granted. Specific examples of this are provided in Chapter 6.

Greenwood and Levin (1998) highlight how “transferring knowledge from one context to another relies on understanding the contextual factors in the situation where the inquiry took place, judging the new context where the knowledge is supposed to be applied, and making a critical assessment of whether the two contexts have sufficient processes in common to make it worthwhile linking them” (p. 253). Therefore, instead of generalisability, the focus of the research has been on the potential transferability of the research results. This places the responsibility of justifying a contextualist-coaching approach on those who seek to apply the framework.

Action research is harder to generalise than traditional quantitative work with its different standards of validity, reliability and trustworthiness (Erlandson et al. 1993; Miles & Huberman 1994; Reason & Bradbury 2008). Validity in this research is therefore not defined within the context of an independent group of scientists. Instead, abstract generalisability is de-emphasised (Reason & Bradbury 2008; Schwandt 1996). In its place, the generation of usable knowledge that makes a contribution to the growth of coaching is offered. Aligned with Bradbury & Reason's (2003) description of 'good' action research, this research has therefore sought to generate the requirement for a re-patterning of coaching in its wake.

Action research allows for a broader range of criteria by which it can be judged than that of empirical research, as it is variously concerned with worthwhile purposes, democracy and participation, many ways of knowing and its emergent development form (Reason 2006). Its quality comes from an awareness of the transparency about the choices available at each stage of the inquiry process (Reason 2006). For example, most conventional research methods gain their rigour by control, standardisation, objectivity, and the use of numerical and statistical procedures. However, to do so often sacrifices flexibility due to difficulty in achieving replicability and responsiveness at the same time (Dick 1993). Instead, this research values whether the contextual-coaching framework developed allows for others to be contextually responsive rather than only capable of replicating what the researcher and members of the CTC did within their specific contexts. Otherwise, it would be very difficult to achieve action as part of the research. This example illustrates what Herr and Anderson (2005) describe as the challenge beyond positivism to redefine validity in generative and creative ways that involves all forms of knowing.

In addressing quality criteria debates, Herr and Anderson (2005) propose five validity criteria to use when justifying the choice of research methodology and methods. They include the generation of new knowledge (dialogic and process validity), the achievement of action-oriented outcomes (outcome validity), the education of both researcher and participants (catalytic validity), and results that are relevant to the local setting (democratic validity) and involve a sound and

appropriate research methodology (process validity). To address these, this research was conducted according to the procedures suggested by Dick (1993) as follows:

- Brief action research cycles were used within the BARC, the H&S and the CTC to provide adequate iteration.
- Multiple data sources were used to provide a dialectic.
- Interpretations were developed as part of data collection.
- Relevant literature was continually accessed to aid in interpretation, to widen the dialectic.
- Assumptions were continuously, skeptically and rigorously tested, and exceptions to apparent agreement and explanations for apparent disagreement were actively sought.
- Ideas from evidence and literature were constantly challenged in both fieldwork and reading.

Given that when conducting action research, “you are always in a process without a formal beginning or ending” (Sarah et al. 2002, p. 539); the arbitrary beginning of this research was taken to be the time whereby there existed no prior contextualist-coaching framework. The arbitrary finish of the research reported in this document occurred when the contextualist framework, developed through collaboration with the BARC and H&S, had been tested and modified through the engagement of other coaching practitioners, namely the members of the CTC. However, the development of contextualist-coaching theory is inherently ongoing.

5.8 Documentation

During this research over a period of four years, records were kept of the following:

- emerging interpretations, and any changes in these
- changing strategies and techniques, any refinements in them, and any conclusions that could be drawn about them
- the literature accessed, and any confirming or disconfirming information obtained from the writings of others, and
- quotes from raw information that capture the interpretations being developed.

As continuous cycles of action research were conducted, the more detailed information collected in later cycles superseded the earlier data. Therefore, Chapter 6 provides a summary of the outcomes of the emerging interpretations of contextualist-coaching and reflections on the research, rather than a transcript of the journey undertaken to reach these interpretations.

5.9 Ethical considerations

Traditional ethical frameworks that provide clear-cut prescriptions for research are based on closed systems thinking (Walker & Haslett 2002). However, the praxis-oriented action research methodology aligned with the open systems assumptions of contextualism utilised in this research is fundamentally exploratory. Therefore, any ethical dilemmas within such a long-term action research project relate primarily to the relationship between the researcher and the various participants. These include issues concerning participant selection and voluntary participation, informed consent, decision-making, anonymity and confidentiality, and conflicting and different needs. These issues were addressed by allowing all participants involved in the H&S and the CTC a fully voluntary choice about the nature and extent of their participation.

There were three primary groups of participants in this research: the BARC, the H&S and the CTC. Each of the members of the BARC had an understanding of ethical issues through having been actively involved in previous action research while obtaining either their masters or doctoral qualifications. In addition, participation in BARC discussions was encouraged but not compulsory. The four Learning Facilitators participated voluntarily within the H&S arrangement and the CTC consisted of five coaching professionals who actively sought to be involved in this research. As such, the research represented a very low risk.

An analysis of previous action research processes shows that ethical dilemmas can often arise unexpectedly (Walker & Haslett 2002). To mitigate this risk, the existence of any potential ethical questions was addressed through the evaluation step in the action research cycles, by focusing not only on developing a contextualist approach to coaching but also on the process with which it was conducted. This ensured that evaluation did not only take place at a fixed point at

the end of the program. Instead, evaluation was useful as a means for continually improving individual elements of the research design. As such, evaluation was embedded in the methodology that pursues understanding and change and the use of participation. It was achieved by ensuring that critically reflective processes occurred within a cyclic process with the researcher at all times attempting to find exceptions to the data collected and to challenge any emerging interpretations. Examples of how this occurred are provided in Chapter 6.

5.9.1 Ethics Clearance

Ethical clearance was obtained from the University of Queensland Institutional Human Research Ethics Approval Committee (approval number 2013000700). Records, in the form of researcher notes (both oral and written) were collected by means of engaging participants in reflective conversations with the researcher to produce action plans for conducting coaching sessions.

Research participants provided permission for their involvement according to the following information:

Project title: Towards a Contextualist-Coaching Framework

I am a PhD student researching executive coaching with the aim of developing a new, specific approach to coaching and demonstrating how it can be applied in practice. The aim of this research is to provide a strong theoretical foundation for future research into coaching.

What does participation involve?

Participation involves engaging in reflective conversations with the researcher to produce action plans for conducting coaching sessions. As these conversations continue, it is anticipated that a coaching framework will emerge. The duration of your participation is at your own discretion. You are under no obligation to continue to participate and may withdraw at any time.

Confidentiality: *The information in this study will not be linked back to you as an individual. Only aggregated results will be reported. The information will be stored in a secure environment and access to the data will be made available only to the members of the research team. Your comments will be kept confidential and any information provided will only be used for the purposes of this research.*

No funding has been sought or provided for the research and you will receive no payments. However, participants can expect to be engaged in learning as part of their involvement. Meetings are held at the researcher's office, or at other mutually agreed premises where confidentiality can be assured.

The risk to participants is low; it will require no more risk than what is associated with everyday professional development programs. Any potential harm is limited to discomfort or inconvenience such as the potential anxiety induced by critical reflection.

5.10 Implications

One of the assumptions of contextualism is that by solving one problem you do not solve another, even if the situations seem identical. Thus, coming up with a definition of coaching prior to putting it into practice does not make sense. Instead, contextualism views that problems need to be dealt with in an ongoing way. Therefore, it follows that it is not possible to declare a contextualist-coaching framework in advance. Instead, an account of a contextualist-coaching framework is provided that positions it within the ongoing dialectic at the particular time of this writing. Consequently, the framework described in chapter 6 represents the salient features of a contextualist-coaching approach at the time whereby it was judged that the emergent categories were sufficient to be recoverable by others.

This contrasts with what would normally be expected when describing a coaching framework in a traditional way. This is because conventional formistic and mechanistic assumptions rely upon a 'tick the boxes' checklist that describes approaches and frameworks that are essentially viewed as static. Instead,

contextualism does not seek to discover a ‘truth’ that can be relied upon repeatedly. Instead it prescribes a determined ‘right’ for today that may be effective tomorrow and the day after, or not. That is, with its historical metaphor and particular focus on the nuances of context, contextualism is concerned with continual learning from the past, particularly during the current and immediate context. It relies on the use of ongoing analysis and synthesis dialectic to support this.

The repeatability criterion of the natural sciences relies upon phenomena being homogeneous through time. However, this is not the case for social phenomena, or for a contextualist view of the world. Therefore, the criterion of repeatability is beyond the reach of this work. Instead, a contextual model with the intention of meeting what Checkland and Holwell (1998) call recoverability is the best that is possible. Instead of settling for a definition of a contextualist approach to coaching, this research declares a methodology that allows for a contextualist-coaching framework to be recoverable. The decision to write about this research at this time reflects my judgement that the methodologies and frameworks of ideas discussed here are sufficient to be recoverable by others.

5.11 Summary

Considering the open systems nature of organisations and the environment, it was hypothesised in Chapter 4 that coaching practice aligned with the assumptions of Pepper’s meta-theory of contextualism may be more effective than the closed or partially open system assumptions underlying current coaching practice and its research. Subsequently, this research focused on developing a contextualist-coaching framework.

Chapter 5 justifies the use of action research interpreted as an analysis and synthesis dialectic as an appropriate methodology for addressing the question of how a researcher-practitioner can coach within the assumptions of a contextualist world hypothesis. Fundamentally, this is because action research embodies pragmatism that is an assumption underlying Pepper’s (1942) contextualism and Peirce’s triadic modes of inquiry.

Three reflective action research strategies were designed to facilitate the emergence of a contextualist-coaching framework: the BARC, the H&S and the CTC.

There is some way to go before coaches and researchers go deep enough to understand and subsequently attempt to unravel the contradictory assumptions underlying their theory, practice and research. Without understanding theory at an epistemological and ontological level, they risk misattributing the reasons for any successes and failures within their coaching practice. The central argument developed is therefore that a strong theory base comes out of research that is contextualised, namely done in the field and with others. Given the assumptions underlying contextualism, this type of research is distinguished by the blurring between the theoretical foundations of contextualism and the practice that tests it.

Chapter 6 provides an account of emerging interpretations using Checkland and Holwell's (1998) FMA framework as a way of reporting the linking of theory, research and practice.

Chapter 6: Development of contextualist-coaching theory

6.1 Introduction

With the assistance of the Business Action Research Cohort (BARC), and subsequently through a bespoke Hub and Spoke (H&S) arrangement, Chapter 6 describes how as the researcher-practitioner, I engaged in critical reflective inquiry as a way to examine my own coaching practice and its relationship to Pepper's meta-theory of contextualism. Through multiple cycles of critical, reflective inquiry, an initial theoretical contextualist framework for coaching emerged that was ready to be put into practice in an executive professional development program. During this program, ongoing cycles of critical reflective inquiry and critical reflective practice generated successive interpretations of theory. At the conclusion of the executive program, the most recent version of contextualist-coaching theory was put into practice in a coach-training cohort (CTC). Members of the CTC were coached by the researcher according to the interpretations of contextualist-coaching theory that continued to emerge through interactions with members of the CTC and the H&S.

6.2 Issues concerning how to convey the data and results that led to iterations of theory

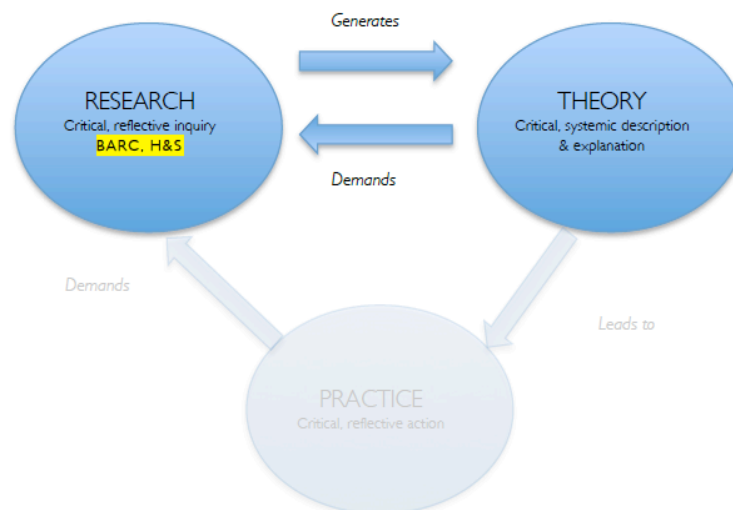
With the detailed information collected in later cycles naturally superseding earlier data, deciding how to effectively convey progressive iterations of a critical, systemic description and explanation for coaching theory presented a number of dilemmas. This was partly due to the immense amount of data generated over five years (2010–2014) and complicated by the use of abductive reasoning and its associated intuitive leaps. Progress was not linear, yet the formist characteristics of language and the act of writing required that explanations be communicated in sequence, within a set of propositions. While this made the flow of ideas easier to comprehend, it did not accommodate a full account of events and hides the uncertainty and numerous dead-ends also investigated.

A fundamental assumption of the methodology utilised is that dealing with complexity is a continual process of facing challenges, rather than of solving closed system problems. Therefore, a framework was not declared in advance and pre-determining an endpoint was not possible. Instead, over a period of five years, cycles of critical reflective inquiry and action generated iterations of theory. The eventual critical, systemic description and explanation for contextualist-coaching theory is therefore positioned in the context of an ongoing dialectic and presented in its form at the specific time of writing. The research was only ready for documenting when the salient features of a contextualist-coaching framework and interpretations of what could constitute contextualist-coaching practice had emerged to a point that others viewed as recoverable.

6.3 Top loop critical reflective inquiry to generate theory

Participants of the BARC and, subsequently, the H&S arrangement provided the first forums for top loop research, whereby cycles of critical reflective inquiry into Pepper's meta-contextualist world hypothesis generated a series of early critical, systemic descriptions and explanations of contextualist-coaching theory. The bottom loop of critical, reflective action was not yet in play (see Figure 10).

Figure 10: Top loop methods for critical reflective inquiry to generate theory



(Adapted from: Lynham & McDonald 2011, p. 132)

While the BARC and H&S members had a limited understanding and experience of coaching, each member offered different perspectives that assisted my understanding of the nuances of contextualism and expanded my thinking. I was exposed to new frameworks that helped me critically reflect on different philosophical approaches to research, such as action research and systems thinking, which challenged my interpretations of myself as a coach. These interactions (Rossman & Rallis 2000) were essential to my learning and informed how I subsequently collected and integrated data.

6.3.1 Framework (F): Assumption reflection during top loop inquiry

My own coach training had been largely based upon organicist assumptions (see Ontological coaching in 2.14.1.1), and, as a coach, with a traditional education including an MBA and over ten years experience as an executive, I was aware that I was immersed in the mechanistic and formist assumptions of business. Therefore, the focus of critical inquiry at this stage was on how I could improve my ability to recognise my own implicit assumptions and any consequent limitations of my interpretations. I sought, with the assistance of the BARC and then the H&S, to ground my observations of the world, rather than to take contextually based action in my coaching practice at this stage. This required an intense effort to improve my self-awareness and skills of observation.

6.3.1.1 Personal assumptions

With the assistance of members of the BARC and H&S, I sought possible explanations for situations in which I, and others, had taken action that produced outcomes that seemed at odds with espoused intentions. Through Pepper's (1942) lens, I observed my entanglement in the predominantly mechanistic business approaches and interpretation of various "theories-in-use" (Argyris & Schön 1974, p. 30) that were governing behaviour and not producing intended results.

Journal entry (5 February 2009)

I have been taking particular notice of the language executives (and myself) use. Mechanistic metaphors are very common.

*Let's **solve this problem** (when talking about people such as poor performers)!*

*KPI's... let's hold people (**individual parts**) accountable to improve their performance (**assumption that when these individual parts are functioning according to specifications then the 'whole' organisation will function properly**).*

Message from a boss: "The more (business development) calls you make, the more effective you will be in bringing in work. And, if I monitor the number of calls that you make then the more money you will earn" — (linking of performance to quantitative measures that drive remuneration) - This mechanistic approach doesn't recognise the complexity of human behaviour. The fixation on metrics in a formist way (devoid of context) is an attempt to oversimplify the managerial task by confusing quantity with quality.

Journal entry (9 March 2010)

*Recruitment is undertaken in ways that assume you can select the most effective candidate based upon a (**formistic**) list of competencies. As a coach, I hear both employers and candidates opine the same process with its insufficient outcomes for all concerned. However, they address the issue by seeking to get better and better at checking off candidates against lists, rather than to change the process. With a contextualist focus, the issue and what to do about it would be different. Approaching the dilemma from a contextualist position wouldn't involve these linear assumptions. It would recognise that recruitment requires an understanding of contextualism's change, novelty, quality and texture. I don't yet have any idea how this would look.*

I engaged in experiments to unearth implicit assumptions:

Journal entry (20 April 2010)

I have applied for a number of consulting positions requiring someone to lead the managing of change within an organisation and have been successful at reaching interview stage for four of them. I have been told that the purpose of each interview was for the interviewers to assess me against their key selection criteria. Most criteria required being able to demonstrate previous capacity in managing change in other situations.

Upon reflection, all interviews were conducted in ways that only recognised analytical approaches to change. Questions typically involved looking for responses indicating the possession of the 'right' 'knowledge'. They were looking for knowledge and experience in frameworks such as Lewin's Change Management model, the McKinsey 7-S model, Kotter's 8-step change Model, Human Synergistics approach to change etc. While I have knowledge and/or experience with these models, during interviews I attempted to respond according to how someone with contextualist assumptions might respond. That is, I didn't provide a stock standard answer based upon a model. I asked questions to elucidate context before stating a hypothesis about what initial action I might take (according to the model they wanted me to demonstrate). I responded expressing a 'contextualist' approach to facing challenges, rather than stating a solution to a problem. I placed synthesis in the context of managing change.

They expected me to talk about 'parts' of a 'whole' process despite the understanding that managing change is about dealing with complexity. I summarised a process of continually re-assessing context after each action and taking further appropriate action depending on each (new) context. I described a methodology of dealing with change based upon my understanding of contextualist assumptions, rather than a framework.

I was subsequently informed by all interviewers that they had enjoyed interviewing me and that I had made them think about change in ways that they hadn't before. I received no offers....

6.3.2 Methodology (M): Process reflection during top loop inquiry

A basis for comparing different ways of knowing and the human faculties for learning was provided by Eikeland's (2012a) gnoseological framework for understanding different forms of action research and their respective knowledge claims, by illuminating the different philosophical, methodological and theoretical horizons of the various conceptions. This allowed for the "reconsidering and reintegrating [of] ways of knowing: traditional, practical, tacit, emotional, experiential, intuitive etc., marginalised and considered insufficient by modernist thinking" (pp. 20–21).

Aristotle's distinctive 'ways of knowing' (Eikeland 2012a), described in Table 3, provided a basis for process reflection about the strategies and procedures associated with the BARC and H&S. Aisth sis (perception) was utilised for becoming aware of perception beyond the visual; how I felt as well as what I observed. Empeiria (practically acquired experience) would later provide a basis for reflection about the theory as it was being put into practice in the executive leadership program and the CTC.

Table 3: Aristotelian ways of knowing

Basis	Ways of knowing	Associated rationality	English equivalent
<i>Aísthêsis</i> (perception)	Theôrêsis = <i>zepistêmê</i>	Deduction, demonstration, didactics	Spectator speculation
	Páthos	??	Being affected passively from the outside
<i>Empeiría</i> (Practically acquired experience)	Khrêsis Poiêsos	Tékhnhê (calculation)	Using, making, manipulating
	<i>Praxis</i>	Phrónêsis (deliberation)	Doing, virtuous performance
	<i>Praxis</i>	Dialectics/dialogue. The way from novice to expert, from tacit to articulate	Practice, training for competence development and insight (<i>theôría</i>)
	<i>Theôría</i> = <i>epistêmê</i>	Dialogue, deduction, deliberation	Insight

(Eikeland 2007, p. 348)

6.3.2.1 The BARC strategy

Members of BARC met for three hours every month with the goal of developing practitioner-scholars capable of bridging the realm of ideas and the world in action and establishing theory concerning how learning is embedded in organisations (Sarah et al. 2002). The cohort operated on the principle that, no matter what the specific area of interest, effective practice is based on well-articulated theory.

The purpose of the cohort is to provide a means of mutual support for its members along with the creation of ‘a “space and time” for group reflection and the creation of insight and new knowledge about their practice as research practitioners’ (Sarah et al. 2002).

I listened, observed, asked lots of questions, read extensively and engaged in critical reflection with BARC members. The intellectual stimulation among the group facilitated learning that was deeper than would have otherwise been possible. Participants did this by providing multiple perspectives and introducing frameworks that extended my knowledge, particularly within the area of systems thinking and research strategies. They listened to my accounts of various stages of my thinking about coaching and formulated questions that challenged my interpretations.

However, I had not made much progress on developing a contextualist-coaching theory when the BARC community dissolved. Without these knowledgeable associates and such a forum, my learning process was reduced to self-reflection and the need for collaboration during critical reflection was highlighted. Within the BARC community, I had felt supported and was allowed the time to listen, observe and understand new frameworks. I was encouraged at all times by all members who also showed interest in my learning beyond the formal meetings. My identity as a learner had been validated.

My attention turned to developing a replacement process for conducting effective critical, reflective inquiry. This required an understanding of the features of the operation of the BARC that had been effective. To acquire this understanding, I

considered what contextualism might theoretically offer about methodological approaches to critical reflective inquiry.

I found clues in contextualism's three distinct specifications of its operational theory of 'truth', which indicate steps in the development of pragmatism. This led me towards establishing a pragmatic view.

The first is the narrowest and the one the enemies of pragmatism try to associate with it; the last is the broadest but comes dangerously near to overstepping the categorical limits of contextualism. The first two have been named by C. W. Morris "successful working" and "verified hypothesis"; the third may be called "qualitative confirmation" (Pepper 1942, pp. 268–270).

The BARC had incorporated processes that I viewed as having been central to my learning. Therefore, I proceeded to analyse the BARC situation in search of a way to create a new group to replace it, with "definite references for action" (Pepper 1942, p. 269).

A tentative hypothesis is constructed, this hypothesis being in the nature of an instrumental texture with definite references for action. These references are followed out, and this activity is the act of verifying the hypothesis. If the hypothesis is blocked, and accordingly the original blocked strand (the problem) is not satisfied, then the operation is said to be false and the whole process of analysis, construction of hypothesis, and verification starts over again. If however, the following of the hypothesis leads to the satisfaction of the blocked strand and to the solution of the problem, then the operation is said to be true. Truth is thus the result of an instrumental texture which removes a blocking and integrates a terminal texture (Pepper 1942, p. 269)

I based a tentative hypothesis for the formation of a new group to continue inquiry into addressing the research question on what had appeared to be effective in the BARC in creating the necessary space for my behaviour, thinking and perception to change. This hypothesis of best inference included the following references for action:

1. Collaboration among members both formally and informally
2. Valuing of the practice of reflection and a spirit of inquiry
3. Common frameworks to advance discussion around action research and systems thinking
4. Opportunity for members to make presentations about their research and be supported during rigorous analysis and discussion of work
5. Informal and unstructured learning with wide and exploratory discussions
6. An understanding of traditional methodologies and a decision to work outside of them
7. A place to be both a practitioner (discussion of specific projects) and scholar (discussion of theory)
8. The body of theory that supports the work being done by members is developed communally
9. Thinking that draws on many bodies of knowledge
10. Learning by adapting theoretical models to new real life situations
11. Developing new frameworks for interpreting experience
12. Tackling real organisational issues to produce tangible outcomes by linking research and practice
13. An emphasis on mutual learning rather than teaching

Whether this list of references for action was enough, or whether any references were blocked, was yet to be determined. Subsequently, I sought indirect evidence to increase or decrease the probability of satisfaction towards direct verification of each reference. If a new group based upon what I considered unblocked references, were not successful, then I would have to go through the whole process of analysis, construction of hypotheses, choosing of a hypothesis of best inference and verification again. If, however, my hypothesis was successful, and a new group of

people was able to effectively assist me in addressing the research question, my hypothesis could be said to be true.

6.3.2.2 The Hub and Spoke Arrangement

This tentative hypothesis combined with pragmatic considerations, such as who might be available and interested in assisting me, led to the formation of the H&S group. I approached my PhD supervisor TH who was the common supervisor for all members of the BARC and had been crucial to its success, as well as three other people: a Doctoral supervisor from early in my research (LK), a successful Information Technology entrepreneur (NW) and a published natural history expert (JT) to be part of my H&S arrangement. Each had regularly expressed interest in this research and agreed to become members of the H&S.

The original strand (the problem) was not satisfied by the tentative hypothesis in 6.3.2.1. The hypothesis required modification to be true. The novel features of the new H&S arrangement related to the blocked references 1, 3, 4, 6 and 8. Subsequent modifications relating to these five blockages are discussed.

Reference 1: Collaboration among members both formally and informally

Rather than true collaboration among members, communication within the H&S arrangement was in the form of one-on-one conversations. This was at the request of the spokes. Consequently, I did not experience interaction between each of the 'spokes', that in view of their diverse backgrounds, may have resulted in the emergence of other new ideas, and possibilities.

This arrangement had flexibility and also meant that I could utilise the assistance of individual 'spokes' for specific action research cycles and then present any resulting interpretations to the other spokes. However, my ability to act as a proxy for the communication of ideas among the group was limited by my own understanding.

Reference 3: Common frameworks to advance discussion around action research and systems thinking

While this reference for action was true in the BARC because members shared common frameworks, it emerged that discussion was advanced by the diversity of frameworks contained in the H&S arrangement. However, the lesser importance of shared frameworks in the H&S may have been because my participation in the H&S followed the BARC and I had already benefitted from a shared frameworks approach. Intellectual support in the H&S came through exploring new theory and ideas with members who held a diversity of views. I had to continually examine opposing viewpoints that challenged my perceptions. In addition, the mix of practitioners and scholars within the H&S provided a place for me to be both a practitioner (bottom loop research) and a scholar (top loop generation of theory).

Reference 4: Opportunity for members to make presentations about their research and be supported during rigorous analysis and discussion of work

I was the only member of the H&S who made presentations. In the BARC, the depth of understanding and the multiple views within the group ensured that rigorous analysis and discussion took place. However, while members of the H&S were also supportive, my presentations, made separately to each individual, lacked the benefit of interaction between members. For example, in my discussions with one member, the relationship between science, mathematics and research methodologies regularly arose. If other H&S members had been present, then the diversity of their views and understandings would have led to different questions and, perhaps, intuitive leaps.

Reference 6: An understanding of traditional methodologies and a decision to work outside of them

Two H&S members were traditional researchers who were sceptical of the efficacy of the action research methodology I was using. They repeatedly engaged me in debates around related issues. In particular, one member held the position that traditional methodologies incorporate the methodology used in this research, while

it was my view that the methodology used here incorporates traditional methodologies as a subset.

Reference 8: The body of theory that supports the work being done by members is developed communally

While the body of theory developed was done in collaboration with members of the H&S, it was done without the benefit of direct interaction between members. The daily conversations with one member, and the weekly interaction with another, mostly related to top loop inquiry. One exception occurred when a member of the H&S worked directly with me in a bottom loop inquiry during an executive leadership program. While each member of the H&S contributed in important ways, it could not be said that the theory was developed communally.

6.3.3 Area of Application (A): Content reflection during top loop inquiry

The initial area of application was focused on developing a critical, systemic description of a contextualist-coaching approach that was ready to be put into practice so that bottom loop critical reflection to generate further iterations of theory could take place. One outcome of this top loop content reflection was the emergence of the idea that coaching based upon contextualist assumptions may be effective when conducted in cohorts. However, I recognised later that this intuitive leap was not only based upon top loop reflection into the initial area of application but also on bottom loop reflection relating to how to replace the BARC.

Journal entry, (2 June 2015)

A possible explanation for the confusion I felt in late 2009 was because of a fusion of the details of the textures of the two tasks I was undertaking at the time. I was trying to work out the best way to replace the BARC so that I could continue to develop further iterations of contextualist-coaching theory. At the time I made no sharp line of distinction between the strands and contexts of the two tasks. The context, texture and strands for each were relative to one another and converged.

The related body of knowledge pertaining to group coaching was subsequently reflected upon as a way of inquiring into both top and bottom loop tasks.

6.3.3.1 Emergence of the idea of cohort coaching

According to Pepper (1942), contextualism's point of origin is the historic event; an "act in and with its setting, an act in its context" and involving "doing, and enduring, and enjoying" (Pepper 1942, p. 232). Such acts are all "intrinsically complex, composed of interconnected activities with continuously changing patterns" (Pepper 1942, p. 233). Facilitating an understanding of such interconnected activities was already being achieved in the H&S (and previously the BARC) through the stimulation of multiple perspectives. I sought to identify any references associated with these diverse perspectives, on acts perceived within their context that had been present in the BARC and the H&S group settings.

As an experienced facilitator of executive development programs, I had observed that intense learning often coincided with group discussions in which different perspectives were raised. Interestingly, participants often indicated surprise at this, because they had come to value the learning they had gained predominantly from external perceived experts, academic literature and 'authorised' bodies of knowledge, rather than from each other within their local organisational context. I sought to critically reflect on the assumptions of contextualism to determine whether, and how, this idea of cohort coaching could be aligned with the assumptions of contextualism. Inquiry turned to whether coaching that involved more than one coachee may more adequately allow the emergence of the contextualist categories of change, novelty, quality and texture.

Perhaps critical, reflective inquiry, within a group guided by contextualism's system of concepts, could elicit different perspectives relating to the contextualist categories of change, novelty, quality and texture and would enhance the possibilities for action and learning:

.... We shall elaborate what is meant by quality and texture by means of a number of subheadings under each. Under quality we shall consider (1) the spread of an event, or its so-called specious present, (2) its change, and (3)

its degrees of fusion. Under texture we shall consider (1) the strands of a texture, (2) its context, and (3) its references. Among these references we shall further note the following sorts: (a) linear, (b) convergent, (c) blocked, and (d) instrumental. This system of concepts may be regarded as a set of working categories for handling the events in our epoch (Pepper 1942, pp. 236–237).

It was posited that coaching discussions held within a cohort could focus on revealing many ways of analysing events, depending on which strands were followed, from events to their context.

In addition to uncovering a diversity of strands emanating from events, a cohort arrangement may also help with the backward referencing of contextualism:

Some pragmatists have overstressed the forward and neglected the equally important backward reference in the transitive direction of linear reference. This has involved them in many unnecessary difficulties and misunderstandings. The linear reference is intrinsically a forward-and-back, future-and-past, initiation-and-satisfaction activity (Pepper 1942, pp. 252–253).

Putting a group of people together and interacting with them according to traditional coaching approaches would not suffice in teasing out the system of concepts required by contextualism. Subsequently, I examined the existing literature on group coaching to elucidate current practice and contextualist assumptions, but there was very little research available at the time. However, since my initial survey of the literature at the early stage of research there has been a significant increase in the number of relevant peer reviewed articles. Consequently, the literature described below was accessed retrospectively.

6.3.3.2 Review of existing literature on group coaching: Pepper's world hypotheses as a lens

Despite the potential for skillful group and team coaching to “take advantage of the collective wisdom of its participants through shared experiences, modeling, social

contagion and interpersonal learning” (Kets de Vries 2014, p. 79), literature related to group coaching has only recently emerged (Kets de Vries 2014). Despite being previously scarce, contributions have now been made by researchers including Kets de Vries (2005, 2011), Clutterbuck (2007), Britton (2010), Thornton (2010), Cockerham (2011) and Hawkins (2012).

Given that the analyses conducted in chapter 2 found that the majority of implicit assumptions associated with the different bodies of knowledge about coaching are mechanistic or, at best, organicist, coaches risk incorporating such analytic assumptions into not only their individual, but also their group coaching practice. To ascertain the assumptions made in the literature on group coaching, I examined this emerging literature using Pepper’s (1942) world hypotheses as a lens.

Evidence of assumptions in the literature on group coaching

Kets de Vries (2014) describes group coaching as an effective intervention technique that can be extremely successful at creating inflection points in executives’ lives. While acknowledging that standardisation has its advantages, he advocates that “all coaches should approach group coaching in the way that best suited their personality; they should do whatever they felt they were most comfortable doing” (Kets de Vries 2014, p. 85). He applies a clinical lens to help with the examination and reflection on the behaviour of the coach, the behaviour of others in the coaching group and the interrelationship between the parties, and lists seven premises upon which he bases his practice. In Kets de Vries’ example of a coach’s journey to ‘becoming’ a group coach, he indicates that a coach needs to be aware of the interdependence and reciprocity that lies at the heart of the coaching process.

The literature on group coaching includes research on group dynamics, teams and the roles people play in groups (Hackman 2002; Hackman & Wageman 2005; Kets de Vries 2007, 2014; Wageman et al. 2008; Yalom & Leszcz 2005). Driskell, Radtke and Salas (2003) claim that group coaching is a highly effective way of creating tipping points for change that is appropriate for today’s highly diverse, complex, global, networking-oriented organisations. Group coaching is a good way of achieving shared objectives, improve constructive conflict resolution, make

stronger commitments, increase accountability and trust, and reduce conflict. However, the research on which these claims are based relies on implicit assumptions in the existing bodies of knowledge, whose sources can be inferred from the name of the publisher. For example, Driskell, Radtke and Salas' (2003) work is published in a group dynamics journal, and Kets de Vries (2007) work is associated with organisational dynamics. Kets de Vries, Florent-Treacy and Korotov's (2007) work is grounded in the psychology literature with other authors such as Winnicott (1971) referencing the psychodynamics of Tavistock. Publications sorted into such bodies of knowledge omit explicit theoretical underpinnings.

In their account of research comparing individual and group coaching, Mühlberger and Traut-Mattausch (2015) state that "although numerous studies have shown that coaching works, the search for "active ingredients" of successful coaching is ongoing" (p. 1). They cite the research of de Haan (2008; 2012), de Haan, Culpin and Curd (2011) and de Haan et al. (2013) as being concerned with the search for these parts. This assumption that parts can be identified suggests a mechanistic stance that implies it is the frameworks that are important. Although contextualism is able to account for the mechanistic notion that coaching can be composed of parts, the ways in which parts are seen to comprise group coaching in these studies falls short of contextualism's interpretation. Contextualism, with its emphasis on no two situations capable of being the same, is concerned with the way that frameworks are brought into specific coaching situations, rather than the frameworks themselves.

Lewin's (1951) study of training groups (T-groups) in which participants learn about themselves through their interaction with each other using feedback, problem solving, and role play provides an example of a focus on method, rather than on specific frameworks. While his work is viewed by some as a fad (Ward, van de Loo & ten Have 2014), Lewin sought methods of shifting people's attitudes and providing them with greater insight. His T-groups have been recognised as bringing about subtle changes to modern management techniques. Ward, van de Loo and ten Have's (2014) recent interpretation suggests that the positive benefits of T-groups on a range of symptoms shown in outcome studies may be due to "the security of

sharing a journey where the other participants experience similar challenges” (p. 70). Lewin’s description of a journey implies an emphasis on method rather than on any framework utilised in discussions within T-groups. It signals that the way members of a group engage with shared frameworks could be of more importance than the frameworks themselves.

In 2014, Kets de Vries de-emphasised the use of frameworks by stating that common cookie-cutter frameworks are not necessary for group coaching. Rather, he observed the importance of understanding the method for coming together in groups relative to the specific frameworks discussed in groups:

Because I was very pleased with the results, for many years, I didn’t explore the matter any further. Without really knowing what we were doing, we seemed to have stumbled on an intervention technique that proved extremely effective at creating inflection points in executives’ lives. But after a while I started to feel uncomfortably dissatisfied. The reason why this process worked needed to be explored further. Were there elements of the design of the intervention process that made a difference? (Kets de Vries 2014, p. 85)

While recognising the clinical paradigm as being of great use for generating a better understanding of intra-personal, interpersonal and group dynamics, Kets De Vries (2014) looked for other possible levers that could explain the success of group coaching interventions. He sought to capture the intuitive knowledge of coaches and subsequently co-authored a series of books on coaching: *Coach and Couch* (Kets de Vries, Florent-Treacy & Korotov 2007), *The Coaching Kaleidoscope* (Kets de Vries et al. 2010), and *Tricky Coaching* (Korotov et al. 2011). His *The Hedgehog Effect* (Kets de Vries 2011) also focused on the dynamics of group intervention. Despite Kets de Vries (2014) using references to mechanistic language by referring to a search for levers, he also recognises the importance of coaching methodology to the effectiveness of group coaching. He also hints at the organicist language of Wilber’s integral coaching by referring to developmental levels and transitional spaces.

While one-on-one coaching can be complex enough, the challenges become much more pronounced in a group coaching setting. The coach is constantly

faced with conundrums. He or she has to digest and metabolize a myriad of dynamic, fluctuating and multidimensional projections that represent group members' intersubjective experiences at various developmental levels. If the group is going to progress (not regress), the coach needs to be a safe container for all this emotional and cognitive debris and create an ambiance where participants can explore their feelings and challenges without the fear of judgment or rejection. The coach has to construct a safe, transitional space for the participants, where they have permission to talk about issues they never had the opportunity to confront before (p. 88).

With its truth criterion being the successful working of something, contextualism has a tendency to accommodate other worldviews and their frameworks (Prawat & Floden 1994). While a coach's perceptions and frameworks are critical to the outcome of coaching, they represent an analytical way of thinking. Perhaps, the perceived success of group coaching relies less upon whether or not specific frameworks are being used and more upon being able to adopt what Hayes, Hayes and Reece (1998) refer to as alternative worldviews inherent within different frameworks.

Contextualism does not, however, deny the possibility that certain relational patterns or causal properties of events may be revealed through experimentation but recognizes that this would provide only partial explanations of complex events (Jaeger & Rosnow 1988, pp. 68–69).

Although previously limited empirical attention has been paid to group coaching, it is growing as a leadership development initiative and its benefits are recognised to include “economies of scale, diversity of perspectives, and behavioural change” (Ward, van de Loo, ten Have 2014, p. 63). This recognition led Ward, van de Loo and ten Have (2014) to conduct a meta-analysis and outcome study to facilitate a better understanding of psychodynamic-oriented interventions, group psychotherapeutic interventions, and executive coaching interventions. They particularly concerned themselves with randomised control trials rather than qualitative analysis and hypothesised that reviewing the literature in each of these domains would help develop a theory of psychodynamic executive group coaching.

This focus on examining coaching frameworks, rather than on methodologies of group coaching can also be seen in the work of Turner (2010) and Zaleznik (2009). Kilburg (2000) argues for the framework of psychodynamic theory as a flexible and useful tool not only for psychologists but also for consultants and coaches, and Laske (2007) points to forms of development in coaching that surpass and supersede the purely behavioural. Kets de Vries (2011) has underlined the paramount importance of psychoanalytic conceptualisations in executive groups, and Florent-Treacy (2009) has examined executives in what is described as an identity laboratory, a process that is presented through narratives from program participants. The study concludes that group psychotherapy can be adapted to create an identity laboratory experience for executives. However, while psychodynamic group therapy has been widely studied, the same cannot be said about group coaching (Ward, van de Loo & ten Have 2014).

Through ongoing discussions within the H&S, support continued emerging for a hypothesis that coaching according to contextualist assumptions may be more effective in a group setting with a focus on a method, rather than on specific framework(s). This focus on method, rather than on any specific framework, corresponds with Ward, van de Loo and ten Have's examination of the efficacy of varied group interventions. However, while Ward, van de Loo and ten Have used control groups to research these interventions, a contextualist approach emerging from the H&S discussions makes the concept of control groups, or the ability to hold things constant, redundant.

Throughout my coaching career I had observed that personnel who were responsible for procuring coaching services placed great emphasis on a prospective coach's frameworks, or technical competence, corresponding with those of the people to be coached. My own technical knowledge of engineering, banking, marketing, information technology etc. had assisted me in being chosen to coach engineers, scientists, IT professionals and educationalists. However, I knew that it was not my operational background and knowledge that had the greatest impact on coaching outcomes. I viewed the clients' emphasis on technical knowledge as a contributing factor for the success of coaching encounters to be a misattribution. Perhaps because the clients' understanding of learning emphasised the acquisition

of knowledge and its constituent parts they did not expect coaching to be successful unless the coach possessed the same body of knowledge.

Such misattribution can be illustrated by examining the act of goal setting, which Ordóñez et al. (2009) describe as “one of the most replicated and influential paradigms in the management literature” (p. 6). Through Pepper’s (1942) lens, goal setting can be seen as an analytical process based upon the fundamental assumption that the world can be known, predicted and experimented with as a closed system. Yet, coaches do not typically contemplate philosophical issues such as the nature of the theory underpinning their views. They use goal setting without understanding the limitations they subsequently impose upon themselves and their clients. When things do not work out as expected, they then attempt ‘fixes’ that involve trying to get better at achieving their goals.

While its advocates have had a substantial impact on research, management education and management practice, goal-setting has caused a narrowing of focus that neglects non-goal areas, distorted risk preferences, a rise in unethical behaviour, inhibited learning, corrosion of organisational culture, and reduced intrinsic motivation (Ordóñez et al., 2009). The proposed contextualist-coaching approach has attempted to address this issue by not splitting theory, research and practice. Instead, it describes a process whereby goals emerge and yet are expected to be reformulated as both context and perceptions of context shift as a result of learning.

Journal entry (16 January 2010)

How much more do I need to know? I have been reading for years. So many different bodies of literature to draw from.... The more I think I know, the less I know I know... what am I missing here?

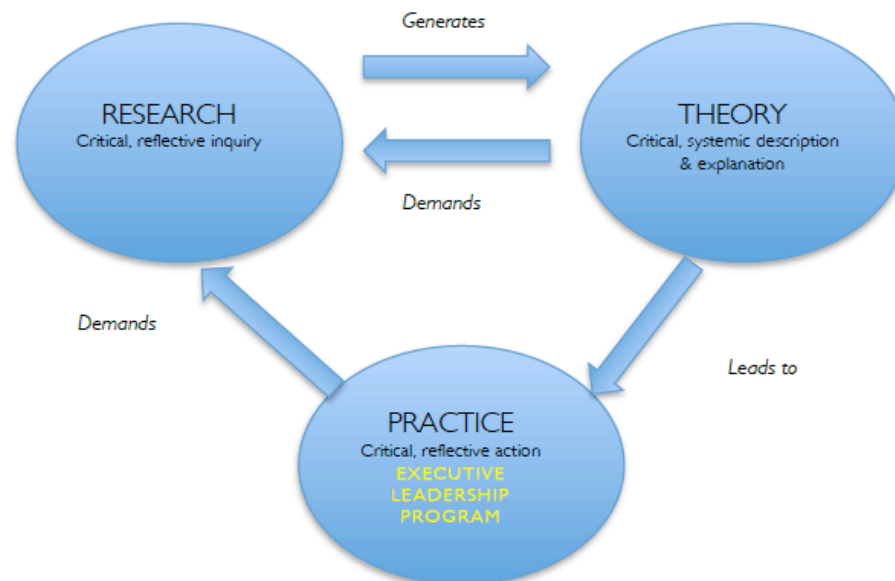
Instead of investigating effectiveness over time (longitudinal studies) while holding any body of knowledge constant, perhaps there is efficacy in focusing on the method (M) employed within coaching groups, irrespective of the framework in use.

Cycles of critical, reflective inquiry with members of the H&S resulted in successive iterations of critical systemic descriptions and explanations for a contextualist-coaching theory. The particular iteration of theory that was judged ready to be put into practice was decided pragmatically through successfully winning a tender to design, develop and facilitate a leadership program.

6.4 Top and bottom loop critical reflective inquiry and practice to generate theory: executive leadership program

While Aristotle's *aisthesis* describes the process whereby theory was generated using the top loop methods of BARC and H&S, the synergism between research, practice and theory was completed using *empeiria* (practically acquired experience) by incorporation of the bottom loop of Lynham and McDonald's (2011) model (see Figure 11: Synergism between research, theory and practice). This first iteration of contextualist-coaching theory was described to the client in the tender response document (see 6.4.1). It was pragmatically determined ready for putting into practice when the tender response was successful. Consequently, the specific area of application (A) for this synergism between research, theory and practice became an executive leadership development program for an organisation represented by a project management team (the client) and 24 executives conducted over a 9-month period.

Figure 11: Synergism between research, theory and practice



(Adapted from: Lynham & McDonald 2011, p. 132)

The client brief was to design, develop and deliver a module called Developing Self with the purpose of increasing the personal capacity of 24 executives for “sustained, impactful leadership through increased self awareness and greater understanding of their impact on others within their organisational culture” (client brief, 21 December 2009). The client required the participants, on completion of the program, to “be more likely to be compassionate, sensitive, confident, resilient and adaptable” (Client brief, 21 December 2009).

In response to the key selection criteria and questions asked during interviews, the proposed Contextualist Cohort Coaching approach incorporated the following:

1. acknowledgement of frameworks already known to participants
2. the psychometric Roche-Martin ECR (Emotional Capital Report) 360° assessment tool comprising 77 questions and backed by ten years of empirical analysis and a database of 10,000 participants (<http://www.rochemartin.com/products/emotional-capital-report.html>, viewed 19 April 2015)

3. conduct of coaching sessions to occur predominantly within groups (cohorts) rather than individually and with two coaches
4. a methodology involving individual action research cycles, whereby within each cohort members collaborate in critically reflecting on the actions and observations undertaken within each members specific area of application.

I invited member LK of the H&S to assist me in the design and delivery of this work. In addition to meeting the requirements of the tender contract, my research goal was to advance contextualist-coaching theory through engaging in cycles of critical inquiry utilising the H&S method with my actions as a Learning Coach being the area of application. I envisaged that having two learning coaches present during each cohort-coaching session would improve the quality of observations and critical reflection possible within the H&S.

The research was not just about testing an iteration of coaching theory; it was about generating further iterations of theory. Given this aim, client-identifiable information is not needed nor provided.

6.4.1 Frameworks (F): Assumption reflection

Characteristics of the frameworks relating to the iteration of contextualist-coaching at the time of the tender submission were highlighted in the tender response. The approach and elements of implementation were conveyed using a table specifying the links between the client's quality standards and action research within an open system environment (see Appendix 1). The role of facilitator and coach within the proposed methodology was contrasted to that of traditional roles. The rationale for creating situations for participants' learning to increase the potential for effective transformational change included a comparison between the roles of Learning Coaches and teachers (see Table 4). The proposed timing and mode of delivery followed a mutually agreed upon timeline (see Figure 12).

Table 4: Extract from Tender Response (8 February 2010)

Differences between Training Facilitators and Learning Coaches

<i>Training Facilitators</i>	<i>Vs.</i>	<i>Learning Coaches</i>
<i>Intervene as problems arise</i>		<i>Allow problems to continue so that learning can occur</i>
<i>Improve group interaction</i>		<i>Help groups change their interaction</i>
<i>Help to find or provide the right answer and to diagnose problems</i>		<i>Help participants learn how to effectively ask questions</i>
<i>Help to improve process and task</i>		<i>Help participants learn how to learn</i>
<i>Recommend needed training</i>		<i>Provide just-in-time learning by being knowledgeable and skilled in facilitating presentations on various frameworks that may assist in the moment</i>
<i>Help groups to work well within their existing paradigm</i>		<i>Help participants to change the paradigm through which they are viewing problems and challenges</i>
<i>Support single loop learning</i>		<i>Facilitate double and triple loop learning</i>

Learning coaches create situations for learning by assisting cohort members to engage in:

- 1. framing, reframing and providing an alternative framing for project/problems, since complex issues are seldom what they first seem;*
- 2. identifying, clarifying and testing their personal insights and theories about their areas of application;*
- 3. learning how to reflect on the way in which they formulate problems, test and solve them;*

4. *developing cohesively within the kind of environment that best supports inquiry and learning;*
5. *attending to both team process and individual learning.*
6. *Learning coaches aim to:*
 - *not teach, but provide conditions under which cohort members might learn themselves from their project work and from each other;*
 - *model questioning insight;*
 - *create opportunities for critical reflection and fostering transformative learning;*
 - *provide a supportive environment;*
 - *emphasise confidentiality;*
 - *make work visible;*
 - *challenge the group;*
 - *help participants to give and receive help and feedback to each other;*
 - *at times, say nothing and being invisible.*

Learning Coaches help balance task and learning through the use of questions designed to stimulate critical reflection. They ask questions to help make situations visible and look for opportunities to help participants to think differently. They foster a climate in which participants feel comfortable in examining their beliefs, practices and norms. Through this type of reflection, reframing of the presenting problem commonly occurs because people uncover misperceptions, norms and expectation that are often hidden.

Without a Learning Coach explicitly reinforcing the goals of a program, learning tends to be driven by task focus.

Reflection is a critical ingredient that is frequently missing in quantity and depth in many programs. It is a key component to ensuring that what is learned through the experience of working on a real project is explicit and planned. The Learning Coach tries to primarily use questions as a way of working with groups in order to model questioning insight. The Learning

Coaches can also be freer to ask questions from an outsider's perspective, as they are not constrained in the organisational culture or by political issues.

Private reflection is helpful but thoughts are not fully developed without conversation. Through Action Research, coaches provide a vehicle for questioning insight and conversations that will help participants reframe their thinking. The program will need to provide regular opportunities where participants reflect. In doing so they will learn from what they do in each session. In this way the program models the reflective practice that will be necessary beyond the program.

In summary, the Learning Coaches will present opportunities for participants to reflect because:

- 1. people are often unaware of the consequences of their actions and therefore cannot alter them*
- 2. without reflection, people cannot close the gap between what they espouse and what they actually do*
- 3. biases in the way people work lead to errors that cannot be easily detected and corrected without reflection*
- 4. new situations often present new contexts that require new ways of thinking about what worked in the past—reflection is essential for such consideration.*

The amount of learning by participants will be dependent upon a combination of programmed instruction and the development of their personal questioning insight.

Figure 12: ‘Developing Self’ Program Timeline



The three topics, Self Awareness, Impact on Self of Organisational Culture and Building Leadership will be developed and interwoven across the two workshops to ensure ideas are linked, there is ongoing inquiry into underlying assumptions, perceptions and premises and relevant actions are identified and implemented to build the capabilities and dispositions of effective leadership.

6.4.2 Methodology (M): Process reflection

From April 2010, H&S member LK and I commenced designing, facilitating and delivering the program to 24 executives over a period of nine months. In addition to the critically reflective activities that we facilitated among participants, we conducted critical reflective inquiry into our Learning Coach practice with the goal of further developing contextualist-coaching theory.

From the outset, the process tested our resolve of maintaining our contextualist focus, rather than falling back upon the (false) safety of mechanism. The nature of our engagement with the client, to whom we were answerable, presented a dilemma and, we believed, represented the biggest risk to the success of the program. The client had indicated that our tender had been successful because of the approach we favoured; however, in practice the client project managers held immovable formist and mechanistic assumptions. Consequently, in order to implement the program it was necessary to negotiate with them continually.

Our predicament worsened three months into the program, when we learned, through another provider, that two competing organisations had also been engaged for the same task, working with different client groups. We were all independently designing, developing and facilitating the 'same' program. The client was privately comparing individual components of each program, with a view of taking the best from each and developing a (better) final program, which would be implemented in their organisation for a subsequent three years. In this way, our programs were collectively being treated mechanistically, each being seen as being composed of individual parts rather than comprising a non-reducible whole.

The client's withholding of this information conflicted not only with the principle of collaboration, but also with the underlying principles of learning that were essential to our approach. It became clear that the client project team's understanding of action research differed from ours. We were clearly operating from different paradigms. Reflection on this issue became an important source of personal learning during the program. I had underestimated the difference between action research perceived through one paradigm and another. The distinct systemic levels of zero, single loop, double loop and triple loop learning (Argyris & Schön

1974, Flood & Romm 1996, Snell & Man-Kuen Chak 1998) provided a useful framework for making this distinction.

Zero learning occurs in an organizational setting when fresh imperatives or problems arise, yet members fail to take corrective action. Single loop learning refers to making simple adaptations and taking corrective actions, whereas double loop learning involves reframing, that is, learning to see things in totally new ways. Finally, triple loop learning entails members developing new processes or methodologies for arriving at such re-framings.

Generally speaking: the higher the learning level is, the more complex it is. Zero learning and single loop learning are widespread in most organizations, but double loop and particularly triple loop learning are rare (Romme & van Witteloostuijn 1999).

I interpreted the client's approach to action research as being aligned with that of double loop learning; that is, as a process whereby results would be attained by going through a critical reflection process that did not require a change in executive perceptions. It appeared that despite their espoused theory, the theory-in-action focus of the client was on changing the behaviour and thinking of participants, not on the transformative possibilities associated with reflection-shifting perceptions. Their approach was limited by their unexamined implicit paradigm.

From comments made by participants during cohort-coaching sessions, other perceptions of action research viewed through different paradigms also became apparent. For example, during a cohort-coaching session early in the program, the perceived safety of the orderliness of mechanism was evident:

Journal entry (19 July 2010)

When I asked the group what they wanted to get out of the program a number of participants commented that they wanted to "learn steps that I can take to be a better leader. Tell me what I need to know."

At first this goal seemed to be at odds with contextualism. However, I instead began to view it as one of the many ways to interpret the world within the

assumptions of contextualism. This confirmed my view that a role of a cohort was to facilitate different perspectives, to expand the list of possibilities for action, and that different perspectives included those of mechanism.

... disorder is a categorical feature of contextualism, and so radically so that it must not even exclude order. That is, the categories must be so framed as not to exclude from the world any degree of order it may be found to have, nor to deny that this order may have come out of disorder and may return into disorder again—order being defined in any way you please, so long as it does not deny the possibility of disorder or another order in nature also (Pepper 1942, p. 234).

Journal entry (20 July 2010)

Contextualism doesn't preclude me telling participants 'what they want to know'. However, I have to be careful that when I do this that I am explicit about why I am doing so. I need to frame the 'telling' in a context of the multiple understandings of contextualism.

Our contextualist approach was “constantly on the verge of falling back upon underlying mechanistic structures, or of resolving into the overarching implicit integrations of organicism” (Pepper 1942, p. 235). This was clear to us as we faced the seemingly permanent and immovable constraint (structure) of delivering the program while our progress was being constantly monitored through mechanistic analytical ‘eyes’. At each session a client representative sat at the back of the room and assessed our delivery, referring to a checklist. This boundary that we found constricting was set up early in the project, but had not been mentioned prior to our engagement. It was conveyed to us that the client believed that providers should have expected such procedures.

Journal entry (5 May 2010)

I just received an email from the client relationship manager. We have to produce ALL of the documents for the whole program before we have met any of the participants. And, we have to produce these 'recipes' using complex, strict templates without any deviation. We have to finalise them and have them approved before we can even meet with the participants or start the program. This is not what I would choose to do and conflicts with how I view learning from within the assumptions of contextualism.

This is our first major, and unexpected, conflict with delivering the program according to contextualist assumptions. How can we produce all documentation for the program prior to any engagement with, or contribution from, the participants? Contextualist cohort coaching theory is aligned to emergence and we had very clearly articulated this during the selection process. We entered our first meeting with the allocated client team believing that they understood and valued our proposed approach. We were wrong.

Journal entry (2 April 2010)

It has dawned on me that I have been quite naïve about [the client's] understanding of my proposal. We have been meeting with [client relationship manager] over the past three months and we still haven't met, or been provided with any information about any of the participants of the program. At interview, [client] it had been indicated that our approach was understood. However, this can't be the case.

[Client relationship manager] never has any time to meet outside of structured meetings and when we do meet we have to stick to a prearranged agenda and the meetings can't go over 60 minutes.

The client is insisting that we meet our contractual obligations by producing completed Facilitator and Participant Handbooks prior to commencing the program.

Journal entry (3 April 2010)

There is no opportunity for collaborating with the participants in designing the program. Each meeting with [client] involves assessing our progress against criteria including the production of reading materials adhering to the [organisation] style template.

The program is focused on tasks where knowledge is paramount and all we have to do is expose the participants to it—we have to fill their empty heads! I feel like I am in an OLD school.

Our focus shifted to how we could accommodate these immovable mechanistic requirements within the assumptions of contextualism.

Journal entry, (3 April 2010)

The importance of “what is there for me to learn here?” has hit home. I need to focus in a different way.

We focused our attention on how we could meet the client’s mechanistic and formist requirements while maintaining a contextualist focus. Documents were subsequently drafted using frameworks that we considered would be useful for the purpose at hand while still allowing for learning to emerge within the program in a ‘just in time’ way. However, the client continued making it clear that they wanted more detailed documents prepared so that ‘anyone’ could deliver the program. This of course was linked to their desire to put together a program by pulling bits and pieces from three programs being developed by different consultancies.

Journal entry (10 June 2010)

Writing these materials in the client prescribed manner is inconsistent with my view of how people learn. Finalising a participant and facilitator handbook, before we have even met the proposed participants is such a waste of time and effort. I feel undervalued, invalidated and annoyed.

Our instructional designer (ID) has become so frustrated with the seemingly contradictory requirements from the client that she has decided to leave the project. The perfectionistic approach taken by [the client] required the ID to spend a lot of (unnecessary) time focusing on formatting documents so that they looked right and adhered to their strict writing policies. We were being assessed according to competencies unrelated to the learning outcomes they desired from the program.

As Program Director, I am left to finalise the written materials. So I have decided not to prepare copious written materials. I am focusing on providing the least I can to meet their requirements so that I can leave room for learning to emerge during the program. With participants engaging with us [Learning coaches] in a 'just in time' way, learning opportunities will arise during the program. This approach to meeting the client requirements while not deviating from contextualist assumptions requires a delicate balance of client relationship management. I am going to see what I can get away with by just placing certain frameworks into the materials that would provide a common starting point for discussions within the cohorts.

I eventually understood that, to be effective, I had to accept the analytical worldview of the client and manage my actions accordingly. I had to learn how to relate to their analytical worldview from a contextualist perspective. To achieve this shift, I refocused my area of application from running the program according to the assumptions that I had described in the tender response, to learning how to run a contextualist program within a mechanistic culture. With the assistance of regular critical reflection with members of the H&S, I went back to the basics of the meta-theory of contextualism and its two ineradicable contextualist categories of change and novelty and associated quality and texture.

Pepper (1942) describes a procedure for developing these categories of contextualism, but first points out that “in this theory nothing shall be construed as denying that anything may happen in this world. Thus change and novelty accepted in the most radical sense will be regarded as the fundamental presuppositions of this theory” (pp. 235–236).

Within contextualism, we must “deal with the world as we meet it, and we meet it only in the events of the epoch in which we are living” (Pepper 1942, p. 236). These “events of our epoch seem to exhibit a structure which may be regarded as relatively uniform, and the basic concepts for this structure may be taken as quality and texture” (Pepper 1942, p. 236). “They are the basic categories subject to the general proviso above mentioned regarding change and novelty” (Pepper 1942, p. 236). I had to deal with the world [of the client] as I met them. That is, mechanistically and formistically.

Journal entry (20 August 2010)

Mechanism has definitely met contextualism and there is much for me to learn!

Once again I engaged in top loop critical, reflective inquiry with the H&S. I inquired into contextualism to guide the emergence of theory that could lead to theory that would guide my actions with the client. The conflict in paradigms between our espoused methodological approach and the client’s interpretation of our description became the new focus and area of application. Since contextualism’s system of concepts represents a “set of working categories for handling the events in our epoch” (Pepper 1942, p. 236) with every event in the present epoch having quality and texture, the project very quickly focused on learning how to work contextually with client representatives who held non-contextual assumptions.

6.4.3 Area of Application (A): Content reflection

To address this area of application (A), the focus shifted to recognising the quality and texture of the events encountered in the project. For quality, I had to consider the spread, its change and degrees of fusion. Under ‘texture’ came consideration of (1) the strands of textures, (2) their context, and (3) references which are either (a) linear, (b) convergent, (c) blocked or (d) instrumental (Pepper 1942). This led to the emergence of the hypothesis that the way forward would be to recognise the references that were in common between the different paradigmatic views and moving forward within these shared assumptions.

The relations involved in a historic event are inexhaustible, and a set of contextualistic categories does not so much determine the nature of our world as lead one to appreciate fair samples of the world's events (Pepper 1942, p. 237).

With the assistance of members of the H&S, I sought to understand the client's interpretations using an analysis and synthesis dialectic. I attempted this within the assumptions of contextualism, despite that not being the client's paradigm of the construction of events.

Pepper subcategorises quality into spread, change and fusion. Interpreting events using these subcategories helped me not only develop iterations of hypotheses for moving forward in the project but also understand contextualism more deeply. In attempting to understand its system of concepts, I was able to manage the inconsistencies between the different interpretations of the client and myself. Thus contextualism facilitated clarity and acceptance of change through its acceptance of ambiguity, volatility, complexity and uncertainty.

The client and I had different interpretations of the most effective ways for facilitating learning in the executive program. This paradox had arisen because the linear scheme of time was being imposed on the events of the program. I realised that I was attempting to operate according to the assumptions of contextualism, within the dimensional *time* of the client's view. Their mechanistic view revealed "a conceptual scheme useful for the control and ordering of events, but not categorical or, in that sense, real" (Pepper 1942, p. 240). So, contextualism guided me to be "careful to distinguish between qualitative time (often called "duration") and schematic time (Pepper 1942, p. 242).

For example, requiring the preparation of completed materials prior to the actual program events presumed that texture could be predicted and ordered. Schematic time ordered these non-factual events, whereas the events occurring in actual time had to be intuited from the forward and backward spread of the quality of each event as it took place in the program.

In an actual event the present is the whole texture which directly contributes to the quality of the event. The present therefore spreads over the whole texture of the quality, and for any given event can only be determined by intuiting the quality of that event (Pepper 1942, p. 242).

The assumptions of contextualism as a basis for an approach to coaching were chosen partly because of the way that contextualism accounts for change. With contextualism's quality continuously changing and never stopping, change is seen as a "categorical feature of all events" (Pepper 1942, p. 243).

... since on this world theory all the world is events, all the world is continuously changing in this manner. Absolute permanence or immutability in any sense is, on this theory, a fiction, and its appearance is interpreted in terms of historical continuities which are not changeless (Pepper 1942, p. 243).

It became necessary for me to focus on 'living in the moment' to embrace contextualism's way of dealing with change. This recognition led to increasingly engaging with the client in a just-in-time way.

I sought for the fusion of events across our different paradigms.

Wherever a quality is had, there is a unit, and the tighter the fusion the greater the unification. Every given event has its quality, which is the first unit, and the unity of the event, is defined and determined by that quality. As far as the event quality extends, so far does the event extend, so far does the actual present extend (Pepper 1942, p. 244).

... generally there is some degree of qualitative integration in an event, in which case the fusion of the event quality is relaxed and the qualities of the details of the texture begin to be felt in their own right though still as within the quality of the event. Such qualitative integration may pass through several levels in a single event with varying degrees of fusions at the different levels (Pepper 1942, p. 244).

Pepper explains simplicity as a result of fusion:

Whatever is simple and unified in experience, therefore, is the result of fusion. It is not a mere psychological affair. It reflects the active structures of textures, and we may infer that qualities and fusions are as extensive as the events of our cosmic epoch (Pepper 1942, p. 245).

While the client had achieved their clarity through fusion, I observed that in doing so they denied certain categories of quality. As a result, their textures did not hold meaning for me.

But the analysis and practical control of events goes on in terms of the categories of texture. It becomes easy, therefore, to forget the categories of quality. But, without qualities, textures would be as empty as sentences the words of which had no meaning. As will be seen, the categories of texture are inexplicable except on the assumption of the categories of quality — as is equally true conversely (Pepper 1942, pp. 245–246).

An example of how I sought fusion between the different paradigms is provided by how the program was evaluated. The client sought to determine whether the program was achieving their version of quality by breaking the program into components. With neither consultation nor our knowledge of any evaluation taking place, the client embarked on a session-by-session evaluation of the program. I did not have an opportunity to contribute to the choice of evaluation method. In addition, the client conducted an additional post-program assessment 12 months after the conclusion of the program. I sought fusion through utilisation of this data, making sense of it within a contextualist paradigm.

The executives completed evaluations, designed and collected by the client. The results confirmed our perceptions that participants had been very receptive to our version of the program. Yet the positive results and participant comments appeared to surprise the client project managers.

On one occasion when I was facilitating a whole group session, I responded to a participant's question that had significantly engaged the group. This meant the

session diverged from the timing in the plan by 10 minutes, but the time was made up later, prior to the next break. However, during the morning tea break I was cautioned for deviating from the session plan. My contextualist approach was tested by such incidents. However, interpreting such events through Pepper's (1942) subcategories of quality enabled me to learn how to work amid different paradigms or views of the world.

Journal entry (24 August 2010)

Although, during the selection process, the client project team indicated that that they understood emergence, the importance of context, and the concept of just-in-time facilitation, they required us to prepare and produce session plans, facilitator guides and participant manuals for the whole program before it commenced.

While I was comfortable with the client's mechanistically driven need to be present during large workshops, I insisted that no one other than cohort members and the two Learning Coaches (myself and LK) be present during cohort coaching sessions.

We subsequently found out that the client had made the decision to award the following 3-year contract to provide this program to another provider even though we hadn't started the Cohort Coaching section of our version of the program. In the end this actually worked out well for us because the client project team ceased their vigilance in observing our whole group sessions and agreed not to attend any Cohort Coaching sessions.

Despite all-round good intentions and mutual encouragement, the discrepancy between the client project management team's analytical approach and contextualism was at first the biggest threat to the success of our program, but eventually provided the most learning opportunities.

6.4.4 Cohort-Coaching Hypothesis

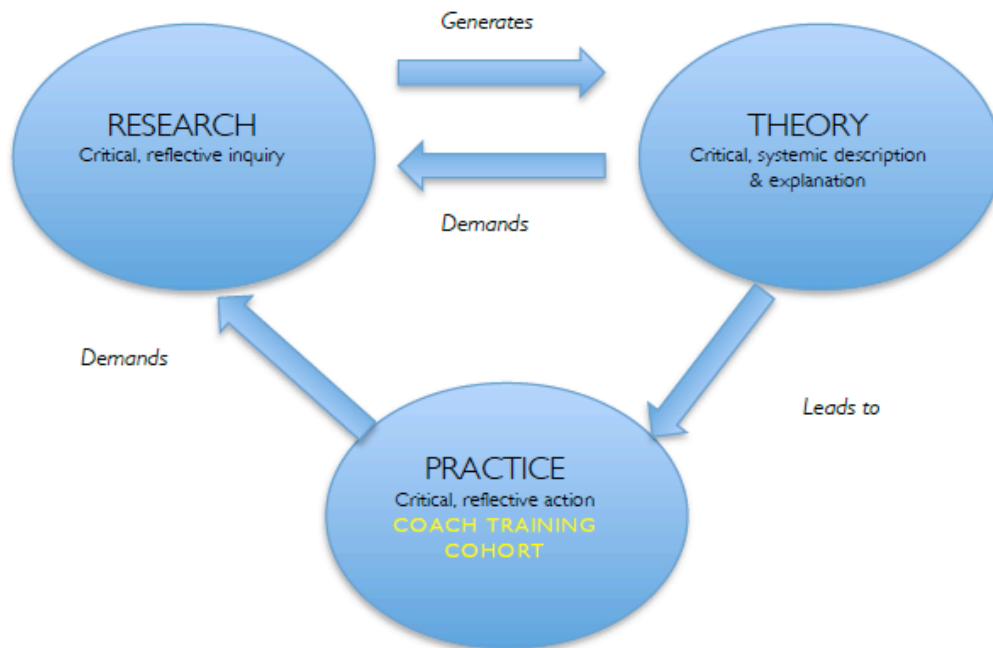
The action research approach utilised within the H&S group resembled that of Eikeland's (2006a, 2006b, 2007, 2008, 2012a, 2012b) praxis, which he interprets as approximating our everyday activities, in contrast to science and technology. Through engaging members of the H&S in praxis, by the end of the executive leadership development program the most effective coaching outcomes were being conducted in cohorts of 5–7 participants, using two Learning Coaches introducing frameworks whose assumptions were aligned with open systems thinking. A hypothesis was formulated.

Cohort-Coaching Hypothesis: *Implementation of contextualist principles within a non-contextual paradigm could be more effectively achieved through cohort coaching involving 5–7 participants and two learning coaches rather than large group facilitation or by individual coaching sessions.*

6.5 Top and bottom loop critical reflective inquiry and practice to generate theory: Coach-Training Cohort (CTC)

The ensuing action research (praxis) cycles were aimed at testing this hypothesis and generating further iterations of theory concerning contextualist-coaching using cohorts and two coaches. Subsequently, cohort coaching was put into practice within a coach-training cohort conducted during 2012 and 2013. This represented a synergism between research, theory and practice (see Figure 13). During this time the H&S continued to operate, as interpretations relating to the bottom loop of Lynham and McDonald's (2011) model were incorporated into the theory-generating process of the top loop.

Figure 13: Synergistic nature between research, theory and practice



(Lynham & McDonald 2011, p. 132)

The theoretical approach that a coach adopts is likely to shape their coaching practice (Barner & Higgins 2005). However, as Argyris (1996) points out, many people unknowingly use theories that are not appropriate to their circumstances because they do not understand the assumptions underlying either their espoused theory or theories-in-action. Given this lack of explicit and grounded theory, it follows that there is some way to go before coaches and coaching researchers understand the contradictory assumptions underlying their existing theory and practice. Without understanding theory at an epistemological and ontological level, they risk misattributing their successes as a coach. That is, they may think that their success is because of certain assumptions they hold whereas the success may be occurring despite these (limiting) beliefs.

This Coach Training Cohort (CTC) program placed value on the practice of critical reflection upon any philosophical assumptions that underlies each coach's practice. To gain a rudimentary understanding of the nuances of contextualism has been a lengthy process. Therefore, my first dilemma was how to conduct the CTC within

the assumptions of contextualism, without undertaking a level of inquiry more appropriate for a PhD. I addressed this problem by utilising Checkland and Holwell's (1998) FMA model to introduce various frameworks into the CTC and an action research methodology to facilitate critical reflection. Based upon the contextualist cohort-coaching theory established at the conclusion of the executive development program, I concentrated on developing habits of praxis among the group, independent of the frameworks being utilised.

By meeting the requirements of the Australia New Zealand Institute of Coaching (ANZIC), I had already established an accredited Coach Training program. However, this accredited program was built upon the assumptions of Ontological Coaching, an organicist approach. The CTC method was used to shift the underlying paradigm of the earlier coach-training program to reflect contextualist principles. With these explicit intentions, I enrolled four already experienced coaches who self-selected to be involved in this research into what I called Coach (Un) Training.

The goal of members of the CTC was to better understand coaching from a philosophical perspective and learn how to take action according to contextualist-coaching theory in their existing coaching practice. This CTC method allowed for the generation of data that would be used in subsequent action research cycles within the CTC. In consultation with the H&S members, reflection on the workings of the CTC further refined and generated theory.

While reflective activities represented in the top loop were focused on generating theory, reflection relating to the bottom loop activities was concerned with placing the emerging contextualist-coaching theory into a series of different practical situations. These situations included the personal coaching practice of each CTC participant.

Critical reflection on action taken by members of the CTC occurred over a nine-month period. As participants were introduced to contextualist-coaching frameworks, they tested their developing understanding in their own coaching practice. This provided feedback into the top loop research that was being

conducted with the assistance of the H&S. This would facilitate the continual emergence of contextualist-coaching theory.

The CTC provided a forum for putting into practice the developing frameworks of a contextualist-coaching approach in multiple situations. Observations and reflections that arose during CTC discussions were incorporated into the ongoing action research cycles of the H&S group. This formed continuous cycles of action research, producing further iterations of a critical, systemic description and explanation of a contextualist-coaching approach. That is, action research cycles occurring in the CTC became part of an act component of the research being conducted within the H&S arrangement.

Journal entry (10 December 2012)

The CTC approach is about people engaging in learning about the assumptions they make about the world and their coaching practice. They are finding some frameworks are more useful than others. The emerging methodology of cohort coaching has them looking into the world in a way that has them think about things instead of becoming subservient to unexamined assumptions.

Even though I am introducing some frameworks into the cohort, they are not required to adhere to them. Instead, these frameworks are introduced to stimulate critical reflection.

Each coach-training student reads different things depending on the context of their coaching practice. They talk about the frameworks they are finding useful to others in the cohort. They are learning from each other.

Journal entry (15 January 2013)

Trying to operate according to contextualist principles has been a satisfying activity.

I am confident in my lack of surety about the world (formistic and mechanistic views see expertise as 'knowing' more).

I am confident that it is necessary to be unsure in the world.

Journal entry (23 February 2013)

Members of the CTC cohort are getting better at recognising situations where they have unwittingly participated in promulgating the systems that produce the results they do not want. The extent to which they have developed these traditional worldviews and adopted a positivist approach to thinking about the world, influences how they conduct their practice. That is, they are becoming conscious of the extent to which their assumptions align with a mechanistic world hypothesis as opposed to a contextualist world hypothesis.

6.5.1 Frameworks (F): Assumption reflection

Over the course of the operation of the CTC, cohort members attempted to put a number of frameworks into practice using the assumptions of contextualism. The outcome of these actions was investigated using praxis during weekly cohort meetings. The many frameworks inquired into by the cohort included those of world hypotheses (Pepper 1942), modes of inquiry (Peirce 1998), levels of learning (Argyris 1996; Argyris & Schön 1974; Flood & Romm 1996; Romme & van Witteloostuijn 1999; Snell & Man-Kuen Chak 1998), the Ashby Space (1956 - as interpreted by Boisot and McKelvey (2010)), systems thinking (Irvin 2002) and Kegan's theory of adult development (Garvey Berger 2012; Kegan 1982).

6.5.1.1 Pepper's World Hypotheses and Peirce's modes of inquiry

Pepper's world hypotheses and Peirce's modes of inquiry were not successfully incorporated into the coaching practice of the cohort members. These frameworks caused much confusion, and it was collaboratively decided that they would best be utilised to guide my actions as the Learning Coach of the cohort, rather than by members of the CTC attempting them in practice. Understanding Pepper and Peirce's frameworks was a step too far at the time they were introduced. The literature concerning each was academically oriented and my ability to explain them became a specific area of application for my practice as a Learning Coach.

One of the ways this issue of getting others to understand the theoretical perspectives of the researcher in practice is using action research as a meta-methodology (or a way of thinking by the researchers that subsumes multiple sub-processes) rather than as the actual methodology. For example,

In particular, two characteristics enable action research to do this. One is its cyclic process, iteratively tracing out a rhythm of planning, acting, and observing the results. The other is the nesting of its cycles, applied at scales ranging from the overall study to the moment- by- moment facilitation (Dick et al. 2015).

6.5.1.2 Levels of learning

The distinct systemic levels of zero, single loop, double loop and triple loop learning (Argyris & Schön 1974; Flood & Romm 1996; Romme & van Witteloostuijn 1999; Snell & Man-Kuen Chak 1998) had already proven useful in distinguishing between viewing action research through different paradigms. It was revealed that most members of the CTC already had some understanding of learning theory through previous encounters with Argyris' (1996) work. They embraced the levels of learning framework to guide their coaching practice.

Here was a set of concepts, which linked together within-person, between-person and system dynamics. Further, it was accompanied by a set of processes for enhancing all of them (Dick & Dalmau 1999).

The CTC engaged in discussion of the literature surrounding Argyris' work and observed examples of his frameworks in action. The concept of Triple Loop Learning became a particular focus of the group and was interpreted as learning that was transforming, or learning that resulted in the changing of perception at the level of identity.

6.5.1.3 Ashby's Law of Requisite Variety

The idea of complexity and its relationship to the assumptions of contextualism was ultimately given some clarity through cohort discussion of Boisot and McKelvey's (2011) description of the choices facing managers. Boisot and McKelvey's (2011)

interpretation and explanation of Ashby's Law of Requisite Variety (1956) offered a perspective, based on some recent developments in complexity science, that distinguished between the "simplicities achieved by reductionism (equilibrium, law-like equations, linearity, and predictability) and the complexity triggered by initiating "butterfly events"—nonlinearity, scale-free causes, and power laws (PLs)" (Boisot & McKelvey 2011, p. 119). They framed their "schema formation and adaptation within Gaussian and PL ontologies" (p. 119) in terms of Ashby's Law of Requisite Variety (1956):

Variety perceived to be requisite is sensitive to the type of ontological assumptions that are made. PL approaches to management inquiry focusing on rank/frequency distributions, fractal structures, and scale-free dynamics are outlined (Boisot & McKelvey 2011, p. 119).

In the CTC, discussions focused on how the assumptions of the non-contextualist coaching-approaches could be interpreted as operating within the ordered regime of the Ashby Space (Boisot & McKelvey 2011). While allowing for stable and structured conditions, the CTC determined that coaching from the assumptions of the ordered regime did not bring better understanding and practice within the complexity associated with the variety of stimuli in coaching.

Consideration of the high variety of stimuli encountered by coaches in the current business environment led to hypothesising that a contextualist framework involved theorising about coaching beyond the ordered regime. The CTC subsequently engaged in inquiry that linked contextualism to the complex regime of the Ashby Space (Boisot & McKelvey 2011). Using Pepper's (1942) distinctions, an understanding of contextualism took shape as the cohort related to the Ashby Space. It helped explain order as a subset of disorder and the differences between contextualism and mechanism and organicism.

Disorder is a categorical feature of contextualism, and so radically so that it must not even exclude order. That is, the categories must be so framed as not to exclude from the world any degree of order it may be found to have, nor to deny that this order may have come out of disorder and may return into disorder again—order being defined in any way you please, so long as it

does not deny the possibility of disorder or another order in nature also (Pepper 1942, p. 234).

Contextualism is constantly threatened with evidence for permanent structures in nature. It is constantly on the verge of falling back upon underlying mechanistic structures, or of resolving into the overarching implicit integrations of organicism (Pepper 1942, p. 235).

6.5.1.4 Systems Thinking

The systems-thinking iceberg (Figure 4) and Irvin's (2002) description of systems, proved a useful diagram for critical reflection within the CTC. It provided a way to link events, patterns and systems to the underlying mental models upon which assumptions are held. In reflecting upon the depth of understanding required to address complicated and complex situations, the cohort shifted from speaking in terms of 'solving complex problems' to 'facing complex challenges'.

6.5.1.5 Kegan's model of adult development

Kegan's (1982) model of adult development was the final framework that the CTC inquired into before its dissolution. Its activities ceased as a natural consequence of each cohort member gaining their coaching qualification by meeting the requirements of ANZIC's professional coach criteria.

Kegan's model provided a way of reflecting on the personal maturity and learning of cohort members and their clients. Its success as a useful framework for coaching and discussion within the cohort was evident: three cohort members continued to investigate Kegan's model and actively use it within their ongoing coaching practice. They have learned how to conduct subject/object interviews and continue to use Kegan's (1982) model to hypothesise the leading and trailing edges of the personal development stage of their coaching clients.

Learning how to conduct subject/object interviews involved learning how to determine the leading edge of a person's maturity (Garvey Berger 2012), according to Kegan's (1982) model of ways of thinking. This involves recognising the limits of a person's current ways of doing things and knowing when their frustration has

reached a stage where they can feel the limits of their current ways of thinking. The implications for coaching were that coachees on this path needed sufficient support so that they can persist in the face of their anxiety and any conflict they may face as they learn. However, within the group of three members of the CTC who pursued Kegan's model, it was recognised that Kegan had taken an organicist, not a contextual, approach to its development stages.

6.5.2 Methodology (M): Process reflection

I had earlier observed the impact that different interpretations of action research can have on actions and perceptions during my involvement in the executive 'Developing Self' program. Despite an agreed shared assumption (during the tender process) that achieving a purely rational understanding of the world is illusory, in practice it transpired that the client project team had a very different understanding of the process of action research from LK and myself. I perceived their understanding as mechanistic, whereas I was attempting to perform action research within the assumptions of contextualism. Reflection on the emerging literature on group coaching had also raised concerns about whether its implicit theoretical foundations were largely mechanistic. Subsequently, the CTC had provided a practice arena for renewed reflection on action research as interpreted through contextualism.

On many occasions, I observed Argyris' double loop learning (Dick & Dalmau 1999) occurring among members of the CTC. However, I was now interested in theory that might direct action that would facilitate triple loop learning at the level of identity. I would need to identify the characteristics of an action research method that could focus at the level of mental models and beliefs—theory that could direct action that facilitated triple loop learning. Having read extensively about different approaches to action research, I found Eikeland's (2006a, 2006b, 2008, 2012a, 2012b) interpretations the most useful as they differentiated and clarified concepts of "intervention", "collaboration", "interactivity", "application" and "development" (unfolding implicit, emergent tendencies) (Eikeland 2012a, p. 12).

The philosophy of Aristotle provides other ways of conceptualising knowledge generation and application which are not dependent on the

insider-outsider distinction and its implied divisions of labour. But the main purpose of this text is not to disavow “intervention”, “collaboration” and similar terms or practices but to provoke reflection and open the theoretical space for exploring praxis-research. These most commonly used terms just mentioned do not open this reflective theoretical space sufficiently, since they all seem to presuppose the institutionalised division of labour and do not incorporate reflections on the Aristotelian concept of praxis (Eikeland 2012a, pp. 12–13).

Eikeland (2012a) further claimed that it is “both possible and desirable to do action research as praxis-research in ways that transcend “intervening”, “collaborating”, “interacting”, and “applying” mainstream research methods and scientific theory, as a dialectical “Aufhebung” of these terms and practices” (p. 13). By “Aufhebung”, Eikeland (2012a) means “transcending, retaining, transforming, and improving at the same time, literally; to raise something to a new level, mainly by recontextualising it. This can be done by rethinking these terms within a comprehended praxis-research framework” (p. 13).

With the assistance of the H&S, I was a practitioner-researcher performing the task of knowledge generation and research. I was doing so with deliberate philosophical reflection. However, I had observed that others, such as the client project team in the executive development program, were doing what McNiff and Whitehead (2011) describe as action research reduced to problem solving and improving practice, without explicit and clear theoretical ambitions. They had applied conventional research methods to the process of action research.

Eikeland (2012) describes practitioner research as necessary but still not sufficient for praxis-research. In this reconstruction of Aristotle, Eikeland (2012a) “differs from the most current ‘applied’ way of presenting Aristotle on knowing by separating epistêmê from tékhnê and phrónêsis (cf. Flyvbjerg, 2001; Toulmin, 1996a, 1996b, 1996c, 2001; Schwandt, 2002; Ramírez, 1995; Polkinghorne, 2004)” (p. 13).

The separation is usually done in order to emphasize phrónêsis as an independent alternative to epistêmê and tékhnê, or to “science” and

“technology”. *Phrónêsis is seen as deliberation connected to praxis, interpreted as approximately our everyday activities, contrasted to science and technique* (Eikeland 2012a, p. 13).

Eikeland (2012a) distinguishes action research practices through their ancestries. The more traditional versions keep a critical distance as a necessary premise for objectivity, explanation and prediction; others hold the premise that doing research at a distance is insufficient, irrelevant, and even distorting and invalidating. Claiming that doing research that is “immediately ‘useful’ for some externally defined cause is hardly a viable alternative to disengaged spectator research” (p. 15), he calls for “other forms and ways of attaining and maintaining ‘critical distance’ without externalised segregation” to be distinguished and developed (p. 15). That is, he formulates the basic challenge, which is to be concerned with various ways of knowing, knowledge forms, and their validity and relevance and “normally not addressed and more often evaded and obscured by focusing too narrowly on so-called ‘practical purposes’ and ‘usefulness’ of research” (Eikeland 2012a, p. 18). Zuber-Skerritt (2001) addresses this dichotomy between subjective and objective truth by proposing that, instead of relying on the perspective of a personal view, one can utilise an interactive dialectic using multiple data, respondents and co-inquirers. As such, the focus becomes the dialectical relationship between action and research, rather than the aim of obtaining the traditional ‘truth’. This is congruent with the notion of truth in contextualism, which is that of ‘effective working’.

The method of action research undertaken in the CTC sessions was driven by the synergism between research, theory and practice and reflection, resembling that of Aristotle’s praxis. Therefore, the research meets Eikeland’s (2012a) criteria that research needs to be done by “knowers studying their own practice, not merely the practices of others, and not merely for practical purposes but even theoretical (in a certain sense)” (p. 14).

6.5.3 Area of Application (A): Content reflection

By the maxim of autonomy, we know that one world theory cannot be legitimately convicted of inadequacy by the judgement of another. How, then,

do we discover that a theory is inadequate? By its own judgement of its own achievements in attaining complete precision in dealing with all facts whatever presented. A world theory, in other words, convicts itself of inadequacy. By its own logic, or refined canons of cognition, it acknowledges its own shortcomings in dealing with certain kinds of facts, or in dealing with them consistently with its dealing with other kinds of facts. These judgments, once made by the theories themselves, can then be compared externally. Theories which show themselves up as dealing much less adequately with the world-wide scope of facts than others are said to be relatively inadequate; the others, relatively adequate (Pepper 1942, pp. 115–116).

If a theory is any good it can stand on its own evidence. The only reason for referring to other theories in constructive cognitive endeavor is to find out what other evidence they may suggest, or other matters of positive cognitive value. We need all world hypotheses, so far as they are adequate, for mutual comparison and correction of interpretive bias (Pepper 1942, p. 101).

During the CTC sessions it emerged that it was not necessary for each member of the cohort to focus on the same framework. Instead, of most importance was the method of action research, or praxis (deliberate philosophical reflection), which guided the critical reflective practice and inquiry. This led to the idea that, for coaching to become a profession, perhaps it does not require its own body of knowledge; instead, a shared methodology is needed. This hypothesis was based upon my observations of participants' improved efforts at praxis, rather than their increased understanding of various frameworks, being largely responsible for achieving the desired outcomes in their coaching practice. Thus a further iteration of the cohort-coaching hypothesis was formulated.

6.6 Summary

A summary of significant iterations of contextualist-coaching theory that emerged during specific times during the research is presented.

6.6.1 Formation of the H&S network to replace the BARC

The hypothesis of best inference for the formation of a new group to continue inquiry into addressing the research question on what had appeared to be effective in the BARC included the following references for action:

1. Collaboration among members both formally and informally
2. Valuing of the practice of reflection and a spirit of inquiry
3. Common frameworks to advance discussion around action research and systems thinking
4. Opportunity for members to make presentations about their research and be supported during rigorous analysis and discussion of work
5. Informal and unstructured learning with wide and exploratory discussions
6. An understanding of traditional methodologies and a decision to work outside of them
7. A place to be both a practitioner (discussion of specific projects) and scholar (discussion of theory)
8. The body of theory that supports the work being done by members is developed communally
9. Thinking that draws on many bodies of knowledge
10. Learning by adapting theoretical models to new real life situations
11. Developing new frameworks for interpreting experience
12. Tackling real organisational issues to produce tangible outcomes by linking research and practice
13. An emphasis on mutual learning rather than teaching

While the H&S arrangement was subsequently formed without the blocked references 1, 3, 4, 6 and 8, the thirteen references above were subsequently significant to the operation of the CTC.

6.6.2 Iteration of theory at commencement of the executive leadership program

The iteration of theory presented in a successful tender response to design, develop and deliver an executive leadership program (see 6.4) incorporated the following:

1. acknowledgement of frameworks already known to participants
2. a psychometric 360° assessment
3. conduct of coaching sessions to occur predominantly within groups (cohorts) rather than individually
4. a methodology involving individual action research cycles, whereby within each cohort members collaborate in critically reflecting on the actions and observations undertaken within each members specific area of application.

6.6.3 Iteration of theory upon completion of the executive development program

A cohort-coaching hypothesis was proposed upon completion of the executive development program:

Implementation of contextualist principles within a non-contextual paradigm could be more effectively achieved through cohort coaching involving 5–7 participants and two learning coaches rather than large group facilitation or by individual coaching sessions.

6.6.4 Iteration of theory upon completion of the CTC

Cohort-Coaching Hypothesis: *Cohort coaching is more likely to align to contextualist assumptions if members of a cohort regularly and explicitly engage in a shared methodology based upon praxis; that is, when members of a cohort deliberately engage in deep philosophical reflection on the assumptions inherent in any frameworks upon which they base their actions within their different areas of application.*

The references for action upon which this iteration of contextualist theory included Pepper's World Hypotheses, Peirce's modes of inquiry, Ashby's Law of Requisite Variety and the use of structures, such as the H&S and CTC, for engaging in critical reflective inquiry and practice.

Chapter 7: Conclusion

7.1 Introduction

This account of the research undertaken represents a ‘snapshot in time’: an account of the seminal milestones of the ideas that emerged rather than a description of all of the integrated twists and turns.

Chapter 7 provides a summary description of contextualist-coaching theory at the time of writing. A post-rationalisation of the research provides a framework representing the salient features of a contextualist-coaching approach, at the point in time at which it was judged that the emergent categories were sufficient to be recoverable by others. The central argument developed is that a strong theory base comes out of research that is contextualised, namely done in the field and with others, according to the assumptions of Pepper’s contextualism. The chapter also examines the potential for this theory to make a contribution to the future development of coaching practice.

7.2 Summary description of a contextualist-coaching approach

The research of academics is:

... (sufficiently) relevant but still not what our customers (i.e., the managers) want or need. The gap that exists is not between rigorous and relevant research; it is between relevant and useful knowledge. For (relevant) research to become managerially useful, it still needs to go through a transformation. Unfortunately, academics are not good at this transformation process which has a serious implication on what actually needs to be done to make research more managerially useful (Markides 2011, p. 121).

The value of this research is justified by providing an iteration of a new coaching model that exists within a much broader philosophical context than other coaching approaches. It does not represent a statement that this particular version of a contextualist-coaching model is ‘better’ than any other, or ‘right’. Instead, it provides for ongoing learning and investigation. The pragmatic argument proposed

is that, while frameworks need to be developed, it is the methodology and the testing of frameworks in the real world that point towards the usefulness and validity of a theory.

... contextualism advocates a pluralism of ideas and methodologies. It counsels a critical awareness of the forms and functions of different orientations and of the strengths and weaknesses of different methodologies to consider the ways in which they may complement each other (Jaeger & Rosnow 1988, p. 72).

The intent of developing a contextualist-coaching approach, based upon Pepper's (1942) contextualist assumptions, was to link research, practice and action, thereby allowing coaches to tackle real organisational issues and produce tangible outcomes more effectively than current approaches. Subsequently, a theory was developed, which included a cohort arrangement as a major feature. When facing complex challenges, the incorporation of additional observers in a cohort illustrated contextualism's assumption that "it is impossible to arrive at a single or simple explanation of the 'cause' for anything... [M]ultiple perspectives are appreciated, even required" (Super & Harkness 2003, p. 6).

In the development of this theory, it was recognised that undertaking deep philosophical reflection on the underlying assumptions of any framework used to guide actions is of utmost importance, rather than the use of any specific body of knowledge frameworks. Thus this research attempts to address the gap that exists between relevant and useful knowledge, by diverting the emphasis from specific knowledge towards developing skills in deep philosophical reflection, or praxis.

It emerged that of utmost importance was a focus on methodology, rather than any specific frameworks or area of application. However, without careful adherence to the explicit underlying assumptions of contextualism, there is a risk that a coach could inadvertently implement contextualist-coaching theory aligned with the assumptions of an analytical world hypothesis, such as mechanism. To avoid this happening, an understanding of the principles of contextualism is essential.

Taking action aligned with contextualist assumptions was found to be extremely difficult because of the mechanistic assumptions implicit in the actions of most coaches and practitioners and the organisations within which coaches and their clients operate. However, this risk can be alleviated through critical reflection in the presence of experienced others, in a cohort arrangement, who have relevant philosophical, theoretical and methodological knowledge, as this provides access to multiple interpretations.

Contextualism welcomes multiple interpretations, and the number of possible interpretations increases with the addition of observers. Therefore, it was hypothesised that, when conducted within a cohort, or network of people, facilitated by two Learning Coaches who act according to contextualist assumptions, coaching will be more effective than when it is underpinned by non-contextualist assumptions.

Cohort-Coaching Hypothesis: *Cohort coaching is more likely to align to contextualist assumptions if members of a cohort regularly and explicitly engage in a shared methodology based upon praxis; that is, when members of a cohort deliberately engage in deep philosophical reflection on the assumptions inherent in any frameworks upon which they base their actions within their different areas of application.*

The key features of such a contextualist-coaching approach that emerged during this research include the following:

1. The assumptions of Pepper's (1942) contextualism provide an explicit theoretical foundation for facing challenges in the open systems VUCA environment.
2. Pre-determining endpoints prior to research is not possible; hypotheses must be formulated and tested in the context of an ongoing dialectic between analysis and synthesis.
3. Detailed information collected in later cycles naturally supersedes earlier data.

4. Critical reflection according to the assumptions of contextualism is more effectively facilitated through the use of cohorts, or networks of 5–7 people with two Learning Coaches, with the following characteristics:

- a) the desire of members to seek relevant knowledge and develop the skills necessary to reflect, at a philosophical and theoretical level on the frameworks underlying any actions taken within any specific area of application
- b) mutual support for members, with an emphasis on learning rather than teaching
- c) adequate creation of a space and time for group reflection and the creation of insight and new knowledge about practice
- d) valuing of the practice of reflection and a spirit of inquiry
- e) informal and unstructured learning, with wide and exploratory discussions
- f) a place for coaches to be both consultant-practitioner (discussion of specific projects) and scholar-researcher (discussion of theory)
- g) reflections drawing upon many bodies of knowledge
- h) learning achieved by adapting theoretical models to real life situations
- i) encouragement of development of new frameworks for interpreting experience
- j) encouragement of different perspectives within the cohort, which provide alternative framing for project/problems and complex issues

5. Learning Coaches should adhere to the following principles:

- a) approach members within their own paradigm, yet interact in accordance with contextualist principles
- b) not teach, but provide conditions under which cohort members might learn themselves from their work and from each other
- c) model questioning insight
- d) create opportunities for critical reflection and fostering transformative learning

- e) provide a supportive environment
- f) emphasise confidentiality
- g) make work visible
- h) challenge the group
- i) help participants give and receive help and feedback to each other
- j) at times, say nothing and be invisible.

7.3 Key contextualist principles

The central premise of contextualism is that all propositions are true in some contexts, just as they are all false in some contexts (Tebes 2005). However, this represents a world where there is no absolute truth.

Scientific norms are virtually impossible because there is nothing other than the specific research context to recommend one particular theory or method over another (Tebes 2005, p. 218).

Consequently, contextualism rejects the belief that “there is a reality out there that can be identified and specified, not only because doing so would require limiting the number of variables one specifies, but also because one would need to assume an invariant context or point of view from which reality is perceived” (Tebes 2005, p. 218).

This inadequacy of knowledge becomes apparent to coaches and their clients when the amount of information encountered exceeds their capacity to process it directly. In order to cope with the world’s complexity and diversity, they reduce and distort the information they receive, in order to fit it into their existing cognitive categories (McGuire 1983). The proposed contextualist-coaching approach has been an attempt to account for, and provide a contrast to, such mechanistic and formist views, by treating reality as an active changing event: turbulence and change are its categorical features. It deals with change in a “plurality of ways, some of which point to completeness, unity, and order whereas others point to novelty, indeterminacy, and chance” (Jaeger & Rosnow 1988, p. 67).

Contextualism emphasises the interrelationship between an event and its context. With its roots in intentional human action, its basic assumption is that “human acts or ‘events’ are active, dynamic, and developmental moments of a continuously changing reality” (Jaeger & Rosnow 1988, p. 65). However, this interpretation of reality (as continuously changing) contrasts starkly with the order that is imposed and implicit in mechanistic positivist understandings. Instead, for contextualists, the world is perceived as being composed of active, ongoing events that are continuously in the process of *becoming* or *making*.

These elements of contextualism are essential to the emphasis the emerged coaching approach places on theory development. Instead of people ‘practicing science’ by making closed or partially closed system assumptions and the applied practitioner using these discoveries by ‘applying them’, contextualism deals with science in a different way. With an understanding that the outcomes of science are themselves contingent upon the contexts within which they were developed, contextualism rejects the distinction between 'pure' and 'applied' orientations. It highlights the inseparable connections between theory and practice (Jaeger & Rosnow 1988).

To do this requires a paradigm shift away from functioning according to the assumptions of mechanism, formism or organicism. It requires that coaches achieve a transformation in their identity, or triple loop learning (Argyris & Schön 1974, Flood & Romm 1996, Snell & Man-Kuen Chak 1998).

7.4 Seminal ideas

Dealing with complexity is a continual process of facing challenges rather than of solving closed system problems. Coaches can face such challenges by developing theory for specific contexts, through engaging in research that involves studying their own practice as well as the practices of others; that is, research within the context of their own practice.

Aligned to Eikeland’s (2012b) view that theory development is necessary for effective practice, the practice of coaches must be based on personally well-articulated theory that is capable of bridging the realm of ideas and the world in

action, no matter the specific area of interest of the coach. That is, best theory is derived from best practice, which, in turn, is derived from theory and so on. It creates links between theory, research and practice, without which unintended consequences can eventuate and their causes be misattributed.

Eikeland (2012a) believes the current split between “theory and practice” to be not only “produced by a fundamentally contemplative, externalised, and spectator based epistemology and institutionalisation of modern social science, but also by technical approaches to action” (p. 18). To overcome this split requires coaches and their clients to have a theoretical and epistemological understanding of the paradigms at play and have a method for enacting these understandings at institutional or organisational levels. It requires engaging in phronesis; that is, practical changes in the ways of doing things, individually and collectively (Eikeland 2008). This is what this contextualist-coaching theory has attempted to achieve.

The central argument developed here is that a strong theory base comes out of research that is done in the field with others, as it promotes the gaining of practical wisdom based upon insights and judgments that are grounded in multiples of experience in this volatile, uncertain, complex and ambiguous environment. The approach seeks to meet the challenge of making “experience-dependency conscious and visible, and then to integrate it adequately into the self-conceptualisation and practices of action research and of social research in general” (Eikeland 2012a, p. 18).

With its synergistic relationship between research, theory and practice, coaching with contextualist principles contrasts with the ways that coaches typically operate. Most do not provide an explicit methodological framework (Checkland 1992) but rather focus exclusively on activities pertaining to the bottom loop of Lynham and McDonald’s (2011) model. They typically take action based upon application of their existing frameworks without an examination of the implicit theoretical underpinnings of their actions.

Coaches have not typically generated new theory. Instead, they have made linear assumptions of how knowledge can be transferred between science and practice

(Rasche & Behnam 2009). This linearity is a characteristic of the closed systems thinking of formism and mechanism and neglects the top loop of Lynham and McDonald's model. It explains why unexpected results occur and are often attributed to improper application of theory, rather than deficient theory generation.

7.5 Contribution beyond this research: a model development process

Implicit theories and their associated assumptions about the nature of reality (ontology), the justification of knowledge claims (epistemology), and how knowledge is constructed (methodology) have formed a background to this research. However, such foundational issues are embedded not only in coaching theory, practice and research but also in all that we do whether they are expressed explicitly (rarely) or are implicit (often).

The key factor that distinguishes the emerged coaching approach from other approaches already in use is its contextualist underpinnings. Earlier chapters established that this is important because we live in an imperfect world and variables cannot be controlled like they can in a closed system. Coaches and their practitioner clients operate primarily within closed or partially open system assumptions of other world hypotheses, predominantly mechanism and organicism. This places their actions in conflict with the environment. Therefore, it was hypothesised that a contextualist approach is more likely to be effective in the open system environment.

This proposed approach represents a shift for coaches and practitioners and is relevant because it explains how they can go about constructing an intellectual framework, or theory, for their individual practice. It requires coaches view philosophy as “a dynamic and very personal process that makes our daily lives more meaningful and even more successful” (Weick 2008, p. 89), rather than an abstract and sterile concept. It highlights the importance of coaches spending a lot of time thinking about theory to refine their ideas amid practice.

Given the open system nature of the world of work, and the contextualist underpinnings of the approach, the best way of testing it is by having coaches put

the theory into practice. It would be expected that further iterations of theory would develop as coaches learn their way to becoming more effective.

7.6 Limitations of this research and suggested areas for further research

This research has provided an example of using the Framework Methodology Area of Application (FMA) (Checkland & Holwell 1998) structure to investigate the practice of coaching. It addresses the demand for research into the ‘actuality of projects’ by experienced practitioners and academics using action research based on ‘lived experience’ (Cicmil et al. 2006). Constructing a methodology using Peirce’s work on abduction, the ideas of Pepper’s (1942) world hypotheses and Lynham and McDonald’s model representing the interacting, synergistic nature of research, theory, and practice (2011), focussed attention on praxis, context-dependent judgement, on situational ethics and on reflexivity.

7.6.1 Limitations of the research

The epistemological and ontological ideas presented have been documented within the context of the lived experience of the researcher. While they provide a starting point for further research, they represent only a snapshot in time; it is limited to the events of the researcher and premonitions of neighbouring events. They are less definite about the wider structures of the world.

Typically, coaches have not needed to understand the theory underpinning their actions in order to perform them. However, an understanding of the theory underpinning the contextualist-coaching model, with its obscure and seemingly inaccessible language to the average reader, is required for the necessary shifts in perception to put contextualism into practice. This process does not lend itself to lists or communication by means of a theoretical or programmatic description.

The work is not explanatory. Instead, a contextualist-coaching framework was developed with which to build theories of behaviour, its usefulness lying in its ability to describe practically important facts of behaviour in theoretically useful ways. Contextualist coaching theory is not a theory in the sense of being an

explanation. It is theory pragmatically related to practice and not constituted in the form of a substantive theory.

7.6.2 Suggested areas for further research

By adopting the assumptions of Pepper's meta-theory of contextualism, a contextualist-coaching model was developed to address the need for a stronger theory base in coaching. However, consistent to the assumptions of contextualism, a contextualist-coaching model would never be final. Instead, the model, with its new and explicit theoretical underpinnings, provides a general methodology that others could use for further developing theory and put into their own coaching practice.

Practice can develop differently in the presence of a good theory (Sandelands 1990). As such, the coaching theory developed represents a "context factor in the in the elaboration of new and possibly worthwhile forms of practice" (Sandelands, 1990, p. 258).

In addition, the area of application need not be limited to coaching. Since other business activities occur within the same dynamic environment as coaching, a contextualist theory based model may have much broader applications. It has potential for an approach to consulting that aligns to the assumptions of the volatile, uncertain, complex and ambiguous world in which we find ourselves.

7.7 Conclusion

There is now a coaching model with new and explicit theoretical underpinnings. It provides a way forward for ongoing learning and investigation by guiding the actions of coaches when they face the challenges of the open system real world in which they and their clients operate.

Within contextualism there is no final analysis of anything. It accepts that the knowledge coaches and their clients attain will remain relative and incomplete. This view, with its radical emphasis on change, represents a needed shift in thinking. In developing this contextualist-coaching theory, it was observed that the explicit underpinnings of contextualism were crucial in guiding the action research

approach, rather than any specific bodies of knowledge or areas of application. Subsequently, the methodology developed was hypothesised to be applicable in any area of application that occurs in an open system environment. That is, the process undertaken represents an emerged general methodology that consultant-practitioners could use to develop theory and put into practice.

Reference List

Ackoff, R 2002, 'The corporation as a community, not as a corpus', *Reflections*, vol. 4, no. 1, pp. 14–21.

Adams, FG 2009, 'The world financial crisis: New economy, globalisation and old-fashioned philosophy', *World Economics*, vol. 10, no. 1, pp. 45–58.

Aldag, RJ 2012, 'Bump it with a trumpet: On the value of our research to management education', *Academy of Management Learning and Education*, vol. 11, pp. 285–292.

Almaas, AH 1988, *The pearl beyond price*, Diamond Press, Berkley, California.

Altman, I & Rogoff, B 1987, 'World views in psychology: Trait, interactional, organismic, and transactional perspectives', in Stokols, D & Altman, I (eds.), *Handbook of Environmental Psychology*, Wiley, New York, pp. 7–40.

American Management Association 2008, *Coaching: A global study of successful coaching practices*, viewed 27 July 2013, <www.opm.gov/WIKI/uploads/docs/Wiki/OPM/training/i4cp-coaching.pdf>.

Ansoff, HI & Slevin, DP 1968, 'An appreciation of industrial dynamics', *Management Science*, vol. 14, pp. 383–397.

ANZIC (Australia and New Zealand Institute of Coaching) n.d., *Home Page*, viewed 27 July 2013, <<http://www.anzicoaching.com>>.

Ardagh, A 2005, *The translucent revolution: How people like you are waking up and changing the world*, New World Library, Novato, California.

Argyris, C 1990, *Overcoming organizational defenses: facilitating organizational learning*, Prentice-Hall, Englewood Cliffs, New Jersey.

——— 1996, 'Unrecognized defenses of scholars: Impact on theory and research', *Organization Science*, vol. 7, pp. 79–87.

Argyris, C, Putnam, R & Smith, DM 1985, *Action science*, Jossey-Bass, San Francisco.

Argyris, C & Schön, D 1974, *Theory in practice: Increasing professional effectiveness*, Jossey-Bass, San Francisco.

——— 1978, *Organizational learning: A theory of action perspective*. Addison-Wesley Publishing, Reading, Massachusetts.

Ashby, RW 1956, *An introduction to cybernetics*, Chapman & Hall, London.

Askeland, MK 2009, 'A reflexive inquiry into the ideologies and theoretical assumptions of coaching', *Coaching: An International Journal of Theory, Research and Practice*, vol. 2, pp. 65–75.

Association for Coaching 2015, *Home Page*, viewed 22 April 2015, <www.associationforcoaching.com/pages/home/>.

Australian Qualifications Framework 2013, *Home Page*, viewed 27 July 2013, <<http://aqf.edu.au>>.

Australian Skills Quality Authority n.d., *Home Page*, viewed 27 July 2013, <<http://www.asqa.gov.au>>.

Babbage, DR & Ronan, KR 2000, 'Philosophical worldview and personality factors in traditional and social scientists: Studying the world in our own image', *Personality and Individual Differences*, vol. 28, pp. 405–420.

Bachkirova, T & Kauffman, C 2008, 'Many ways of knowing: How to make sense of different research perspectives in studies of coaching', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 107–113.

——— 2009, 'The blind men and the elephant: Using criteria of universality and uniqueness in evaluating our attempts to define coaching', *Coaching: An International Journal of Theory, Research and Practice*, vol. 2, pp. 95–105.

Bailey, JR, Ford, CH & Raelin, JD 2009, 'Philosophical ties that bind practice: The case of creativity', *Journal of Management Inquiry*, vol. 18, pp. 27–38.

Bansal, P, Bertels, S, Ewart, T, MacConnachie, P & O'Brien, JP 2012, 'Bridging the research-practice gap', *Academy of Management Perspectives*, vol. 26, no. 1, pp. 73–92.

Barner, R & Higgins, J 2005, 'Understanding implicit models that guide the coaching process', *Journal of Management Development*, vol. 26, no. 2, pp. 148–158.

Barrow, J 1991, *Theories of everything*, Vintage, London.

Barton, J, Emery, M, Flood, RL, Selsky, JW & Wolstenholme, E 2004, 'A maturing of systems thinking? Evidence from three perspectives', *Systemic Practice and Action Research*, vol. 17, pp. 3–36.

Barton, J & Haslett, T 2006, 'Fresh Insights into System Dynamics Methodology—Developing an abductive inference perspective', International Conference of the System Dynamics Society, Nijmegen, The Netherlands, 23–27 July.

——— 2007, 'Analysis, synthesis, systems thinking and the scientific method: Rediscovering the importance of open systems', *Systems Research and Behavioral Science*, vol. 24, pp. 143–155.

Bartunek, JM 2007, 'Academic-practitioner collaboration need not require joint or relevant research: Toward a relational scholarship of integration', *Academy of Management Journal*, vol. 50, pp. 1323–1333.

Basseches, M 1984, *Dialectical thinking and adult development*, Ablex Publishing, Norwood, New Jersey.

Bauer, RM 2007, 'Evidence-based practice in psychology: Implications for research and research training', *Journal of Clinical Psychology*, vol. 63, pp. 685–694.

Bauwens, M 2005, 'A critique of Wilber and Beck's SD-Integral', *P/I: Pluralities/Integration*, vol. 61, no. 3, pp. 1–3.

Beck, DE & Cowan, CC 1996, *Spiral dynamics: Mastering values, leadership, and change*, Blackwell Publishing, Malden, Massachusetts.

Beer, S 1981, *Brain of the firm: The managerial cybernetics of organization*, Wiley, Chichester, UK.

Bennett, JL 2006, 'An agenda for coaching-related research: A challenge for researchers', *Consulting Psychology Journal: Practice and Research*, vol. 58, pp. 240–249.

Berglas, S 2002, 'The very real dangers of executive coaching', *Harvard Business Review*, vol. 80, no. 6, pp. 86–92.

Bion, WR 1952, 'Group dynamics: A review', *The International Journal of Psychoanalysis*, vol. 33, pp. 235–247.

Bloom, G, Castagna, C, Moir, E, & Warren, B 2005, *Blended coaching: Skills and strategies to support principal development*, Corwin Press, Thousand Oaks, California.

Bluckert, P 2005, 'The foundations of a psychological approach to executive coaching', *Industrial and Commercial Training*, vol. 37, pp. 171–178.

Boisot, M & McKelvey, B 2010, 'Integrating modernist and postmodernist perspectives on organizations: A complexity science bridge', *Academy of Management Review*, vol. 35, pp. 415–433.

——— 2011, 'Connectivity, extremes, and adaptation: A power-law perspective of organisational effectiveness', *Journal of Management Inquiry*, vol. 20, pp. 119–133.

Bosch, O., Maani, K & Smith, C 2007, 'Systems thinking—Language of complexity for scientists and managers', *Proceedings of the Conference on Improving the Triple Bottom Line Returns from Small-scale Forestry*, Ormoc, Philippines, pp. 18–21.

Bozer, G & Sarros, JC 2012, 'Examining the effectiveness of executive coaching on coachees' performance in the Israeli context', *International Journal of Evidence Based Coaching and Mentoring*, vol. 10, no. 1, pp. 14–32.

Bradbury, H & Reason, P 2003, 'Action research: An opportunity for revitalizing research purpose and practices', *Qualitative Social Work*, vol. 2, pp. 155–175.

Brennan, D 2008, 'Coaching in the U.S.: Trends and challenges', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 186–191.

Briner, RB, Denyer, D & Rousseau, DM 2009, 'Evidence-based management: Concept cleanup time?', *Academy of Management Perspectives*, vol. 26, no. 1, pp. 19–32.

Britton, JJ 2010, *Effective group coaching: Tried and tested tools and resources for optimum group coaching results*, Wiley, New York.

Britton, K 2008, 'Increasing job satisfaction: Coaching with evidence-based interventions', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 176–185.

Brockbank, A 2008, 'Is the coaching fit for purpose? A typology of coaching and learning approaches', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 132–144.

Brydon-Miller, M., Greenwood, D. & Eickland, O, 2006, 'Editorial introduction to special issue on ethics and action research', *Action Research*, vol. 3, no. 1, pp. 5–8.

Burks, AW 1958, *Collected papers of Charles Sanders Peirce, Science and Philosophy*, Vol. 7, Harvard University Press, Cambridge, Massachusetts.

Burrell, G & Morgan, G 1979, *Sociological paradigms and organizational analysis: Elements of the sociology of corporate life*, Heinemann, London.

Cabana, S, Emery, F & Emery, M 1995, 'The search for effective strategic planning is over', *Journal for Quality and Participation*, vol. 18, no. 4, pp. 10–19.

CAMeO 2013, *What is coaching?*, viewed 27 July 2013, <<http://cameo.clutterbuckassociates.co.uk/coaching.php>>.

Campbell, DT 1978, 'Qualitative knowing in action research', in Brenner, M, Marsh, P & Brenner, M (eds.), *The Social Contexts of Method*, Croom Helm, London, pp. 184–209.

Carr, W 2006, 'Philosophy, methodology and action research', *Journal of Philosophy of Education*, vol. 40, pp. 421–435.

Cassell, C & Johnson, P 2006, 'Action research: Explaining the diversity', *Human Relations*, Vol. 59, pp. 783–814.

Center for Enhanced Learning and Teaching 2014, *The action research cycles*, viewed 22 April 2015, <<http://celt.ust.hk/teaching-resources/action-research>>.

Chalmers AF 1990, *Science and its fabrication*, University of Minnesota Press, Minneapolis, Minnesota.

Chambless, DL 1995, 'Training and dissemination of empirically validated psychological treatments: Report and recommendations', *The Clinical Psychologist*, vol. 48, pp. 3–23.

Charan, R 2008, 'Apprentice yourself to leadership', *Leader to Leader*, no. 48, pp. 39–44.

Checkland, P 1985, 'From optimizing to learning: A development of systems thinking for the 1990s', *Journal of the Operational Research Society*, vol. 36, pp. 757–767.

— 1992, 'Systems and scholarship: The need to do better', *Journal of the*

- Operational Research Society*, vol. 43, pp. 1023–1030.
- 1999, *Soft systems methodology: A 30-year retrospective*, John Wiley & Sons, Chichester, UK.
- 2002, *Systems thinking, systems practice*, Wiley, New York.
- Checkland, P & Holwell, S 1998, ‘Action research: Its nature and validity’, *Systemic Practice and Action Research*, vol. 11, pp. 9–21.
- Checkland, P & Scholes, J 1990, *Soft systems methodology in action*, John Wiley and Sons, Brisbane.
- Chein, I, Cook, SW & Harding, J 1948a, ‘The field of action research’, *American Psychologist*, vol. 3, pp. 43–50.
- 1948b, ‘The use of research in social therapy’, *Human Relations*, vol. 1, pp. 497–511.
- Chick, V 2004, ‘On open systems’, *Brazilian Journal of Political Economy*, vol. 24, no. 1, pp. 3–16.
- Chick, V & Dow, C 2005, ‘The meaning of open systems’, *Journal of Economic Methodology*, vol. 12, no. 3, pp. 363–381.
- Christensen, CM & Raynor, ME 2003, ‘Why hard-nosed executives should care about management theory’, *Harvard Business Review*, vol. 81, no. 9, pp. 66–74.
- Cicmil, S, Williams, T, Thomas, J & Hodgson, D 2006, ‘Rethinking project management: Researching the actuality of projects’, *International Journal of Project Management: Special issue on rethinking project management*, vol. 24, no. 8, pp. 675–686.
- CIPD (Chartered Institute of Personnel and Development) 2015, *Coaching and mentoring*, viewed 22 April 2015, <www.cipd.co.uk/hr-topics/coaching-mentoring.aspx#Informationpage>.

Clegg, S, Rhodes, C, Kornberger, M, & Stilin, R 2005, 'Business Coaching: Challenges for an emerging industry', *Industrial and Commercial Training*, vol. 37, pp. 218–223.

Clutterbuck, D 2007, *Coaching the team at work*, Nicholas Brealey, London.

——— 2010, 'Coaching reflection: The liberated coach', *Coaching: An International Journal of Theory, Research and Practice*, vol. 3, pp. 73–81.

Clutterbuck, D, & Megginson, D 2005, *Making coaching work: Creating a coaching culture*, Chartered Institute of Personal Development, London.

Cockerham, G 2011, *Group coaching: A comprehensive blueprint*, iUniverse.com, Bloomington, Indiana.

Coghlan, D & Brannick, T, 2001, *Doing action research in your own organization*, Sage, London.

Collier, J 1945, 'United States Indian administration as a laboratory for ethnic relations', *Social Research*, vol. 12, pp. 265–303.

Cooper, R 1992, 'Formal organization as representation: Remote control, displacement and abbreviation', in Reed, M & Hughes, M (eds.), *Rethinking Organization*, Sage, London, pp. 254–272.

Corey, SM 1953, *Action research to improve school practices*, Columbia University, New York.

Cortright, B 1997, *Psychotherapy and spirit: Theory and practice in transpersonal psychotherapy*. State University of New York, Albany.

Courpasson, D 2000, 'Managerial strategies of domination: Power in soft bureaucracies', *Organization Studies*, vol. 21, pp. 141–161.

Coutu, D & Kauffman, C 2009, 'What coaches can do for you?', *Harvard Business Review*, vol. 87, no. 1, pp. 91–92.

- Daft, R & Wiginton, J 1979, 'Language and organization', *Academy of Management Review*, vol. 4, pp. 179–191.
- Dagley, G 2006, 'Human resources professionals' perceptions of executive coaching: Efficacy, benefits and return on investment', *International Coaching Psychology Review*, vol. 1, no. 2, pp. 34–45.
- Daley, MC 2000, 'An image of enduring plurality in economic theory: The root-metaphor theory of Stephen C. Pepper', PhD thesis, University of New Hampshire, Durham, New Hampshire.
- Danieli, GA, Minelli, A & Pievani, T (eds.) 2013, *Stephen J. Gould: The scientific legacy*, Springer, Milan.
- Davies, L & Ledington, P 1991, *Information in action: Soft systems methodology*, Macmillan, Houndmills, UK.
- Davis, RD & Millon, T 1994, 'Personality change: metatheories and alternatives', in Heatherton, TF & Weinberger, JL (eds.), *Can Personality Change?*, American Psychological Association, Washington, D.C., pp. 85–119.
- Day, C, Elliot, J, Somekh, B & Winter, R (eds.) 2002, *Theory and practice in action research*, Symposium Books, Oxford.
- Deetz, S 1996, 'Describing differences in approaches to organizational science: Rethinking Burrell and Morgan and their legacy', *Organization Science*, vol. 7, pp. 191–207.
- de Geus, A 1997, *The Living Company*, Harvard Business School Press, Boston.
- de Haan, E 2008, *Relational coaching: Journeys towards mastering one-to-one learning*, Wiley, Chichester, UK.
- 2012, 'Back to basics II: How the research on attachment and reflective-self function is relevant for coaches and consultants today', *International Coaching Psychology Review*, vol. 7, pp. 194–209.

de Haan, E, Culpin, V & Curd, J 2011, 'Executive coaching in practice: What determines helpfulness for clients of coaching?', *Personnel Review*, vol. 40, pp. 24–44.

de Haan, E, Duckworth, A, Birch, D & Jones C 2013, 'Executive coaching outcome research: The contribution of common factors such as relationship, personality match, and self-efficacy', *Consulting Psychology Journal*, vol. 65, pp. 40–57.

de Haan, E & Nieb, C 2011, 'Change through executive coaching', *Training Journal*, July, pp. 66–70.

de Meuse, KP, Dai, G & Lee, RJ 2009, 'Evaluating the effectiveness of executive coaching: Beyond ROI?', *Coaching: An International Journal of Theory, Research and Practice*, vol. 2, pp. 117–134.

de Paoli, D 2000, 'Does time really precede existence? A reflection on prigoginism', *21st Century*, Spring, pp. 27–44.

Deutsch, KW 1951, 'Mechanism, organicism, and society', *Philosophy of Science*, vol. 18, pp. 230–252.

Devinney, TM & Siegel, DS 2012, 'Perspectives on the art and science of management scholarship', *Academy of Management Perspectives*, vol. 26, no. 1, pp. 6–11.

Dewey, J 1933, *How we think—A restatement of the relation of reflective thinking to the education process*, D.C. Heath & Company, Lexington, Massachusetts.

Dick, B 1993, *You want to do an action research thesis? How to report and conduct action research*, Interchange, Chapel Hill, North Carolina.

—— 2012, 'Action research and action learning for an uncertain and turbulent world', in Zuber-Skerritt, O (ed.), *Action research for sustainable development in a turbulent world*, Emerald Group Publishing, Bingley, UK, pp. 29–44.

Dick, B & Dalmau, T 1999, *Values in action: Applying the ideas of Argyris and Schön*, 2nd edition, Interchange, Chapel Hill, Queensland.

Dick, B, Sankaran, S, Shaw, K, Kelly, J, Soar, J, Davies, A & Banbury, A, 2015, 'Value co-creation with stakeholders using action research as a meta-methodology in a funded research project', *Project Management Journal*, vol. 46, no. 2, pp. 36–46.

Dick B, Stringer E & Huxham C 2009a, 'Theory in action research', *Action Research*, vol. 7, pp. 5–12.

——— 2009b, 'Final reflections, unanswered questions', *Action Research*, vol. 7, pp. 117–120.

Downey, M 1999, *Effective Coaching*, Orion Business Books, London.

Drake, DB 2008, 'Finding our way home: Coaching's search for identity in a new era', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 15–26.

Driskell J, Radtke S & Salas E 2003, 'Virtual teams: Effect of technological mediation on team performance', *Group Dynamics*, vol. 7, no. 4, pp. 297–323.

Dunne, J 1993, *Back to rough ground – “Phronesis” and “Techne” in modern philosophy and in Aristotle*, University of Notre Dame Press, South Bend, Indiana.

Edwards, MG 2005, 'The integral holon: A holonomic approach to organisational change and transformation', *Journal of Organizational Change Management*, vol. 18, pp. 269–288.

Eikeland, O 2006a, 'Condescending ethics and action research—Extended review essay', *Action Research*, vol. 4, no. 1, pp. 37–47, Special Issue: Ethics and action research.

——— 2006b, 'Phrónêsius, Aristotle, and action research', *International Journal of Action Research*, vol. 2, no. 1, pp. 5–53.

——— 2007, 'From epistemology to gnoseology—understanding the knowledge claims of action research', *Management Research News*, vol. 30, pp. 344–358.

—— 2008, *The ways of Aristotle: Aristotlian phrónêsius, aristotlian philosophy of dialogue, and action research*, Peter Lang, Bern, Switzerland.

—— 2012a, 'Action research—Applied research, intervention research, collaborative research, practitioner research, or praxis research?', *International Journal of Action Research*, vol.8, no. 1, pp. 9–44.

—— 2012b, 'Action research and organisational learning: A Norwegian approach to doing action research in complex organisations', *Educational Action Research*, vol. 20, no. 2, pp. 267–290.

Eisenhardt, KM & Graebner, ME 2007, 'Theory building from cases: Opportunities and challenges', *Academy of Management Journal*, vol. 50, pp. 25–32.

Eisler, R 2007, *The real wealth of nations: Creating a caring economics*, Berrett-Koehler, San Francisco.

Emery, FE 1980, 'Designing socio-technical systems for 'greenfield' sites', *Journal of Occupational Behaviour*, vol. 1, pp. 19–27.

Emery, FE & Trist, EL 1965, 'The causal texture of organisational environments', *Human Relations*, vol. 18, pp. 21–32.

Emery, M 2000, 'The current version of Emery's open systems theory', *Systemic Practice and Action Research*, vol. 13, pp. 623–643.

English, M 2006, 'Business print media coverage of executive coaching: A content analysis', PhD thesis, Capella University, <http://www.capella.edu>.

Epstein, RM 1999, 'Mindful practice', *Journal of the American Medical Association*, vol. 282, pp. 833–839.

Eraut, M 1994, *Developing professional knowledge and competence*, Routledge-Falmer, Oxford.

Erhard, W, Jensen, MC & Granger, KL 2011, 'Creating leaders: An ontological model', in Snook, S, Nohria, N & Khurana, R (eds.), *The handbook for teaching leadership: Knowing, doing, and being*, Harvard Business School, Cambridge, Massachusetts, pp. 245-262.

Erlandson, DA, Harris, E, Skipper, B & Allen, S 1993, *Doing naturalistic inquiry: A guide to methods*, Sage, Newbury Park, California.

Evered, RD & Selman, JC 1989, 'Coaching and the art of management', *Organizational Dynamics*, vol. 18, no. 2, pp. 16–32.

Fatien, P 2011, 'Current research into executive coaching', paper presented at the annual Academy of Management Conference, San Antonio, Texas, 12–16 August.

Feldman, DC & Lankau, MJ 2005, 'Executive coaching: A review and agenda for future research', *Journal of Management*, vol. 31, pp. 829–848.

Ferrer, JN 2002, *Revisioning transpersonal theory: A participatory vision of human spirituality*, State University of New York, Albany.

Flood, RJ 2010, 'The relationship of 'Systems Thinking' to action research', *Systemic Practice and Action Research*, vol. 23, pp. 269–284.

Flood, RL & Romm, NRA 1996, 'Contours of diversity management and triple loop learning', *Kybernetes*, vol. 25, nos. 7 & 8, pp. 154–163.

Florent-Treacy, E 2009, 'Behind the scenes in the identity laboratory: Participants' narratives of identity transition through Group Coaching in a Leadership Development Programme', *INSEAD Faculty and Research Working Paper*, SSRN Electronic Journal 02/2009; DOI:10.2139/ssrn.1340332.

Flyvbjerg, B 2001, *Making social science matter – Why social inquiry fails and how it can succeed again*, Cambridge University Press, Cambridge.

Forrester, JW, 1961, *Industrial Dynamics*, MIT Press, Cambridge, Massachusetts.

Forsyth, BR 2010, 'The influence of worldviews on selective recall from texts about history and physics', PhD thesis, Michigan State University, East Lansing, Michigan.

Garvey Berger, J 2012, *Changing on the job: Developing leaders for a complex world*, Stanford University Press, Stanford, California.

Gergen, K & Gergen, M 2008, 'Social construction and research as action', in Reason, P & Bradbury, H (eds.), *The handbook of action research: Participative inquiry and practice*, 2nd edition, Sage, London, pp. 159–171.

Gharajedaghi, J & Ackoff, RL 1984, 'Mechanisms, organisms and social systems', *Strategic Management Journal*, vol. 5, pp. 289–300.

Grant, AM 2001, 'Towards a psychology of coaching: The impact of coaching on metacognition, mental health and goal attainment', PhD thesis, Macquarie University, Sydney, New South Wales.

—— 2008, 'Coaching in Australia: A view from the ivory tower', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 93–98.

Grant, AM & Cavanagh, M 2004, 'Toward a profession of coaching: Sixty-five years of progress and challenges for the future', *International Journal of Evidence Based Coaching and Mentoring*, vol. 2, no. 1, pp. 1–16.

Gray, DE 2011, 'Journeys towards the professionalization of coaching: Dilemmas, dialogues and decisions along the global pathway', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 4–19.

Greenwood, DJ & Levin, M 1998, 'Action research, science, and the co-optation of social research', *Studies in Cultures, Organizations and Societies*, vol. 4, pp. 237–261.

Greenwood DJ & Levin, M (eds.) 2007, *Introduction to Action Research* (2nd edition), SAGE, Thousand Oaks, California.

Gregory, JB & Levy, PE 2010, 'Employee coaching relationships: Enhancing construct clarity and measurement', *Coaching: An International Journal of Theory, Research and Practice*, vol. 3, pp. 109–123.

Griffiths, KE & Campbell, MA 2008, 'Regulating the regulators: Paving the way for international, evidence-based coaching standards', *International Journal of Evidence Based Coaching and Mentoring*, vol. 6, no. 1, pp. 19–31.

Guastello, SJ 1995, *Chaos, catastrophe, and human affairs—Application of nonlinear dynamics to work, organizations, and social evolution*, Lawrence Erlbaum Associates, Mahwah, New Jersey.

Guba, EG 1990, 'The alternative paradigm dialog', in Guba, EG (ed.), *The paradigm dialog*, Sage, Newbury Park, California, pp. 17–27.

Gyllensten, K & Palmer, S 2007, 'The coaching relationship: An interpretative phenomenological analysis', *International Coaching Psychology Review*, vol. 2, no. 2, pp. 168–177.

Haack, S & Lane RE 2006, *Pragmatism, old and new: Selected Writings*, Prometheus Books, Amherst, New York.

Habermas, J. 1987. *The theory of communicative action, vol. II.* (translated from *Theorie des kommunikativen handelns*, band 2 by T. McCarty), Beacon Press, Boston.

Hackman, JR 2002, *Leading teams: Creating conditions for great performances*, Harvard Business School Press, Boston.

Hackman, JR & Wageman, RA 2005, 'Theory of team coaching', *Academy of Management Review*, vol. 30, 269–287.

Haig, BD 2008, 'Scientific method, abduction, and clinical reasoning', *Journal of Clinical Psychology*, vol. 64, pp. 1013–1018.

Hamlin, RG, Ellinger, AD & Beattie, RS 2009, 'Toward a Profession of Coaching? A definitional examination of 'coaching', 'organizational development' and 'human resource development', *International Journal of Evidence Based Coaching and Mentoring*, vol. 7, no. 1, pp. 13–38.

Hardcastle, G & Richardson, AW 1993, *Logical empiricism in North America*, University of Minnesota Press, Minneapolis, Minnesota.

Harris, M, Fontana, AF & Dowds, BN 1977, 'The world hypotheses scale: Rationale, reliability and validity', *Journal of Personality Assessment*, vol. 41, pp. 537–547.

Hartshorne, C & Weiss, P (eds.) 1931, *Collected papers of Charles Sanders Peirce, Vol. 1, Principles of Philosophy*, Harvard University Press, Cambridge, Massachusetts.

— 1932, *Collected papers of Charles Sanders Peirce, Vol. 2, Elements of Logic*, Harvard University Press, Cambridge, Massachusetts.

— 1935, *Collected papers of Charles Sanders Peirce, Vol. 5, Pragmatism and Pragmaticism*, Harvard University Press, Cambridge, Massachusetts.

Hatch, MJ 2005, 'The revenge of Gagliardi on utilitarianism', *Journal of Management Inquiry*, vol. 14, no. 4, pp. 316–318.

Hawkins, P 2006, 'Coaching supervision', in Passmore, J (ed.), *Excellence in coaching: The industry guide*, Kogan-Page, London, pp. 215–226.

— 2008, 'The coaching profession: some of the key challenges', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 28–38.

— 2012, *Leadership team coaching: Developing collective transformational leadership*. Kogan-Page, London.

Hawkins, P & Smith, N 2006, *Coaching, mentoring and organisational consultancy: Supervision and development*, Open University Press, New York.

Hayes, SC, Hayes, LJ & Reece, HW 1988, 'Finding the philosophical core: A review of Stephen C. Pepper's world hypotheses: A study in evidence', *Journal of the Experimental Analysis of Behavior*, vol. 50, pp. 97–111.

Heifetz, R, Grashow, A & Linsky, M 2009, *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*, Harvard Business School Publishing, Boston.

Heller, F (ed.) 1986, *The use and abuse of social science*, Sage, London.

Herr, K & Anderson, GL 2005, *The action research dissertation: A guide for students and faculty*, Sage, Thousand Oaks, California.

Heslin, PA, VandeWalle, D & Latham, GP 2006, 'Keen to help? Managers' implicit person theories and their subsequent employee coaching', *Personnel Psychology*, vol. 59, pp. 871–902.

Hoeflin, RK 1987, 'The root-metaphor theory: A critical appraisal of Stephen C. Pepper's theory of metaphysics through an analysis of its interpretation of the concepts of truth, beauty, and goodness', PhD thesis, New School for Social Research, New York, New York.

Hollingsworth, S (ed.) 1997, *International action research: Educational reform*, Routledge, London.

Holton, G 1998, *The Scientific Imagination*, Harvard University Press, Cambridge, Massachusetts.

Hooijberg, R & Lane, N 2009, 'Using multisource feedback coaching effectively in executive education', *Academy of Management Learning and Education*, vol. 8, pp. 483–493.

Houts, AC 1991, 'The contextualist turn in empirical social science: Epistemological issues, methodological implications, and adjusted expectations', in Cohen, R & Siegel, AW (eds.), *Context and Development*, Erlbaum, Hillsdale, New Jersey, pp. 25–54.

Hubbard, R & Vetter, DE 1996, 'An empirical comparison of published replication research in accounting, economics, finance, management, and marketing', *Journal of Business Research*, vol. 35, pp. 153–164.

Human Synergetics 2015, *Home Page*, viewed 22 April 2015, <www.human-synergetics.com.au>.

Hunt, J 2004, 'Successful executive coaching from the consumer's perspective: Adaptive and developmental learning', in Buono, AF (ed.), *Creative consulting: Innovative perspectives on management consulting*, Information Age Publishing, USA, pp. 165–199.

Hunt, JM & Weintraub, JR 2002, *The coaching manager: Developing top talent in business*, Sage, Thousand Oaks, California.

Hutchins, E 1993, 'Learning to navigate', in Chaiklin, S & Lave, J (eds.), *Understanding Practice*, Cambridge University Press, Cambridge, UK, pp. 35–63.

Hyslop-Margison, EJ 2009, 'Going soft on corporate invasion: The university in a corporate culture', *Canadian Association of University Teachers Bulletin*, vol. 56, January.

Institute of Coaching 2013, *Harnisch Grants*, viewed 22 April 2015, <<http://www.instituteofcoaching.org/index.cfm?page=grants2>>.

International Coach Academy 2015, *How ICA Coach Training Works*, viewed 22 April 2015, <<http://www.icoachacademy.com/coach-training/how-ica-coach-training-works/>>.

International Coach Federation n.d.a, *2012 ICF Global Coaching Study—Executive Summary, 2012*, viewed 15 May 2012, <www.coachfederation.org/coachingstudy2012/>.

—— n.d.b, *2014 ICF global consumer awareness study*, viewed 22 April 2015, <http://coachfederation.org/about/landing.cfm?ItemNumber=825&navItemNumber=624/>>.

—— n.d.c, *Strategic plan*, viewed 18 February 2015,
<http://www.coachfederation.org/about/landing.cfm?ItemNumber=848&navItemNumber=846/>>.

—— n.d.d, *2011 annual report*, viewed 15 May 2012,
<www.coachfederation.org/coachingstudy2012/>.

—— n.d.e, *Core Competencies*, viewed 22 April 2015,
<www.coachfederation.org/icfcredentials/core-competencies/>.

—— n.d.f, *Credentialing program upgrades to be implemented April 1, 2014*,
viewed 10 April 2014,
<www.coachfederation.org/newsdetail.cfm?ItemNumber=3373>.

—— n.d.g, *Need coaching?*, viewed 22 April 2015,
<www.coachfederation.org/need/?navItemNumber=501/>.

—— n.d.h, *Key definitions*, viewed 22 April 2015,
<www.coachfederation.org/about/landing.cfm?ItemNumber=838&navItemNumber=646/>.

Irvin L 2002, 'Ethics in organizations: A chaos perspective', *Journal of Organizational Change Management*, vol. 15, pp. 359–381.

Ison, R 2010. *Systems practice: How to act in a climate-change world*, Springer, London.

Ives, Y 2008, 'What is 'coaching'? An exploration of conflicting paradigms', *International Journal of Evidence Based Coaching and Mentoring*, vol. 6, no. 2, pp. 100–113.

Jackson, MC 2003, *Systems thinking: Creative holism for managers*, John Wiley & Sons, University of Hull, UK.

Jackson, P 2005, 'How do we describe coaching? An exploratory development of a typology of coaching based on the accounts of UK-based practitioners', *International Journal of Evidence Based Coaching and Mentoring*, vol. 3, no. 2, pp. 45–60.

Jaeger ME & Rosnow RL 1988, 'Contextualism and its implications for psychological inquiry', *British Journal of Psychology*, vol. 79, pp. 63–75.

Jick TD 1979, 'Mixing qualitative and quantitative methods: Triangulation in action', *Administrative Science Quarterly*, vol. 24, pp. 602–611.

Johnson, JA, Germer, CK, Efran, JS & Overton, WF 1988, 'Personality as the basis for theoretical predilections', *Journal of Personality and Social Psychology*, vol. 55, pp. 824–835.

Josephsen, JR & Josephsen, SG (eds.) 1994, *Abductive Inference: Computation, Philosophy*, Cambridge University Press, Cambridge, UK.

Kampa-Kokesch, S, & Anderson, MZ 2001, 'Executive coaching: A comprehensive review of the literature', *Consulting Psychology Journal: Practice and Research*, vol. 53, pp. 205–228.

Kauffman, C 2004, 'De-mystifying research: An introduction for coaches', *Proceedings of the 2nd ICF Coaching Research Symposium*, International Coaching Federation, Washington, DC, pp. 161–168.

Kauffman, C & Bachkirova, T 2008a, 'An International Journal of Theory, Research and Practice: Why does it matter?' *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 1–7.

——— 2008b, 'The evolution of coaching: An interview with Sir John Whitmore'. *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, pp. 11–15.

—— 2009, ‘Spinning order from chaos: How do we know what to study in coaching research and use it for self-reflective practice?’ *Coaching: An International Journal of Theory, Research and Practice*, vol. 2, pp. 1–9.

Kauffman, CM, Russell, SG & Bush, MW (eds.) 2008, *100 coaching proposal research abstracts, International Coaching Research Forum (ICRF)*, Harvard Medical School, Cambridge, Massachusetts.

Keedy, JL 2005, ‘Reconciling the theory and practice schism in educational administration through practitioner-developed theories in practice’, *Journal of Educational Administration*, vol. 43, pp. 134–153.

Kegan, R 1982, *The evolving self: Problem and process in human development*, Harvard University Press, Cambridge, Massachusetts.

Kemmis, S & McTaggart, R (eds.) 1988, *The action research planner*, 3rd edition, Deakin University Press, Geelong, Victoria.

Kemmis, S 2009, ‘Action research as a practice-based practice’, *Educational Action Research*, vol. 17, no. 3, pp. 463–474

Kets de Vries, MFR 2005, ‘Leadership group coaching in action: The zen of creating high performance teams’, *The Academy of Management Executive*, vol. 19, no. 1, pp. 61–76.

—— 2007, ‘Decoding the team conundrum: The eight roles executives play’, *Organizational Dynamics*, vol. 36, no. 1, pp. 28–44.

Kets de Vries, MFR (ed.) 2010, *The coaching kaleidoscope: Insights from the inside*, Palgrave Macmillan, New York.

Kets de Vries, MFR 2011, *The hedgehog effect: The secret of building high performance teams*. Wiley, London.

—— 2014, ‘The group coaching conundrum’, *International Journal of Evidence Based Coaching and Mentoring*, Vol. 12, no. 1, pp. 79–91.

Kets de Vries, MFR, Florent-Treacy, E & Korotov, K 2007, *Coach and couch: The psychology of making better leaders*. Palgrave/Macmillan, Hampshire, UK.

Kets de Vries, MFR, Guillen, L, Korotov, K & Florent-Treacy, E, 2010, *The coaching kaleidoscope: Insights from the inside*. Palgrave/Macmillan, Hampshire, UK.

Khurana, R 2007, *From higher aims to hired hands: The social transformation of American business schools and the unfulfilled promise of management as a profession*, Princeton University Press, Princeton.

Kilbourne, B 1974, 'Identifying world views projected by science teaching materials: A case study using Pepper's World Hypotheses to analyze a biology textbook', PhD thesis, University of Toronto, Toronto, Ontario.

Kilburg, RR 1996, 'Forward: Executive coaching as an emerging competency in the practice of consultation', *Consulting Psychology Journal: Practice and Research*, vol. 48, pp. 59–60.

——— 2000, *Executive Coaching: Developing Managerial Wisdom in a World of Chaos*, American Psychological Association, Washington, DC.

Kinlaw, D 1996, *Coaching: The ASTD trainer's sourcebook*, McGraw-Hill, New York.

Klein G 1998, *Sources of power: How people make decisions*, MIT Press, Boston.

Klimoski, R 2007, 'Introduction: Physician heal thyself', *Academy of Management Learning and Education*, vol. 6, pp. 81–83.

Kolb, DA 1984, *Experiential learning: Experience as the source of learning and development*, Prentice-Hall, Englewood Cliffs, New Jersey.

Kombarakaran, F, Yang, J, Baker, M & Fernandes, P 2008, 'Executive coaching: It works!', *Consulting Psychology Journal: Practice and Research*, vol. 60, pp. 78–90.

Korotov, K, Florent-Treacy, E, Kets de Vries, MFR & Bernard, A 2011, *Tricky coaching: Difficult cases in leadership coaching*. Palgrave/Macmillan, Hampshire, UK.

Kramer, DA, Kahlbaugh, PE & Goldston, RB 1992, 'A measure of paradigm beliefs about the social world', *Journal of Gerontology*, vol. 47, pp. 180–189.

Krayem, G 2012, 'Five questions with Ghaith Krayem', paper presented on Human Resources Practices Day of the Australian Human Resources Institute, Melbourne, 14 May.

Kuhn, T 1996, *The structure of scientific revolutions*, 3rd edition, University of Chicago Press, London.

Lackoff, G & Johnson, M 1999, *Philosophy in the flesh: The embodied mind and its challenge to western thought*, Basic Books, New York.

Laske, OE 2000, 'Foundations of scholarly consulting: The developmental structure/process tool (DSPT)', *Consulting Psychology Journal: Practice and Research*, vol. 52, pp. 178–200.

——— 2007, 'Contributions of evidence-based developmental coaching to coaching psychology and practice', *International Coaching Psychology Review*, vol. 2, no. 2, pp. 202-212.

Law, H 2013, *Coaching Psychology: A Practitioner's Guide*, John Wiley & Sons, Chichester, UK.

Lawler, EE 1985, 'Challenging traditional research assumptions', in Lawler, EE, Mohrman, AM, Mohrman, SA, Ledford, EE & Cummings, TG (eds.), *Doing research that is useful for theory and practice*, Jossey-Bass, San Francisco, pp. 1–17.

Lazanski, TJ 2010, 'Systems thinking: The ancient Mayans' evolution of consciousness and contemporary systems thinking', in Dubois, DM (ed.), *Computing Anticipatory Systems, American Institute of Physics Conference*

- Proceedings*, vol. 1303, American Institute of Physics, Melville, New York.
- Lerner, RM, Hultsch, DF & Dixon, RA 1983, 'Contextualism and the character of developmental psychology in the 1970s', *Annals of the New York Academy of Sciences*, vol. 412, pp. 101–128.
- Lewin, K 1946, 'Action research and minority problems', in Lewin, GW (ed.), 1973, *Resolving Social Conflicts*, Souvenir Press, London, pp. 201–216.
- 1951, *Field Theory in Social Science*, Tavistock Publications, London.
- Lewis, MD 2000, 'The promise of dynamic systems approaches for an integrated account of human development', *Child Development*, vol. 71, pp. 36–43.
- Lin, AC 1998, 'Bridging positivist and interpretivist approaches to qualitative methods', *Policy Studies Journal*, vol. 26, no. 1, pp. 162–180.
- Lincoln, YS & Guba, EG 1985, *Naturalistic inquiry*, Sage, London.
- Linder-Pelz, S 2010, *NLP Coaching: An evidence-based approach for coaches, leaders and individuals*, e-book, viewed 28 July 2013, <<http://UQL.ebib.com.au/patron/FullRecord.aspx?p=501505>>.
- Lippitt, R 1949, *Training in community relations—A research exploration toward new group skills*, Harpers Publishing, New York.
- Lueneburger, A 2012, 'Retaining high potential talent: Assessment and coaching as a means of avoiding the “Mahna-Mahna” effect', *International Journal of Evidence Based Coaching and Mentoring*, vol. 10, no. 1, pp. 124–131.
- Lynham, SA & McDonald, KS 2011, 'There's nothing quite as practical as good research', *Advances in Developing Human Resources*, vol. 13, pp. 131–134.
- Maani, KE & Cavana, RY 2007, *Systems thinking, systems dynamics*, 2nd edition, Pearson Education, Rosedale, New Zealand.

Maital, S, Prakhya, S & Seshadri, DVR 2008, 'Bridging the chasm between management research, education and practice: Moving towards the 'Grounded Theory' approach', *Vikalpa: The Journal for Decision Makers*, vol. 33, pp. 1–18.

Malone, D 1934, *Dictionary of American Biography*, Oxford University Press, London.

Markides C 2011, 'Crossing the chasm: How to convert relevant research into managerially useful research', *Journal of Applied Behavioral Science*, vol. 47, pp. 121–134.

Marrow, AJ 1964, 'Risks and uncertainties in action research', *Journal of Social Issues*, vol. 20, no. 3, pp. 5–20.

Marshall, C & Rossman, GB 1989, *Designing qualitative research*, Sage, London.

Mayo, D 1996, *Error and the growth of experimental knowledge*, University of Chicago Press, Chicago.

McCutcheon, G & Jung, B 1990, 'Alternate perspectives on action research', *Theory into Practice*, vol. 29, pp. 144–151.

McGovern, J, Lindemann, M, Vergara, M, Murphy, S, Barker, L & Warrenfeltz, R 2001, 'Maximizing the impact of executive coaching: Behavioral change, organizational outcomes, and return on investment', *The Manchester Review*, vol. 6, no. 1, pp. 1–9.

McGuire, WJ 1983, 'A contextualist theory of knowledge: Its implications for innovation and reform in psychological research', in Berkowitz, L (ed.), *Advances in experimental social psychology*, vol. 1, Academic Press, New York.

McGuire, JB & Rhodes, G 2009, *Transforming your leadership culture*, Jossey-Bass, San Francisco.

McKernan, J 1988, 'The countenance of curriculum action research: Traditional, collaborative, and emancipatory-critical conceptions', *Journal of Curriculum and Supervision*, vol. 3, pp. 173–200.

McKinney, JC 1966, *Constructive typology and social theory*, Appleton-Century-Crofts, New York.

McNiff, J 2013, *Action Research: Principles and practice*, e-book, accessed 23 July 2013,
<<http://uql.eplib.com.au.ezproxy.library.uq.edu.au/patron/FullRecord.aspx?p=1143676>>.

McNiff, J & Whitehead, J 2011, *All you need to know about action research*, 2nd edition, Sage, London.

McTaggart, R 1997, *Participatory action research: International contexts and consequences*, New York State University Press, Albany.

Meadows, D 2004. *The limits to growth: The 30-year update/ Donella Meadows, Jørgen Randers, and Dennis Meadows*, Chelsea Green Publishing, White River Junction, Vermont.

Mezirow J 1991, *Transformative dimensions of adult learning*, Jossey-Bass, San Francisco.

Midgley, G 2003, *Systems Thinking*, vol. 1, Sage, London.

Miles, MB & Huberman, AM 1994, *Qualitative data analysis: An expanded source book*, Sage, Thousand Oaks, California.

Mohrman, SA & Lawler, EE III (2012), 'Generating Knowledge that Drives Change', *Academy of Management Perspectives*, vol. 26, no. 1, pp. 41–51.

Monast, JH III 1975, 'Evidence, common sense, and metaphysical systems: The philosophical methodology of Stephen C. Pepper', PhD thesis, Tulane University, New Orleans, Louisiana.

Morgan, G 2006, *Images of Organizations*, Sage, Thousand Oaks, California.

Morris, EK 1988, 'Contextualism: The world view of behavior analysis', *Journal of Experimental Child Psychology*, vol. 46, pp. 289–323.

Mühlberger, MD & Traut-Mattausch, E 2015, 'Leading to effectiveness: Comparing dyadic coaching and group coaching', *Journal of Applied Behavioral Science*, vol. 51, pp. 1–33.

Murphy, M 1992, *The future of the body: Explorations into the further evolution of human nature*, Tarcher, Los Angeles.

Natale, SM & Diamante, T 2005, 'The five stages of executive coaching: Better process makes better practice', *Journal of Business Ethics*, vol. 59, pp. 361–374.

Neenan, M & Dryden, W 2002, *Life coaching*, Brunner-Routledge, Hove.

Newfield Network 2015, *Coach training*, viewed 22 April 2015, <www.newfieldnetwork.com/New2/CoachTraining/>.

Newsom, G 2008, 'A work behavior analysis of executive coaches', PhD thesis, University of North Carolina Greensboro, North Carolina.

New York Times, 25 May 1946, '*Atomic education urged by Einstein: Scientist in plea for \$200,000 to promote new type of essential thinking*', New York.

Nicolis, G & Prigogine, I 1989, *Exploring complexity: An introduction*, Freeman, San Francisco.

Noffke, S 2009, 'Revisiting the professional, personal, and political dimensions of action research', in Noffke, S & Somekh, B (eds.), *The SAGE handbook of educational action research*, Sage, London, pp. 6–25.

Nonaka, I 1994, 'A dynamic theory of organizational knowledge creation', *Organization Science*, vol. 5, pp. 14–37.

Nonaka, I & Takeuchi, H 1995, *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press, New York.

Odjanyk, VW 1993, *Gathering the light. A psychology of meditation*, Shambhala, Boston.

- O'Hanlon, C 1996, *Professional development through action research: International education perspectives*, Falmer Press, London.
- Olalla, J 2010, *From knowledge to wisdom: Essays on the crisis in contemporary learning*, Newfield Network, Boulder, Colorado.
- Ordóñez, LD, Schweitzer, ME, Galinsky, AD & Bazerman, MH 2009, 'Goals gone wild: The systematic side effects of overprescribing goal setting', *Academy of Management Perspectives*, vol. 23, no. 1, pp. 6–16.
- Orenstein, RL 2006, 'Measuring executive coaching efficacy? The answer was right here all the time', *Consulting Psychology Journal: Practice and Research*, vol. 58, pp. 106–116.
- Overton, WF 1984, 'World views and their influence on psychological theory and research: Kuhn-Lakatos-Laudan', in Reese, HW (ed.), *Advances in Child Development and Behavior*, Florida Academic, Orlando, pp. 191–291.
- Parsloe, E 1992, *Coaching, Mentoring and Assessing: A Practical Guide to Developing Competence*, Kogan-Page, New York.
- 2004, "Beware of the 'professional' coach", *Training Journal*, January, p. 20.
- Passmore, J & Fillery-Travis, A 2011, 'A critical review of executive coaching research: A decade of progress and what's to come', *Coaching: An International Journal of Theory, Research and Practice*, vol. 4, pp. 70–88.
- Patching, D 1990, *Practical soft systems analysis*, Pitman, London.
- Paulson, DS 2008, 'Wilber's integral philosophy: A summary and critique', *Journal of Humanistic Psychology*, vol. 48, pp. 364–388.
- Payne, R 1975, 'Truisms in organisational behaviour', *Interpersonal Development*, vol. 6, pp. 203–220.

Pederzani CD 2008, Evidence based practice in executive coaching: A guide for the practitioner', PhD thesis, Widener University, Chester, Pennsylvania.

Peirce Edition Project (ed.) 1998, *The essential Peirce: Selected philosophical writings*, Vol. 2, Indiana University Press, Bloomington, Indiana.

Pepper, SC 1942, *World Hypotheses: A study in evidence*, University of California Press, Berkeley, California.

—— 1947, 'What are categories for?', *The Journal of Philosophy*, vol. 44, pp. 546–556.

—— 1963, 'A proposal for a world hypothesis', *Monist*, vol. 47, winter, pp. 267–286.

—— 1968, 'The development of contextualist aesthetics', *The Antioch Review*, vol. 28, no. 2, pp. 169–185.

Perloff, F 2010, 'Ken Wilber's integral theory applied to mediation', *Conflict Resolution Quarterly*, vol. 28, pp. 83–107.

Peterson, DB & Hicks, MD 1996, *Leader as coach: Strategies for coaching and developing others*, Personnel Decisions International, Minneapolis, Minnesota.

Petrie, N 2011, *Future Trends in Leadership Development*, White Paper, Center for Creative Leadership, Colorado Springs, Colorado.

Pfeffer, J & Sutton, RI 2000, *The knowing-doing gap: How smart companies turn knowledge into action*, Harvard Business School Press, Boston.

—— 2006, *Hard facts: Dangerous half-truths & total nonsense*, Harvard Business School Press, Boston.

Polanyi, M 1962, *Personal knowledge: Towards a post-critical philosophy*, Psychology Press, London.

Polkinghorne, DE 2004, *Practice and the human sciences – the case for a judgment based practice of care*, State University of New York Press, Albany, New York.

Prawat, RS & Floden, RE 1994, 'Philosophical perspectives on constructivist views of learning', *Educational Psychologist*, vol. 29, pp. 37–48.

Proper, H 1982, 'Identifying world views projected by teacher's classroom discourse using Kilbourne's analytical scheme based on Pepper's World Hypotheses', MA thesis, Simon Fraser University, Burnaby, British Columbia.

Raelin, JA 2005, 'We the leaders: In order to form a leaderful organization', *Journal of Leadership and Organizational Studies*, vol. 12, no. 2, pp. 18–30.

——— 2007, 'Toward an epistemology of practice', *Academy of Management Learning and Education*, vol. 6, pp. 495–519.

Ramírez, JL 1995, *Skapande mening – En begreppsgenalogisk undersökning om rationalitet, vetenskap och planering*, Nordplan, Stockholm.

Rasche, A & Behnam, M 2009, 'As if it were relevant: A systems theoretical perspective on the relation between science and practice', *Journal of Management Inquiry*, vol. 18, pp. 243–255.

Reason P 2006, 'Choice and Quality in Action Research Practice', *Journal of Management Inquiry*, Vol. 15, no. 2, pp. 187–203.

Reason, P & Bradbury, H (eds.) 2008, *The SAGE handbook of action research: Participative inquiry and practice*, 2nd edition, Sage, London.

Reason, P & Rowan, J (eds.) 1981, *Human inquiry: A sourcebook of new paradigm research*, J. Wiley, New York.

Reece, HW & Overton, WF 1970, 'Models of development and theories of development', in Goulet, LR & Baltes, PB (eds.), *Life-span developmental psychology: Research and theory*, Academic Press, San Diego, California, pp. 115–145.

- Rehm, R. & Cebula, N. 1996, *The search conference method for participative planning: Adapted from the article The Search Conference: State of the Art by Merrelyn Emery*, viewed 22 April 2015, <http://www.elementsuk.com/libraryofarticles/searchconference.pdf>
- Roche-Martin ECR (Emotional Capital Report), viewed 19 April 2015, <<http://www.rochemartin.com/products/emotional-capital-report.html>>
- Rodrigues CT 2011, 'The method of scientific discovery in Peirce's philosophy: Deduction, induction, and abduction', *Logica Universalis*, Vol. 5, pp. 127–164.
- Romme, AGL & van Witteloostuijn, A 1999, 'Circular organizing and triple loop learning', *Journal of Organizational Change Management*, vol. 12, no. 5, pp. 439-454.
- Rose, H. A. 2003. Pepper's world hypotheses: A philosophical rubric for understanding family theories. Paper presented at the Theory Construction and Research Methodology Pre-Conference at the annual conference of the National Council of Family Relations, Vancouver, British Columbia, 19–23 November.
- Rosenberg, A 1988, *Philosophy of Social Science*, Clarendon Press, Oxford.
- Rossmann, GB & Rallis, SF 2000, 'Critical inquiry and use as action', *New Directions for Evaluation*, vol. 88, pp. 55–69.
- Rostron, SS 2009, 'The global initiatives in the coaching field', *Coaching: An International Journal of Theory, Research and Practice*, vol. 2, pp. 76–85.
- Rousseau, DM, Manning, J & Denyer, D 2008, 'Evidence in management and organizational science: Assembling the field's full weight of scientific knowledge through synthesis', *Academy of Management Annals*, vol. 2, pp. 475–515.
- Rowan, J 2005, *The transpersonal: Spirituality in psychotherapy and counseling*, 2nd edition, Routledge, New York.
- Ryan, FX 1996, 'Circles of inquiry: John Dewey's philosophy of transaction', PhD thesis, Emory University, Atlanta, Georgia.

- Ryle, G 1949, *The concept of mind*, University of Chicago Press, Chicago.
- Rynes, SL 2007a, 'Carrying Sumantra Ghoshal's torch: Creating more positive, relevant, and ecologically valid research', *Academy of Management Journal*, vol. 50, pp. 745–747.
- 2007b, 'Let's create a tipping point: What academics and practitioners can do alone and together', *Academy of Management Journal*, vol. 50, pp. 1046–1054.
- Rynes, SL, Bartunek, JL & Daft, RL 2001, 'Across the great divide: Knowledge creation and transfer between academics and practitioners', *Academy of Management Journal*, vol. 44, pp. 340–355.
- Sandelands, LE 1990, What is so practical about theory?: Lewin revisited, *Journal for the Theory of Social Behavior*, vol. 20, no. 3, pp. 235–262.
- Sanderlands, LE & Stablein, RE 1987, 'The concept of organization mind', in Bacharach, S & DiTomaso, N (eds.), *Research in the Sociology of Organizations*, vol. 5, JAI Press, Greenwich, Connecticut, pp. 135–161.
- Sanford, N 1970, 'Whatever happened to action research?', *Journal of Social Issues*, vol. 26, no. 4, pp. 3–23.
- Sarah R, Haslett T, Molineux J, Olsen J, Stephens J, Tepe S & Walker B 2002, 'Business action research in practice—A strategic conversation about conducting action research in business organizations', *Systemic Practice and Action Research*, vol. 15, pp. 535–546.
- Sargut, G & McGrath, RG 2011, 'Learning to live with complexity', *Harvard Business Review*, vol. 89, no. 9, pp. 68–76.
- Sayer, A 1984, *Method in Social Science*, Hutchinson, London.
- Schell, L & Haslett, T 2007, 'Cycle two of the Monash action research cohort: Looking back and looking forward', *International Journal of Knowledge, Culture and Change Management*, vol. 6, no. 11, pp. 109–117.

Schneider, KJ 1987, 'The deified self: A "centaur" response to Wilber and the transpersonal movement', *Journal of Humanistic Psychology*, vol. 27, pp. 196–216.

—— 1989, 'Infallibility is so damn appealing: A reply to Ken Wilber', *Journal of Humanistic Psychology*, vol. 29, pp. 470–481.

—— 2001. 'A reply to Roger Walsh', in Schneider, K, Bugental, J & Pierson, J (eds.), *The Handbook of Humanistic Psychology: Leading Edges in Theory, Research and Practice*, Sage, Thousand Oaks, California, pp. 621–624.

Schön, DA 1983, *The reflective practitioner: How professionals think in action*, Basic Books, New York.

—— 1987, *Educating the reflective practitioner*, Jossey-Bass, San Francisco.

Schwandt, TA 1996, 'Farewell to criteriology', *Qualitative Inquiry*, vol. 2, no. 1, pp. 58–72.

—— 2007, *The SAGE dictionary of qualitative inquiry*, 3rd edition, Sage Publications, Los Angeles.

Schwaninger, M 2004, 'What can cybernetics contribute to the conscious evolution of organizations and society?', *Systems Research and Behavioral Science*, vol. 21, pp. 515–527.

Senge, PM 1992, *The fifth discipline: The art and practice of the learning organization*, Random House Australia, Milsons Point, New South Wales.

Shapiro, DL, Kirkman, BL & Courtney, HG 2007, 'Perceived causes and solutions of the translation problems in management research', *Academy of Management Journal*, vol. 49, pp. 249–266.

Sheffield, J, Sankaran, S & Haslett, T 2012, 'Systems thinking: Taming complexity in project management', *On the Horizon*, vol. 20, pp. 126–136.

Sherman, S & Freas, A 2004, 'The wild west of executive coaching', *Harvard Business Review*, vol. 82, no. 11, pp. 83–90.

Showers, B 1984, *Peer coaching: A strategy for facilitating transfer of training*, Oregon University Center for Educational Policy and Management, Eugene, Oregon.

Shumsky, A 1958, *The action research way of learning*, Columbia University Publications, New York.

Sieler, A 2007, *Coaching to the human soul: Ontological coaching and deep change, Volume 2*, Newfield Institute, Blackburn, Victoria.

Sirbiladze, G 2010, *Extremal fuzzy dynamic systems: Theory and applications*, Springer, New York.

Skiffington, S & Zeus, P 2003, *Behavioral coaching: How to build sustainable personal and organizational change*, McGraw-Hill, Sydney.

Smith HA 2005, 'Peircean theory, psychosemiotics, and education', *Educational Philosophy and Theory*, Vol. 37, No. 2, pp. 191–206.

Smither, JW, London, M, Flautt, R, Vargas, Y, & Kucine, I 2003, 'Can working with an executive coach improve multi-source feedback ratings over time? A quasi-experimental field study', *Personnel Psychology*, vol. 56, pp. 23–44.

Snell, R & Man-Kuen Chak, A 1998, 'The learning organization: Learning and empowerment for whom?', *Management Learning*, vol. 29, pp. 337-364.

Somekh, B 1995, 'The contribution of action research to development in social endeavours: A position paper on action research methodology', *British Educational Research Journal*, vol. 21, pp. 339–355.

—— 2006, *Action research: A methodology for change and development*, Open University Press, Maidenhead, UK.

Spence, GB 2007, 'Further development of evidence-based coaching: Lessons from the rise and fall of the human potential movement', *Australian Psychologist*, vol. 42, pp. 255–265.

- Sperry, L 2008, 'Executive coaching: An intervention, role function, or profession', *Consulting Psychology Journal: Practice and Research*, vol. 60, pp. 33–37.
- Sprick, R, Knight, J, Reinke, W & McKale, T 2006, *Coaching classroom management: Strategies and tools for administrators and coaches*, Pacific Northwest Publishing, Eugene, Oregon.
- Spiro, RJ, Feltovich, P & Coulson, R 1996, 'Two epistemic world-views: Prefigurative schemas and learning in complex domains', *Applied Cognitive Psychology*, vol. 10, no. 7, pp. 51–61.
- Standards Australia 2011, *Coaching in organizations*, SAI Global Limited, Sydney.
- Starr, J 2003, *The Coaching Manual*, Prentice-Hall, London.
- Stein, IF 2007, 'Enacting the role of coach: Discursive identities in professional coaching discourse', PhD thesis, Fielding Graduate University, Santa Barbara, California.
- Stephens, J, Barton, J & Haslett, T 2009, 'Action research: Its history and relationship to scientific methodology', *Systemic Practice and Action Research*, Vol. 22, pp. 463–474.
- Stephens, J & Haslett, T 2011, 'A set of conventions, a model: An application of Stafford Beer's viable systems model to the strategic planning process', *Systemic Practice and Action Research*, vol. 24, pp. 429–452.
- Sterman, J 1994, 'Learning in and about complex systems', *System Dynamics Review*, vol. 10, pp. 291–330.
- 2000, *Business Dynamics*, Irwin-McGraw Hill, Boston.
- Stern, LR 2004, 'Executive coaching: A working definition', *Consulting Psychology Journal: Practice and Research*, vol. 56, no. 3, pp. 154–162.

Stewart, GL & Barrick, MR 2012, 'The folly of using research lacking rigor as a call to action', *Academy of Management Learning and Education*, vol. 11, pp. 278–294.

Stober, DR & Grant, AM 2006, *Evidence-based coaching handbook: Putting best practices to work for your clients*, John Wiley & Sons, Hoboken, New Jersey.

Straussfogel, D & von Schilling, C 2009, 'Systems Theory', in Kitchen, R & Thrift, N (eds.), *International Encyclopedia of Human Geography*, vol. 1, Elsevier, Oxford, pp. 151–158.

Super, CM & Harkness, S 2003, 'The metaphors of development', *Human Development*, vol. 46, pp. 3–23.

Taylor, AM 2001, 'Ken Wilber's a theory of everything: Some societal and political implications', *World Futures: The Journal of Global Education*, vol. 57, pp. 213–237.

Tebes, JK 2005, 'Community science, philosophy of science, and the practice of research', *American Journal of Community Psychology*, vol. 35, pp. 213–230.

Tepe, SJ & Barton, J 2009, 'World view and implications for practice: Occupational Health and Safety (OHS) as a model', *Proceedings of the 53rd annual meeting of the International Society for Systems Sciences*, International Society for Systems Science, Brisbane, Queensland, 12–17 July.

The Coaching Institute n.d., viewed 14 March 2016, <<http://www.thecoachinginstitute.com.au/courses/thought-dynamics>>

The Coaching Institute n.d., viewed 14 March 2016, <<http://www.thecoachinginstitute.com.au/meta-dynamics/what-is-meta-dynamics>>

The Institute of Coaching n.d., viewed 25 October 2015, <<http://www.instituteofcoaching.org/resources/coaching-competencies>>.

The Myers and Briggs Foundation 2015, *Home page*, viewed 22 April 2015, <www.myersbriggs.org>.

Thornton, C 2010, *Group and team coaching: The essential guide*, Routledge, London.

Tobias, L 1996, 'Coaching executives', *Consulting Psychology Journal: Practice and Research*, vol. 48, pp. 87–95.

Topp, W 2000, 'Generative conversations: Applying Lyotard's discourse model to knowledge creation within contemporary organizations', *Systems Research and Behavioral Science*, vol. 17, pp. 333–340.

Toulmin, S 1996a, 'Introduction', in Toulmin S & Gustavsen B (eds.), *Beyond theory: Changing organizations through participation*, John Benjamins Publishing, Amsterdam, pp. 1–4.

—— 1996b, 'Concluding methodological reflections: Élitism and democracy among the sciences', in Toulmin S & Gustavsen B (eds.), *Beyond theory: Changing organizations through participation*, John Benjamins Publishing, Amsterdam, pp. 203–226).

—— 1996c, 'Is action research really "research"?', *Concepts and Transformation*, vol. 1, no. 1, pp. 51–62.

—— 2001, *Return to reason*, Harvard University Press, Cambridge.

Toulmin, S & Gustavsen, B (eds.) 1996, *Beyond theory: Changing organizations through participation*, John Benjamin Publishing Co., Amsterdam and Philadelphia.

Tsoukas, H 1994, 'Refining common sense: Types of knowledge in management studies', *Journal of Management Studies*, vol. 31, pp. 761–780.

—— 1996, 'The firm as a distributed knowledge system: A constructionist approach', *Strategic Management Journal*, vol. 17, Special Issue: Knowledge and the firm, pp. 11–25.

Tudge, JRH & Winterhoff, PA 1993, 'Vygotsky, Piaget and Bandura: Perspectives on the relations between the social world and cognitive development', *Human Development*, vol. 36, pp. 61–81.

Tulpa, K 2008, 'Foreword', *Coaching: An International Journal of Theory, Research and Practice*, vol. 1, p. 1.

Turner, E 2010, 'Coaches views on the unconscious dynamics to executive coaching', *Coaching: An international journal of theory research and practice*, vol. 3, no. 1, pp. 12–29.

Underhill, BO, McAnally, K & Koriath, JJ 2007, *Executive coaching for results: The definitive guide to developing organisational leaders*, Berrett-Koehler Publishing, San Francisco.

Vaartjes, V 2005, 'Integrating action learning practices into executive coaching to enhance business', *International Journal of Evidence Based Coaching and Mentoring*, vol. 3, no. 1, pp. 1–17.

van de Ven, AH 2007, *Engaged scholarship: A guide for organisational and social research*, Oxford University Press, Oxford.

van de Ven, AH & Johnson, PE 2006, 'Knowledge for theory and practice', *Academy of Management Review*, vol. 31, pp. 802–821.

van Nieuwerburgh, C 2012, *Coaching in Education: Getting Better Results for Students, Educators and Parents (Professional Coaching)*, Karnac Books, London.

Vaughan, F 2001, *The inward arc: Healing in psychotherapy and spirituality*, iUniverse.com, Lincoln, Nebraska.

von Bertalanffy, L 1950, 'The theory of open systems in physics and biology', *Science*, vol. 111, no. 2872, pp. 23–29.

——— 1968, *General systems theory, foundations, development, applications*, Braziller, New York.

Wageman, R, Nunes, D, Burruss, J & Hackman, J, 2008, *Senior leadership teams: What it takes to make them great*. Harvard Business School Press, Boston.

Waldman, DA 2003, 'Does working with an executive coach enhance the value of multi-source performance feedback?', *Academy of Management Review*, vol. 17, pp. 146–148.

Walker, B & Haslett, T 2002, 'Action research in management—Ethical dilemmas', *Systemic Practice and Action Research*, vol. 15, pp. 523–533.

Walsh, R, & Vaughan, F 1994, 'The worldview of Ken Wilber', *Journal of Humanistic Psychology*, vol. 34, pp. 6–21.

Ward, G, van de Loo, E & ten Have, S, 2014, 'Psychodynamic group executive coaching: A literature review', *International Journal of Evidence Based Coaching and Mentoring*, vol. 12, pp. 63–78.

Warren, K 2002, *Competitive strategy dynamics*, John Wiley & Sons, Chichester, UK.

Washburn, M 1990, 'Two patterns of transcendence', *Journal of Humanistic Psychology*, vol. 30, pp. 84–112.

—— 1994, *Transpersonal psychology in psychoanalytic perspectives*, State University of New York, Albany.

—— 1995, *The ego and the dynamic ground*, 2nd edition, State University of New York, Albany.

—— 2003, *Embodied spirituality in a sacred world*, State University of New York, Albany.

Weick, K 1987, 'Organizational culture as a source of high reliability', *California Management Review*, vol. 29, no. 2, pp. 112–127.

Weick, CW 2008, 'Issues of consequence: Lessons for educating tomorrow's business leaders from philosopher William James', *Academy of Management Learning and Education*, vol. 7, pp. 88–98.

Weick, K & Roberts, K 1993, 'Collective mind in organizations: Heedful interrelating on flight decks', *Administrative Science Quarterly*, vol. 38, no. 3, pp. 357–381.

West, D & Stansfield, MH 2001, 'Structuring action and reflection in information systems action research studies using Checkland's FMA model', *Systemic Practice and Action Research*, vol. 14, pp. 251–281.

West, L & Staub, F 2003, *Content-focused coaching: Transforming mathematics lessons*, Greenwood Publishing Group, Santa Barbara, California.

White, H 1973, *Metahistory*, John Hopkins University Press, Baltimore.

Whitehead, AJ & McNiff, J 2006, *Action Research: Living Theory*, SAGE, London.

Whitmore, J 2009, *Coaching for performance: Growing human potential and purpose; the principles and practice of coaching and leadership*, 4th edition, Nicholas Brealey, Boston.

Whyte, W 1991, *Participatory action research*, Sage, London.

Whyte, WL & Hamilton, EF 1964, *Action research for management—A case report on research and action in industry*, Dorsey Press, Homewood, Illinois.

Wierzbicki AP, 1982, 'A mathematical basis for satisficing decision making', *Mathematical Modelling*, vol. 3, pp. 391–405.

Wilber, K 1996, *A brief history of everything*, Shambhala, Boston.

——— 2000, *The collected works of Ken Wilber: Sex, ecology, spirituality*, vol. 6, Shambhala, Boston.

——— 2002, *Boomeritis: A novel that will set you free*, Shambhala, Boston.

—— 2005, *A social god: Towards a new understanding of religion*, Shambhala, Boston.

—— 2006, *Integral spirituality: A startling new role for religion in the modern and postmodern world*, Integral Books, Boston.

Wildflower, L & Brennan, D 2011, *The handbook of knowledge-based coaching: From theory to practice*, Jossey-Bass, San Francisco.

Winch, P 1958, *The idea of social science and its relation to philosophy*, Routledge, London.

Winnicott, DW 1971, *Playing and reality*. Tavistock, London.

Winter, R & Munn-Giddings, C 2001, *A handbook for action research in health and social care*, Routledge, London.

Yalom, I & Leszcz, M, 2005, *The theory and practice of group psychotherapy*, Basic Books, New York.

Yawson, RM 2012, 'Systems theory and thinking as a foundational theory in human resource development—A myth or reality?', *Human Resource Development Review*, vol. 12, pp. 53–85.

Yayanti, EB 2011, 'Through a different lens: A survey of linear epistemological assumptions underlying HRD models', *Human Resource Development Review*, vol. 10, pp. 101–114.

Zaleznik, A 2009, *Executive's guide to understanding people*, Palgrave Macmillan, Hampshire, UK.

Zander, RS & Zander, B, 2002, *The art of possibility: Transforming professional and personal life*, Penguin Books, New York.

Zuber-Skerritt, O 1992, *Action research in higher education*, Kogan-Page, London.

—— 2001, ‘Action learning and action research: Paradigm, praxis and programs’, in Sankaran, S, Dick, B, Passfield, R & Swepson, P (eds.), *Effective change management using action learning and action research: Concepts, frameworks, processes, applications*, Southern Cross University, Lismore, New South Wales, pp. 1–20.

—— 2012, ‘Introduction to action research for sustainable development in a turbulent world’, in Zuber-Skerritt, O (ed.), *Action research for sustainable development in a turbulent world*, Emerald Group Publishing, Bingley, UK, pp. 3–25.

Appendix 1: Linking [the client’s] Quality Standards to an open systems, action research approach and specific elements of implementation

References to AR are adapted from Action Research: Participatory Inquiry and Practice (2nd ed.) (Reason & Bradbury 2008)

Quality Standard	Open Systems Thinking & Action Research (AR)	Project Element
<p>Context Standards:</p> <p>Address the organisation in which the new learning will be implemented and what support and resources are necessary to provide quality professional learning</p> <p>Ensure learners are supported and the professional learning is accessible and relevant to the contexts in which educators work</p>	<p>Open systems’ thinking offers a way of thinking based on the primacy of the ‘whole’ and of relationships and deals with hidden complexity, ambiguity and mental models. It provides tools and techniques to unravel complexity and creates the skills to address chronic problems</p> <p>AR is a set of practices that responds to people’s desire to act creatively in the face of practical and often pressing issues in their lives in organisations and communities</p> <p>AR calls for engagement with people in collaborative relationships, opening new ‘communicative’ spaces in which dialogue and development can flourish</p>	<p>Questions from each module will be the guide to the formulation of specific relevant problems within each participant’s workplace</p> <p>Problems will be researched and acted upon by each participant within their own team</p> <p>Workplace sponsors will be required to provide support to each participant</p> <p>The Learning Coaches will facilitate just-in-time learning when each participant is ready for specific learning. [Organisation] resources will form a source of ‘systematic’ learning materials</p> <p>Participants will form AR cohorts to support each other, enable discourse and the learning outcomes of AR to be met</p>

<p>Professional Learning is inclusive and learner centred</p>	<p>Formally, AR is phenomenological (focuses on peoples’ actual lived experience/reality), interpretative (focuses on their interpretation of acts and activities), and hermeneutic (incorporates the meaning people make of events in their lives)</p> <p>AR is oriented to learning</p> <p>AR is values oriented seeking to address issues of significance concerning the flourishing of people, their communities and the wider ecology</p> <p>AR processes do not occur in a socially neutral settings, but are subject to deeply seated social and cultural forces that are taken into account through the participatory processes of investigation of a group based AR project</p>	<p>Module cohort members will explore their experience, gain greater clarity and understanding of events and activities, and use those extended understandings to construct effective solutions to the questions/problems which are defined for each module of study</p> <p>Individual development goals will be determined at the start of the program (although they will likely change)</p> <p>Assessment tool provides an opportunity for cohort participants to reflect on their readiness for learning</p>
<p>Uses flexible modes of delivery to provide quality access for all learners</p>	<p>People have different preferences and readiness for learning—no ‘one-size-fits all’</p> <p>AR draws on many ways of knowing, both in the evidence that is generated in inquiry and its expression in diverse forms of presentation as learning is shared with wider audiences</p> <p>AR programs are less defined in terms of hard and fast methods, but are a work of art emerging</p>	<p>Being an effective Learning Coach assumes high level traditional program design and implementation skills</p> <p>Learning Coaches create situations for participant learning rather than put themselves in a teaching role</p> <p>Learning Coaches will deliver face-to-face in</p>

	<p>in the doing of it</p> <p>Learning Coaches need to be prepared for almost any eventuality and be able to draw on an extensive collection of materials and knowledge</p> <p>Learning Coaches help balance task and learning through the use of questions designed to stimulate critical reflection.</p>	<p>workshops, in cohorts, on-line and in one-on-one coaching sessions.</p> <p>‘Just-in-time’ training is usually delivered through mini-presentations, handouts or exercises at the point when it will be most helpful. This will be included in Participant Workbooks.</p> <p>Between modules.</p> <p>Participants will have access to on-line learning and reading material and various forms of online communication.</p>
<p>Enriches learning through partnerships with [organisation]</p>	<p>AR is participative</p> <p>Involves collaborative inquiry where learning about working as a group/leader occurs while tackling a ‘real world’ problem</p>	<p>Participants take action within their own workplaces, supported by their sponsor</p> <p>Collaboration with other participants in each module builds relationships within the organisation.</p>
<p>Supports professional communities of learners and practice, opportunities for participants to share their knowledge and learn from each other, enable participants to collectively solve problems, develop new capabilities, leverage best practice and create and share knowledge</p>	<p>A primary purpose of AR is to produce practical knowledge that is useful to people in the everyday conduct of their lives</p> <p>Involves engaging communities of practice</p> <p>AR is only possible with, for and by persons and communities, ideally involving all stakeholders both in the questioning and sense making that informs the research, and in</p>	<p>AR Cohort arrangement creates opportunities for participants to share their learning experiences and learn from each other</p> <p>AR Cohort enables a participative inquiry into each participant’s problem with collegiate opportunities for reflection and action cycles</p>

	<p>the action which is its focus</p> <p>AR is emancipatory; it leads not just to new practical knowledge, but also to new abilities to create knowledge.</p>	
<p>Content Standards</p> <p>Refers to the knowledge, skills and information presented during the learning process</p> <p>Requires deep engagement with significant educational ideas and practices through coherent and connected learning experiences</p>	<p>AR facilitates a higher order of learning than traditional professional development programs</p> <p>Open systems thinking incorporates systematic thinking—theories and models that can assist in learning such as the 12 Circumplex styles of human thinking (Human Synergistics) are included</p> <p>AR requires that participants understand the underlying assumptions and limitations of models and theories</p> <p>Deep engagement requires a connection between reflection, action and learning</p>	<p>AR underpins all aspects of the proposed program</p>
<p>Uses research-based content, organised around domains of practice</p>	<p>An AR approach allows that content be utilised when the learner is most ready</p>	<p>Just-in-time learning will incorporate theories and models provided by the [Organisation]</p> <p>Learning coaches have attained a level of mastery that enables them to be flexible in delivery and to draw upon a wide variety of learning resources</p> <p>[Organisation] content will be utilised during the program when the learner is most ready</p>

<p>Sustains a focus on domains of practice to deepen content knowledge</p>	<p>AR knowledge may be defined as what participants learn while working in a context of action that is the result of the transformation of their experience during conversation with both self and others. It allows for the creation of useful actions that leaves inquirers and co-inquirers stronger</p> <p>AR takes knowledge from a number of difference domains which participants use within a cyclic inquiry process to deepen their knowledge within their own ‘real’ situations</p>	<p>[Organisation] content is essential for the research component involved in learning</p> <p>The theories and models provided in the content will raise awareness of participants in areas where their knowledge is not deep—it will assist them to develop reflective practice</p> <p>Participants will increasingly seek out specific knowledge due to learning the value that it brings when utilised when they are most ready for learning</p>
<p>Offers coherent curricula whereby objectives for learners, learning strategies and assessments are aligned to learning outcomes</p>		<p>Modules will align with aims and objectives, content and learning outcomes and be predicated on clearly articulated principles to endure fundamental coherence</p>
<p>Process Standards</p> <p>Ensures the professional learning employs evidence based learning strategies and assesses participant learning and program impact</p>	<p>Action Research has been practiced since the 1920s. It is a direct form of evidence-based learning and there are a plethora of examples citing its success in the facilitation of learning (a summary of relevant literature can be provided upon request).</p> <p>Since the consortium will be following an action research approach to deliver on the scope of this project participant learning and program impact will automatically be assessed. This correlates to the</p>	

	<p>observation and reflection elements of the process.</p>	
<p>Applies knowledge of human development, learning and change in order to acknowledge attributes of adult learners</p>	<p>Action research and its applicability to human development, learning and change is grounded in the work of many seminal authors (literature review available on request)</p> <p>Philosophical systems cluster around a few core models or worldviews. Knowledge of human development, learning and change calls for an approach that is aligned with a contextual world-view. Approaches, other than AR, such as formist and mechanistic approaches are aligned with treating learning as requiring reductionist systematic knowledge. Contextualism includes these approaches as valid, and essential, while mechanism and formist approaches do not recognise the complexity of humans that contextualism does.</p>	<p>Our approach is specifically designed to recognise the rich and varied life experiences of participants and provide differentiated learning opportunities.</p> <p>An AR approach provides a means of development that requires people to have responsible involvement in some real, complex and stressful problem by starting with what they already know and do and their accumulated personal experience of what works</p>
<p>Uses problem-based learning strategies that link theory and practice</p>	<p>AR approaches involve engaging people in participative cyclic processes, which alternate between action and critical reflection. Subsequent action and critical reflection cycles involve continuous refinement of methods, data and interpretation in the light of the understanding developed in earlier cycles</p> <p>Participants take actions in relation to solving their problems with the goal of learning through critical reflection on the results of their</p>	<p>The participants in the development program will be involved in problem-based learning. An AR approach allows for the linking between theory and practice in a most direct way—the knowing/doing gap is therefore avoided</p>

	<p>actions. They learn how to learn within specific complex and interacting problems. Learning in this way enhances the transfer of learning from the classroom to each participant's work environment</p>	
<p>Enables learners to apply knowledge, skills and dispositions in real-world settings</p>	<p>Reflection is a critical ingredient that is frequently missing in quantity and depth in many programs thus creating a knowing/doing gap</p> <p>A key component of AR is that it ensures that what is learned through the experience of working on a real project is explicit and planned</p>	<p>The problems addressed by participants will require acknowledgment and application of their knowledge, skills and dispositions in their own real-world settings</p>
<p>Uses strategies that support modelling, questioning, observations of practice and feedback</p>	<p>AR provides a vehicle for questioning insight and conversations that will help participants reframe their thinking. The program will need to provide regular opportunities where participants reflect. In doing so they will learn from what they do in each session. In this way the program models the reflective practice that will be necessary beyond the program</p> <p>The amount of learning by participants will be dependent upon a combination of 'P' or programmed instruction and 'Q' the development of their personal questioning insight</p>	<p>The AR process presented in the workshops and reinforced by the Learning Coaches will support:</p> <p>Modelling, through learning coaches</p> <p>Questioning, through AR Cohort interactions</p> <p>Observation of practice, through the reflective phase of AR</p> <p>Feedback, throughout the program by numerous means</p>

<p>Engages learners in collegial and collaborative practices</p>	<p>Central to AR as described above.</p>	<p>Cohorts provide a mechanism for the provision of a supportive collegiate environment</p> <p>Learning coaches will ensure that a supportive informative environment for learning is created</p> <p>Sponsors will assist in the action phase of AR</p>
<p>Optimises the use of current and emerging technologies and a variety of learning spaces</p>	<p>See above</p>	
<p>Assesses the development and application of knowledge, skills and dispositions</p>	<p>On-going critical reflection and evaluation is a formal part of any AR program and will be paramount to the program design at each stage</p>	<p>The proposed formative evaluation strategy will collect data on application especially through the AR project</p>
<p>Evaluates and monitors programs to guide continuous improvement</p>	<p>A key dimension to be considered when assessing quality of an AR project is whether cohort members become more aware of their choices, how they make those choices clear and transparent both to themselves and to their inquiry partners and when they start sharing and presenting to the wider school community.</p>	<p>Learning coaches, sponsors and cohort members will provide insights to the evaluation process.</p>

