

Problematising current coaching strategies from a worldview perspective



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Orientation: Leaders need goodness-of-fit with the context in which they are leading, and coaching is considered an effective strategy to achieve this.

Research purpose: To critically problematise current dominant coaching strategies in terms of their underlying worldviews, in order to assess their potential effectiveness and relevance in enhancing context–leadership goodness-of-fit, given the emerging context faced by leaders.

Motivation for the study: The current ever-changing context of leaders requires different thinking, including with regard to coaching. The framework of the coaching landscape, with its associated building blocks, provides the conceptual framework for the review of current coaching strategies. Three dominant worldviews that have historically influenced the thinking in social sciences are employed in this review, namely Newtonian, general systems theory and complexity or chaos (second-order systemic thinking).

Research approach/design and method: This was a critical conceptual study aimed at problematising the worldviews informing the currently dominant coaching strategies.

Main findings: The problematising of the worldviews underlying the dominant coaching strategies revealed that these strategies are not always informed by a worldview congruent with that demanded by the qualities and features of the world that leaders currently face. There is a pressing need for a coaching strategy informed by a complexity or chaos (second-order systemic) worldview, which better meets the emerging contextual demands and requirements imposed on leaders in practice.

Practical/managerial implications: A different coaching strategy, called *systemic coaching*, is proposed.

Contribution/value-add: The proposed systemic coaching strategy is highly suitable to bringing about improved goodness-of-fit between the leader and the emerging context.

Keywords: Leader–context fit; coaching strategies; worldviews; newly emerging world; systemic coaching strategy.

Introduction

Without any doubt, leadership makes a critical difference in the performance and success of individuals, teams, organisations, communities and society (Bhatnagar, 2020; Hawkins & Turner, 2019; Kahn, 2018; Lawrence, 2019; Veldsman, 2016). Leadership effectiveness, and hence organisational effectiveness, are a direct function of leader–context best fit (Veldsman, 2016). For the purpose of this article, leadership is defined as a dynamic, systemic and holistic influencing process that cultivates a willingness in people to jointly achieve something worthwhile while being engaged in a responsive dialogue (Coetzee, 2019).

Leaders are adaptive, complex systems (Hawkins & Turner, 2019; Obolensky, 2010). A leader's adaptability equips him or her with emergent strategies to cope better and engage more effectively with changing circumstances and contexts (Hawkins & Turner, 2019; Obolensky, 2010; Veldsman, 2016). Coaching has become one of the top five strategies for leadership development over the last decade (Carey et al., 2011; Odendaal, 2016). Coaching also forms part of most successful leadership development programmes, as it assists leaders to be effective in the context in which they lead and is more likely to translate into measurable forms of business value (Gavin, 2018).

For the purpose of this article, we define coaching as a holistic, interactive process between an internal (employed within the organisation) or external coach and leader to, firstly, understand the current realities and intentions faced by the leader and, secondly, explore and co-create alternative

options for the leader to enhance his or her personal and leadership excellence and to have a positive impact on the organisation in a complex world of change (Coetzee, 2019).

According to Cavanagh and Palmer (2009), coaching is ideally placed to assist leaders in developing new and alternative ways to respond to the challenges of the present and the future. Coaching is further positioned as a key intervention for vertical leadership development, where the emphasis is on thinking, acting and engaging differently with the context to find a best fit (Hawkins & Turner, 2019; Odendaal, 2016; Palus et al., 2020; Stelter, 2014a; 2014b; 2016; Veldsman, 2016).

If the context changes, particularly when such change is fundamental and radical, as is currently the case, the power of coaching to equip leaders to fit their context must be interrogated from first principles, in particular, the coaching strategies followed. Coaching as a strategy for vertical leadership development should provide a leader with the possibility to co-construct new meaning and explore alternative options to deal with complexities of a fundamentally different context. If the leader faces a context demanding engagement via a different worldview, then the goodness-of-fit of the worldviews informing coaching strategies with respect to the emerging context must be interrogated for relevance.

A worldview refers to the perceptions and mental models we use to make sense of the world around us and award meaning (Senge, 2006). It is how we know, think and decide about the reality with which we are engaging. In addition, it is also how we give meaning to and make sense of what we observe (Coetzee, 2019; Schein, 2016). Metaphorically, a worldview is leadership's 'set of glasses' in making sense of and creating meaning regarding reality (Veldsman, 2016).

If the worldviews of the context and of coaching differ – a context-coaching misfit – leaders will be inappropriately equipped to engage with that world. The coaching will thus be ineffective and will exacerbate the misfit between the leaders and the context. The world the leader faces will not resonate with the worldview informing the coaching strategy that is used to develop the leader to deal with that world.

Purpose of this research

The purpose of the research was to interrogate the worldviews informing the current dominant coaching strategies and to critically assess their relevance to and effectiveness in the emerging context in which leadership must lead. Put slightly differently, from a worldview vantage point, the aim was to critically problematise (Alvesson & Sandberg, 2011) current dominant coaching strategies for their potential effectiveness and relevance, in order to enhance the context-leadership goodness-of-fit, given the fundamentally and radically changing context in which leaders have to lead. The key findings are also evaluated in the current turmoil context of coronavirus disease 2019 (COVID-19), in which leaders need to think and lead differently.

Approach

The procedure followed offers a problematising, critical conceptual review of the appropriateness of worldviews informing the current dominant coaching strategies relative to the emerging context faced by leaders, with the aim of offering an alternative coaching strategy, one that better fits the emerging context.

A review of literature on coaching and the respective dominant worldviews informing these strategies was conducted following a structured and analytical process. It was based on a fair selection of sources, and we critically compared the ideas and evidence, thereby identifying the gap of what still needs to be known and researched (cf. Jesson & Lacey, 2006). In the analytical process, the framework of the coaching landscape (Coetzee, 2019) was applied to evaluate the themes. Subsequently, we developed an alternative strategy to leadership coaching, one based on a systemic worldview. The findings are evaluated in light of the context leaders currently face, in which leaders need to steer their organisations towards specific routines and rituals, be it working remotely or in a hybrid working environment.

The conceptual review covered various articles in scholarly journals and books focused on leadership theories, coaching strategies and worldviews that inform our thinking and beliefs. We made use of EBSCOhost's database to ensure that we included all relevant articles. The latest updates of the Harvard Business Review were also included. In reviewing coaching strategies and worldviews, the focus was on the originally cited literature and not interpretations of the theory or the strategy. The literature review includes references from 1950 up to 2022 because of the nature of the study. The time period of the review provided the opportunity to test, over time, the development of theory and beliefs, as well as the relevance of the findings.

Storyline

The storyline of the problematising and critical review unfolded as follows: (1) a characterisation of the emerging context, with the commensurate leadership requirements; (2) an outline of the coaching landscape as a conceptual framework to review the current dominant coaching strategies; (3) profiling the current dominant coaching strategies against the coaching landscape; (4) a distinction between basic worldviews and uncovering which worldview informs which current dominant coaching strategies and the implications thereof; and (5) proposing a systemic coaching strategy that is better matched to the emerging context faced by leaders.

Emerging context with its leadership requirements

The context of leaders has changed over time and is now, more than ever, characterised by increasing uncertainty and turbulence in what is termed the *VUCA world* (volatility, uncertainty, complexity and ambiguity). Veldsman (2021)

characterises this new world context as *VICCAS*: increasing variety, interdependency, complexity, change, ambiguity and seamlessness (i.e. boundarylessness). This new context requires different leadership characteristics, such as the mental agility to identify and exploit emergent opportunities in the ever-changing context (Kutz & Bamford-Wade, 2013; Le Gentil, 2021) and resilience – the ability to bounce back regardless. Leaders are not only required to be concerned about the performance of their business and managing the performance of employees, but also, given the COVID-19 pandemic, they must respond to and manage the mental wellness of their teams. The leaders of today need to be great human leaders who are able to respond to the fast-changing, unpredictable business world and make their people feel respected, listened to and inspired, thereby encouraging them to find purpose and meaning in what they do (Le Gentil, 2021; Veldsman, 2021; Veldsman, 2016).

Leadership effectiveness is further shaped by goodness-of-fit with the context. According to Clarke (2013), leadership has shifted away from a traditional individualistic focus to a more collective, social concept, whereby leadership is based on relationships. Clarke (2013) describes leadership as:

[...A]n emergent possibility within the social system ... The increasing complexity facing organisations requires us to consider leadership as embedded not merely in the sets of interpersonal relationships, but more widely as constituting an array of interacting organizational processes that facilitate intelligent innovative organizational adaptation. (p. 137)

According to Hawkins and Turner (2019), the future is bigger and more challenging, one in which we will need to adapt and evolve, and shared leadership is key. Our current way of doing business is not fit-for-purpose, and it will take more empathy, collaboration and systemic thinking to navigate this exponential change.

Leaders are thus faced with difficult challenges that they need to deal with in order to achieve sustainable success. The key contextual shifts that require different leadership behaviours and actions can be described as substantive trends and qualitative trends (Ganz, 2010; Hawkins & Turner, 2019; Kanter, 2010; Le Gentil, 2021; Murray, 2019; Rhinesmith, 2010; Veldsman, 2016, 2021; Veldsman & Veldsman, 2020; Willyerd & Meister, 2010). These trends are summarised.

Substantive trends include: (1) rising expectations of knowledgeable customers and new legislation, which require leaders to be close to customers, understand their needs and respond effectively; (2) changes in societal values and shifting workforce demographics, which require leaders to understand the needs of their employees, provide direction and ensure alignment to achieve a collective outcome and to create a shared and noble purpose for the organisation and its people; (3) current (younger) generations access information very differently and in an instant, virtual and on-going manner, so leaders need to have a multifold focus, explore options and possibilities, be technologically confident and focus on constant learning, which will accelerate as we move into the

future; (4) a competitive market with no clearly defined boundaries and global changes that seem utterly chaotic, so leaders need to have the ability to work across boundaries, adopt a global mindset and be comfortable operating in ambiguity and chaos; and (5) complexity of diverse and demanding stakeholders who require leaders to balance the needs of stakeholders in a fair and equitable manner, build and maintain social capital in the process and invest in collaborative relationships with different stakeholders.

Two dominant qualitative contextual trends also highlighted by Kutz and Bamford-Wade (2013) are, firstly, a complex context, with everything becoming increasingly connected and interdependent. For example, the organisation is now being defined as a complex system, with every part of the system affecting every other part. Leaders need to shift their thinking to a systemic view, where the emphasis is on complexity, interconnected relationships, patterns and unpredictability. Secondly, there is a trend of accelerating change and uncertainty – the context of leaders is ever-changing and characterised by uncertainty and turbulence. Leaders need to manage change with high resilience while building change capabilities in their teams and organisations. As the rate and degree of organisational and contextual changes increase, leaders need to keep up with newly required patterns of behaviour and spend less time on managing tasks and more on leading, enabling and empowering people.

It is evident that the world has changed, placing different demands on leaders. For the leader to thrive in this context of radical, fundamental change, leadership development – and coaching, specifically – should offer alternative options to leaders to recognise the holistic patterns and complexity in the ever-changing organisational landscape of the *VICCAS* world. Contextual intelligence, where the leader integrates the principles of tacit knowledge, synchronicity and time orientation, is an essential competency for today's leaders (Kutz & Bamford-Wade, 2013). Single, linear solutions are not sufficient. It is proposed that ecosystemic thinking is required. In addition, navigating as leader in a new hybrid way of working, where there are no clear guidelines or research on how to succeed as leader, demands that leaders rely on deep insight and reflection to manage complexity.

Not only do we need to enable leaders to develop different thinking perspectives and capabilities to achieve success, but we also need to think differently about leadership development. Traditional leadership development programmes focus mainly on horizontal development – adding skills, knowledge and competence. This is important but not sufficient in a *VICCAS* world (Veldsman, 2021). For leaders to succeed in a complex world, there should be greater focus on vertical development, which refers to advancement in a leader's thinking capability (Odendaal, 2016). In addition, given the complexity illustrated by the different levels of work for leaders, from purely operational to strategic (Jaques, 2004), it will become increasingly important to consider moving from horizontal to more

vertical leadership development interventions. This will enable leaders to co-construct meaning and think and act differently and to ensure that their doing and decision-making are equal or superior to the complexity of the environment in which they operate (Odendaal, 2016; Palus et al., 2020).

The outcome of vertical development is the ability to think in a more complex, systemic, strategic and interdependent way (cf. Palus et al., 2020). The focus here is on relationships, patterns of dialogue, connections, shared vision, collaboration, change and ambiguity, different possibilities and options and new ways of thinking and doing (Hawkins & Turner, 2019; Hernez-Broome & Hughes, 2004; Petrie, 2013). The underlying worldview or perspective of the coaching strategy will indicate if the focus is on vertical or horizontal development. It is proposed that coaching as a strategy for vertical leadership development, where the focus is on meaning-making in a collaborative practice, can provide new alternatives if based on a systemic worldview. Coaches are therefore urged to deliver value beyond the individual leader and to the increasingly complex group of stakeholders with whom they are partnering (Hawkins & Turner, 2019).

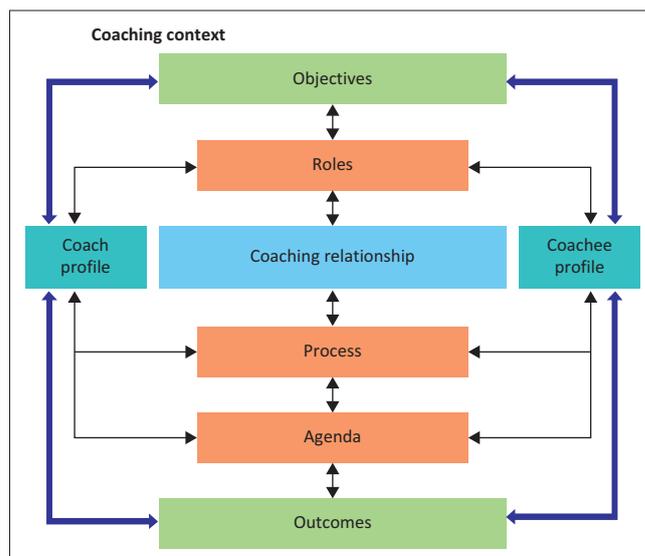
Coaching landscape as conceptual framework to review different coaching strategies

A 'map' of coaching must be applied in order to understand the coaching territory. Veldsman (personal communication, 2007) depicts mentoring in terms of a landscape made up of different building blocks. A coaching landscape based on that of Veldsman (personal communication, 2007) is proposed, one that would enable a holistic view of coaching through its building blocks, as depicted in Figure 1.

In exploring the literature on coaching, certain themes became apparent. These themes emerged as building blocks of the landscape of coaching, portraying the important components of most approaches in the current coaching literature. When exploring these building blocks, it is important not to view them as individual components, but rather to consider how they form an interdependent, organic totality. The coaching building blocks shown in Figure 1.

Coaching context

This building block refers to the setting within which coaching takes place. The questions to be posed here are: how broad is the focus of coaching? Who are included in the coaching conversation, and what elements form part of this coaching setting? For example, does it include other people, the team or different facets of life? Does the context include the broader internal organisational environment (Cox, 2012; Lawrence, 2019), such as culture, structure and organisational processes? The context may also include external and wider social, political and economic factors that may impact the coaching (Cox et al., 2014).



Source: Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg

FIGURE 1: The Coaching Landscape.

Coaching objectives

According to Clutterbuck and Megginson (2005), the contribution of coaching is significant in achieving organisational goals, as well as in enhancing leadership potential. With respect to this building block, it is important to look at the aim(s) of coaching. Why is there a coaching engagement (Dryden, 2018) – what is the desired outcome? Is the aim of coaching a fixed and structured view, or does the approach allow flexibility in the conversation?

Coaching roles

The role of the coach in relation to the coachee, and vice versa, must be contracted. The respective roles of the coach and coachee refer to the contribution, accountability and responsibility each will take in the coaching process (Cox et al., 2014). Are the coach and coachee active and direct or more subtle and exploring?

Coaching relationship

With respect to this building block, the focus is on the nature of the relationship and its cornerstones. The relationship in coaching forms the basis of the interaction (Dryden, 2018) and is key in bringing the leader (coachee) and context into dialogue and creating a shared reality (Kahn, 2018). The coach-coachee relationship is also referred to as an 'equal partnership', one with change impact on all stakeholders (Hawkins & Turner, 2019). But what does such a relationship look like? Is the relationship equal, or is the coach seen as the guru? How important is the relationship per se in the coaching process? How will the relationship be established and sustained?

Coaching process

The coaching process is the sequence of developmental events over time, the unfolding interactions between the

coach and the leader. The coaching process can be structured using tools and techniques in goal-setting and goal pursuit (David et al., 2013). Alternatively, the coach could see goals as evolving and emergent (Stelter, 2014a, 2014b). The focus here is more on the coaching conversation and less on the mechanics of goal-setting (Cox et al., 2014; Hawkins & Turner, 2019). The coach will use the opportunity to observe, enquire and deepen his or her understanding of the context throughout the coaching process in co-creating a new meaning for the future (Kahn, 2018).

Coaching agenda

The coaching agenda entails posing the correct questions at the right time in the right sequence. The agenda is described throughout the literature as significant in the coaching process, as it is an enabler in creating the opportunity for thinking (Cox et al., 2014; Hawkins & Turner, 2019; O'Neill, 2000; Peltier, 2010). Who determines the agenda – the coach or the coachee, or is it a joint action? Is the agenda influenced by the organisational context? According to Kauffman and Hodgets (2016), agility in the approach to coaching is important. Therefore, understanding the culture and context of the leader as coachee and asking appropriate additional questions to explore the broader territory will enable the coach to apply a fit-for-purpose strategy.

Coach profile

This building block pertains to the coach. Relevant issues to explore here are: what does the coach apply of him- or herself in the coaching process? The coach should acknowledge the complexity and unpredictability of the coaching process when applying him- or herself, as well as the interconnectedness between the coach and the context (Bachkirova, 2016). Furthermore, will the coach use his or her whole self holistically or only deploy certain parts of the self? Is there any reference to specific qualities a coach should have in using the approach? Coaches are trained in specific models, theories or approaches, with specific techniques, skills or knowledge, which are applied in line with the coaching method or coaching paradigm (Hawkins & Turner, 2019; O'Neill, 2000).

Coachee profile

This building block deals with the coachee and what will be explored in the coaching relationship (Peltier, 2010). Are only the unconscious processes considered, or is the conscious way he or she thinks explored? How comprehensive is the focus with respect to the coachee? Will the coach consider the whole person within his or her context, including important relationships and all life dimensions, or only certain facets of the coachee? The disposition of the coachee towards inclusion of the whole context is explored in this paper.

Coaching outcomes

The focus of this building block is on what one aspires to achieve through coaching. What is the change, if any, that needs to occur? What must be different after the coaching

engagement? Another important question is: how predictable and measurable is the outcome?

Profiling currently dominant coaching strategies against the coaching landscape

In order to create structure and meaning for the review of different coaching approaches, two frameworks were applied. The first framework drew on the work of Kauffman and Hodgets (2016) and Barner and Higgins (2007). According to these authors, the effectiveness of coaching can be enhanced if the coach is familiar with multiple psychological models and able to apply them appropriately to the client's needs and context, referred to as 'model agility'. Although coaches tend to be eclectic in their approach to coaching, there are foundational theories that guide their thinking and actions. Most coaches, however, have been trained to use a dominant approach, model or framework (Grant, 2011; Kauffman & Hodgets, 2016; Lawrence & Turner, 2019; Stelter, 2014a, 2014b).

Barner and Higgins (2007) refer to the following four theory models that inform coaching practice: (1) the **clinical model** enables the leader to change personality and self-perception, and change comes from the inside; (2) the **behavioural model** helps the leader to change a problematic area in behaviour, and the focus is on changing thoughts and behaviour, with a specific target and outcome in mind; (3) the **systems model** enables the leader to align his or her personal goals with those of the organisation, and the focus is on changing the interaction between the leader and the organisational context; and (4) the **constructionist model** helps the client to re-author his or her story in alignment with his or her role in the organisation. The focus is on defining new realities and changing the prevailing narrative. The four theoretical models cover a broad spectrum and are still applied in recent literature in discussing prevailing coaching models (Cox et al., 2014; Odendaal, 2016).

The second framework that fits well with the present review is based on the notion of different generations of coaching, as described in the work of Stelter (2014a, 2014b, 2016). The framework enables us to clarify how coaching can be characterised based on the evolution of the application of coaching over time. The framework includes the following three generations of coaching:

- **First-generation coaching** – *coaching from a problem and goal perspective*. In this case, the purpose of coaching is to assist the coachee to deal with problems and challenges, in order to achieve specific goals and develop action strategies aligned to that goal. This includes sports, performance and skills coaching, using different models to structure the conversation, such as the Goal, Reality, Obstacles (or Options) and Way Forward (or Will) (GROW) Model, goal-setting theory (Passmore, 2018; Whitmore, 2005), neurolinguistic programming (NLP) coaching (O'Connor & Lages, 2004), psychodynamic coaching (Kets De Vries, 2006; Lee, 2014) and cognitive-behavioural coaching (CBC) (Neenan & Palmer, 2012).

- **Second-generation coaching** – coaching from a solution- or future-oriented perspective. The purpose of these coaching strategies is to create positive future scenarios and possibilities. There is a strong focus on the strengths of the coachee and building on them for future success. Second-generation coaching includes strategies such as solution-focused coaching (Cavanagh & Grant, 2014), coaching from a general systems theory (GST) perspective (Kahn, 2011; O’Neill, 2000), appreciative inquiry and positive psychology or strength-based coaching (Biswas-Diener, 2010).
- **Third-generation coaching** – coaching in a reflective space. Third-generation coaching includes narrative collaborative coaching (Drake, 2010; Stelter, 2014a, 2014b). It is characterised by a clear relationship symmetry between coach and coachee. The coach is neutral and not the expert (as in first-generation coaching). The coachee is the expert on his or her own life. The coaching conversation can be described as co-creative and collaborative, and knowledge, learning and change emerge between the coach and coachee in a reflective dialogue process. The most recent work and development around the application of an ecosystemic coaching strategy by Lawrence and Turner (2019) relates well to third-generation coaching and will be included later in the discussion.

In problematising current dominant coaching strategies, the following coaching approaches were reviewed: psychodynamic coaching (Kets De Vries, 2006; Kilburg, 2004; Lee, 2014; Peltier, 2010), behavioural coaching (Grant, 2014; Peltier, 2010; Peterson, 2006; Skiffington & Zeus, 2006), CBC (Dryden, 2017; Good et al., 2010; Grant et al., 2012; Neenan, 2018; Neenan & Palmer, 2012; Williams et al., 2014), NLP coaching (Grimley, 2014; Hayes, 2006), solution-focused coaching (Cavanagh, 2006; Cavanagh & Grant, 2014; Cox et al., 2014; Jackson & McKergow, 2011), systems psychodynamic coaching (Bunning, 2006; Campbell & Huffington, 2008; Cilliers, 2005; Cilliers & Terblanche, 2010; Diamond, 2013; Lee, 2014; Roberts & Bunning, 2018) and narrative collaborative coaching (Drake, 2010; Stelter, 2014a, 2014b).

Table 1 provides a summary of the key principles and assumptions of the coaching approaches, as aligned to the two frameworks.

From the literature, it would seem that the majority of coaches are trained in a specific coaching model, which is often first- or second-generation coaching (Grant, 2011; Kauffman & Hodgetts, 2016). Third-generation coaching seems to be described less often in the literature. In unpacking the coaching strategies in an integrative manner, we noticed a conceptual convergence between the different approaches.

In the past 3–5 years, there seems to have been more development in and focus on coaching from a third-generation perspective. The expectation of coaches to respond differently to the complexity of the leaders’ context is requiring a different way of coaching (Hawkins & Turner,

2019). The demand on leaders to be able to thrive in a complex, ever-changing world is constantly increasing, and therefore, coaching as a strategy for leadership development should provide a leader with the possibility to co-construct new meaning and explore alternative options in dealing with the complexities of a context. The perspective of Stelter (2014a, 2014b) regarding third-generation coaching plays a fundamental role in defining an alternative coaching strategy for coaching in a complex and ever-changing world.

Worldviews informing current dominant coaching strategies and the implications for their effectiveness in the emerging context

The way I see the world may be different from how you look at it. The way each of us perceives the world around us is determined by our own mental model (or worldview) (Veldsman, 2016). As we grow up, we all form our own ideas about what we see and think. However, these are influenced by certain mental models or perspectives to which we are exposed. In social sciences, there are also certain paradigms, schemata and theories that shape the way we think.

We will focus on three dominant worldviews that have historically influenced the thinking in social sciences i.e. Newtonian, GST and complexity and chaos (also called *second-order systemic thinking*). There are different views of and nuances to each of these worldviews (cf. Midgley, 2003). For the purpose of this review, we identified and elucidated the most prominent features informing the generic understanding of the worldview concerned.

The three worldviews are elucidated in terms of the following four themes: (1) the nature of the reality to be known; (2) the aims and outcomes of the knowing process; (3) the process of knowing and the features of a sound knowing process; and (4) the role of the knower relative to the reality to be known. Table 2, Table 3, Table 4 and Table 5 provide comparisons of the three worldviews’ prominent features in terms of the four themes, which are, in turn, applied to the coaching strategy concerned.

The nature of the reality to be known

Table 2 addresses the first worldview theme: the nature of the reality to be known.

As shown in Table 2, the major differences between the three worldviews are that they range as follows: (1) from deconstructing objects into their smallest standalone parts, which inter-relate through linear causality ruled by immutable laws; to (2) systems composed of inputs, throughput, outputs and feedback loops, governed by homeostasis and equifinality; to, finally, (3) emerging sets of

TABLE 1: Coaching approaches' key differentiating principles and assumptions.

Coaching approach	Principles and assumptions	Barner and Higgins (2007)	Stelter (2014)
Psychodynamic coaching	<i>Context:</i> Focus on individual leader, inner world and unconscious defence mechanisms <i>Aim:</i> Influencing the unconscious <i>Role of the coach:</i> Expert <i>Relationship:</i> Trust is important, but the coach is a direct role player <i>Process:</i> Well-defined coaching steps and defined process <i>Agenda:</i> The inner world and unconscious 'story' of the leader <i>Coach:</i> Direct and well-trained in psychological processes and the unconscious <i>Coachee:</i> Performs self-reflection and explores his or her unconscious mind <i>Outcome:</i> Greater self-awareness through an understanding of the impact of unconscious conflicts, regression and hidden dynamics	All building blocks are aligned to the clinical model	First generation, with focus on addressing a problem or achieving a goal
Systems psychodynamic coaching	<i>Context:</i> Problem is placed in a systemic context – the leader's role in relation to the organisation <i>Aim:</i> To address the conscious and unconscious impact of the organisation on the leader's role and performance <i>Role of the coach:</i> Expert, but includes transference and taking a reflective stance from a meta position; coaching is direct, with well-defined steps and process <i>Process:</i> Based on principles of general systems theory, exploring the role of the leader in the organisation while focusing on deep anxiety and unconscious dynamics <i>Coach:</i> Skilled in unconscious dynamics and group process and Tavistock exploring roles and group or organisational dynamics <i>Coachee:</i> Willing to explore dynamics of deep anxieties about his or her role in the organisation <i>Outcome:</i> Insight into the coachee's inner world	Most building blocks are aligned to the clinical approach, with elements of systems or GST, for example, the context, relationship and the process	First generation, with some alignment to second generation; for example, coaching context, process of coaching and the focus on the organisational system
Behavioural and CBC	<i>Context:</i> Thoughts and behaviour in a given situation; the leader is seen as a whole system, but the approach is planned and specific, with the focus on recurring ineffective behaviour <i>Aim:</i> Changing behaviour in a scientific and measurable way <i>Role of the coach:</i> Specific and direct <i>Coaching relationship:</i> Coach sets the tone and ensures accountability but in a collaborative way <i>Process:</i> Defined, with steps and stages to change behaviour in a measurable and scientific way <i>Agenda:</i> Set jointly by coach and leader but driven by a specific outcome and structured according to a framework <i>Coach:</i> Skilled in behavioural techniques and role modelling desired behaviours <i>Coachee:</i> Motivated to change through deliberate practice <i>Outcome:</i> Enhanced learning of skills to solve problems and shift behaviour	Behavioural model: Focus is on behaviour with the aim of changing ineffective behaviour	First generation: putting actions plans in place to achieve a specific goal
NLP	<i>Context:</i> Intent is to understand the whole person within his or her context <i>Aim:</i> Increasing the leader's resourcefulness and awareness of reality and changing perception to open possibilities for a new reality <i>Coaching relationship:</i> Coach acts in close alignment with coachee <i>Process:</i> Specific steps are applied in a defined process of working with patterns of thinking and beliefs <i>Agenda:</i> Exploring beliefs, values and thinking, with an expectation to directly challenge the leader to action <i>Coach:</i> Skilled in spotting and changing thinking patterns <i>Coachee:</i> Willing to change beliefs and explore new thinking patterns impacting all life dimensions <i>Outcome:</i> Changing limiting beliefs	Focus is on GST with direct focus of the coach; mixture of models, but more emphasis on systems model	According to Stelter's first generation, but exploring of patterns and creating new realities is more aligned to second generation
Solution-focused	<i>Context:</i> Acknowledgement of the whole system, describes the leader in relation to significant people in his or her context (interactional system) <i>Aim:</i> Change how the leader views the problem and find an appropriate solution <i>Role of the coach:</i> Coach and leader co-construct conversations and stories to shape the future <i>Coaching relationship:</i> Partnership in constructing solutions <i>Process:</i> Defined to shift the focus from problems to solutions through strength-based interventions <i>Agenda:</i> Leader is resourceful and provides the agenda, but the coach ensures a focus on the solution <i>Coach:</i> Trusts the resourcefulness of the leader; finds solutions together with coachee <i>Coachee:</i> Able to shift from a problem-focused to a solution-focused mind-set <i>Outcome:</i> Uncovering of own resourcefulness and achievement of personal goals	Systems model	Second generation
Narrative collaborative	<i>Context:</i> Full context of the leader forms an integrated part of the coaching conversation <i>Aim:</i> Co-create dialogue with the possibility of meaning-making <i>Role of the coach:</i> Equal <i>Coaching relationship:</i> Equal dialogue partners <i>Process:</i> Defined to ensure meaning-making, altering the story and tying events together in new and alternative ways <i>Agenda:</i> Leader determines the agenda and they co-create together <i>Coach:</i> Comfortable being a flexible conversational partner <i>Coachee:</i> Open to co-creating, through metaphors, an alternative life story <i>Outcome:</i> Focus on strengths and opportunities and a co-created, new story	Constructionist – co-creating a new story	Third generation

Source: Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg
GST, general systems theory; CBC, cognitive behavioural coaching; NLP, neurolinguistic programming.

integrated dynamic wholes forming self-designing patterns infused by either virtuous or vicious cycles of interaction.

The implications for coaching range from a focus on the leader as a single entity re-engineering a predictable outcome, to understanding the leader within his or her context through feedback loops and circularity, to then, finally, the coach and leader as a systemic whole, in which emerging, self-designing relationship patterns stand central and co-evolve over time.

The aims and outcomes of the knowing process

Table 3 addresses the second worldview theme: the aims and outcomes of the knowing process.

As shown in Table 3, major differences between the worldviews range from (1) quantifiable, observable linear causality expressed in verified empirical facts and laws, to (2) feedback loops and circular causality, to (3) multiple interconnectedness and patterns and everything existing in complementary relationships of 'both-and'.

The implications for coaching range from (1) fixing the identified problem in a linear way, to (2) assisting the leader as an open system to adapt to change in order to conserve equilibrium or attain homeostasis, to (3) considering the interconnected whole, uncovering patterns and identifying where to intervene in a pattern with its associated rules, in order to change the pattern.

TABLE 2: Nature of the reality to be known: worldviews with their application to coaching.

Newtonian worldview	General systems theory	Systemic thinking (second-order cybernetics)
Nature of the reality to be known: worldviews		
<ul style="list-style-type: none"> Reality is objective and hence observer-independent Reality is fixed, stable and static Reality is made up of fixed, interchangeable and standalone objects Objects have to be understood by reducing them to their smallest parts Objects are the sum total of their constituent parts Objects interact like separate cogs in a machine, through linear cause-effect relationships Causal relationships are governed by given, immutable laws 	<ul style="list-style-type: none"> Reality consists of various systems, hierarchically arranged from more to less complex: micro, meso, macro A system is an organised whole composed of interacting parts centred around an identity within boundaries Living systems are open and maintain themselves through continuous inputs from their environment, converting them – the throughput – into outputs Outputs are linked to inputs via feedback loops aimed at preserving homeostasis (equilibrium) in the system The system goal is to reach and maintain homeostasis – balance and avoid negative entropy – the rundown of the system by ensuring constant feedback (information) The same final state in a system can be reached from various starting conditions and through different processes of equifinality 	<ul style="list-style-type: none"> Reality is an interconnected whole of reciprocally influencing, interacting, self-organising variables Everything exists in relationship with something else: 'patterns that connect' Things are not polar opposites or 'either-or', but complementary relationships of 'both-and' Relationships between variables are characterised by ongoing resolution of dynamic, opposing tensions that, through emerging and self-organising (or adapting), form a dynamic, unique pattern of interacting (or relating) within the whole, i.e. autopoietic A pattern manifests as either a virtuous or vicious cycle of interaction A pattern is governed by a limited number of underlying organising rules Reality as an interconnected whole moves through successive states of chaos – the breakdown of an existing pattern and order – towards the emergence of a new pattern
Nature of the reality to be known: application to coaching		
<p>The leader has the ability to solve organisational problems mechanistically and controls the outcome in a linear, rational manner. The coach focuses solely only on the leader within this mechanistic world and sees the leader in isolation from the bigger context.</p> <p>The emphasis is on the leader as a single entity consisting of 'parts to be fixed' and on how to re-engineer what he or she is doing in order to equip the leader to achieve a more predictable, effective outcome. A single, best coaching solution exists.</p>	<p>The leader does not lead or act in isolation but forms part of a bigger team, organisation or system and interacts with the systems around him or her.</p> <p>To better understand the leader, one needs to look at him or her within the context. To deal only with his or her behaviour or thought processes or internal belief systems will be insufficient. The interaction with the context provides information through feedback loops that will help the coach in the coaching process.</p> <p>Based on equifinality as principle, the coach can work with any specific theme or pattern that may have a circular effect through the feedback loops on the bigger system and have the same impact.</p>	<p>Leaders and organisations are seen as examples of adaptive systems. The focus is on relationships that are an essential part of the leader and his or her context that need to be understood.</p> <p>Leaders have to adapt and grow continuously and apply new ways of doing. The aim is for leadership to be less about control and more about adaption, as well as more relation-centric and multidirectional.</p> <p>Coach and coachee form a systemic whole in which emerging, self-designing relationship patterns stand central and co-evolve over time. Coach, coachee and relevant stakeholders play an integral role in the co-creation of alternative patterns.</p>
Currently dominant coaching strategies by worldview (refer Table 2)		
Psychodynamic coaching; CBC; systems psychodynamic	Some elements of CBC explore circular loops to understand the leader better; solutions coaching; NLP coaching	Narrative collaborative coaching
References		
Obolensky (2010), O'Murchu (2004), Veldsman (2016), Wheatley (2010)	Dell (1985), Fourie (1991), Miller (2003) Von Bertalanffy (1950, 2003), Veldsman (2016)	Fairholm (2004), Guastello and Liebovitch (2009), Jennings and Dooley (2007), Keeney (1983), Kuhn (2012), Maturana (1975), Midgley (2003), Obolensky (2010), Plowman and Duchon (2007), Simon (1985), Stacey (2007), Veldsman (2016), Wheatley (2010)

Source: Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg
 CBC, cognitive behavioural coaching; NLP, neurolinguistic programming.

The process of knowing and the features of a sound knowing process

Table 4 addresses the third worldview theme: the process of knowing and the features of a sound knowing process.

As shown in Table 4, major differences between the worldviews range from (1) one best, standalone solution to change and a single, linear causal relationship, to (2) a system that evolves through feedback and homeostasis, to (3) chaos and complexity with no equilibrium, which enables growth through multiple possible configurations.

The implications for coaching range from (1) setting specific goals, following logical steps to achieve the goals and dealing with agenda points in a step-by-step way, to (2) understanding and exploring circular feedback loops that influence leadership, to (3) a recursive process of deepening meaning through conversation, enabling the leader to find ways to thrive in the VICCAS world.

The role of the knower relative to the reality to be known

Table 5 addresses the fourth worldview theme: the role of the knower relative to the reality to be known.

As shown in Table 5, major differences between the worldviews range from (1) an objective, passive, reactive observer recording and fixing things according to one best way, to (2) a best way, determined by the context, where the objective observer is part of two independent systems, to (3) reality being co-created and the outcome emerging, self-designing into patterns in which participants are embedded.

The implications for coaching range from the coach as objective, analytical observer and the leader as more passive and reactive, to coach and leader as two independent and separate systems, connected through circular loops, but both objective and detached in the way they perceive the world, to, finally, coach and leader co-constructing a new reality (meaning) and finding alternative ways of perceiving and changing the circular, holistic and dynamic world. Thus, there is no objectivity but rather an ecosystemic interconnectedness.

Summarised view of the worldviews informing the dominant coaching strategies

The comparisons in Table 2, Table 3, Table 4 and Table 5 show that the worldviews of the different coaching strategies are predominantly built on Newtonian principles. Psychodynamic coaching, although adapted to align with the complexity of

TABLE 3: Aims and outcomes of the knowing process – genuine knowledge about the reality to be known: worldviews and their application to coaching.

Newtonian worldview	General systems theory	Systemic thinking (second-order cybernetics)
Aims and outcomes of the knowing process: worldviews		
<ul style="list-style-type: none"> Proven one-on-one, predictable and linear relationships between single, standalone, observable variables: regulated by sequential cause and effect For every action there is an equal and opposite reaction Knowledge about the atomistic, linear reality in the form of empirical facts and laws that need to be quantifiable and measurable, providing predictions 	<ul style="list-style-type: none"> Discovery through observation of systems dynamics manifested as circular causality To understand systems as bounded, goal-seeking, self-regulating, recursive and equilibrium-seeking entities with a given environment and attaining a state of stability, consistency and harmony True knowledge gives a quantitative description of systems in the form of empirical facts and laws about systems dynamics, allowing one to make predictions about such dynamics 	<ul style="list-style-type: none"> To understand the multiple interconnectedness between entities expressed in relationships and manifested in patterns with their underlying rules Absolute prediction and uniformity are not possible To find 'both-and' solutions through the dynamic fusion of opposing tensions amongst variables by bringing about virtuous cycles or eliminating vicious cycles through changing the underlying rules
Aims and outcomes of the knowing process: application to coaching		
<p>Identify standalone cause and effect of not being a good leader and trying to, in a rational, objective way, guide the leader to effect change or fix the identified problem linearly by changing a negative or destructive cause.</p> <p>The need to be addressed and the expected outcome must be quantifiable and quantified. Entails the use of an assessment to determine the gap in the desired behaviour of the leader and to measure and predict the outcome in relation to this initial assessment.</p>	<p>Role of a leader in an organisation is to manage his or her and the organisation's boundaries and ensure that the respective system with its subsystems adapt to change, in order to sustain or retain equilibrium.</p> <p>Good leaders ensure that an organisation adapts to the changing context through a process of feedback to achieve a stable equilibrium. Entails assisting the leader as an open system embedded in the organisation as larger system to adapt to change in order to conserve equilibrium or attain homeostasis.</p> <p>The leader has to gain insight into his or her inputs, how these are converted into outputs and the impact of these outputs on his or her context and subsequent changes inputs through feedback, if necessary, to achieve homeostasis.</p>	<p>To observe and consider the leader as part of a holistic pattern of interaction with its underlying rules in his or her context and what role he or she plays within the pattern. Insight must be gained into the circular interconnectivity between him or her and everyone within the context, including the coach.</p> <p>Entails trying and opening new ways or options to the leader to consider the interconnected whole, helping him or her to uncover patterns and to identify where to intervene in a pattern with its associated rules, in order to change it.</p>
Currently dominant coaching strategies by worldview (refer Table 2)		
Psychodynamic coaching; behavioural coaching, CBC; systems psychodynamic	Solutions coaching; NLP coaching	Narrative collaborative coaching
References		
DeWitt McGarry (2002), Obolensky (2010), O'Murchu (2004)	Stacey (2007), Von Bertalanffy (1950, 2003), Veldsman (2016)	Bateson (1979, 2003), Hamdani et al. (2011), Obolensky (2010), Stacey (1992), Wheatley (2010)

Source: Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg
CBC, cognitive behavioural coaching; NLP, neurolinguistic programming.

TABLE 4: Process of knowing and its features – the coaching process with its agenda: worldviews and their application to coaching.

Newtonian worldview	General systems theory	Systemic thinking (second-order cybernetics)
The process of knowing and its features: worldviews		
<ul style="list-style-type: none"> Sensory-based observations of objective reality Understand a phenomenon by breaking it up into the smallest possible pieces, where the whole is equal to the sum total of its parts Study the standalone, individual parts and their causal interdependencies of cause-effect Planning and predicting are key in order to ensuring logical steps to reach an end goal 'Either-or' solutions and one best solution only 	<ul style="list-style-type: none"> Observation of intact system that is more than the sum of its constituent parts and must be described in terms of its constituent elements in reciprocal interaction Understanding how systems evolve through feedback to achieve homeostasis Overall systemic interactions through a process of recursion Detecting positive feedback that reinforces the original state and leads to growth or negative feedback that tends to result in equilibrium and stagnation 	<ul style="list-style-type: none"> Delineate whole with constituent variables Respond to disorder or nonequilibrium with renewed life, creating a higher and new form of order or pattern In the context of chaos and complexity, where there is no equilibrium, the leader evolves and grow continuously Reconfiguration of self to a higher level of complexity and a new pattern of functioning as a response, in order to be better able to deal with the change in its context Considering multiple possible configurations – the manifesting pattern is only one of many patterns
The process of knowing and its features – the coaching process with its agenda: application in coaching		
<p>To solve a problem, one would try to find the most recent analytical tool or applying recent learning to try and understand the cause of a difficult situation. It could be productivity, low morale, turnover of staff or re-engineering. An emotional maturity assessment will determine why he or she cannot lead people effectively.</p> <p>The assessment may show a low score for self-regard or self-belief. The coach concentrates on the essentials of self-regard exclusively and tries to understand what causes the low score, in order to fix it.</p> <p>Specific goals are set to analyse the cause of a problem and then applying logical steps to achieve the goal.</p> <p>Agenda points are dealt with in step-by-step way.</p>	<p>Feedback loops forms an integral part of the coaching process. The leader's internal beliefs will not be the only aspect that will influence the way he or she leads, but also feedback (i.e. a series of actions) from the team and context around them.</p> <p>Important to understand all the circular feedback loops that influence the way he or she is leading.</p> <p>Agenda points are dealt with by exploring circular effects.</p>	<p>The application of paradoxes or wholeness enables leaders to re-examine their own mental models and to find alternative ways of doing. Entails exploring complementary aspects or paradoxes in order to enable the leader to find ways of thriving in the current VUCA world. It is a process of seeking, finding and sustaining dynamic fusion between opposites.</p> <p>Aims to help the leader to function on the border between chaos and sameness or, what complexity theory refers to as the <i>edge of chaos</i>. Here, both stability and instability (i.e. chaos) are important.</p> <p>The role of the coach can be to increase the level of instability or challenge that which is comfortable, in order to move the leader out of his or her stable mindset and to create new ways of thinking and doing.</p> <p>The flow of the coaching agenda refers to a recursive process of deepening meaning through conversation</p>
Currently dominant coaching strategies by worldview (refer Table 2)		
Psychodynamic coaching; behavioural coaching, CBC; systems psychodynamic	NLP; solutions coaching; some elements of systems psychodynamic in relation to process	Narrative collaborative coaching
References		
Heylighen (2006), Obolensky (2010), Wheatley (2010)	Stacey (2007), Von Bertalanffy (2003)	Cavanagh (2006), Guastello and Liebovitch (2009), Obolensky (2010), O'Connor and McDermott (1997), Keene (2000), Stacey (1992, 2007), Wheatley (2010)

Source: Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg
CBC, cognitive behavioural coaching; NLP, neurolinguistic programming.

TABLE 5: Position and role of the knower relative to the reality to be known – the coach and coachee: worldviews and application to coaching.

Newtonian worldview	General systems theory	Systemic thinking (second-order cybernetics)
The position and role of the knower relative to the reality to be known: worldviews		
<ul style="list-style-type: none"> Reality is fixed and a given within a set of predetermined laws, where the knower applies these laws in a direct way within an innate laws environment of linear cause and effect. Knower is a passive, reactive, objective observer who merely, like a passive digital camera, records truthfully the sensory images he or she receives. He or she decides on what pictures to take with what focus and the way in which to organise the photos. 	<ul style="list-style-type: none"> Reality and one-best-way determined by the context, variables concerned and feedback received As a proactive knower, he or she uses her or his thinking to construct and use her or his digital camera to take pictures of systems and then applies her or his thinking to analyse the photos taken with the ideas she or he has in his or her mind about possible system dynamics. 	<ul style="list-style-type: none"> Reality and context are constantly changing and evolutionary – an incessant interplay between experience and cognitive construction, producing different and multiple ideas and representations of reality. The knower actively engages with demarcated wholes in order to understand manifested patterns in the form of relationships, rules and patterns and then responds to the uncovered patterns of which she or he forms part by either adapting or changing a pattern by changing its underlying rules.
The position and role of the knower relative to the reality to be known – the coach and coachee: application to coaching		
<p>The coach is an objective, analytical observer who has a blueprint definition of what the components of good leadership are and has to repair or replace the ‘faulty parts’ of the coachee in order for the coachee to function more efficiently.</p> <p>The coachee plays a more passive, reactive role in the ‘fixing’ process. A one-size-fits-all plan exists for effecting the change.</p>	<p>The coach and coachee are two independent and separate systems. Although connected through circular loops, both are objective and detached in the way they perceive the world.</p> <p>The coach considers different and holistic options, concentrating on the circular feedback loops. The coach is able to assist the leader with the best and appropriate solution to understand the circular loops and restore balance in life.</p>	<p>Leaders construct their own versions of reality and do not hold an objective reality of the world. The coach and the coachee will co-construct a shared meaning related to what has been observed.</p> <p>The coach cannot be described as the expert or a change agent; neither party is objective. The coach is co-constructing a reality with the leader to find alternative ways of perceiving and changing the circular, holistic and dynamic world, expressed as a self-organising pattern in which he or she lives.</p>
Currently dominant coaching strategies by worldview (refer Table 2)		
Psychodynamic coaching; behavioural coaching; CBC; systems psychodynamic, NLP	Solutions coaching, some elements of NLP, narrative collaborative coaching	None of the coaching strategies
References		
Obolensky (2010), O’Murchu (2004), Wheatley (2010)	Stacey (2007), Von Bertalanffy (2003)	Walsh (1997), Dell (1985), Ford and Maturana (2003), Von Foerster (1984, 2003), Von Glasersfeld (2003), Stacey (2007), Wheatley (2010)

Source: Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg
CBC, cognitive behavioural coaching; NLP, neurolinguistic programming.

today’s world, is still essentially Newtonian. Behavioural coaching collects data systemically and holistically, utilising some GST principles, but is still based on the same worldview. Cognitive behavioural coaching is an integrated approach, but the role of the coach is direct, with the aim of solving problems in a structured and systematic way, aligned to Newtonian principles. Neurolinguistic programming works with the whole and applies some GST and first-order systemic thinking principles, but it still emphasises the objective reality.

Hawkins and Turner (2019) confirm this thinking in the development of the ecosystemic coaching strategy. Coaching has mainly developed out of the fields of counselling, psychology and psychotherapy and, to a large extent, adopted what are now outdated notions of psychotherapy and counselling that were dominant from 1960 to 1990. These beliefs centred around the importance of staying objective while trying to ‘objectively’ understand and enable the client to achieve better health and a fuller life. In this paradigm, health, thinking, learning and development are all located internal to the client. The counsellor, psychologist or coach attempts to be an objective outsider and applies well-developed tools and methods to enable the leader’s development.

Although solution-focused coaching considers the whole and works with all life dimensions of the leader in co-constructing solutions, the underlying principles and beliefs are mostly GST, with some systemic thinking principles. Systems psychodynamic coaching includes the broader context and explores relationship connections, but the emphasis is still on cause and effect, with a predetermined outcome. The worldview remains Newtonian, with some elements of GST or open systems. Lawrence (2019) refers to

this way of thinking as ‘first-order systems thinking’, where the focus is, once again, on the objectiveness of the observer or coach.

The only approach that seems to be informed by a systemic worldview is the third-generation approach: narrative collaborative coaching. There is less focus on goals and quick fixes and more on reflection, in-depth meaning-making dialogue and the relationship between the coach and coachee. The coaching conversation is based on a clear link between the coachee and his or her context and facilitates a new narrative in relation to the challenges experienced. However, the process seems direct, with the aim being to achieve specific outcomes. Although the coach and coachee co-create realities for future narratives, there is no clear indication of the autonomy of the leader and the unpredictable outcome of the process, or of the impossibility of objectivity of the observer (coach), all of which are linked to GST principles. A coach operating according to first-order principles or GST is likely to regard organisational systems as real and to think in terms of bounded subsystems, and even the broader context, but the coach remains objective and may try to find a single truth (Lawrence, 2019).

The demand on leaders to be able to thrive in a complex, ever-changing world is increasing. The problematising of the worldviews underlying the dominant coaching strategies revealed that these strategies are not always informed by a worldview congruent with that demanded by the qualities and features of the present world. There is a pressing need for a coaching strategy that better meets the emerging contextual demands and requirements imposed on leaders in practice.

Towards a proposed strategic coaching strategy befitting the emerging new world

The current theoretical coaching strategies described in the literature are mainly informed by Newtonian principles, with some elements of GST. A study by Coetzee (2019) indicated that there was already a different pattern in the practice of coaching, with coaches applying a combination of GST and a systemic strategy in practice. The descriptions and approaches in theory are therefore not a complete reflection of what is happening in the coaching field in practice. The most recent literature (Hawkins & Turner, 2019; Lawrence, 2019) confirms our belief that coaching from a systemic perspective, applying an integrative framework of the coaching building blocks, would provide more alternatives for leaders in today's emerging world to understand and change their own patterns of self-renewal. Today, coaches increasingly apply a systemic strategy in practice as they are challenged by the interconnected complexities of leaders and organisations having to respond to the impact of COVID-19.

By using the building blocks of the coaching landscape explicated in Figure 1, we focus on principles and assumptions that will enable the leader to apply alternative thinking and doing for greater effectiveness by enhancing the context-leader fit, which is necessary in a fundamentally and radically changing context.

Coaching context

Leaders at all levels of the organisation are exposed to continuous change and complexity. This recursive interaction between the coachee and the complex, ever-changing context necessitates a different way of thinking and acting. There is increasing demand for coaches to deliver value beyond the individual and to ensure the inclusion of the stakeholders with whom leaders are partnering. It will therefore be important to contract, not only with the leaders, but also the wider system with which they engage and for which they are responsible (Hawkins & Turner, 2019).

Given the complex, changing context of leaders, the coaching context should be approached in a holistic manner and should include multiple stakeholders with multiple and different views of reality, as decided by the coach and coachee. The inclusion of multiple stakeholders opens the opportunity for shared leadership systems or a leadership community to collectively address complex organisational challenges in order to thrive. It is about the whole person, addressing all aspects of life and understanding how these dynamically fit together. The context includes a collection of meanings and ideas and is physical, constitutional, normative, experiential and historical (Kutz & Bamford-Wade, 2013). This coaching happens in a conversational setting, in which meaning and perceptions are formed.

Traditionally, coaching involves a human coach and coachee or team, with most interactions occurring face to face.

However, this is changing in the more recent context. The 15th Sherpa Coaching Survey (2020) showed that the percentage of coaching delivered face to face decreased in the last 10 years and accounts for only approximately 33% of all coaching interactions. Since the start of COVID-19, coaches have had to consider alternative ways, such as virtual or e-coaching.

Artificial intelligence (AI) has formed part of many subjects of conversations since the discussions on the Fourth Industrial Revolution at the World Economic Forum in Davos in 2016. A recent study reported that AI is also making inroads in workplace coaching. However, research in this domain is limited (Terblanche & Cilliers, 2020). Although AI or chatbots are yet to be confirmed as effective in coaching, it will be important for coaches to think about the inclusion of AI or chatbots as a complementary medium as face-to-face interactions are replaced with virtual or electronic connections.

It is our opinion that the focus should not be on chatbots or AI in isolation but the exploration of a human coach complemented with AI application. Given the complexity of the context of the leaders, it will be difficult to look at only a linear AI approach to coaching, as applying judgement, alternative thinking and exploring systemic options are integral to human connection.

Coaching objectives

The objective of a systemic strategy for coaching is to explore the immersed patterns making up the current complex world, to find alternative patterns of acting and to be more aware of how aspects in the leader's life are interconnected. The choice of systemic objectives will enable the leader to discover, explore, reflect on and learn about the past present future pattern, as well as many possible patterns in the complex world around him or her.

Objectives are therefore interactive and connected and focus on the holistic being of the coachee across all life dimensions and contexts. In current work patterns, boundaries between work and personal life are fluent. Work-life balance, which was originally premised on a clear distinction between work and life, has morphed into life harmonisation – where work is interspersed with daily life (Gartner, 2021).

Role of the coach and coachee

Both coaches and coachees acknowledge that it is impossible to be objective. Reality is co-constructed equally by the coach and the coachee, and they are equals in the process (Coetzee, 2019). The coach and coachee act as co-explorers of patterns and, through conversation and meaning-making, act as co-constructors of a new and different reality. Another system that functions within this shared role is the different stakeholders, who also act as co-creators of new patterns and ideas. Shared roles provide the opportunity for shared leadership to collectively deal with the complexity of an ever-changing world. The role of the systemic coach is to listen, not only to the

leaders, but to the systemic contexts they inhabit, both inside and outside work (Hawkins & Turner, 2019).

Coaching relationship

This building block covers the role significant stakeholders who play in the co-creation of new patterns of acting for the coachee. The relationship with the leader is participative and collaborative, one of co-creating a conversation, meaning and reality. There are high levels of interconnectedness, with a circular impact on the broader system. It is a *both and* relationship that includes different stakeholders. The relationship is informed by values such as interconnectivity, equality, empathy, attentive listening, clear confidentiality boundaries and immense understanding. This participative, interconnected coaching relationship enables growth for both the coach and the coachee (Coetzee, 2019).

It would be interesting to explore the use and impact of AI or chatbots on relationship quality. Current research indicates the important role of the coaching relationship in impacting the outcome of coaching, in which trust is a key ingredient (Grant, 2012; Terblanche & Cilliers, 2020). According to Terblanche and Cilliers (2020), trust will become less important when the coachees feel that they are achieving their goals. We are of the opinion that the coach and coachee should collectively agree what the role of AI or chatbots should be, if any.

Coaching process

The focus of the systemic coaching process building block is on coaching as a participative, exploratory conversation about the life story of the coachee, constructing relationships in an interconnected and holistic way and understanding life in a more interconnected way. Systems are constructed by responsive and complex conversations – a Socratic dialogue that drives a co-evolution of ideas.

In the coaching process, there is dialogue in the form of storytelling about the past, present and future. The coaching engagement is a complex, adaptive system in which the conversation is co-created in multiple reflective spaces. The interactive circles in the coaching process include multiple views and provide a variety of possibilities for the complex context with which the leader is dealing. The inclusion of different stakeholder voices into the coaching conversation changes the reflective spaces between the coach and coachee to complex, interactive circles illustrating the interconnectedness of all systems.

The mentioned views of the authors are supported by Lawrence (2019) and Hawkins and Turner (2019), who emphasise that change within the organisation as a whole is the outcome of a multiplicity of local interactions taking place within the context. The participative conversation, which means not only working with the dialogue but also patterns of the dialogue, will enable holistic change in a complex environment (Coetzee, 2019; Lawrence & Moore, 2018).

Coaching agenda

The current coaching strategies in the literature focus mainly on Newtonian and GST views in determining the coaching agenda. However, coaches and coachees have indicated the need for a systemic worldview, where the agenda is not predetermined but rather is allowed to evolve and deepen in the recursive coaching conversation between coach and coachee (Coetzee, 2019). In the most recent literature (Hawkins & Turner, 2019; Lawrence, 2019; Lawrence & Moore, 2018), the focus of the agenda is systemic and interactive in searching for patterns.

The flow of the systemic coaching agenda can be described as a spiral of deepening meaning through conversation. Questions are circular and interconnected and include others, the context and relationship patterns. Lawrence and Moore (2018) refer to it as 'patterns of dialogue'. Circular questioning provides the opportunity to explore the complexity and allows for new meaning-making.

A coaching strategy based on a systemic worldview provides the opportunity to experience a deeper level of conversation with a more holistic focus in dealing with complexities and change, ultimately leading to meaning and fulfilment. During the COVID-19 pandemic, coaches must adapt their conversations even more to allow for discussions on managing personal well-being and a state of languishing of leaders and their teams (Grant, 2021). Finding personal meaning and holding on to their personal identity while dealing with the impact of the pandemic has been part of the coaching agenda for most leaders.

Profile of the coach

The coach is not objective and does not provide the answers but is a fellow traveller on a life journey and a co-creator of a new or reframed reality, one in which the coachee determines the destination. The coach appreciates wholeness, has a circular perspective and is comfortable with chaos and complexity. The coach needs to have a 'bifocal view' i.e. be comfortable to include the bigger context and stakeholders into the coaching.

The systemic focus and interconnected reality of the coach is confirmed by Hawkins and Turner (2019), who describe each system – coach, coachee and stakeholders – as connected to and in relationships with the others.

Profile of the coachee

The most recent literature (Hawkins & Turner, 2019; Lawrence, 2019) and the findings of Coetzee (2019) indicate that coachees (leaders) are comfortable with the systemic world principle of including other significant stakeholders in the coaching process, currently and in the future. These views differ from previous literature, where the profile of the coachee is mainly Newtonian and GST-based. The coachee is comfortable with (1) including other stakeholders or spheres of his or her life in coaching; (2) the coach not providing

objective answers or solutions; and (3) ambiguity and exploring unknown territory.

Outcomes

Systemic coaching provides the leader with alternative and holistic options with which to reconfigure his or her life in an interconnected fashion and enables the leader to explore different life dimensions (internal and external) in a more interconnected manner. Coaching outcomes are not predictable but are co-created through an unfolding two-way conversation. A systemic strategy encourages a willingness in leaders to explore unknown territory in an interconnected way.

Conclusion

The currently emerging context is complex and ever-changing and requires a different way of thinking and acting from the leaders of today. Leaders need to find the best fit with their context. In critically problematising the current dominant coaching approaches, given their worldviews, these appear not to fully meet the emerging contextual demands and requirements faced by leaders in practice. This context-coaching misfit will have a detrimental impact on the effectiveness of coaching, as well as leaders' ability to engage with a complex, ever-changing context.

The findings confirm the need for a coaching strategy based on a systemic worldview going into the future. In this strategy, the focus is on a coaching context that includes the whole and considers the interconnectedness of all stakeholders. The aim of coaching should be to explore the immersed patterns of the current VICCAS world and to find, together with the leader, alternative patterns, where the coach and leader are equal partners co-creating a new and alternative reality and life story.

In the emerging world, the coaching process cannot be a linear, step-by-step approach; rather, it should be an interconnected, recursive and participative conversation, where the agenda is not predetermined, but evolves in the conversation as a spiral of deepening meaning is created through conversation. The outcomes of the coaching need to be more systemic and unpredictable, co-created through an unfolding two-way conversation in which the coach is a fellow traveller and the leader determines the destination.

A coaching strategy based on a systemic worldview will add more value in practice, because it will enhance the goodness-of-fit of leaders with their contexts in a changing world. Going forward, it will be important for coaching as a practice to re-imagine strategies for the future, in order to realign with what is needed to ensure goodness-of-fit for leaders in a complex and systemic context. Coaching bodies and learning institutions will need to re-look at the development of coaches. Training should not be focused only on developing skills and capabilities or applying systemic principles but should include the complexity of second-order

principles of ecosystemic thinking, where reality and meaning are not objective but are co-created within an interconnected, evolving context.

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Authors' contributions

M.E.C. was responsible for the conceptualisation, methodology, formal analysis, validation, data curation, project management and writing the original draft as well as the reviewing and editing thereof. T.V. contributed towards the conceptualisation. T.V. and A.O. supervised the study and contributed in reviewing and editing the article.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

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Data availability

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References

- Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematisation. *Academy of Management Review*, 36(2), 247–271. <https://doi.org/10.5465/AMR.2011.59330882>
- Bachkirova, T. (2016). The self of the coach: Conceptualization, issues, and opportunities for practitioner development. *Consulting Psychology Journal: Practice and Research*, 68(2), 143–156. <https://doi.org/10.1037/cpb0000055>
- Barner, R., & Higgins, J. (2007). Understanding implicit models that guide the coaching process. *Journal of Management Development*, 26(2), 148–158. <https://doi.org/10.1108/02621710710726053>
- Bateson, G. (1979). *Mind and nature: A necessary unity*. E. P. Dutton.
- Bateson, G. (2003). Forms, substance and difference. In G. Midgley, (Ed.), *Systems thinking*, Vol I (pp. 365–378). Sage.
- Bhatnagar, V.R. (2020). Systemic coaching for higher effectiveness. *Industrial and commercial training*, 53(1), 1–14. <https://doi.org/10.1108/ICT-07-2019-0072>
- Biswas-Diener, R. (2010). *Practicing positive psychology coaching: Assessment, diagnosis and intervention*. John Wiley & Sons.
- Brunning, H. (2006). *Executive coaching: Systems psychodynamic perspective*. Karnac Books.
- Campbell, D., & Huffington, C. (2008). *Organisations connected. A handbook of systemic consultation*. Karnac.
- Carey, W., Phillippon, D.J., & Cummings, G.G. (2011). Coaching models for leadership development. *Journal of Leadership Studies*, 5(1), 51–69. <https://doi.org/10.1002/jls.20204>

- Cavanagh, M. (2006). Coaching from a systemic perspective: A complex adaptive conversation. In D.R. Stober & A.M. Grant (Eds.), *Evidence based coaching handbook* (pp. 313–354). John Wiley & Sons.
- Cavanagh, M., & Grant, A. (2014). The solution-focused approach to coaching. In E. Cox, T. Bachkirova, & D. Clutterbuck (Eds.), *The complete handbook of coaching* (pp. 51–64). Sage.
- Cavanagh, M., & Palmer, S. (2009). Editorial. Leadership coaching in a challenging world – Growing with our clients. *International Coaching Psychology Review*, 4(1), 4–6. <https://doi.org/10.1080/03079450902914958>
- Cilliers, F. (2005). Executive coaching experiences. A systems psychodynamic perspective. *South African Journal of Industrial Psychology*, 31(3), 23–30. <https://doi.org/10.4102/sajip.v31i3.205>
- Cilliers, F., & Terblanche, L. (2010). The systems psychodynamic leadership coaching experiences of nursing managers. *Health SA Gesondheid*, 15(1), Art #457, 1–9. <https://doi.org/10.4102/hsag.v15i1.457>
- Clarke, N. (2013). Model of complexity leadership development. *Human Resource Development International*, 16(2), 135–150. <https://doi.org/10.1080/13678868.2012.756155>
- Clutterbuck, D., & Megginson, D. (2005). *Making coaching work. Creating a coaching culture*. CIPD.
- Coetzee, M.E. (2019). *The application of a systemic world view within coaching as strategy for leadership development*. Unpublished doctoral thesis, University of Johannesburg.
- Cox, E. (2012). Individual and organisational trust in a reciprocal peer coaching context. *Mentoring & Tutoring*, 20(3), 427–443. <https://doi.org/10.1080/13611267.2012.701967>
- Cox, E., Bachkirova, T., & Clutterbuck, D. (Eds.). (2014). *The complete handbook of coaching*. Sage.
- David, S., Clutterbuck, D., & Megginson, D. (2013). *Beyond goals: Effective strategies for coaching and mentoring*. Aldershot.
- Dell, P.F. (1985). Understanding Bateson and Maturana: Toward a biological foundation for the social science. *Journal of Marital & Family Therapy*, 11(1), 1–20. <https://doi.org/10.1111/j.1752-0606.1985.tb00587.x>
- DeWitt McGarry, D. (2002). Perceiving the pattern of organization in a family system. *Systems Research and Behavioural Science*, 19(5), 499–506. <https://doi.org/10.1002/sres.504>
- Diamond, M.A. (2013). Psychodynamic approach. In J. Passmore, D.B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell handbook of the psychology of coaching and mentoring* (pp. 365–384). John Wiley & Sons.
- Drake, D.B. (2010). Narrative coaching. In E. Cox, T. Bachkirova, & D. Clutterbuck (Eds.), *The complete handbook of coaching* (pp. 120–131). Sage.
- Dryden, W. (2017). *Very brief cognitive behavioural coaching (VBCBC)*. Routledge.
- Dryden, W. (2018). *Cognitive emotional behavioural coaching. A flexible and pluristic approach*. Routledge.
- Fairholm, M.R. (2004). A new science outline for leadership development. *Leadership & Organization Development Journal*, 25(4), 369–383. <https://doi.org/10.1108/01437730410538699>
- Fourie, D.P. (1991). *The development of eco systemic thinking*. Pretoria.
- Ganz, M. (2010). Leading change: Leadership, organization and social movements. In N. Noria & R. Khurana (Eds.), *Handbook of leadership theory and practice. An HBS centennial colloquium on advancing leadership* (pp. 527–569). Harvard Business Press.
- Gavin, C.S. (2018). The impact of leadership development using coaching. *Journal of Practical Consulting*, 6(1), 137–147.
- Good, D., Yeganeh, B., & Yeganeh, R. (2010). Cognitive behavioural executive coaching. *OD Practitioner*, 42(3), 18–23.
- Grant, A.M. (2011). Developing an agenda for teaching coaching psychology. *International Coaching Psychology Review*, 6(1), 84–100.
- Grant, A.M. (2012). An integrated model of goal-focused coaching: An evidence based framework for teaching practice. *International Coaching Psychology Review*, 7(2), 146–165.
- Grant, A.M. (2021, April 19). There is a name for the blah you're feeling. It is called languishing. *New York Times*.
- Grant, A.M., Passmore, J., Cavanagh, M., & Parker, H.M. (2012). The state of play in coaching today. A comprehensive review of the field. *International review of Industrial and Organizational Psychology*, 25(1), 125–167. <https://doi.org/10.1002/9780470661628.ch4>
- Grimley, B. (2014). The NLP approach to coaching. In E. Cox, T. Bachkirova, & D. Clutterbuck (Eds.), *The complete handbook of coaching* (pp. 185–198). Sage.
- Guastello, S.J., & Liebovitch, L.S. (2009). Introduction to nonlinear dynamics and complexity. In S.J. Guastello, M. Koopmans, & D. Pincus (Eds.), *Chaos and complexity in psychology. The theory of nonlinear dynamical systems* (pp. 1–40). Cambridge University Press.
- Hamdani, Y., Jetha, A., & Norman, C.D. (2011). Systems thinking perspectives applied to healthcare transition for youth with disabilities: A paradigm shift for practice, policy and research. *Child Care Health Development*, 37(6), 806–814. <https://doi.org/10.1111/j.1365-2214.2011.01313.x>
- Hawkins, P., & Turner, E. (2019). *Systemic coaching. Delivering value beyond the individual*. Taylor & Francis Group.
- Hayes, P. (2006). *NLP coaching*. McGraw-Hill.
- Hernez-Broome, G., & Hughes, R.L. (2004). Leadership development: Past, present, and future. *Human Resource Planning*, 27(1), 24–32. <https://doi.org/10.1002/lia.1075>
- Heylighen, F. (2006). *The Newtonian world view*. Principia cybernetica. Retrieved from [pespmc1.vub.ac.be/NewtonWV.html](https://www.pespmc1.vub.ac.be/NewtonWV.html)
- Jackson, P., & McKergow, M. (2011). *Making coaching and change simple*. Nicolas Brealey Publishing.
- Jaques, E. (2004). *Requisite organization. A total system for effective managerial organization and managerial leadership for the 21st century*. Cason Hall and Company.
- Jennings, P.L., & Dooley, K.J. (2007). An emerging complexity paradigm in leadership research. In J.K. Hazy, J.A. Goldstein, & B.B. Lichtenstein (Eds.), *Complex systems leadership theory* (pp. 17–34). ISCE Publishing.
- Jesson, J., & Lacey, F. (2006). How to do (or not to do) a critical literature review. *Pharmacy Education*, 6(2), 139–148. <https://doi.org/10.1080/15602210600616218>
- Kahn, M.S. (2011). Coaching on the axis: An integrative and systemic approach to business coaching. *International Coaching Psychology Review*, 6(2), 194–210.
- Kahn, M.S. (2018). *Coaching on the axis. Working with complexity in business and executive coaching*. Routledge.
- Kanter, M.S. (2010). Leadership in a globalizing world. In N. Noria & R. Khurana (Eds.), *Handbook of leadership theory and practice. An HBS centennial colloquium on advancing leadership* (pp. 569–611). Harvard Business Press.
- Kauffman, C., & Hodgets, W.H. (2016). Model agility: Coaching effectiveness and four perspectives on a case study. *Consulting Psychology Journal*, 68(2), 157–176. <https://doi.org/10.1037/cpb0000062>
- Keene, A. (2000). Complexity theory: The changing role of leadership. *Industrial and Commercial Training*, 32(1), 15–18. <https://doi.org/10.1108/00197850010311121>
- Keeney, B.P. (1983). *Aesthetics of change*. Guildford Press.
- Kets De Vries, M.F.R. (2006). *The leader on the couch: A clinical approach to changing people and organizations*. Jossey-Bass.
- Kilburg, R.R. (2004). When shadows fall: Using psychodynamic approaches in executive coaching. *Consulting Psychology Journal*, 56(4), 246–268. <https://doi.org/10.1037/1065-9293.56.4.246>
- Kuhn, L. (2012). Epistemological reflections on the complexity sciences and how they may inform coaching psychology. *International Coaching Psychology Review*, 7(1), 114–118.
- Kutz, M.R., & Bamford-Wade, A. (2013). Understanding contextual intelligence: A critical competency for today's leaders. *Emergence: Complexity and Organization*, 15(3), 55–80.
- Lawrence, P. (2019). What is systemic coaching? *Philosophy of Coaching: An International Journal*, 4(2), 35–52. <https://doi.org/10.22316/poc/04.2.03>
- Lawrence, P., & Moore, A. (2018). A systemic approach to coaching individuals. In P. Lawrence & A. Moore (Eds.), *Coaching in three dimensions* (pp. 63–79). Routledge.
- Le Gentil, H. (2021). *Leaders, stop trying to be heroes*. HBR. Retrieved from <https://hbr.org/2021/10/leaders-stop-trying-to-be-heroes>
- Lee, G. (2014). The psychodynamic approach to coaching. In E. Cox, T. Bachkirova, & D. Clutterbuck (Eds.), *The complete handbook of coaching* (pp. 21–33). Sage.
- Maturana, H.R. (2003). Reality: The search for objectivity or the quest for a compelling argument. In G. Midgley (Ed.), *Systems thinking*, Vol III (pp. 14–64). Sage.
- Midgley, G. (Ed.). (2003). *Systems thinking* (Vol. 1, 2 & 3). Sage.
- Miller, J.G. (2003). Living systems: Basic concepts. In G. Midgley (Ed.), *Systems thinking*, Vol I (pp. 171–230). Sage.
- Murray, A. (2019, September). America's CEOs seek a new purpose for the corporation. *Fortune*, pp. 42–48. Retrieved from <https://fortune.com/longform/business-roundtable-ceos-corporations-purpose/>
- Neenan, M. (2018). *Cognitive behavioural coaching. Distinctive features*. Routledge.
- Neenan, M., & Palmer, S. (2012). *Cognitive behavioural coaching in practice: An evidence-based approach*. Routledge.
- O'Connor, J., & Lages, A. (2004). *Coaching with NLP. How to be a master coach*. Element. (Original work published 1994).
- O'Connor, J., & McDermott, I. (1997). *The art of systems thinking. Essential skills for creativity and problem solving*. Thorsons.
- O'Murchu, D. (2004). *Quantum theology. Spiritual implications of the new physics*. Crossroads Publishing Company.
- O'Neill, M.B. (2000). *Executive coaching with backbone and heart. A systems approach to engaging leaders with their challenges*. Jossey-Bass Publishers.
- Obolensky, N. (2010). *Complex adaptive leadership. Embracing paradox and uncertainty*. Gower.
- Odendaal, A. (2016). Leadership coaching. In T.H. Veldsman & A.J. Johnson (Eds.), *Leadership. Perspectives from the front line* (pp. 631–649). Knowres.
- Palus, J.P., McGuire, J.B., Stawiski, S., & Torbert, W.R. (2020). The art and science of vertical development. In J. Reams (Ed.), *Maturing leadership. How adult development impacts leadership* (pp. 59–81). Emerald.
- Passmore, J. (2018). Behavioural coaching. In S. Palmer & A. Whybrow (Eds.), *Handbook of coaching psychology* (pp. 73–85). Routledge.
- Peltier, B. (2010). *The psychology of executive coaching* (2nd ed.). Routledge.

- Peterson, D.B. (2006). People are complex and the world is messy. A behaviour-based approach to executive coaching. In D.R. Stober & A.M. Grant (Eds.), *Evidence based coaching handbook* (pp. 51–76). John Wiley & Sons.
- Petrie, N. (2013). *Vertical leadership development – Part 1. Developing leaders for a complex world. A white paper*. Center for Creative Leadership.
- Plowman, D.A., & Duchon, D. (2007). Emergent leadership: Getting beyond heroes and scapegoats. In J.K. Hazy, J.A. Goldstein, & B.B. Lichtenstein (Eds.), *Complex systems leadership theory* (pp. 109–127). ISCE Publishing.
- Rhinesmith, S.H. (2010). Globally savvy leaders. In E. Biech (Ed.), *The ASTD handbook* (pp. 339–353). Berret-Koehler Publishers.
- Roberts, V.Z., & Brunning, H. (2018). Psychodynamic and systems-psychodynamics coaching. In S. Palmer & A. Whybrow (Eds.), *Handbook of coaching psychology* (pp. 253–277). Routledge.
- Schein, E.H. (2016). *Organization culture and leadership*. Jossey-Bass.
- Senge, P. (2006). *The fifth discipline. The art and practice of the learning organization*. Random House.
- Simon, R. (1985). A frog's eye view of the world. *Family Therapy Networker*, 9(3), 32–43.
- Skiffington, S., & Zeus, P. (2006). *Behavioral coaching. How to build sustainable personal and organizational strength*. McGraw-Hill.
- Stacey, R.D. (1992). *Managing chaos. Dynamic business strategies in an unpredictable world*. Kogan Page.
- Stacey, R.D. (2007). *Strategic management and organisational dynamics. The challenge of complexity*. FT Prentice Hall.
- Stelter, R. (2014a). *A guide to third generation coaching. Narrative-collaborative. Theory and practice*. Springer.
- Stelter, R. (2014b). Third generation coaching: Reconstructing dialogues through collaborative practice and a focus on values. *International Coaching Psychology Review*, 9(1), 33–48.
- Stelter, R. (2016). *Third generation coaching. Reconstructing dialogues through collaborative practice and focus on values*. Workshop delivered in April at Department of Industrial Psychology and People Management, University of Johannesburg.
- Terblanche, N., & Cilliers, D. (2020). Factors that influence users' adoption of being coached by an artificial intelligence coach. *Philosophy of Coaching: An International Journal*, 5(1), 61–70. <https://doi.org/10.22316/poc/05.1.06>
- Veldsman, T.H. (2016). A flourishing and thriving leadership community. In T.H. Veldsman & A.J. Johnson (Eds.), *Leadership. Perspectives from the front line* (pp. 667–681). Knowres.
- Veldsman, T.H. (2021). *Industrial–organisational psychologists engaging with the new world of work. The unfolding challenge of future-fitness for the 4th industrial revolution*. KR Publishing.
- Veldsman, T.H., & Veldsman, D. (2020). Critically problematising existing organisational identity theory against practice: Part 1 – The thinking framework of organisational identity. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 46, a1799. <https://doi.org/10.4102/sajip.v46i0.1799>
- Von Bertalanffy, L. (1950). An outline of general systems theory. *British Journal of Philosophical Science*, 1(2), 134–165. <https://doi.org/10.1093/bjps/l.2.134>
- Von Bertalanffy, L. (2003). The quest for a general systems theory. In G. Midgley (Ed.), *Systems thinking* (Vol. I, pp. 36–51). Sage.
- Von Foerster, H. (1984). On constructing a reality. In P. Watzlawick, (Ed.), *The invented reality* (pp. 41–62). W.W. Norton & Co.
- Von Foerster, H. (2003). Cybernetics of cybernetics. In G. Midgley (Ed.), *Systems thinking* (Vol. III, pp. 1–4). Sage.
- Von Glasersfeld, E. (2003). Reconstructing the concept of knowledge. In G. Midgley (Ed.), *Systems thinking*, Vol III (pp. 5–13). Sage.
- Wheatley, M.J. (2010). *Leadership and the new science. Discovering order in a chaotic world*. ReadHowYouWant.
- Whitmore, J. (2005). *Coaching for performance*. Nicholas Brealy Publishing.
- Williams, H., Palmer, S., & Edgerton, N. (2014). Cognitive behavioural coaching. In E. Cox, T. Bachkirova, & D. Clutterbuck (Eds.), *The complete handbook of coaching* (pp. 34–50). Sage.
- Willyerd, K., & Meister, J. (2010). Trends shaping future leadership attributes. In E. Biech (Ed.), *The ASTD handbook* (pp. 299–310). Berret-Koehler Publishers.