'Double, double': theories four | 'cauldron bubble': what's in store?

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Abstract

In a world where a failure to conform to standard societal norms could be described as weird, the three prophesising witches of Shakespeare's Macbeth serve to promote an alternate perspective where self is an apparition, progress an illusion, and a future-focus finds itself tethered to the past.

The intent of this paper is to explore how combining theories can enrich philosophical inquiry and contribute to a deeper understanding of how to address collaborative development of education policy and practice for a curriculum with a future focus.

Keywords: future focus, complexity, constructionism, availability, positioning, discourse

Prologue: Macbeth[1] as a puppet of prophesies

The sisters weird came to the heath, there to meet up with MacBeth,
a strange intelligence at first; though later apparitions cursed.

> The battle joined, the foe engaged, the noble captains claimed the stage.
> they won the day, commanded awe; rewards were promised, more and more:
> So spoke the king, and soon as said was done:
> what Cawdor lost, '*noble Macbeth*'[2] had won.

Macbeth did cogitate and dream:
'If chance will have me king, why, chance may crown me, without my stir,[3]
but so soon yet his thoughts conspired to find a new and murd'rous direction:
'If it were done when 'tis done, then 'twere well it were done quickly'[4]
Intent had turned — this way, then that, a pendule betwixt right and wrong.
First opined he: 'I dare do all that may become a man: who dares do more is none'[5]

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[1] (Shakespeare, 1606, selected quotes)

[2] Act I, scene ii — discursive positioning

[3] Act I, scene iii — social construction of reality

[4] Act I, scene vii — discourse

[5] Act I, scene vii — social mores = social construction

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But then pursued he a much diff'rent course, despite the premonition:
'that we but teach bloody instructions, which, being taught, return to plague the inventor'[6].

> Believing thus conspired to alter judgement, change the ready discourse and his virtue into vice[7]. Apparitions 'show his eyes, and grieve his heart'[8] — yet saw he not the greater part that custom and philosophy employed in crafting all the 'mind's construction'[9].

Though prophecies do prove him ill, then yet MacBeth 'not yield'[10] will,
but rather 'try the last … and damned be' .. until the end of 'tyranny'[11]

Introduction

There is much in the world of Macbeth that corresponds to our own. Where a failure to conform to standard societal norms could be described as weird, Shakespeare's three prophesising witches served to promote an alternate perspective where *self* was an apparition, *progress* an illusion, and a *future-focus* found itself tethered to the past. Similarly today, where widely-accepted constructs of distinct selves are evident in the pervasive emphasis on individual assessment and accountability within many education institutions as well as in the discourses that prevail. Embedded in such discourses are constructs of measurement that are used to assess progress through external attributions of success and failure. Such measures serve to retain the influence of a positivist paradigm and retain a technology-oriented future-focus perspective in Aotearoa-New Zealand, at the expense of broader sustainability considerations.

In this paper it is suggested that 'modern technologies of power' (Foucault, 1980, p. 152) increasingly marginalise the progressive ideals of previous generations of educators, and that such alternate socially-oriented perspectives have become less

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[6] Act I, scene vii — complexity theory, predictable world

[7] Summary: his valiant efforts in the service of the king diverted to a new and painful future.

[8] Act IV, scene i — the complicated space (Complexity theory) — positioning the supernatural as the experts, MacBeth as a puppet operating in the simple domain

[9] Act I, scene iv — this is about social construction and complexity where MacBeth sees only the simple aspect

[10] Act V, scene viii — a pivotal theme

[11] Act V, scene viii — positioning the audience to reinforce socially constructed polarities and the accompanying discourses

available as a consequence. Amongst the consequences of a standardising focus has been the normalising of 'stultification' (Rancière, 1991, p. 13) resulting from an emphasis on measurable 'achievement objectives [that are] … well-defined' (Ministry of Education, 2007, p. 4) at the expense of the interpersonal ideals of the *key competencies*: 'relating to others … [and] participating and contributing' (Ministry of Education, 2007, pp. 12–13). Even using the term 'competencies' brings connotations of specificity that contribute to 'the bewitchment of our intelligence' (Wittgenstein, 1953, p. 40) wherein the choice of phrasing frames and shapes what occupies the centre ground and what is at the margins. The curriculum could be what Wittgenstein described as a '*system of propositions* … laid like a yardstick against reality' (1975, p. 317) — a system that distances many constructs of reality while favouring a few. My argument is that such privileged realities have not only been shaped through the power relations of tradition and practice, but have also been instrumental in determining what are commonly accepted as the social norms of schooling through the discourses that determine education standards.

Challenging the dominance of these discourses could position education as more about developing 'human freedom' (Biesta, 2010b, p. 75, 2010a, p. 81), so that, when opportunities to escape or rise above conformity became evident, alternate positions become tenable and different perspectives more available. This argument is itself necessarily positioned towards the margins, for such perspectives remain antithetical to the dominant education discourses and subject to the centrifugal energies that force such ideals to be designated outliers. Despite such positioning, simply critiquing and questioning those discourses that have colonised the centre ground serves to exemplify and thus to expand the spaces in which freedom can develop.

In arguing that the constructs of creativity and freedom depend on whatever discourses are most readily available in an education context, it needs to be acknowledged that students, parents, and the wider community play as strategic a role in the shaping of the education system as teachers, administrators and policy-makers. With this perspective of the social construction of multiple simultaneous realities, both the significance and the complex interplay of traditions of behaviour and language use can be seen as instrumental in the ongoing shaping of paradigms and contexts. Of course, as Nightingale and Cromby (2002) observe: 'constructionism, far from being ontologically mute, must itself be an ontology' (p. 705), and one that I contend:

> … has to be conceived as an attitude, an ethos, a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them (Foucault, 1984, p. 85).

The school curriculum in this country includes the objective of escaping some of the constraints of traditional teaching practices through the adoption of a 'future-focus' positioning as outlined by the Ministry of Education (Ministry of Education, 2013), while acknowledging the impact of the past. Yet a critical analysis of this positioning suggests that the understandings made possible by *Complexity Theory* are absent rather than being presented as 'available alternatives' (Morss, 1996, p. viii) with a view through a different lens where 'we are all … continually making and remaking our own and others' lives' (p. ix). In particular, the *future focus* positioning represents teaching as simply following practices espoused by experts — something that exists in the *complicated* domain of Snowden's (2011a) *Cynefin framework*, rather than the *complex* space of teaching. For teachers, following rubrics of 'best practice' limits professional decision-making in favour of obvious and predictable outcomes , effectively denying the unpredictability of possible futures.

~~It is my intention in this paper to~~ weave together these various theoretical perspectives in order to illustrate the multidimensionality of schooling, as well as philosophies of education. While each of the theories described makes a contribution to the whole, it is as much in the indeterminate spaces between them as in their overlap that meaning is sought, so that the different framings of the contexts can add to an appreciation of their interconnectedness.

Theories and perspectives: Social constructionism

A theory of a social construction of realities (Berger & Luckmann, 1967) became prominent more than a half-century ago, but psychology-based perspectives on individual development continue to exert their influence over the provision of education. Through the lens of Social Construction, 'a person's acts are inevitably 'shaped' in the course of their performance partly by the acts of others around them' (Shotter, 2010, pp. 244–245), whereas education delivery and much of the NCEA assessment, particularly the external examinations, remain predicated on the notion of individual learning and performance. For example, despite the popularity of team

sports in this country, it is the notion of individual selves that underpins societal constructs of achievement, progress, failure and blame.

Discourse theory

Foucauldian discourse analysis explores power relations using a genealogical frame where 'in everyday political rationality the future of political theories is probably due neither to politics nor to theories but to the type of rationality in which they are rooted' (Foucault, 1988, p. 161). Schooling in Aotearoa/New Zealand is rooted in traditions that have increasingly emphasised the rationality of market-forces economics and norms. Such power relations play out in many and varied ways, including: the traditions imposed by the physical architecture; the availability of different types of resources such as outdoor spaces; libraries and the various uses of written texts; the availability of digital devices together with the confidence and competence of teachers and students to use these; and the levels of inequality of all forms that prevail in the different contexts of schooling. This last factor is particularly significant for *future-focused education*, because 'the fourth industrial revolution will generate great benefits and big challenges in equal measure. A particular concern is exacerbated inequality' (Schwab, 2016, p. 11). While prevalent discourses are context-sensitive in many ways, those that dominate the centre-ground of what is accepted as the norms tend to be more resilient and resist displacement. This is particularly concerning with respect to the application of free-market ideas in the management of education, especially since two[12] of the most influential economists, despite their very different positions, agree that such an influence is problematic for society.

Complexity theory

[12] 'The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else … [and] it is ideas, not vested interests, which are dangerous for good or evil' (Keynes, 2013, pp. 170–171), and
'… the influence of the economist that mainly matters is an influence over laymen: politicians, journalists, civil servants and the public generally.' (von Hayek, 1974)

'The potential of complexity is … to allow contextually appropriate solutions to emerge' (Snowden, 2011b, p. 226)

Complexity theory posits the ways in which we can regard events and behaviours in terms of the different levels of predictability that are involved. At the simple level there are cause-and-effect inferences that can be made, by most people because they are deemed obvious (at least in the context of the prevailing discourses); and in such situations it is apposite to define 'best practice'. However, as situations become less predictable there is a need for expertise which is not available to everyone as the connections between cause and effect are no longer obvious, and in this complicated space it is therefore more appropriate to reference practice as being 'good' rather than 'best'. In contrast, much in education — both teaching and learning — can be an unpredictable activity because there are so many overlapping aspects and relationships, so direct causes are frequently apparent only in hindsight. This is particularly so in consideration of the broad curriculum and the full range of competencies and interrelationships when schooling is interpreted as a societal rather than an individual good.

Positioning theory

'Positioning … is the discursive process whereby selves are located in conversations as observably and subjectively coherent participants in jointly produced story lines' (Harré & van Langenhove, 1999, p. 48). Positioning theory allows us to categorise many of the moment-by-moment interactions of schooling as being 'coercive' (p. 52) patterns that have become the norms, in contrast to those that are more generative of change possibilities but less available because they lack mutuality and fluency in their patterning. Examples include the sort of disconnection apparent between different users of digital technologies, but are equally apparent in any of the curriculum areas, since 'knowledge is not something people possess somewhere in their heads, but rather, something people do together' (Gergen, 1985, p. 270).

Tying the threads together

By positing that people are connectors, social constructionism is necessarily a context-related theory. Fowler and Christakis (2008, p. 27) found that the spread of happiness, obesity, or smoking, for example, involves not only people being influenced by those in their close network, but also by unknown others at up to three levels of separation. Accordingly, social constructionist theory encourages contexts to

be interpreted through including genealogical situatedness and language use, as well as historical, philosophical, and physical locatedness. Such interpretations provide a useful fit with complexity theory.

Complexity theory submits that how people perceive and respond to situations depends on how they categorise them as much as how they conceive of their place in those situations. Perceptions are influenced not only by context but also by prior responses in similar contexts, through creating and reinforcing understandings of predictability. Predictability is reinforced through patterns of positioning.

Positioning theory acknowledges connected selves and mutuality. Connectedness includes more than simple relationships between people, however, since context and custom both contribute to how people position each other and how they are in turn positioned. For example, differences in age and experience, particularly in workplace scenarios, contribute to positioning based on accepted culturally-acceptable norms that prevail. This is not limited to face-to-face or synchronous interactions, since the creators of media works in all forms position their audiences both intentionally and unintentionally. In turn, such creators are positioned by audience reactions as well as the discursively-constituted norms that influence them to view those audiences through particular lenses. There are, therefore, clear links to discourse theory.

Discourse theory explains social interactions in terms of norms, again context-specific. Since discourses create and shape the frameworks for language, thinking and behaviour, they are instrumental in the social construction of realities. The discourses that dominate in one education context, for example, may differ from another, but the discourses that underpin the various constructs of education exhibit commonalities too — the norms of language referencing and the understandings that accompany those. That is the essence of discourse, for shared understandings require both common words and the grammars that give them sense. Discourses are socially constructed, predictable according to context, and position people in relationships.

In all of these aspects, therefore, the four theories that have been described support and implicate each other. There is, however, another factor that also plays a key role: the availability heuristic (Tversky & Kahneman, 1973). Traditions of language and behaviour that are constantly reinforced in any context become those that are the most readily available and accordingly the most influential in a discursive positioning of selves, as well as the most resilient factor in the construction of perceived realities.

Theories and constructs as ontologies

Just as there are many languages, so too are there many forms of language: oral language, written language, body language, sign language, the languages of art, performance, design, architecture and relationships. No matter what form is used, 'language is never a perfect mirror of materiality … [since] language performs flawed, incomplete reference …[and] this implies that constructionism … must itself be an ontology' (Nightingale & Cromby, 2002, p. 705). That carries implications, for if that perspective offered by Nightingale and Cromby is accepted, then not only must constructions of the self be ontologically based, but also the constructs of mutuality, common understandings, and even discourses.

The same argument applies to discourse theory, positioning theory, and complexity theory. When these theories are understood as ontological theories — for they each posit an interpretation or perspective on some realities — then their alignments, intersections, and divergencies provide opportunities for critical comparisons as well as strengthening their contributions to interpretative epistemologies. Those contributions are effectively reality-lenses, each providing a different perspective that may enhance or augment the others. 'From a social constructionist perspective, language is thought of as gaining meaning in its use, as opposed to meanings of words, for example, being treated as given prior to their use' (Drewery, Winslade, & Monk, 2000, p. 246). From a discourse perspective, language exchanges reinforce mutual understandings and common behaviours and 'the moment we begin to articulate what there is … we enter a world of discourse – and thus a tradition, a way of life, and a set of value preferences' (Gergen, 2009, p. 222).

Positioning theory argues for an ongoing interplay of influences, aligning with Bakhtin's observation that 'there is neither a first nor a last word and there are no limits to the dialogic context' (1986, p. 170). Positionings within interactions are considered to be always in a state of flux in an ongoing dance of responding or reacting to an other as well as the situatedness of the interaction. Since any use of language involves being in relationship, positioning permeates both discourses and the construction of realities, for these cannot exist independent of the community and the language uses that frame and shape them. Positionings therefore conform to customs and shared beliefs: they are subject to the ontological frames in which they exist.

As with discourse theory, complexity theory is predicated on perspectives that derive from learned responses to patterns of interactions in language and behaviour. Predictability, the essence of complexity theory, relies on discourses of cause and effect, despite the obvious over-simplification that is entailed in such reductionism. The construct of complexity itself therefore depends on accepted usage, on language conventions, on common understandings. The construct is ontological.

Within any ontological frame of reference, some constructs are more readily available than others, some more widely shared and referenced than others. 'Reliance on the availability heuristic leads to systematic biases' (Tversky & Kahneman, 1973, p. 207), and such biases become integrated into constructs of individuality as well as patterns of inter-relating. Jargon is an example of how language bias is illustrative of sensitivity to context. Fluency in applying philosophical theories also depends on how readily available they are, rather than on their goodness of fit in comparison with other theories for any given context. Availability therefore plays a key role in critical analysis and interpretation. Theories that can be simplified are more likely to be readily available than those that retain their complexity.

Macbeth as an exemplar for analysis

The three witches, who Macbeth referred to as 'imperfect speakers' (Act I, sc. iii) for not disclosing more to him and Banquo, capture the essence of unpredictability even as they appear to make the future more certain with their prophesies. His response to the predicted future is to embrace that as a possibility he had not countenanced before, though others had positioned him as 'brave' and 'noble' (Act I, sc. ii). However, Lady Macbeth regards him as 'too full of the milk of human kindness' (Act I, sc. v) to pursue the prophesy wholeheartedly, and resolves to bolster his ambition. In doing so, she positions Macbeth as malleable and lacking commitment, although in the battle where his exploits earned him the title as Thane of Cawdor, he had been described as 'valour's minion' (Act I, sc. ii). Lady Macbeth is characterised as lacking such noble qualities but ambitious on her own behalf, echoing the biblical story of Eve succumbing to temptation. That depiction positions her with similar attributes of human weakness presaging an unhappy end, as does her later sleepwalking, that 'great perturbation in nature' (Act V, sc. i) when she wrestles with her troublesome

memories. In drawing the attention of the audience to such matters, Shakespeare also illustrated the longevity of polarity thinking — the discourses of right and wrong.

Where Macbeth is drawn as the author of his own misfortune as a result of acting in pursuit of his own ambition at the expense of others, there is an implicit recognition of a sense of connectedness now discussed as social construction where the witches, Lady Macbeth, and even the 'dark night' (Act II, sc. iv) of Duncan's murder are implicated in the shaping of the characters and their perspectives.

Shakespeare's drama can be interpreted through this combination of theoretical lenses, but there remains a question about the availability heuristic in terms of what alternative ways of thinking or reasoning were available to Macbeth. Although it can be argued that this play, described as a tragedy, could not otherwise be so, ignoring this question could be argued as diminishing any critical analysis. In the unfolding of the drama it is easy to ignore the inevitability of Macbeth's tragic turn, even though the power of the supernatural is often referenced, making him the puppet of events rather than their author. At every turn the directions and next steps most readily available to Macbeth are the ones presented and followed, showing a relentless drive to dishonour and eventual calamity. That issue is one that has also characterised much of the education sector with ongoing privilege and inequities continuing over generations of students.

Implications for philosophies of schooling with a future focus

Having argued that ontologies are central to assigning meaning to any theory or language interaction it is pertinent to raise Wittgenstein's question: 'In what sort of context does it occur?' (1953, p. 161e). When theories as tools for interpretation, such as the ones referred to in this paper, are used in conjunction rather than separately, then policies that derive from them are more likely to be based on broader and deeper understandings. Many of the current societal threats exist because of the strength and pervasiveness of the discourses of measurement and the power of technologies that support these. Although what is loosely referred to as *big data* drives the style as well as the uptake of social media, policies that influence the provision and practice of schooling, even policies involving the now-pervasive use of digital devices, are less nuanced and context-sensitive than the artificial intelligence (AI) algorithms used by the corporations that benefit from the use of their products in schools. Lacking access to such capabilities, or sufficient rich data from up-to-date

qualitative studies, most of the day-to-day decisions that are made in schools are formulated in the context of long-standing discourses that do not address the complex interplays of truly future-focused schooling. Accepting social interconnectedness requires acknowledging that 'much of human cognition is distributed across many minds … [and]… can be enhanced through the development and use of more efficient tools and methods of intellectual collaboration' (Bostrom & Sandberg, 2009, p. 321). Combining expertise across several dimensions implies collaborating to not only discover areas of possible alignment and divergence, but also to use such collaboration to gain richer and deeper understandings, multiple perspectives on policies and practices. That represents a challenge to traditions of expertise and best practice and a call to encouraging more emergent practices by recognising those areas of education where simple measures are no longer appropriate because the future is by definition unpredictable, complex and manifestly requiring greater collaboration.

Epilogue: reflections

Writing this paper has effectively been a proof of concept exploring the viability of the argument contained within it. If it also engages the reader at some level, then to that extent the concept can be considered to be supported. Shifting focus from one theoretical position to another felt mostly like an invitation to find commonality and overlap rather than difference or distinctiveness between the various perspectives. Accordingly, I suspect that this process has illustrated the tendency to consolidate the ways of thinking that have become those that are most readily available for me. That is the main learning that I have gained. The conference theme was my starting point and my intention was to approach that theme in an open-ended manner, bringing a philosophical curiosity about the connections between the theories that have become my defaults for interpreting what I experience or read. Exploring what my existing lenses allow me to see has also persuaded me to continue to explore further, to bring a more critical gaze to the processes by which my realities are constructed and where those lenses are focused.

> Constructionism doesn't try to rule on what is or is not fundamentally real. Whatever is, simply is. However, the moment we begin to articulate what there is – what is truly or objectively the case – we enter a world of discourse – and thus a tradition, a way of life, and a set of value preferences. (Gergen, 2009, p. 222)

The main question this has raised for me is the one that I also wish to leave for any readers to ponder: *to what extent can the traditions and ways of being that have become default frames of reference for an individual remain open to change*?

Alternatively: *in what ways might future learning be constrained by prevailing discourses in the absence of bringing together divergent theoretical positions*?

Answers might benefit from addressing the echo-chamber effect that applies to any theories that are espoused, or perhaps examine whether that position might be just another illusion and that it might be the reverse: that in the field of education it is minds that become colonised by theories. Accordingly, I leave the last word to another proponent of social constructionism:

> Social constructionists are often not just interested in the causes of our ideas and the social forces at work on objects, but are interested in how best to understand a given kind, and in particular whether it is a natural or social kind. (Haslanger, 2012, p. 131)

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