Immunity to Change Revisited:
Theoretical Foundations for Awareness Based Practices for Leadership Development

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Abstract: This article presents an inquiry into how the understanding of Kegan and Lahey's immunity to change process can be enhanced through examining it in relation to two other theoretical lenses, the work of David Bohm and the Arbinger Institute. This is taken as an exemplar of the conception of *awareness based practices for leadership development* which is introduced as the larger focus of the article. A brief review of literature in relevant fields is presented to situate the present work. A set of methodological considerations is described along with the process for the analysis of textual extracts from the three sources. This is followed by a description of ten themes emerging from this analysis. These themes are examined for interconnections and key insights. The discussion centers around two elements. First is the wisdom of self-transcendence in relation to the immunity to change process. Second is how the emerging view of awareness can contribute to understanding leadership development. Concluding reflections summarize the findings and identify limitations of the inquiry.

Keywords: Awareness, immunity to change, leadership development, virtuality of self.

Introduction

In 2009 Kegan and Lahey's *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization* was released. Having just tried out their four column approach for fostering developmental growth (Kegan & Lahey, 2001), I eagerly read, applied and reviewed it (Reams, 2009). Over the six years since then, three things have kept my energy and attention on building a deeper understanding of this work; public interest, personal practice and theoretical inquiry.

The first of these is the growing popularity and use of the Immunity to Change (ITC) process by coaches and consultants in the field of leadership development. Their 2001 book *How the Way We Talk can Change the Way We Work: Seven Languages for Transformation* laid out the basic workings of the four column process. With time, experience and feedback to improve on this foundation, Kegan and Lahey's 2009 ITC update has garnered even more attention. For example Brubach (2009, January) wrote a popular article highlighting their work in *The Oprah*

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Magazine. A google search (November 10, 2015) using the term 'immunity to change' registered 39,000,000 hits.

In addition to these indications of popular uptake and mainstreaming, a number of articles have appeared engaging in research related to ITC (Markus, 2013; Pinkavova, 2010; van Diemen van Thor, 2014), including my own inquiry into how the ITC process has been used in coaching (Reams & Reams, 2015). This small sample can be seen as evidence that the idea of developmental growth through the use of ITC is not only gaining more mainstream traction but also beginning to be inquired into as a sub-field of research on its own.

The second of these strands is around personal practice. Since my initial forays into applying ITC in the classroom and with clients in 2009, I have run more than 30 ITC processes for various groups and also mentored others in running it. These opportunities for practice, observation and reflection have helped immensely in giving nuance and breadth to my understanding of what is going on in the ITC process.

The theoretical dimension is linked to my ongoing interests in awareness, consciousness and developmental psychology. My Ph.D. research enabled me to combine these with the field of leadership studies (Reams, 2002). Elements of this ongoing theoretical inquiry have appeared in different publications and presentations over the last seven years.[2] In addition, in 2010 I began a process of gathering material that I felt could illuminate additional facets of this inner immune system that the ITC process works with and on.

There are two purposes for this article. One is to enrich the discourse on and understanding of the conception of *immunity to change*. The second is to lay out some theoretical foundations for understanding what I describe as *awareness based practices for leadership development*. To accomplish this, I have done an analysis of relevant textual extracts from the ITC book as well as drawn on two additional theoretical lenses. These are the work of the Arbinger Institute and the work of David Bohm.

A brief review of the broader context of leadership studies which this work aims to influence is presented next. This includes examining a number of related fields pertinent to this project; developmental theory, how it has been applied to leadership, awareness practices and mindfulness, transformative learning and self-awareness. This is followed by a brief description of the methodology employed. I have included an appendix that describes a broader set of methodological considerations for those interested in reflections on the deeper background implicit in such matters. There is also an appendix providing rich descriptions of the key themes arising from the textual extract analysis. The main text continues with a summary of these findings, followed by a discussion oriented around two themes; the wisdom of self-transcendence and how the definition of awareness coming from the analysis can contribute to ideas about leadership development.

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[2] This has included; developmental approaches to leadership development (Reams & Fikse, 2010), futures studies (Reams, 2010c), conference presentations on the subtle aspects of the quality of presence (Reams, 2010a, 2010b, 2013; Reams & Caspari, 2013; Reams & Gunnlaugson, 2013), integral leadership (Reams, 2012; Reams & Caspari, 2012) , and cultivating leadership through awareness based practices (Reams, Gunnlaugson, & Reams, 2014).

Context

The field of leadership studies is broad, with almost as many definitions of leadership as there are theorists (Rost, 1991). Kellerman (2012) estimates 1400 definitions of leadership, along with 44 theories about it. Beyond the academic domain, there is a very practical need for developing better leaders and leadership as a competitive advantage. From this "there is little doubt that leadership education and development has become a big business" (Pfeffer, 2011, p. 220) with more than $170 billion being spent on leadership curriculum in US businesses (from the ASTD, in Myatt, 2012). Despite all these resources being spent, building leadership talent was identified as a significant challenge in the 2008 IBM Global Business services report (in Day, Harrison & Halpin, 2009). Yet much of the investment in such development is seen to have a limited impact or return on investment.[3] Mike Myatt, in his December 19, 2012 Forbes leadership blog noted that the number one reason leadership development fails is that it is done as training or indoctrination. His solution is to stop training and begin to develop leaders.

It is in this broader context of a generally poor return on investments that the conception of a *developmental* approach to leadership development arises as one solution to the issue. Kegan and Lahey (2009) are explicit about their ITC process being a tool to foster such development, thus situating the main starting point of this project squarely in this approach.[4] In this section I briefly examine literature on developmental approaches to leadership development and other orientations to awareness based practices including mindfulness, transformative learning and self-awareness in relation to leadership. The boundaries of the present article mean that I only take a brief survey of each area as part of the broader context of this project and invite interested readers to follow up on areas of interest through the specific literature cited.

Developmental Theory

Before delving into these subsections, I believe it is worthwhile to take a brief look at key aspects of the developmental theory component of leadership development. (For those wanting a more thorough description of this, see (Reams, 2014)). The lens of seeing human growth in terms of what is called development began with James Mark Baldwin (1895, 1904, 1906) who talked about 'subject – object development' and genetic epistemology. He was an influence on Jean Piaget (1932, 1954, 1970), who adapted Freud's use of clinical interviews to develop a method of semi-structured interviews to study how epistemological structures evolved. While his focus was on this process of epistemological development, he is often more remembered for his classification of stages of development.

From Piaget's developmental stage model, Lawrence Kohlberg (1969, 1975; 1984) drew on John Rawls' (1971) moral philosophy to generate a stage model of moral development. His work

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[3] It is worth noting that while this article and much of the literature cited here emphasizes the value of self-awareness in leaders, there are many other factors that contribute to how leaders are actually able to be successful in terms of reaching desired outcomes. In conjunction with this, it can be seen that many leaders who appear to have little self-awareness, or are even abusive, still end up being successful.

[4] My review of Anderson and Adams' (2016) *Mastering Leadership* in this issue is another example of a developmental approach to leadership development.

had extensive influence in many domains and a large number of his students continued to apply this work in various domains. Contemporaneously, Jane Loevinger (1976; 1970) built on the work of Harry Stack Sullivan (1968) to build both an assessment instrument and theory of stages of ego development. Susanne Cook-Greuter (1999) extended Loevinger's model and worked with Bill Torbert (2004) on applying the assessment of ego development to managerial and leadership domains.

Robert Kegan (1980, 1982, 1994) built on the foundations that Piaget and Kohlberg, and among others established and articulated a sophisticated model of how the self evolves through a series of 'evolutionary truces' or orders of consciousness. His work integrated three major intellectual strands; the constructive-developmental work highlighted above; the humanistic and existential humanistic work of people like Rogers (1951, 1961), Buber (1958), Maslow (1943) and May (1969); and the neo-psychoanalytical tradition from Anna Freud (1993), Erickson (1982) and Winnicott (1965). Along with this, Lahey, Souvaine, Kegan, Goodman, and Felix (1988) developed the subject object interview guide as a way of assessing these stages of development. The shift from describing and assessing development to facilitating it came with the development of the four column exercise (Kegan & Lahey, 2001) and then the updated immunity to change process (2009) that is the focus of this project.

Also a student of Kohlberg, Kurt Fisher (1980; Fischer & Bidell, 2006; Mascolo & Fischer, 2010) developed dynamic skill theory. This approach focused on developing a better understanding of the dynamic relationship between organism and environment and helped to integrate many cognitive development theories' emphasis on the self with behaviorists' (Skinner, 1938, 1969) understanding of the role of operant conditioning from the environment on development. His model is not explicitly about a self or ego and in contrast to most of the theories described above Fischer never uses the term ego in his work. It is a very interactive model, taking biology, structure of mind, social relationships and environmental influences all into account, to develop a general model of development that can be applied in any domain or context. Assessments related to this orientation have also been developed (Commons, Trudeau, Stein, Richards, & Krause, 1998; Dawson, Commons, & Wilson, 2005; Dawson, Xie, & Wilson, 2003) which focus on assessing the development of performance in relation to specific skills, including cognitive skills.

Developmental Leadership Development

The notion of applying developmental theory from psychology to the field of leadership and management studies did not begin with Kegan and Lahey's (2009) approach to the topic. (Of course their ITC process is designed for a broader range of issues, but is often utilized in relation to leadership development). While there may have been others who began earlier, the work of Bill Torbert (Rooke & Torbert, 2005; Rooke & Torbert, 1998; Torbert, 1991; Torbert & Associates, 2004) stands out as pioneering empirical work on the description of cognitive development in leaders and the impact this has on organizations.

Others such as Bill Joiner & Stephen Josephs (2007), David Day (Day & Dragoni, 2015; Day et al., 2009; Day & Zaccaro, 2004) and Karl Kuhnert (Harris & Kuhnert, 2008; Kuhnert & Lewis, 1987; Lucius & Kuhnert, 1999; Strang & Kuhnert, 2009) have also contributed to

understanding the relationship between leadership development and structural orders of consciousness. As well, the field of coaching has seen an increased use of developmental theory (Elliot, 2011; Markus, 2013; Pinkavova, 2010; van Diemen van Thor, 2014) with the use of ITC being prominent in much of this work.

Day & Dragoni's (2015) current review of leadership development research identifies four key indicators necessary for leadership development; leadership self-efficacy, self-awareness, leader identity and leadership knowledge, skills and competencies. A developmental perspective is included in this review as a factor influencing all of these. Work over time in these key areas can lead to outcomes such as having more dynamic skills as well as more adequate levels of complexity of meaning making structures and processes. In an earlier survey of developmental leadership development research, McCauley et al. (2006) identified a need for moving beyond a focus on "developmental order to include the general dynamics of developmental movement" (p. 648). Palus and Drath (1995) addressed this and focused on the process involved in creating developmenally oriented programs.

This brief description of some key research at this intersection highlights that this approach to leadership development is not new. At the same time, it has not been widely adopted in the mainstream of the field of leadership studies.

Awareness Practices and Mindfulness

A very early influence on me around awareness practices was Tim Gallwey's *The Inner Game of Tennis* (1975), which I bought when it came out both because I played tennis in high school and because there was some felt sense of resonance with the title. His concept is of self 1, a conscious ego mind that likes to judge and critique performance and self 2, a non-judgmental awareness that witnesses, absorbs and learns by doing. This model was extended into the workplace as well (Gallwey, 2000), making it one of the most relevant precursors for this current project. Kahneman's *Thinking, Fast and Slow* (2011) talks about systems 1 and 2 in a way that both reinforces Gallwey's conceptions (although it has the opposite associations to the numbering) and provides a much more detailed exploration of understanding of how these systems work.

Eugene Gendlin's work *Focusing* (1981, 1996), describes his research into what actually makes therapeutic processes effective. This includes a six step process for getting in touch with the 'felt-sense' of a subjective phenomenon. My own experience from using this process has helped develop some of the capacities required to undertake this project. The combination of Gallwey and Gendlin's early influences on me is part of the 'groundwork' noted in Appendix I as part of the methodological considerations behind this project.

Searching google scholar for 'awareness based practices for development' turned up primarily unrelated hits, with some work on mindfulness practices showing up. Using Academic Search Complete, with the terms 'awareness based,' 'practices' and 'development' in abstracts, there was still a diverse set of results, with a few studies of mindfulness again being the most relevant. Changing the search terms to 'awareness practices' and 'development' returned similar results.

From this, a brief look at some elements of how mindfulness practices are being utilized in relation to leadership is warranted.

Mindfulness has its roots in Buddhism as the seventh element on the noble eightfold path. The Pali and Sanskrit terms can also be translated as awareness. In recent decades the core principles of mindfulness have been developed in secular contexts, most notably by Jon Kabat-Zinn in the Mindfulness-Based Stress reduction program at the University of Massachusetts Medical School. He defines mindfulness as "paying attention in a particular way: on purpose, in the present moment and non-judgmentally" (Kabat-Zinn, 1994, p. 4). From this, mindfulness-based practices such as presencing (Senge, Jaworski, Scharmer, & Flowers, 2004) and deep presencing (Gunnlaugson & Walker, 2013) provide a path for applying mindfulness in organizational, leadership and coaching contexts. From this it is apparent that awareness practices are being used in relation to leadership, even if they are not widespread.

Transformative Learning

A brief look at the field of transformative learning can also provide some useful context for this project. The seminal work of Jack Mezirow (1990) provides a foundation for this. In looking at the question of what *form* is transforming, Kegan (1980, 1982, 1994) focuses on the cognitive form (rather than the content) of the learner's structure of meaning making. He organizes this into five orders, of which the third and fourth (socialized mind and self-authoring mind) address the vast majority of the adult population.

The journey through these orders of structuring meaning making, (and by implication how one perceives, interprets and acts in their role as a leader), utilizes critical reflection on deeply held frames of reference, or assumptions. This can be experienced as having rational as well as intuitive or emotional components. Integrating Mezirow's ten steps for transformative learning and Kegan and Lahey's ITC process, it is possible to describe major steps along this journey as including; encountering disorienting dilemmas, being able to inquire into their underlying sources, exploring options for testing the validity of assumptions, gathering data on such tests, building new frames of reference and enabling new orientations, attitudes and behaviors. Palus and Drath (1995) describe how experiential development programs for leaders can support this process and generate new possibilities for leadership development.

Self-Awareness

Central to many of the above concepts and a centrally addressed in this project is self-awareness. Socrates was famous for citing the Delphic oracle in saying that the first condition for being human was to "know thyself." The cultivation of leadership aimed for generating a philosopher king, and the training of young men to prepare them for roles in the ideal Republic (Plato, 1992) was aimed at cultivating self-awareness. Linked to this is what the notion of self was seen to be. Plato's (1954) description of the last days of Socrates framed this in terms of the

doctrine of the immortality of the soul. This theme of self and soul has reverberated through the ages in philosophy and religion and appears today in the study of leadership as well.[5]

Focusing on current research related to self-awareness and leadership, Axelrod (2012) examined self-awareness in relation to psychotherapy and coaching, noting the critical role of emotional awareness. Self-awareness is linked to emotional intelligence competencies of "accurate self-assessment, emotional awareness and self-confidence" (p. 345). Goleman (2006) noted the importance of emotional awareness and social intelligence, citing recent neuroscience research into mirror neurons saying that "whatever the supposed business at hand, we continually transmit emotions, making another feel better or worse" (p. 78). McCraty, Atkinson, Tomasino, and Bradley (2009) describe extensive research in the field of neurocardiology that substantiates this and indicates our ability to sense the electromagnetic field produced by the heart at up to three meters. This ongoing transmission of emotions contributes to what Kegan and colleagues (Kegan, Lahey, Fleming, & Miller, 2014) describe as our 'second job' where we spend a great deal of time and effort to wrestle with the daily implications of how this social-emotional environment plays into our personal growth. Thus awareness of our own state at an emotional level, and the ability to take a perspective on others to enhance social intelligence are critical capacities for leaders.

Self-awareness itself, as a construct in leadership research is approached by many theorists. Fusco, Palmer, and O'Riodran (2011) note that "self-awareness … is the first of the four constructs shown to underpin authentic leadership" (p. 130). Ashley and Reiter-Palmon (2012) note that "empirical support is mounting suggesting that self-awareness is related to leadership such that leaders higher in self-awareness tend to get better outcomes than those with lower levels of self-awareness" (p. 2). Axelrod (2012) likewise says that "the critical importance of executive self-awareness for organizational effectiveness has been frequently noted by a wide array of modern leadership development experts" (p. 340). The growing acknowledgement of the central role that self-awareness plays in leadership and its development makes research into the actual workings of an awareness based approach of critical importance.

This brief survey of background literature provides a contextual backdrop for some of the areas relevant to this project. The next step is to go into an in depth examination of the three focal sources chosen for this project.

Background and Contextualization of the Three Sources

Before delving into the details of the methodology and data analysis, it is worth taking a moment to present some brief background on the context within which each of these three sources arose. The three sources are; Kegan and Lahey's (2009) *Immunity to Change*, David Bohm's (1992) *Thought as a System*, and work from the Arbinger Institute (1997, 2006, 2010; Warner, 2001).

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[5] There is plenty of popular and even well researched literature along this theme (Bolman & Deal, 1995; Chopra, 2010; Conger, 1994; Doetzel, 2006; Dorr, 2006; Hawley, 1993; Nelson, 2002).

Kegan and Lahey's work is the focal point for this project, taking a primarily psychological and developmental lens. Robert Kegan's early (1982) work was described above. Later, along with Lisa Lahey, the four column exercise (Kegan and Lahey, 2001) was developed as a practical tool to support development and was later refined into the immunity to change (2009) form that is in widespread popular use today. Minds at Work is the current business vehicle for spreading their work into the world.[6]

David Bohm's lens arises from a very different background. As a physicist, his PhD was signed off by Oppenheimer as part of the Manhattan Project. He developed the field of plasma physics after that, then wrote serious critiques of the Copenhagen interpretation of quantum mechanics. His association with Marxism while at Berkeley led to fleeing the US during the McCarthy era, eventually settling in the UK. His approach to understanding quantum physics emphasized wholeness (Bohm, 1980; Bohm & Hiley, 1993) and utilized a holographic metaphor. He was also influenced by the mysticism of Jiddhu Krishnamurti (1994) and this contributed to his influential work in the field of dialogue (e.g. Senge, 1990; Isaacs, 1999). His lens as used here appears as an attempt to support processes for gaining coherence in the system of thought (since the text is a transcript of a pre-dialogue group seminar), by understanding the nature of thought itself and its limitations.

The Arbinger[7] work derives from Terry Warner's (1997; 2001) work to understand the fundamental ethical character of being human and from this the phenomenon of self-deception. His background is as a professor of philosophy at Brigham Young University. He also spent time at Linacre College at Oxford where some of his seminal ideas developed. The Arbinger Institute was founded in 1979, and its work expanded significantly upon the publication of *Leadership and Self Deception* in 2000 (which has sold over one million copies and is available in 27 languages). Today they have offices in 20 countries and support individuals and organizations in improving culture and resolving conflict.

This represents three lenses that I have utilized in this project which can be characterized as; psychological, objective and ethical, all being applied to a phenomenon at the heart of the human experience, the gap between our aspirations for change and our ability to achieve the changes we wish.

Methodology

In this section I describe the methodology used in this project. There are two main aspects of the methodology. The first is a set of considerations relevant to the approach to and preparations for the project. This is described in more detail in Appendix I. Briefly, this set of considerations begins with the notion of *bricolage,* or a bricoleur as someone who "works between and within competing and overlapping perspectives and paradigms" (Gidley, 2007, p. 6). From this

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[6] Through Minds at Work they also train coaches to work with this process and I have been fortunate to work with a number of individuals who have been through this training.

[7] In this article, for convenience I use the term Arbinger to cover both the writings published under the corporate name of The Arbinger Institute (where they explain that multiple authors involved chose anonymity to focus on the work itself) and the work of founder Terry Warner.

orientation comes the sense that my goal in this project is less to show *findings* in an empirical sense and more to reveal a sense of *feeling into a view*.

There is a clear sense in which this project falls under the heading of metatheory. Edwards (2010) includes a number of steps in undertaking such work: groundwork, domain specification, design, multiparadigm review, multiparadigm analysis, metatheory building, implications, and evaluation. How these are addressed is outlined in Appendix I. The nature of this project also has a strong heuristic element. Here I worked with a sense of using my own sensitivity to the subject of inquiry as a kind of 'tuning fork' to look for resonances. Finally, interpreting the data required a hermeneutic orientation as well. All of this served to dynamically steer the research process.

I employed this set of methodological considerations as I undertook selecting quotes from the texts that form the basis for this project. For the content analysis of these textual extracts I was able to draw on a more analytical set of tools, specifically in the form of using the NVivo 10 software program to perform various analytical manipulations.

The first step in this process was the reading of the above described texts with an eye towards statements that were perceived to have some relevance to the overarching theme under consideration. This yielded 19 pages or 9146 words of statements (with some brief reflections related to them in the set of Arbinger notes), which were loaded into NVivo 10 in three files, one for each source.

Queries, or analyses performed by NVivo on the texts, were done at five levels of word specification: exact, stemmed, synonyms, specializations and generalizations. Specifications for these queries were given for a four letter word minimum and up to 100 results (see Appendix II for tables of the most relevant results for each query). This resulted in identifying ten terms as most relevant for further investigation: change, cognitive, conscious, feelings, immune, make, others, self, system and thought.

Using a coding function in NVivo, nodes, or categories of data, were generated by the program for each of the results from each query (the ten themes listed above, with a node for each time each of those ten themes occurred in one of the five levels of specification listed above). These nodes contained each term found by the query with five words prior to and after the term as they occurred in the text.

This set of ten terms was then used to create new nodes. These nodes were populated by manually going through the coded text from each of the original query node results (which ranged from 32 up to 495 items) and copying relevant text that illustrated the various uses of each term until each new node was populated with a saturated set of phrases around each of the ten terms.

Each of these ten nodes was further analyzed to produce a table that listed descriptions of how each of the three views used each of the ten terms. (This table, with summaries included, came to eight pages with 1700 words and is not included here). These 30 sets of the uses of the ten terms were then summarized to draw out a more essential description of themes emerging from the selected text excerpts. This resulted in a two page table, with the key constructs related to each

set of three uses of the ten terms (see Appendix III). These results form the basis of the key themes in the findings section.

The next step was to examine the conceptualizations and uses of each of these ten terms in relation to the original body of textual extracts used for the data analysis. NVivo provided highlighted text within the full text related to each of the items in the ten nodes, making it easy to see them in their broader context. Examples from this step were used to illustrate the key themes. A rich description of these ten themes is found in Appendix IV. Finally, once this summary and illustration of the ten themes was complete, they were reviewed in order to examine how the themes intersected, overlapped and informed each other.

Findings

In this section I describe the results of this textual content analysis into the conceptual relationships between the three sources of data used for this project. This consists of two parts. The first is found in Appendix IV, providing an extensive description of the ten themes that emerged from the textual analysis. They are presented in the order of; self, conscious, immune, system, others, feelings, change, make, thought and cognitive.[8] In the second part starting just below, I weave these key concepts into a more integrative sense of what the juxtaposition and combination of these three views can produce.

Following from the description of the ten themes described in Appendix IV, the next step in the process of making sense of this set of data was to review those descriptions and illustrations by using the two focal points set out at the beginning of this article. The first was to look for conceptions that could enrich the understanding of the immunity to change process. The second was around building a foundational conception of what awareness based practices for leadership development could look like.[9]

It is clear that there are also many other possible connections, interpretations and implications that could be focused on. Here, it is clear that I have relied on my tacit knowledge to look for interpretations that aid in making this notion of *feeling into a view* more explicit, which was noted in the methodological considerations as being one of the purposes of this project.

Weaving Threads

One simple observation was to notice that linking the first four terms analyzed (according to the criteria I used for ordering them), one gets the conception of a *self-conscious immune system*, which presents an interesting phrase loaded with possible implications. Also, arising from the analysis of the first two terms was an observation that there is a clear distinction between being

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[8] This appendix can provide a number of pieces of background information that readers may find useful. In addition to summary descriptions and quotes to show in some detail how each of these terms were used, there are also comments that might clarify questions arising, such as why certain terms are in this list, the order of the presentation of the terms as well as how they are used by each source.

[9] While the influence of first focal point is relatively easy to spot in the following, the second one is not as obvious. However, I believe that the influence of attending to it becomes more visible later in the discussion.

self-conscious (or having attention focused on a self that is produced by the system of thought) and being aware, or awareness in itself. This is linked to the distinction made in relation to the term self, where Kegan and Lahey appear to use the term self as a given, an identity or 'entity,' while both Bohm and Arbinger utilize the concept of self in more in connection with illusion, incoherence or deception. The notion of the *virtuality of self* (Rowson 2008) is relevant here, and will be brought forward in the discussion below.

Further disentangling this set of threads, Kegan and Lahey talk about the immune system as something that operates automatically, as something we are unaware of. Bohm talks about it this way as well, but extends this into describing the resistance in the system of thought specifically to the avoidance of unpleasantness. Arbinger talks about an anxiety management system similar to how the immune system is described by Kegan and Lahey. They link this to constant resistance and the assertion of self.

Looking deeper into what is implicit in the conception of being self-conscious, how the term change is used becomes relevant. Change is linked to the self-image dying. The conception of a self and being conscious of it, (being 'self-conscious'), is linked to how the system of thought is invested in maintaining all this by keeping our attention directed *to* and *through* the self. At the same time there is a link between the self-image dying and awareness as distinct from this self-consciousness. This will become an important distinction later.

Kegan and Lahey's (2009) core concept is all about this immune system. As the second pair of terms in this initial configuration, the notion of an immune system is seen by them as "making a mistake sometimes" (p. 37). This can be connected to a lack of awareness and later to incoherence. While Kegan and Lahey's description of our psychological immune system is drawn from its biological equivalent, Bohm's description is of a set of reflexes that include thought, feelings and physiological aspects like electrochemical impulses in the brain as well as including the whole of society.[10] How this system of thought impacts other relevant aspects of this inquiry will be taken up later.

Moving on to examine how the conception of others is used, the distinction between awareness and self-consciousness comes up again and can be linked to Arbinger's notion of collusion. In this concept, the lack of awareness is tied to being self-conscious, which leads to inviting others to participate in collective self-deception. There is a link, (possibly implicit in this view), connecting the notions of self-consciousness and self-deception. One way to derive that implication is from seeing how Arbinger describes our way of being towards others as touching our deepest sense of right or wrong. The shift we are looking for, (explored more below), comes from attending to "the light coming from others" (Warner, 2001, p. 51).

Feelings come into the picture as well, and Kegan and Lahey are clear that it is necessary to engage them for the ITC process to work. At the same time Bohm describes the feeling of necessity as contributing enormously to resistance (or immunity) to change. This feeling of necessity, or 'it cannot be otherwise,' or even 'don't yield,' is a core way in which feelings

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[10] I notice a similarity here with the conception of memes as carries of ideas and culture across society. There are also similarities to how the notion of ᵛmemes is used in the work of Graves (1974) and Beck and Cowan (1996).

impact our immunity to change. If our big assumption implicitly says 'don't yield' and is linked to an automatic set of reflexes acting outside of awareness, then how do we imagine affecting it? While part of the answer provided comes later, here Arbinger describes the distinction between feelings of deception and our moral sense being corrupted, from the liberation possible from a correct understanding (or coherence in Bohm's terms) of a given situation.

Moving deeper into seeing how the possibility of (or resistance to) change is perceived, Kegan and Lahey talk about change in terms of moving aspects of our meaning making from subject to object. According to Bohm, resistance to this comes from unpleasantness, identification and the reflexes around necessity. This necessity is also tied to the self-conscious identity produced by the system of thought, all happening outside of awareness. Arbinger adds nuances to this in that unpleasant emotions seen as are inherently dishonest and thus "intrinsically resistant" (1997, p. 9) to change. Both Bohm and Arbinger note that this is not a passive process, but that there is an active participation in creating deceptive perceptions from inserting representations of thought into perception or the projection of accusations. All of this points to change needing to come from somewhere deeper than thought, or self-consciousness.

This kind of active process of creating reality is how Kegan and Lahey (2009) talk about the function of the immune system. However, this reality can be guided by "false belief" (p. 50). For Bohm, the most fundamental of those false beliefs is the one where the system of reflexes of thought creates images of reality then inserts them into perception while denying its active role in doing this. Extending and linking this to the domain of the self-image, Bohm (1992) also describes how the system of thought gives false information and "produces the thought that it is *I* who am doing everything" (p. 92) and that we have this feeling that we are the ones controlling thought. In this sense, the notion of self is a virtual construction of the system of thought.[11] Arbinger (1997) adds to this by describing how "we live a lie" (p. 8) that then takes the shape of an accusation, which directs attention away from this process and externalizes any problems by blaming others (also described as justifying ourselves).

While Kegan and Lahey's description of change in the immune system is framed in terms of subject object shifts, Arbinger describes this change in terms of making distinctions between the light and darkness as a way to know the difference between right and wrong. They show how our conscience can be deceived, since it is a faculty connected to cognitive functioning. From this it can be surmised that the place from which subject object shifts are made is not thought, but a place from which we can direct attention.

For Bohm (1992), the result of directing attention is described in terms of coherence or incoherence. It is also pointed out that insight is something that has the possibility to be outside of the entire system of thought. This offers an opening to a place from which we can direct attention towards generating coherence in thought. Insight can improve coherence through its re-hardwiring of the system of thought. The process of accessing or coming from insight results not only in greater degrees of coherence, but also of freedom understood as "the creative perception of a new order of necessity" (p. 220). This can be viewed as another way of talking about Kegan and Lahey's notion of transforming our immune systems into a bigger better one, or even changing the big assumptions that govern the immune system. So even if this reality that the

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[11] This theme of the virtuality of self is taken up at length in the discussion.

immune system produces is virtual, governed by what is taken as necessity, we can improve the nature of this virtual reality.

Using the language Arbinger provides, we can describe this in terms of moving into the light or truth that life instructs us with. The lack of light is of course darkness, where we lose our capacity for discernment or the choice of where to direct our attention. If we wish to direct our attention in such a way as to gain freedom from the constraints and limitations of our immune systems, then we need the light of insight.

Summary

Kegan and Lahey (2009) are clear that we cannot think our way out of this immune system, which naturally tries to "save our lives" (p. 50). Following from the inquiry above a question arises: is this immune system actually trying to save the life of a virtual self-image that the system itself creates? They describe how it is necessary to use both a change of mindset through subject object shifts and behavioral change through action in order to effect lasting change that is transformative. This can result in fundamental changes to the structures of the meaning making that we are subject to. However, this investigation has aimed to explore ways to deepen and broaden our understanding of how to overcome this immunity to change. What can we say in addition to their prescription for change?

From Bohm we can see that the resistance of the immune system is from the system itself, even to the electrochemical reflexes in the brain that precede conscious intention. Thus for change (at least change in the direction of coherence) to happen, it is imperative to be able to access a space or source outside this system and this is described as insight. At the same time there is a distinction between self-consciousness, or a self-image, and awareness. Bohm describes this kind of awareness as being proprioceptive in relation to the system of thought, or able to be aware of the functioning of thought as it is happening, and thus in a position to have insight or discernment in relation to the coherence or incoherence of the thought arising.

From Arbinger it can be seen that all these cognitive processes are linked either to self-betrayal (and the chain from there into self-deception and justification), or to perceiving the light of truth. The former is synonymous with propping up an idealized image of ourselves which is intrinsically embedded in darkness and the inability to use our conscience or moral sense to get ourselves out of the situations we are in. In the light of truth lies our hope.

Kegan and Lahey want to transform the immune system and say that it even tries to "save your life." Bohm sees this system as functioning in an incoherent manner, (at least left on its own); while Arbinger says it needs to die. Can Kegan and Lahey's method be seen as trying to make the system of thought more coherent? Yet does this process itself become a dead end or at least give limited returns at some point? Is the next step to perceive the immune system and self it produces as a virtual entity, somehow of value and useful for our experience, but also in the end hiding something essential and critical? Does this self need to die in order for "sensitive human beings" (Warner, 2001, p. 77) to emerge?

The notion of necessity in relation to self appears to be a key link holding the fundamental resistance to change in place. This is also tied to how we conceive of identity. Bohm notes that an alternative orientation or conception could be the idea of moving to a creative rather than identified sense of being. This creative sense of being is also linked to proprioceptive insight, or awareness as something outside of the system of thought. This is also linked to "the light, or source of our understanding of right and wrong" (Warner, 2001, p. 133) as a source or space outside the darkness of the system of thought when it is incoherent.

This summary has aimed to draw out the most essential points coming from the analysis of textual extracts from the three sources. It also represents the result of using the heuristic approach of trying to make tacit knowledge explicit through working with what stands out or resonates in these extracts and the results of analyzing them in relation to each other. From this phase of the project, it is now time to turn attention back to the starting points of this inquiry and discuss these findings in relation to a larger discourse.

Discussion

How can the lenses from Arbinger and Bohm add depth or even offer new possibilities to Kegan and Lahey's descriptions of the immune system and how to change it? Some answers to these questions have emerged above. However, as noted above, the aim of this project is not to come up with answers, (although if some emerge that is ok), but rather to give a sense of *feeling into a view*. Thus the main goal of this discussion is to explore how this view can shine light on various aspects of the phenomenon under study.

The second major question this article focuses on is about what can we learn about the role of awareness in leadership, change and transformation processes? In relation to these two questions, the discussion that follows is made up of two parts. The first section is around the findings just described and possible interpretations, implications and links for the ITC process itself. The second section is to broaden attention back out to the larger context of leadership development and see how the conception of awareness based practices can influence leadership development. In keeping with intention of bounding the scope of the current project I focus on two key elements for this; self-transcendence (and the implication of wisdom in it) and awareness in relation to leadership development.

The Wisdom of Self-Transcendence

In reflecting on the implications of all of the practice, energy and thought (by not only Kegan and Lahey but also by an ever growing number of practitioners), that has gone into the development and practice of the immunity to change process, I have the feeling that there is a generally held, even if implicitly, view that it is somehow *wise* to be able to overcome our immune systems and no longer be subject to limiting or incoherent big assumptions. Emerging from the inquiry at the heart of this project, the most central big assumption revolves around the identification with a sense of self.

The Virtuality of Self

Bohm's description of the system of thought as a set of electrochemical reflexes in the brain that precede conscious intention has been seen elsewhere, most notably in the experiments of Benjamin Libet (Libet, 1989, 2003; Libet, Gleason, Wright, & Pearl, 1983) who found that neural activity preceded conscious intention by up to half a second. This research reinforces the view that the self-conscious being that we experience as making choices is somehow functioning outside of (or at least in a limited domain relative to) an awareness of what is actually going on. Thus this perspective that the system of thought or immune system acts 'outside of awareness' continues to reinforce this distinction between awareness and self/self-consciousness. Can the conception of self as virtual that was alluded to earlier (Rowson, 2008; Varela, 1999) help us see other ways of relating to self?

To explore this further, it is worth delving into Rowson's (2008) description of the conception of the virtuality of self.[12] Rowson describes what happens when we step beyond our conventional constructs in a way that is similar to what has appeared in the present inquiry: "I suggest that the structure we are stepping out of is our constructed and often limiting notion of our own self, and the 'shock' and 'break' we feel is a glimpse of our own virtuality" (p. 86). The roots of this concept have of course been with us for a long time.

> The idea, in essence, is the traditional Buddhist claim that selfhood is a powerful and functional illusion, but is ultimately groundless, and that in becoming aware of the ways in which our sense of self is constructed and maintained we free ourselves from some of the limiting assumptions that hinder the development of wisdom. (p. 4)

If we take it to be generally true that we think it is wise to overcome our immune systems, then this perennial view about the wisdom of transcending a tightly identified sense of ourselves (see also for example Plato (1992) or Walsh (1999)) can play a key role in understanding how to work with the immunity to change process.

To explore this further, it is worth taking another step along the line of reasoning Rowson (2008) presents. One element of this is that we need to get out of the system of thought itself to have direct experience of this place of awareness, light or insight.

> So even when one accepts that the self is some kind of persistent illusion or theoretical construction, you can't just 'snap out of it', … The more challenging question is whether and why we might function more wisely if we became more fully aware of the nature of self, and not just in terms of comprehension, but experientially. (p. 179)

It is this aspect of *experientially* that is crucial here. This experience would seem to be about a more coherent or direct awareness of reality, less (or not at all, but that is a larger discussion beyond the scope of this article) mediated by the inherently limited representations of the system of thought, or alternatively, creating more coherent representations. At the same time, as Rowson

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[12] This is in the context of his Pd.D. work (2008): *From Wisdom-Related Knowledge to Wise Acts: Refashioning the Concept of Wisdom to Improve our Chances of Becoming Wiser*.

indicates, we do not suddenly 'snap out of it' and perceive reality in a radically different way.[13] It seems we need some representations to utilize in mediating our experience, and thus the search for more coherent ones.[14]

Awareness and Insight

In searching for examples of such representations, Deikman (1996) equates "I" with awareness. He distinguishes between *I* and self, saying that "this 'I' should be differentiated from the various aspects of the physical person and its mental contents which form the 'self'" (p. 350). For Deikman, who we are *is* awareness, the 'I' that observes the contents of experience (yet also having its ground of existence independent of the contents of experience).

From this and Rowson's line of thinking above, I perceive that to be able to proprioceptively and coherently perceive the virtual nature of self appears to be the epitome of wisdom. "The realization that the self is virtual brings with it the balance of knowing and doubting, the openness to experience and the psychological mindedness that I have already suggested are central to wisdom" (Rowson, 2008, p. 194). This act of realization is "ontologically different from perceptual knowledge" (Deikman, 1996, p. 355). It could be said that it is one way of talking about feeling into a view.

To access this kind of realization of awareness "experientially has a transformative effect" (Rowson, 2008, p. 192). In terms of Kegan and Lahey's immunity to change process, the transformative effect comes from a combination of the subject object shift and taking action in the world. They say that this transformative effect is not "accomplished by just seeking 'insights,' as empowering or clarifying as those insights might feel" (p. 222). They go on to show how "understanding more and more deeply what motivates us" (p. 222) is in itself insufficient for transformation. From this it seems worth investigating how they are using the term insight in relation to what has been found in the inquiry undertaken in this article.

It appears that Kegan and Lahey's use of the term insight is not the same as Bohm's. It seems that their use allows for insight to be something that occurs within the immune system. This is in the sense that the 'self' has an 'insight' which Kegan and Lahey point to as insufficient, requiring action to supplement it in order for the transformative change to occur. Coming from Bohm's view, this kind of insight, that is had by the self, is not the same as insight coming from beyond the system of thought and thus from beyond the self that system constructs. In this latter case, insight is more related to awareness, or maybe that it comes from awareness and the self merely receives it. However then, as noted by both Bohm and Arbinger, the self lays claim (incoherently, or as an act of self-deception) to the insight as being something that it generates itself.

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[13] Although there are certainly many reported cases of such experiences, they are not the norm and beyond the scope of this article.
[14] There is also an entire discussion about how any direct experience is at some stage interpreted by this system of thought according to our level of cognitive functioning, as well as cultural and other socially constructed influences. To what degree coherence relates to (or does not relate to) cognitive development stages is another matter, but that is also beyond the scope of this discussion.

How does this distinction between self and awareness impact the use of the term self-awareness as noted in the literature review? There the construct self-awareness appears to be utilized without so much explication of the deeper ontological assumptions implicit in it according to the view laid out in this inquiry. In the way it is used in the literature reviewed above, the notion of self is more like how Kegan and Lahey use it, as an identity or entity. Awareness of self is linked to constructs like self-assessment, awareness of our emotional states, or of social relations. One definition given is that self-awareness "is an inwardly-focused evaluative process in which individuals make self/standard comparisons with the goal of better self-knowledge and improvement" (Ashley and Reiter-Palmon, 2012, p. 2). It is apparent that the deeper distinction generated from the present inquiry is not readily apparent in such uses of the term.

Coherence

From these reflections and explorations it is possible to give a preliminary description[15] of awareness as *the experiential realization of the virtuality of self*. Along with the insight coming from such realization, awareness enables a different possibility for transformation than insight appropriated by a self that is part of the immune system. This also has to do with coherence, in contrast to the very fundamentally incoherent act of the constructed self appropriating insight, (or reducing insight to something reinforcing the system of thought and self-image), and then claiming to be the source of insight.

This raises a question around ethics. How ethical can such a self-deceptive process be? There is a fundamental self-deception that comes from the system of thought keeping us tied to identifying with this virtual self. For Arbinger, the move from the darkness of such self-deception into the light is characterized as an ethical move. We can see this in Varela's (1999) thought when he claims that "ethical know-how is the progressive, firsthand acquaintance with the virtuality of self" (p. 63). This matches up very nicely with Arbinger's view of the implications of an I-Thou relationship (Buber, 1958) being the fundamentally ethical basis from which to engage others. In particular, we are encouraged to focus on the transformative effect that comes from acting on the impulses we realize coming from the light of humanity in others. For Arbinger, the ethical use of cognition is in turning our attention to this light.

Immunity to Change Revisited

To bring this back to the examination of the immunity to change process, it is possible to frame the micro subject object shifts Kegan and Lahey describe in terms of dis-identifications. The move of dis-identifying with various aspects of a notion of an identified self that we have been subject to can then be seen as an ethical move, or even in terms of being more coherent. It can also be described as a process of chipping away at or deconstructing layers of illusion collected by our immune system (or the system of thought) in order to protect the identification with the self it has constructed. This process can even be viewed as opening a window (letting the light in) into the experience of the virtuality of at least some small aspect of self.

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[15] I avoid the term definition as I prefer not to get into all of the limitations and constraints I perceive as inherent in the concept and practice of defining terms.

Bringing this part of the discussion to an even sharper focus, what can be gained by reframing what we are subject to at the levels of the socialized and self-authoring mindsets? The fundamental self-deception and big assumption in the socialized mind might take the form of identification with social norms, forms and roles in society being taken as 'real' rather than constructed.[16] Peeling away one rather large layer like this enables the self-authoring mind to be the 'operating system' within the system of thought. Filtering incoming and outgoing information according to its own agenda enables a more complex and powerful stance in relation to the world. Yet Kegan and Lahey (2009) note that this improved, more complex version of the self "may also be a recipe for disaster if one's plan or stance is flawed in some way" (p. 19). Incoherence can strike with any level of complexity of mind. This points to the importance of having more coherent conceptions (or beliefs) as content being used within any order of consciousness. Peeling away the structure implicit in the self-authoring mind can lead to operating from what Kegan describes as the self-transforming mind,[17] yet the same issue of coherence of contents persists.[18]

Coherence can thus be partly understood in terms of structures of consciousness in that the higher orders of this have a more flexible relation to the contents of the system of thought. However, it is also clear that the contents of consciousness play a role in this at whatever order of consciousness we are operating from.[19] While complexity of meaning making will influence how we interpret the content of experience, the underlying and mostly implicit assumptions and worldview will also shape the content and how it is interpreted. At the same time, it has been noted that coherence also has to do with awareness as the experiential realization of the virtuality of self (and by extension and association, the virtuality of our perception of the world as a whole from within this virtual or identified self). This brings the discussion back full circle, to seeing the wisdom inherent in transcending the identification with self.

The discussion thus far has highlighted the new possibilities Bohm's and Arbinger's views bring to the immunity to change process. This centers on a fundamental choice for self-transcendence, or to use a belief, mental model etc. that is more coherent. The contents of this revolve around the virtuality of self and moving away from identification with self as a kind of ontologically real entity. The re-conceptualization of the construct *self* is essential to leverage our attempts to transform our immune systems. I now direct attention to the second focus of this article, the implications of this for leadership, its development and practices.

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[16] This seems to make an easy and obvious connection to the central concepts of social constructionism (Gergen, 1994). Further links and thinking about how the findings and distinctions in this inquiry might inform social constructivism are for the future. As well, how these conceptions could inform our understanding of the self-transforming mind is also beyond the scope of this article.

[17] I have heard that the ITC process is not really designed so specifically for the transition from self-authoring to self-transforming. It would be interesting to see how utilizing the set of conceptions emerging from this inquiry could inform a process more targeted at that particular transition.

[18] Suanne Cook-Greuter (2010) eloquently addresses the misconceptions around presumed advantages of higher order structures of meaning making in themselves being sufficient for people to function well in society.

[19] As well, this is only examining this from the notion of using the construct of 'inner operating systems.' Fisher's (1980) dynamic skill theory can offer another conception to examine this from, but given this article's focus on Kegan and Lahey's immunity to change process, exploring that lens would be for another time.

What can this View of Awareness Contribute to Leadership Development?

The notion of the wisdom of self-transcendence has been described as fundamental in relation to (transformational) leadership (Carey, 1992). From this, what are the broader implications of this for leadership and its development as a whole? This is the question I turn to next. Here I revisit relevant aspects of the literature reviewed earlier, as well as other sources that appear relevant, to see what can be gained from applying the findings from this project to those ideas.

In terms of looking at awareness based practices as a concept for leadership development, the conception of awareness is now more clearly articulated as the experiential realization of the virtuality of self. This is related to the source of insight and a "creative notion of being" (Bohm, 1992, p. 169), or the light of being coming from others (Warner, 2001). This is in clear contrast to the functioning of the immune system/system of thought operating outside of awareness and generating a virtual self. The identification with this virtual self leads to self-deception and all that comes with it. From this, the concept of an awareness based approach to leadership development practices takes on a richer set of meanings and points to a deeply grounded sense of presence in a more coherent perception of events in life.

Developmental Implications

First of all, I note that there could be a further link worth exploring in relation to how Fisher's work on dynamic skill theory could be connected to, or utilized in relation to this notion of awareness as being outside of the immune system, or any constructed sense of self. Fisher's work never used the term ego, and in this sense, can be seen as somehow grounding itself, even if only implicitly, in this domain outside the system of thought. A future project could be to examine how tools built from Fisher's theory (Dawson et al., 2005; Dawson & Stein, 2011; Stein, Dawson, & Fischer, 2010), especially as related to leadership development skills,[20] could benefit from applying the conceptual view described here.

Next, it has already been noted that there are new possibilities in how to approach the immunity to change process. At the same time, there could be implications for ego development theories in general. If ego development is implicitly oriented towards building ever more complex capacities in a self that is inherently virtual, it is possible to imagine it being ever more challenging to master such constructions of self.[21] I do not view this as problematic in and of itself; simply that it invites consideration of how this complex, sophisticated and capable virtual self is kept operating in service, and not as the master. The implications of this for leadership are many. One consideration is how can a given population discern the subtle levels of fallacy and or incoherence that could creep into leadership coming from such a complex virtual self?

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[20] In particular I am thinking about how to understand using the LDMA, or Lectica/Leadership Decision Making Assessment from Lectica.

[21] It is also possible to link this to Vaughan's (1995) (and others) notion of the inward arc, where we develop ego only to eventually transcend it.

Leadership Development

Day & Dragoni's (2015) review of leadership development research mentioned above identifies leadership self-efficacy, self-awareness and leader identity among the key indicators for leadership. It is easy to note that the first two items involve self and the third (of four in total) is about identity. In light of the present inquiry, it is worth taking a critical look at how those constructs are employed in leadership development work. While a thorough undertaking of this is for future projects, some initial considerations can be put forward.

First, Day and Dragoni use the term self-awareness, mixing the two key terms that came to be seen in contrast to each other in this project. Various sources cited in the literature review also note the term self-awareness as central to leadership competency. It was noted above in the discussion that how self-awareness is used in relation to leadership development does not generally address the distinction between self and awareness highlighted here. What might be useful in light of this is to reflect on how the construct of self-awareness is held by the tacit views apparent in such discourse. Is it a self that is aware of its own nature, or is it awareness that is proprioceptive of the virtuality of self? Can making the distinctions noted here between the two terms bring additional clarity or even coherence to the discourse on self-awareness in leadership?

Then what about self-efficacy? Given the distinctions made in this project, self-efficacy could be similar to how it is described above in relation to ego development; what if the self, with this fundamental incoherence limiting it, is so efficacious that it takes control and sees itself as the ultimate master of its world? This could lead to a subtle but deep flaw in how leadership is practiced, certainly a lack of humility. In light of notions of servant leadership (Greenleaf, 1977), seeing self as overly masterly could go against the grain of being of service to a larger sense of purpose. On the other hand, self-efficacy could be conceived in terms of awareness being efficacious in proprioceptively enabling the virtual self to be more and more coherent, and thus better able to serve a larger purpose.

Finally, the notion of an identified sense of being has been understood as a problematic orientation to how we conceive of our beingness in the world. Leadership identity could suffer a similar fate as the previous two constructs. It could lead to a type of self embeddedness which Carey (1992) described as a fundamental option, but one that leads away from the practice of leadership. The other fundamental option is for self-transcendence, which is viewed as the key to practicing transformational leadership. All of this points to the importance of making implicit views, or fundamental big assumptions, sufficiently explicit, at least in relation to this key area. How the construct of self is tacitly informing the lens through which we are viewing leadership is, from the present inquiry, viewed as critically important.

Above, I claimed that one aim for this article was to find how the conception of an awareness based practice could facilitate relevant developmental growth applicable for leadership. The question was raised above in relation to implications of the findings of this inquiry and the field of ego development theory as applied to leadership development. Here I want to breifly address some key points that I believe are worth examining. There are currently a number of ego

development models that have been utilized for the purposes of leadership development.[22] (While I believe that many creators of these tools and frameworks are mindful of the distinctions I am foregrounding in this article, I am not sure of the degree to which the implications of the distinctions and view underlying them permeates the everyday application of these frameworks among the broader community of practice). Above, I described some possible implications of dealing with ever more complex constructs of a virtual self. It could be said that a primary focus of these models is very much on developing the very self that has been viewed as problematic. A response I noted above is that from the view arising here, the challenge is to keep in mind a kind of 'personal mastery' (Senge, 1990) that maintains awareness (or 'mindfulness') of the virtuality of this self that is becoming ever more complex (and thus ever better at hiding its own virtuality).

Mindfulness and the Presence of Awareness

This brings up the topic of mindfulness and its relationship to the kind of awareness discussed here. The brief survey of mindfulness presented above desribed both some early sources of this orientation for my own thinking as well as some recent approaches characterized under the conception of presencing (Scharmer, 2000, 2007; Senge et al., 2004). The critical (as well as appreciative) review I did of Scharmer's *Theory U* (Reams, 2007) highlighted what I perceived as some implicitly held limitations in the view behind how presencing was conceived. More recently Jaworski's *Source* (2012) also addressed the issue of what is at the bottom of the U, or if presencing as a concept is actually a gateway into a deeper experience. This deeper experience, in light of the present inquiry, can be conceived of as the awareness itself in the form of the experiential realization of the virtuality of self. As noted above during the exploration of Rowson and Varela's conceptions of this, maintating a degree of awareness is seen as the core of wisdom. Thus it is possible to think of mindfuness as maintaining awareness and realization of this virtuality, creating keeping the self in a coherent context or perspective.

This kind of mindful awareness is perceived as central to leadership. This notion is also found in the work of Chatterjee (1998), who states that "leadership is not a science or an art, it is a state of consciousness" (p. xix) and that "we can now begin to grasp the phenomenon of leadership as the field of awareness rather than a personality trait or mental attribute" (p. 24). Conceiving of leadership in this manner, given the rich set of associations and connotations that have been found here in relation to awareness, allows for a clear connection to the distinction made between awareness and self. Here there is the addition of the term field to awareness, giving a nuance that can be utilized further in this discussion.

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[22] A brief survey I did recently for another purpose revealed a surprising number of instruments. Some were values based developmental models such as Brian Hall's, Richard Barrett's and the Spiral Dynamics work. Ego development tools included Bill Torbert's Global Leadership Profile, Susann Cook-Greuter's Leadership Maturity Framework and corresponding Maturity Assessment Profile, Terri O'Fallon's StAGES model, Otto Laske's Leadership Development Assessment and Bill Joiner's Changewise 360. Of course many consultants also use Kegan's subject object interview protocol to support leadership development work.

A field has properties that come from what can be conceived of as initial conditions.[23] These conditions are often stable, or not accessible to change without the capacity to directly perceive them. The effects of these initial conditions and the fields they create are also referred to in some discourses as culture in an organization, which is generally perceived as very difficult to produce meaningful changes in. This is visible in the phrase from Peter Drucker that *Culture Eats Strategy for Lunch* (Coffman & Sorenson, 2013). Owen (2000) talks about myth and storytelling in relation to culture and its transformation, pointing to the power that is available in a leader being able to shape the field or culture through the culture generating method of myth and storytelling. From this the ability to consciously (and coherently) perceive the initial conditions that generate these fields can be conceived as an act of leadership.

Central to this is the how "high-energy seeing enables you to touch events or persons with a quality of awareness" (Chatterjee, 1998, p. 3). The quality of awareness referred to by Chatterjee can be interpreted here as the kind of self-transcendent, coherent and insight generating creative conception of being that came from the findings of this inquiry.[24] This is further exemplified by Chatterjee saying that "there comes a time when an individual becomes irresistible and his action becomes all pervasive in its effect. This comes when he reduces himself to zero" (p. 51). This reduction of self to zero is the ultimate self-transcendence, a move away from being identified with not only a self, but any of the roles or even objects that become centers of identification.

Concluding Reflections

Here, near the end of the journey of this project and article, I find it useful to look back and try to summarize what has come from this inquiry. First, what can be said about the ITC process? The concept of overcoming our immunity to change has been examined by analyzing how two other lenses on this phenomenon can add nuance and distinctions. Given that big assumptions play a critical role in the ITC process as described by Kegan and Lahey, it is clear that the content of our beliefs and making them more coherent is central to success in this. The inquiry undertaken here focused on how the identification with self is held to be the central assumption limiting change. If we are embedded in an identified sense of self, we fall prey to a fundamental self-deception which darkens our perception of the world and leads to all manner of self-justification that creates the problematic challenges in our lives. We end up living outside of awareness in the immune system's constructed representations of reality.

The antidote for this darkness or incoherence of perception is taken to be awareness, the *experiential realization of the virtuality of this self*. This is awareness as distinct from the system of thought and generating insight which can bring greater coherence. Achieving and holding this view is tied to being open to acting on the impulses for action arising in us from attending to the light of humanity coming from others. The immunity to change is thus rooted in self-embeddedness, and its cure is found in self-transcendence.

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[23] There is of course a well-developed discourse on how field theory can be applied to leadership that I am only briefly touching on here. For one of the more influential descriptions of this, see Wheatley (1992).
[24] This can also be thought of in terms of quality of presence (Reams & Caspari, 2012).

Then what about leadership development? Self-transcendence is also seen as key to leadership, and is found in such popular conceptions as servant leadership. It is also apparent from this inquiry that reconsidering the construct of self-awareness in relation to leadership can be a fruitful area to explore further. Viewing awareness as the proprioceptive perception of the virtuality of self, enabling (through insight) the virtual self to be more coherent, can provide a key for leadership.

The degree of this awareness present in leaders/leadership contributes to the overall quality of presence through the field of greater coherence it generates. This field of awareness can be seen as the deepest level of functioning of leaders/leadership, enabling others to engage in this process of using the events of life and work to foster their own and their organization's as well as societies' growth towards coherence. Leadership in this sense consists of the choice to attend to the light coming from others and engaging practices that support this.

The larger aim of this project has been to lay a foundation for understanding *awareness based practices for leadership development*. While thoroughly applying the conceptions arising from this inquiry to a variety of aspects of leadership development is for future projects, some groundwork has been laid here. How awareness is conceived and distinguished from self helps to clarify what has been conflated, implicit or unclear previously. The wisdom in proposing the virtuality of self also provides a foundational conception for going forward. The understanding that the experiential field of this awareness generates spaces that can give a sense of purpose and alignment to others provides a direction for focusing development work in leadership.

Limitations and Benefits

Given what has been put forward here, there are some clear limitations to this article. The *feeling into a view* presented here is both enhanced and biased by my own experience of the virtuality of self.[25] At the same time, this is the phenomenological lens that has emerged for me from the re-hardwiring of the system of thought that this experience generated. Thus the implicit lens (that I have worked to make as explicit as possible above) used here in a sense limits this work to first person validity.

At the same time, the use of methodological processes to work through the textual accounts of what are perceived as related views of a similar phenomenon has been aided by the possibility that this tacit view could act as a tuning fork, to guide me in the selection of text to analyze as well as in helping me bring an appreciative interpretation that could open up possibilities from making this tacitness more explicit. It is up to each reader to determine the degree to and or areas in which the views put forward in this article resonate, or give voice to some tacit knowing.

As well, this project was intentionally limited to drawing on a few sources chosen for their personal interest and perceived relevance to the topic. I did not draw on Kegan and Lahey's (2001) earlier work on the immunity to change process. I also neglected to utilize various writings by David Bohm on the topics of implicate order and dialogue (1980, 1996). While I suspect that a more thorough analysis including these texts could have enriched the project, I also

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[25] This came up in the course of my conversation with Jonathan Rowson (Reams & Rowson, 2015).

suspect that the outcomes might not have varied so much, as I had a sense of saturation of the relevant themes from the texts used here.[26]

In the end I make no clear claims of empirical certainty from this project. I simply offer an explication of this view, aided by whatever degree of rigor I could bring to bear through the method, to a subject matter that has generated a significant interest.

Reflections

My first venture into the world of academic writing (Reams, 1999) asked the question "who do we think we are?" This subtitle was intended to imply that the self that thought constructs is not 'who we are' in reality.[27] As I stated above, it is clear that there is a deeply tacit view around this that I have been working to articulate throughout the part of my life that has found an outlet in academic life. The application of this view to leadership development has also guided the direction of my work. This article is another step along that journey.

I see that most of what I have done here is simply to make more explicit something that is in many ways obvious and apparent, at least given a deep sense of a tacit view that I perceive as having some degree of coherence. In aiming to unpack the distinctions here around awareness based practices for leadership development, my goal has been to bring these out for a more detailed examination. My hope has been that this will first of all build some basic foundational pieces for future work in this area. It is also a hope that this project will provide a basis from which to further unpack implications of extending the view these distinctions arise from in relation to other aspects of leadership and its development.

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[26] I am also painfully aware of a rich set of texts highly relevant to this project that have been (as described above) bracketed to the side for the sake of being able to do at least this much. Notes are piling up in relation to many of those, as well as many more I know are possible to engage. At the same time, it is clear that a very different and contrasting or contradictory set of texts, data and research results could be taken into such a project to bring a more diverse or balanced orientation to the worldviews or paradigms engaged here. All of these contribute to the limitations of this work.

[27] While it is beyond the scope of the present article, the answer given to the question was simply soul. I later gave a definition of soul as a "*creative unit of pure awareness*" (Reams, 2012, p. 104, italics in the original). More recently I had the opportunity to interview Jonathan Rowson (Reams & Rowson, 2105) and we had a lively discussion on revitalizing the use of the term soul in public discourse.

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Appendix I: Methodological Considerations

There are various ways in which I can categorize my sense of the methodological background that I have utilized in doing this work. In this appendix I will primarily address the main considerations behind my approach to and preparations for the project.

The notion of bricolage might be the best starting place. Rowson (2008) notes that a bricoleur or "handyman" (p. 127) is well suited to address methodological issues raised in a post-positivist, socially construct aware research culture. His realization that the notion of 'findings' are less relevant "because on this sort of topic [wisdom] there is nothing to be credibly 'found'" (p. 128) leads me to articulate that my goal is less to show findings in an empirical sense and more to reveal a sense of feeling into a view (although there are components of both intertwined). This can be linked to Gadamer's (1993) perception that "all understanding is ultimately self-understanding" (p. 260) indicating a need to have a strong heuristic (Moustakas, 1990) component in the mix. Thus in the methodological considerations for this research I draw on a range of handyman tools; [28] methodological components chosen as perceived to best fit with the different phases, components and needs of the research project.

Gidley (2007) cites Denizen and Lincoln (2005) in describing a bricoleur-theorist as one who "works between and within competing and overlapping perspectives and paradigms" (Gidley, 2007, p. 6). The tensions and challenges inherent in moving beyond disciplinary approaches towards transdisciplinary ones can be described in terms of complexity of cognition and "the epistemological structure of interdisciplinary validity claims" (Stein, 2007, p. 91). Thus working between and within competing and overlapping perspectives and paradigms requires adequate cognitive complexity to take perspectives on those tensions. It also demands sensitivity to level of analysis issues, or what I like to call attending to the 'domain of validity' of a given aspect of the inquiry at hand. It is in this sense that I find a bricoleur approach that enables the use of domain appropriate methods in a sensitive manner best suited to the current undertaking.

I am also mindful of the difficulties in accomplishing this with a substantial degree of transferable recognition among a community of those who are an ongoing part of this discourse. In addition, given that an explicit aim of this work is to begin establishing theoretical foundations for developing an understanding of awareness based practices for leadership development, there is a wish for this work to also speak in an intelligible way to a broader audience possibly unfamiliar with some aspects of the territory covered here. Thus I aim to navigate between a complex and critical inquiry into this view and an articulation of it that meets a reasonable demand of general intelligibility.

Given these orienting perspectives, I will now delve into the more specific and substantive issues appropriate within each methodological tool in my tool belt.

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[28] I find this notion of bricoleur as handyman especially appealing. It enables me to draw on other aspects of my life experience as a way of understanding how a handyman works with different tools and trades to do things. Having a farming, construction and truck driving background, I have a very embodied sense of how to be able to do a bit of everything necessary in a given context.

Metatheory

There is a clear sense in which this work falls into the category of metatheoretical research given that I am using the texts and theories of others as my primary source of data. My respect for the work of Mark Edwards (2010) in this field is documented elsewhere (Reams, 2011). Here I want to acknowledge and draw on elements of this approach I perceive as appropriate, without laying claim to doing rigorous metatheoretical work. In a rigorous metatheoretical method, Edwards would include: groundwork, domain specification, design, multiparadigm review, multiparadigm analysis, metatheory building, implications, and evaluation. I will briefly outline how I have or have not addressed these.

For the groundwork aspect of this I can draw on decades of personal practice and inquiry into consciousness and awareness oriented practices and academic inquiry into consciousness studies and leadership studies. I also described in the introduction how I am focusing on the domain of awareness based practices for leadership development using ITC as a leading exemplar, providing a degree of domain specification.

The design of the project within the domain specified is that I took literature from three sources and engaged in a textual analysis of elements that meet criteria I will lay out in the methodology section (Kegan and Lahey's (2009) Immunity to Change, David Bohm's (1992) Thought as a System, and the work of the Arbinger Institute (1997, 2006, 2010; Warner, 2001)). To a degree this diversity of focus sources addresses the call for a multiparadigm review, although the boundedness also clearly puts limitations on how well this step is addressed. These three primary foci will be partially supplemented in the discussion with relevant insights from other fields that are deemed pertinent to shed light on aspects of this project. These additional sources might also be considered to come from diverse paradigms, helping better address this component. [29] The aspect of multiparadigm analysis is part of the design in so far as the outputs from the textual analyses are presented.

Metatheory building was then undertaken in the specified domain. This happened primarily by weaving the threads provided by the three theoretical lenses to find common themes as well as important distinctions and how those influence thinking about ITC in particular. The implications of this are linked to relevant literature. Finally, some brief evaluative reflections on the outcomes of the process are undertaken. In this limited manner I have aimed to bring a metatheoretical methodology to bear on this project.

Heuristic Inquiry

The nature of this research is such that it involves a good deal of 'self as instrument' in that as a researcher I was holding the question of inquiry while noticing and reflecting on my subjective experiences as I engaged in reading the various texts that are the focus of this project. In the background phase, I had some unarticulated felt sense of what this notion of awareness based practices for leadership development are, and of what each construct is about. This comes from

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[29] The intention to build on this work in the future by engaging a broader range of relevant theory places the current article within the context of a longer term research and publication agenda.

my prior immersion in various experiences, reflections on them and trying to make meaning by connecting them to language and meaning I encounter in a variety of communities of discourse. There was also a phase of probing and testing for the utility of emergent ideas in various settings to see if the meanings forming bear up in different conditions and contexts. All of this points to drawing on heuristic inquiry as an aspect of the methodology.

Moustakas (1990) tells how "underlying all other concepts in heuristic research, at the base of all heuristic discovery, is the power of revelation in tacit knowing" (p. 20). Tacit knowledge is described by Polanyi (1983) simply as "we know more than we can tell" (p. 4). It also "is personal knowledge embedded in individual experience and involves individual factors such as personal belief, perspective, and the value system" (Nonaka & Takeuchi, 1995, p. viii). Heuristic inquiry utilizes a combination of the subsidiary and focal elements of tacit knowledge. The subsidiary factors include those elements of experience that stand out in examination and attract immediate attention, are visible, part of conscious awareness, and can be described. The focal elements include the unseen and invisible, and make possible access to the wholeness of the phenomenon. The combination of elements facilitates the researcher's task of making tacit knowledge of the subject explicit and communicable.

In this project, part of the method or procedure used was for me to notice what stood out for me when reading the texts, being sensitive to how the perceived meaning in and between the lines lit up, or connected with some of the tacit knowing that I held as a sort of tuning fork. Using this criterion I had a means by which I could select elements of text from the whole. The main challenge was to maintain a degree of focus and mindfulness of my inner state while reading to keep the sensitivity to this 'tuning fork' quality in the foreground. I held this notion of my tacit understanding as a way to conceptualize the criteria by which I chose statements to highlight and analyze.

My approach to this was informed by the concept of adequatio, or that "the understanding of the knower must be adequate to the thing to be known" (Palmer, 1993, p. 51). Similarly, Braud and Anderson (1998) note that "we can perceive and know only that for which our sensitivities have prepared us, and these sensitivities depend on aspects of our being" (p. 22). Osborne (1993) states that "we cannot inductively derive an essence from examples unless we can already intuit that essence" (p.171). In this manner I perceive the ongoing heuristic inquiry component of the project to be a kind of dialogue between my evolving tacit and explicit (Nonaka & Takeuchi, 1995) knowledge with the texts and phenomenon encountered through experience. I conceive this in terms of a kind of 'dynamic steering'[30] where with each data point, clue, or piece of the puzzle, I made some form of course correction that helped navigate towards the subject of inquiry.

Hermeneutics

Using the texts of three sources as the basis for this work implies that within this bricoleur approach the element of textual content analysis is the most visible, tangible component of the methodology. Closely related to this is the use of a hermeneutic orientation, being explicit about

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[30] I am borrowing this term from my encounter with the practice of Holocracy.

how I am interpreting the texts in view. Gidley (2007) outlines a four quadrant description of Ricoeur's (1986) approach to hermeneutics from which I draw on the notions of the autonomy of the text itself (in that it stands for something), this in relation to the socio-cultural backdrop it was written in and with an eye to the intentions of the author (or trying to read between the lines into what is tacit in the author's view). This hermeneutical approach to textual interpretation is of course grounded in the lenses available and chosen for this work. This depends on the heuristic aspects described above.

One of the choices I faced was how to navigate the tension between a hermeneutics of suspicion (Ricoeur, 1986) or of a rational analytical "demystification" (Palmer, 1969, p. 44) of the text and a demythologizing, which "deals lovingly with the symbol in an effort to recover meaning hidden in it" (ibid. p. 44). While my preference is for the latter, leaning on an appreciative reading of the texts, I recognized the need to draw on a critical, rational analytical eye from time to time.

Palmer (1969) points to a mode of understanding more fundamental than rational analysis. This can also be seen in relation to Nonaka and Takeuchi's (1995) conception of tacit knowledge, or Gadamer's (1993) prejudice or the hermeneutical horizon of our preunderstanding. It also points to a conception of a 'trans-rational' mode of knowledge (Reams, 2002), in that the analytical function of rationality is secondary and where the notion of 'defining' the focus of inquiry is considered to be 'unwise' (Rowson, 2008). It is in this sense that I aim to uncover, illuminate and describe what I perceive as emerging from this inquiry.

Appendix II

Node generation results based on weighted percentages. (Most relevant results only).

Exact

Word	Count	Weighted %
self	69	1.58
thought	57	1.30
change	43	0.98
system	38	0.87
others	32	0.73

Stemmed

Word	Count	Weighted %
self	69	1.58
thought	66	1.30
change	56	0.98
feelings	48	0.87
systems	44	1.10
make	39	0.89
others	35	0,80
immune	33	0.76

Synonyms

Word	Count	Weighted %
make	172	2.25
feelings	106	1.79
thought	99	1.77
self	69	1.58
change	69	1.41

Specializations

Word	Count	Weighted %
conscious	82	1.66
cognitive	495	1.63
thought	360	1.46
change	394	1.17
others	59	1.11

Generalizations

Word	Count	Weighted %
conscious	82	1.65
others	60	1.11
make	412	1.09
cognitive	495	0.94
thought	360	0.90
change	424	0.87

Appendix III

Table of Theme Summaries

Theme	Kegan and Lahey	Bohm	Arbinger
Self	Notion of self as entity that is identity, tells a story and protects itself.	Concept of self is linked primarily to incoherence or illusion.	Conceptions of self related to underlying root cause of betrayal, deception, justification.
Conscious	Primarily as conscious of self in relation to various aspects; identity, narrative, protective.	Linked to either being aware and learning or of being deceived and not conscious.	Notions of asserting a fictional self and deception and betrayal.
Immune	Central concept, both as an intelligent force that resists change and can be overcome and change into a bigger and more complex system.	No direct mention.	No direct mention.
System	System occurs first as an immune, defense, anxiety management system. System occurs second as a mindset or intelligent force that can become bigger and more complicated.	System is in relation to how thought is conceived, a single set of reflexes including thinking, thoughts, feelings, felts.	Not mentioned in text.
Others	Opinions we need to defend against.	Helping.	Two main themes, around either resisting, accusing, blaming or diminishing others, or a mutual response to the light in others to enable change.
Feelings	Feelings as being intricately inherent in the problem, forming an ecology that resists change.	Feelings as part of the set of reflexes making up the system of thought.	Feelings as untrustworthy, justifying, misleading us. Also feeling related to generosity of spirit.
Change	Change conceived as mental development, changes in structures, developmental shifts i.e. subject / object, altering theories in use.	Change as modifying reflexes, electrochemical, perception. Also as deception or moving away from awareness.	Change conceived as both self-betrayal, shifting blame, taking offense and being open, affected by the light of others, responsive to truth, fundamental change of heart.

Make	Make generalizes into several concepts; creating things like anxiety management systems, warning systems, false beliefs, blind spots, constraining action, actively preventing change. Also a process of developmental shifting.	Make shows up in relation to reflexes producing thought, separation and self-deception, unawareness / insensitivity, changes in perception, making traces and false information, affecting and determining action.	Make as resisting what we have created, accusation and making wrong appear right, making justifications and projections. Also as making clear distinctions, allowing others influence, becoming receptive to truth.
Thought	Thought as meaning making, assumptions, opinions. Also as a warning system.	Multiple conceptions; as the source of problems, deceptive, participating but hiding assumptions, giving false information and affecting perception. As a set of reflexes that automatically control, resist and defend. Identity as incoherence, creative perception and being, insights and truth, coherence (detachment).	Thought as perception, judgment, understanding. Insight as notion of truth. Anxiety and resistance. Heart, change and peace, character.
Cognitive	Cognitive in relation to structure, mindset, intelligent force. As creating reality. Insights and respectful stance. Insufficient for change, creating blind spots	Thought as a system, active, probing set of reflexes. Coherence and incoherence. Deception, resistance to insight, forgetting, participating. Produces an 'I'. Insight, coherent perception, unconditioned capacity, creative being, perception of truth.	Subtle and pervasive self-preservation, resistance of truth. Making and believing judgments. Insecurity about filtered perception and moral sense, process of justification. Heart at peace, affected by the light from others, love, insight, discernment, responsive to truth, forgiving.

Appendix IV: Key Themes Illustrated

This appendix is (mostly) made up of one paragraph describing the summary of each theme (related to the table in Appendix III) with varying amounts of quotes used to illustrate the use of these terms and provide a rich picture of key elements to be woven together. The order was decided by contemplating on the nature of each term and how I perceived the best narrative to unfold. Thus the ten terms are ordered first in relation to the concepts that seemed most obvious as well as those that were not as richly utilized, saving the less obvious and more referenced ones for later (these came mainly from the specialization and generalization query results).

Self

I began with examining how the concept of *self* was used. First, implicit in how I perceived Kegan and Lahey's use of self was that they appear to treat the construct of self as a given, an identity or 'entity.' While this can be considered as a common or popular view in relation to the term, making this explicit here is important. This is because both Bohm and Arbinger utilize the construct of self in relation to terms like illusion, incoherence or the root cause of betrayal, deception and justification, implying a fundamentally different view.

Kegan and Lahey talk about how someone "gradually rewrites the self-narrative" (p. 133) and how criteria for a good entry in column three of the ITC process "is that it is self-protective" (p. 150). Bohm writes about how we are conditioned to resist seeing how thought is "infusing our imagination, our past, our knowledge into what we see" by itself and "that's really where the self-deception arises" (p. 161). In terms of creating an image of self, he writes that "the system contains a reflex which produces the thought that it is *I* who am doing everything" (p. 92). This eventually works into the conception of having "the notion of a creative being, rather than an identified being" (p. 169). For Arbinger, is it clear that self is also linked to how "we cannot doubt that our judgment is true" (1997, p. 4) and this becomes so entwined in us that "self-deception permeates experience" (p. 5). Arbinger even goes so far as to say that the self-betrayal that is the root of self-deception creates a "virtual reality, the product of the technology of defense inevitably employed by self-betrayers" (p. 9).

Conscious

When looking at the term *conscious*, it is used in similar ways as self is for Kegan and Lahey, as in being conscious of self in relation to identity, narrative and being protective. For Bohm it is used more as a distinction between being aware and learning or of not being aware and being deceived. For Arbinger, it occurs around notions of asserting a fictional self and from that again linked to deception and betrayal.

Kegan and Lahey also talk about not being consciously aware: "Though you are not aware of it, you have created a very effective anxiety-management system … But neither of them experiences this anxiety consciously or constantly because the immune system is working beautifully to manage it automatically" (p. 48).

Bohm writes that: "We are producing these situations contrary to our conscious intentions because there is another resistance going on of which we're not very conscious" (p. 11) which sounds very much like the description of immunity to change Kegan and Lahey use. Bohm also describes a type of resistance coming from the system of thought that avoids any unpleasantness and "is set up to move away from awareness of that" (p. 34). To counter this he proposes a stance where "we don't try to do anything. We're just learning – aware, attentive, learning" (p. 84), again sounding a lot like the ITC process.

For Arbinger, the assertion of this fictional self is described as; "constant self-assertion equals constant anxiety equals constant resistance" (1997, p. 6). The remedy or antidote for this is expressed clearly. "Self-betrayers do not comprehend that what they need is the destruction of this fictional self. … The phony self-image must die in order that they, as sensitive human beings, might live" (Warner, 2001, p. 77). Thus the notion of being conscious is somehow connected to being aware of and noticing the automatic operation of the fictional self to enable something more than self as a self-image to live.

Immune

Immune was the term that came up the least in the queries (see Appendix 1), however I wanted to include it because of its central place in Kegan and Lahey's concept of immunity to change that is a focus of this project. For them it is used in relation to notions of an intelligent force that while it resists change, can be overcome. It can also change into a bigger and more complex immune system. Bohm and Arbinger did not mention it.

Kegan and Lahey note that like this intelligent force, the immune system in our physical bodies is trained to reject new material. Sometimes "the body needs to heal itself or to thrive, [and] the immune system can put us in danger. In these instances the immune system is no less focused on protecting us. It is just making a mistake" (p. 37). In response to this, they do not see a need to eliminate our psychological immune systems. "The solution … lies in transforming this immune system, in building a bigger and more complicated immune system" (p. 49). In this sense immune is used as a direct analogy between how our physical bodies function and how our emotional or psychological bodies function.

System

Kegan and Lahey use the term *system* in two ways, first in relation to the notion of an immune system, characterized as a defense or anxiety management system. Second, they talk about it as a mindset or intelligent force which can gain in complexity and size. For Bohm, system is part of how thought is conceived, as a single set of reflexes (described in more detail in the section on thought). Arbinger does not refer to the term system in the text excerpts I had noted.

Kegan and Lahey write "that every immune system is an intelligent force that seeks to protect you, even to save your life" (p. 47). The key to growth for them "lies in transforming this immune system, in building a bigger and more complicated immune system" (p. 49). Bohm's use of the term is quite broad, using it to say "that system not only includes thoughts, 'felts' and feelings, but it includes the state of the body; it includes the whole of society" (p. 19).

Others

All of the previous terms resulting from the queries were expected given the nature of the literature and focus of my extracting quotes from these sources. The term *others* was less anticipated. This was shown in that Kegan and Lahey primarily use the term in relation to self-protection, or defending ourselves from others opinions. Bohm only mentioned others in terms of helping others by sustaining dialogue. For Arbinger, the conception of others occurred in relation to two main themes. One was related to resisting, accusing, blaming and even diminishing others. The second was in relation to mutuality and responding to the light in others to enable change.

Kegan and Lahey talk about this self-protection as being "about protecting or defending the self we want others to see, or the way we want to see ourselves" (p. 150). Bohm notes that "once you have an insight into this, sustaining the dialogue in yourself will help the others" (p. 208). However for Arbinger, the notion of other plays a much more important role. For example, in the state of self-betrayal with others, "together we create and reinforce for one another the self-deceived reality in which we each feel unfairly treated, and each are convinced that we alone are completely justified" (1997, p. 9). In addressing our way of being they note "the deepest way in which we are right or wrong … is in our *way of being* toward others" (2006, p. 57, italics in the original). In relation to how we can make changes in this, they note that "*to the extent that we can come to see others differently, we can undergo a fundamental change, a change in our being, a change of our emotions and attitudes, a change of heart*" (Warner, 2001, p. 46, italics in the original). This change of heart is enabled by us being able to let "*ourselves be affected by the light coming from others, or, in other words, the truth concerning what they are feeling*" (p. 151, italics in the original). This is very much linked to taking an I-Thou (Buber, 1958) orientation to others.

Feelings

Kegan and Lahey approach *feelings* as a central part of the ecology of our immune systems that resist change. Bohm sees feelings as another facet of the set of reflexes that make up the system of thought and can lead to a feeling of necessity. For Arbinger, there appear to be two themes; one around feelings as justifying, misleading and untrustworthy, while the other is around a generosity of spirit.

Kegan and Lahey note that in order to make a successful immunity to change map, it is critical that our improvement goals are not merely rational, but that "we must also experience sufficient need or desire, visceral feelings" (p. 210) in order to "connect head, heart, thinking and feeling" (p. 31). Bohm describes how "feelings are tremendously affected by thoughts. And obviously thoughts are tremendously affected by feelings" (p. 7). This interconnectedness is also visible in the power of the feeling and "thought of necessity. It is much more than a thought. The word 'necessity' means 'it cannot be otherwise,' and the Latin root means 'don't yield'" (p. 68). Thus the resistance that has been described elsewhere can be linked to this feeling of necessity.

For Arbinger, feelings have this polarity of deception or liberation. On the one hand, "self-betrayers truly do have their accusing, self-excusing feelings. But this does not mean that the

feelings themselves are truthful" (Warner, 2001, p. 31). In this state of self-betrayal and not being truthful, these feelings can deceive us and "our moral sense or conscience becomes untrustworthy" (p. 110). Yet on the other hand, "a correct understanding of why we feel and think and act as we do helps to set us free" (p. xii). The key then is in the correct understanding, or as noted below, can be thought of as coherence.

Change

For Kegan and Lahey, *change* is conceived as mental development or changes in structures of meaning making or the altering of theories in use. For Bohm it is about modifying reflexes, electrochemical changes in the brain and perception, as well as deception and moving away from awareness. Arbinger again has a twofold use; one in relation to self-betrayal and shifting blame and the other is around being open to being affected by and responsive to the light in others, leading to a fundamental change of heart.

The changes in the structure of meaning making Kegan and Lahey describe are not simply additive, but for them development is transformative. "This means that if we want to increase mental complexity, we need to move aspects of our meaning-making from subject to object, to alter our mindset" (p. 51). As well, the notion of immunity in relation to change means that "we are actively preventing the very change we wish to make" (p. 56).

Bohm also noted this resistance in relation to change, as in when we encounter unpleasantness and there is a move away from awareness of it. This resistance is linked to the notion of identity; "because that gets in the way of the need to change our reflexes. Once we identify with something, our reflexes are that way – it's very important, 'necessary'" (p. 167).

Arbinger note that "we resist changing the very emotions that make us miserable" because "these emotions and attitudes are accusing and inherently dishonest – and for this reason they are intrinsically resistant" (1997, p. 9). Echoing Bohm about how thought enters perception and then denies it, Arbinger state that "we participate in the creation of our emotional troubles and deny we've had any part in it" (Warner, 2001, pp. ix-x). They then point out that the "truth is, we change in the moment we cease resisting what is outside our box – others" (2010, p. 145). Above it was noted that this is connected to allowing ourselves to be affected by the light coming from others. It also comes down to a choice and following through on it.

Make

Make is a term I had not anticipated coming up in this list. However, it showed up as I queried stemmed words and at the synonym level it was the highest on the list. It turns out to be a very rich construct in this investigation. For Kegan and Lahey it generalized into concepts such as creating anxiety management systems, false beliefs and blind spots. It also was seen in relation to actively preventing change and as a process of developmental shifting. For Bohm, it showed up in relation to reflexes producing thought as well as in the process of separation, self-deception and unawareness. This was also around changes in perception that affected and determined action. For Arbinger, make was used in relation to resisting what we have created; making justifications that make wrong appear to be right, or making projections. However it was also

used in relation to making distinctions and allowing others to influence us and becoming receptive to truth.

Kegan and Lahey see that they are "as it were, seeking to describe the structure of each way of meaning-making, why it created the reality it did" (p. x). Thus there is a creative activity going on. It also is clear that "you have created a very effective anxiety-management system" (p. 48), in the form of an immune system which "has been giving us relief from anxiety while creating a false belief that many things are impossible for us to do – things that are in fact completely possible for us to do!" (p. 50). Then this immune system inevitably creates "blind spots" (p. 48).

One of the central propositions in Bohm's view is related to how the set of reflexes, or system of thought, fundamentally deceives us.

> Thought runs you. Thought, however, gives the false information that you are running it, that you are the one who controls thought, whereas actually thought is the one which controls each of us. … That's the difficulty. Thought is participating and then saying it's not participating. (p. 5)

As well, "*thought is affecting what you see*. The representation enters into the perception." (p. 110, italics in the original). Related to Kegan and Lahey's notion of how our immune system keeps us acting against our best intentions, Bohm notes, "we don't realize that it is our deeper, hidden intentions which have produced it, and consequently we keep on perpetuating the problem" (p. 12). The antidote to this is gaining some perception by making things explicit; "whereas if you don't make it explicit you can't see that thought is involved at all" (p. 82).

For Arbinger, "to have that attitude is to be making and believing that judgment" (1997, p. 3) and that "we create what we resist by resisting it" (p. 6). However, like Bohm points out, thought moves us away from awareness of this, as it is uncomfortable. For Arbinger the outcome of this is that "we live a lie. This self-justifying lie takes the form of an accusation" (p. 8). The self-justification comes from self-betrayal, which together create a "virtual reality, the product of the technology of defense inevitably employed by self-betrayers" (p. 9). Yet not all is so depressing.

Warner (2001) notes that in order to answer these questions "we must draw a clear distinction between the light, or source of our understanding of right and wrong, and conscience" (p. 133). This light "continues always to stream toward us from the faces and voices and gestures of others" (p. 133) while conscience is one of our faculties that can be deceived. "To the degree that we become receptive and responsive to truth, life will keep instructing us" (p. 321).

Thought

Thought showed up in Kegan and Lahey's text excerpts in relation to meaning making, assumptions and opinions, as well as a kind of warning system. For Bohm it is of course a central construct. He uses thought in relation to being the source of problems, deceptive, and affecting perception. It is also described as an automatic set of reflexes that control the system, resisting change and defending itself. He also uses it in relation to the concept of coherence (related to

insights and truth) and incoherence (related to participating in creating assumptions but hiding that participation). Arbinger uses thought in relation to constructs such as perception, judgment and understanding. They also see it in relation to insight as a notion of truth. Finally, they also use it in relation to a change of heart, peace and character.

Kegan and Lahey point to the need to get beyond thinking to shift our immune system. "We can't merely think or feel our way out of an immune system no matter how high our motivation is to accomplish our goal" (p. 217). They also imply something other than thought for this. "They all become keen observers of their own thoughts, emotions, and behaviors, and they learn to use these as information" (p. 244).

Some of the key constructs around thought for Bohm are described in the previous sections. Here I wish to focus on a more specific aspect, coherence of thought.

> The criterion for coherent thought is that it is true and correct. But if you can get pleasure or pain from thought then coherent thought is no longer functioning. Rather, the criterion has become whether the thought gives pleasure or pain, consequently that thought becomes destructive. If thought can be determined by pleasure or pain, that's already the beginning of a lot of trouble. (p. 49)

This is reiterated in the phrase "it can deceive us about anything and everything. There is no limit to its power of deception" (p. 99). As well, there are layers of incoherence involved. "We're saying that there is a second order of incoherence which avoids facing the first order; this second order avoids facing evidence of incoherence" (p. 63). This deception comes from unawareness of thought's participation in perception. It is Bohm's conception of insight that is perceived to have the possibility of remedying this unawareness. "An insight or perception of truth may deeply affect the material processes, which includes all of the reflexes" (p. 148). The result of this unconditioned insight is that "freedom is the creative perception of a new order of necessity" (p. 220).

For Arbinger, "often we call our sense of right and wrong conscience, though that name doesn't capture the way it arises from our living connection with other beings" (Warner, 2001, p. 21). Yet in the state of self-betrayal, we lose this connection and "in the darkness of our self-absorbed, suspicious thoughts and feelings, we cannot discern the way forward" (pp. 110-11). The remedy is described as a change of heart. "But even at its most profound, the change of mind and heart amounts only to a beginning" (p. 245). What follows from this is described in terms of forgoing. "If forgiving can be thought of as recovery from moral and emotional illness by means of a change of heart, forgoing is never falling morally and emotionally ill in the first place, never needing a change of heart" (p. 302).

Cognitive

The final of the ten terms coded was *cognitive*, which turned out to have the most uses when at the level of specializations and generalizations (495). Kegan and Lahey use the term in connection with structure, mindset and an intelligent force. They also connected it with creating reality and insights, but talked about it as insufficient for change and creating blind spots.

Bohm's use was connected tightly to the notion of thought as a system, an active, probing set of reflexes. It was also linked to coherence (now also as unconditioned capacity, creative being and the perception of truth) and incoherence (deception, producing an "I" and resistance to insight). Arbinger linked cognitive to; a subtle and pervasive self-preservation, resistance to truth, making and believing judgments, filtered perception and moral sense and justification. They also used cognitive in a different sense, in relation to; having a heart at peace, being affected by the light from others, insight, forgiving, discernment and being responsive to truth.

Many of the textual quotes relevant here are also represented above in relation to other terms. What stands out here is how Kegan and Lahey note that "we build an immune system to save our lives" (p. 50) and yet "we can't merely think or feel our way out of an immune system no matter how high our motivation is to accomplish our goal" (p. 217). They point to the need for "changing both their mindset … and their behavior; rather than changing only mindset or behavior" (p. 224).

For Bohm, many of the key quotes above are relevant here as well. However, he does describe cognition in a manner that illustrates the system perspective on how our 'immune system' resists change. In relation to moving away from pain or towards pleasure, he describes how:

> Now, by inference – by just thinking about it clearly – we can see that it makes no sense to keep on doing that and the result must be a real disaster. We could say 'my intention is not to do it.' But you will still find yourself doing it. You have a resistance coming from something else – from *the system*. (p. 34)

This resistance to change appears to us as necessary, and so we 'justify' or rationalize our actions. It is also connected to the notion of necessity quoted above in relation to feelings. All of this is described in relation to "some electrochemical process in the brain that preceded your conscious intention. The impulse is coming from the whole system" (p. 72). Becoming proprioceptively aware of the system of thought in operation can lead to "an insight or perception that this is true" and that "an insight or perception of truth may deeply affect the material processes, which includes all of the reflexes" (p. 148). All of this points to the need for an awareness of cognition, thought, perception etc.

For Arbinger, how the construct *cognitive* functions is described in this sentence about what happened to the author when succumbing to self-betrayal. "Having violated this truth [the basic call of his humanity upon me], my entire perception now raced to make me justified" (2006, p. 94) and "*My belief in my 'goodness' depends upon my belief in someone else's 'badness'*" (Warner, 2001, p. 63, italics in the original). Inquiring into the roots of this self-betrayal process and all that comes from it, the critical choice point is identified.

> So the choice that can change our hearts is not a choice of either our behavior or feelings. The first does not affect our way of being and the second, which tries to affect our way of being, is impossible. … The choice point comes elsewhere. It comes when we decide or not to yield to the truth about ourselves, about others, or about what's required of us and be guided by it in our actions. (p. 235)

This truth can then be seen. "We cleanse ourselves of insecurity and gain self-assurance when we do exactly as this love dictates, rather than constantly struggle to prop up a dubious, idealized image of ourselves" (p. 318).

   This is a summary of the key points in these texts that have arisen through the various layers of the methodological process described in the methodology section. It is neither comprehensive nor exhaustive, yet my hope is that through providing a rich picture of the core points of these texts, it will be clearer how the threads extracted and woven together in the findings point towards an emerging description of an awareness based understanding of the immunity to change process.