

CHAPTER TWO

THE STORYTELLING SCIENCE PARADIGM: EVOKING THE TRANSFORMATIVE POWER OF INDIGENOUS ONTOLOGICAL ANTENARRATIVES IN CURIOUS CONVERSATION

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ABSTRACT

South African scholars, like most scholars in the developing world, have sold the idea that social constructivism is the gold standard of qualitative management research. In this chapter, we caution against this subordination to unquestioned conventions and offer a process relational ontology as an alternative to social constructivism that is often punted by most qualitative research programmes and textbooks. We also debunk the idea that ‘grounded theory’ exists by delving into epistemology and showing how science is ‘self-correcting’ rather than ‘tabula rasa’. Instead of boxing business ethics knowledge, as has been done by the case study gurus, we encourage business and organisational ethicists to own their indigenous heritage through storytelling science based on the self-correcting method underpinned by Popperian and Peircian epistemological thought. This chapter encourages business management researchers to move towards more profound ethical knowledge by refuting and falsifying false assumptions in each phase of the study, in a sequence of self-correcting storytelling phases. This is what Karl Popper called trial and error, and what

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C.S. Peirce called self-correcting by the triadic of Abduction–Induction–Deduction. We offer a novel method for accomplishing this aim that we call ‘Conversational Interviews’ that are based on antenarrative storytelling sciences. Our chapter aims to evoking the transformative power of indigenous ontological antenarratives in authentic conversation in order to solve immediate local problems and fill the many institutional voids that plague the South(ern)-/African context.

Keywords: Conversational interviews; true indigenous storytelling; storytelling science paradigm; abduction–induction–deduction; self-correcting epistemology; ‘Groundless’ theory fallacy

INTRODUCING THE STORYTELLING PARADIGM

As a scholar in the South African context located in the broader, more complex African context, it is important to consider the extent to which your research makes a difference to the world around you. One way to do so, as we suggest in this chapter, is to engage in *Conversational Storytelling Interviewing* (CSI). Many researchers are familiar with structured or semi-structured interviewing given their popularity and widespread availability in research method texts, so, we will not explain them herein. The more pressing question at hand is: what does it mean to do CSI that produces transformational *storytelling science* that results in positive impact? In essence, CSI is characterised by the following:

- A. CSI is an iterative back and forth between the storytellers (participants) and the story-listeners (researchers), or else, it devolves into interviewing-by-interrogation.
- B. CSI is dialogical or else it reduces dialogical diversity to narrow and oft-short-sighted monological narrative that is linear and one-dimensional thus committing the *Monological Fallacy*.
- C. CSI has to be *Dialectical*. By the term ‘dialectical’, we mean that it should not just conduct the *Thesis–Antithesis–Synthesis* narrative–counternarrative–metanarrative oppositions done in semi-structured interviews (if that is even possible). Instead, CSI is, at the very least, *Dialogical* and is even capable of executing the *Negation of the Negation* when deployed with proficiency.
- D. CSI is a way to study a multiplicity of storied social narrative ensembles. Nature, like society, is a multiplicity of diversity as it has various species and life forms. We therefore err in treating life as being humancentric by centring it around the one human ‘monolithic’ species through linear one-dimensional narratives whereas a biodiverse multispecies approach to storytelling is possible in the form of story ensembles that reflect the *actual* pluralised nature of reality (Haraway, 2016).
- E. CSI must go beyond mere ‘induction’ in isolation to include ‘abduction’ and ‘deduction’ as well thus forming the holistic *Abduction–Induction–Deduction* (AID) triad.

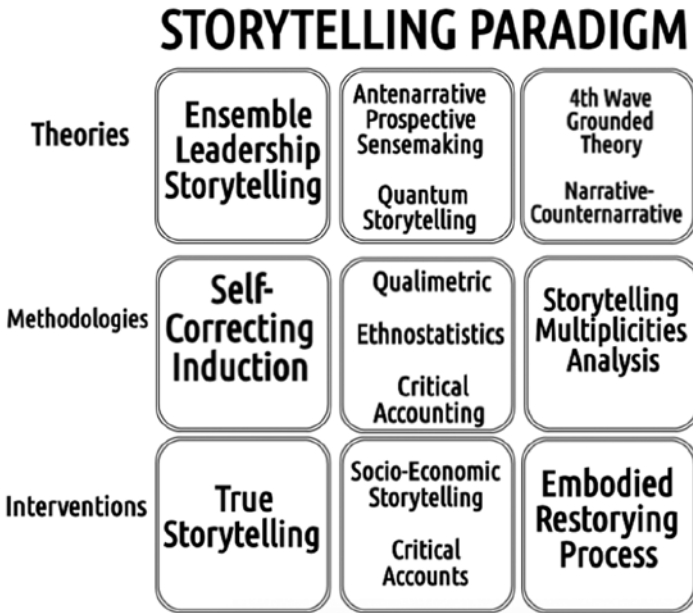


Fig. 2.1. The Storytelling Paradigm. Source: https://davidboje.com/cabrini/storytelling_paradigm_menu.htm (16:21, 01/03/2021) #2.

- F. *Self-correcting* CSI is one of several features of the broader *Storytelling Paradigm* that encompasses it as shown in Fig. 2.1, and it is *storytelling science* we would like you to learn from this chapter.

DOING SELF-CORRECTING STORYTELLING SCIENCE

In each self-correcting phase of ‘storytelling science’ (always lower case), there is a cycle of AID. Each ‘storytelling conversational interview’ begins with Abductions that are explored in the interview with Induction inference inquiry. Either from the get-go or after the first cycle, there is Deduction from theories and from theorising, and adjustments and new Abduction, then second cycle, more Induction, and in each cycle of self-correcting.

It is important because it is in Vol. 5 Section 580 that Peirce (1931/1960) actually uses the term ‘self-correcting effect of the induction’. That said, we must reiterate, it is only one part of the triad that Peirce is developing in his writing about the AID triad. By that, we mean the cycle of AID includes four tests. Self-correcting ‘storytelling science’ conversational interviews involve enacting from one to four tests:

1. Refutation test of self-reflexivity self-conversations we now call autoethnography.
2. Storytelling conversations with others to refute your own ‘auxiliary assumptions’ (as our friend David Trafimow, 2012, calls them).

3. Understanding the science and processes of Nature (and of other sciences) in relation to your research question.
4. Doing experiments and interventions to get your ‘abstracting’ closer to ‘grounding’ and by ‘rehistoricizing’ from your ‘futuring’ projects to test various ‘bets on the future’ pathways, as we like to call them.

We intend a ‘*little “s” science*’, instead of Big ‘*S Science*’. Big ‘*S*’ ‘*Science*’ was challenged by Jean-François Lyotard (1979/1984, pp. 15, 37, bracketed addition ours) with ‘delegitimation and nihilism’ and growing incredulity to the ‘Grand Narrative’ of ‘advanced [neo] liberal capitalism’; in ‘the partial replacement of teachers by machines’, he found ‘intolerable’ and therefore gave credulity for ‘breaking up of the grand Narratives’ into ‘thousands of little narratives’. Lyotard cites the work of Price (1963) ‘little science, Big Science’. There is ongoing hegemony between ‘Big Science’ and ‘little science’ as there is between ‘Big Story’ and ‘little story’. In Price (1963, p. 2), ‘Big Science is so large that many of us begin to worry about the sheer mass of the monster we have created’. Our book explores two approaches to overcome dualism of ‘Big Story’ over ‘little story’: (1) *dialogical* following work of Bakhtin (1981) and Freire (1970/2000) and the other (2) *dialectical* which Freire also pursued but differently than Bakhtin.

At the heart of the storytelling paradigm is *six antenarrative processes* which for ease of memory, we call the *six Bs*: *before, beneath, beyond, between, becoming, and bets on the future*. We are indebted to Marita Svane (2019), for her work in antenarrative, in particular, in work on the *beyond, the foregrasping*, so the five Bs (Boje, 2014, 2019b) become six Bs. The ethic of forecaring includes forehaving,

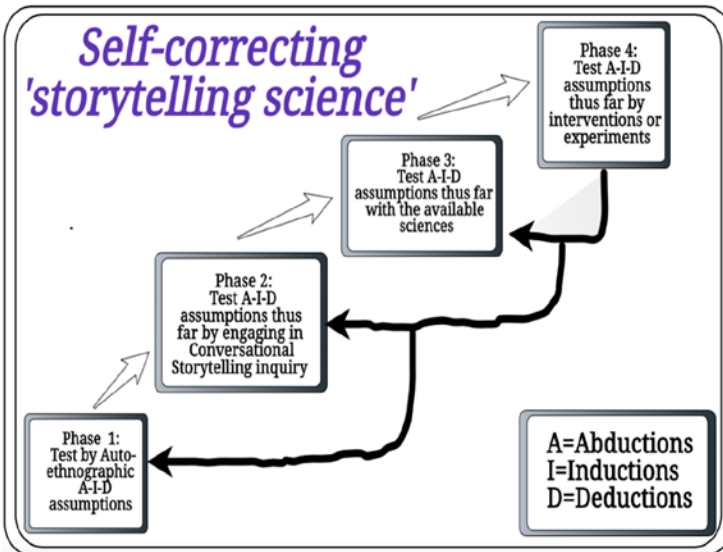


Fig. 2.2. Self-correcting Storytelling Science. Source: https://davidboje.com/cabrini/storytelling_paradigm_menu.htm (16:21, 01/03/2021) #19.

forestructuring, foreconceiving, foregrasping, and bets in the future (all made in advance, preparing this future rather than other futures to arrive). ‘Hermeneutic storytelling means a method of research interpreting the storytelling by “critical” questioning and investigating the facticity of the multiplicity of the storytelling and the habits of care’ (Boje, 2019b, p. 127).

It is time for antenarrating to do more ‘Grounding’ than ‘Abstracting’ and more ‘Futuring’ than ‘Rehistoricizing’ to create a paradigm shift in ‘storytelling science’. Western Ways of Knowing (WWOK) narratives have been obsessed with ‘Abstracting’, reducing lived experiences to simplistic, linear plots that are inadequate to ‘Indigenous Ways of Being’ (IWOB) and ‘Indigenous Ways of Knowing’ (IWOK) by storytelling (Rosile, 2016). We must emphasise that a ‘living story web’ in IWOB/IWOK is not that same as narrative–counternarrative in narratology. WWOK narratology has been all about linking some few events into linear plot form instead of *grounding* in the substance of the ontology of existence. Narratology has been obsessed with retrospective narrative sense-making (rehistoricising the past) rather than the work of futuring by prospective sense-making about *futuring* (Boje, 2001, 2008, 2011, 2014, 2019b). Recently, Karl Weick (2012) recognised the value of antenarrating, of prospective sense-making in its relation to his pioneering work retrospective narrative sense-making.

We no longer have recourse to the grand narratives – we can resort neither to the dialectic of Spirit nor even the emancipation of humanity as a validation for postmodern scientific discourse. (Lyotard, 1979/1984, p. 60)

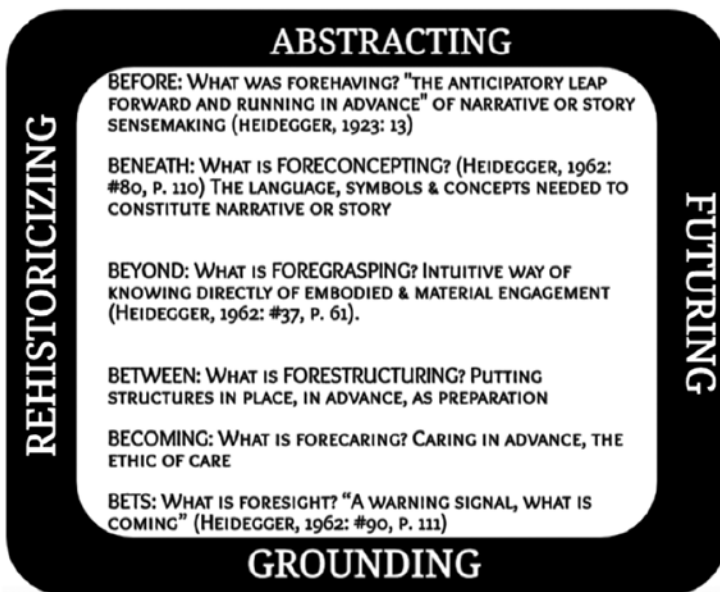


Fig. 2.3. Antenarrative Abstracting, Grounding, Futuring, and Rehistoricising.
 Source: https://davidboje.com/cabrini/storytelling_paradigm_menu.htm
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Our book introduces you to ‘little s’ ‘*storytelling science*’ paradigm shifts in theory–method–*praxis*, and ways to do theory, method, and *praxis*, in the ‘*ontological turn*’ to what we call ‘*ensembles of multiplicities*’ rooted in the works of Gilles Deleuze and Jean-Paul Sartre, both trying to amend Henri Bergson’s pioneering work on multiplicities. Ensembles of ‘little stories’ are dialogic, and many times dialectic to ‘Big Stories’ and ‘Grand Narratives’ as ensembles of multiplicity fracture and coalesce, absorb, and interpenetrate. Sartre’s (1960/2004) theory of *practical ensembles of multiplicities*, and Deleuze (1994, pp. 240–241) intensive multiplicity of *spatium* (or ‘intensive space ... a pure energy’) in ‘the theater of all metamorphosis or difference in itself which envelops all its degrees in the production of each’. The extensive multiplicity, the intensive multiplicity has a ‘virtual object’ of multiplicity at centre.

The four tests (as needed) are done in each AID cycle of self-correcting storytelling science. It is not the usual gathering a bunch of semi-structured interviews, then transcribing them, and coming up with a theme analysis to generate a typology (aka taxonomy). Rather, it’s a back-and-forth storytelling conversational sharing, where you actually write down your *abductive hypotheses BEFORE* the storytelling conversation (or participative immersion or experiment or intervention) and then do the Inductive inquiry of the co-sharing storytelling (back-and-forth), and Deductions from theory to local come *BEFORE* or *AFTER* each round of conversational interviews. It is therefore inadequate to stick to a protocol of semi-structured questions, since the theory assumptions (deductions), the inquiry (induction), and the propositional assumptions (abductions) can *CHANGE* from phase to phase. *The point we are making is to write it down, write out the AID as you go, not post hoc, after-the-fact.* For Popper what Peirce calls self-correcting is termed ‘trial and error’ of the scientific method, so we arrive closer to the truth (Popper, 1963, p. 318).

We are metaphysicians. Charles Sanders Peirce (1933–1937, Vol. 1, Section 129, hereafter 1.129, bracketed additions, our own) put it this way:

Find a scientific man [or woman] who proposes to get along without any metaphysics – not by any means every man [and woman] who holds the ordinary reasoning of metaphysics in scorn – and you have found one whose doctrines are thoroughly vitiated by the crude and uncriticized metaphysics with which they are packed.

In short, we are all metaphysicians. We are metaphysicians doing what we will call ‘*storytelling science*’ critically questioning metaphysics, submitted it to what Peirce calls ‘critical examination’. We are ontologists, and each ontology does a reduction to metaphysics. Various ‘*ontologies*’ reduce ‘*metaphysics*’ by their preferred particular ‘*Oakum’s Razor*’. There are consequences that we intend to study. Popper (1956/1983, p. 5) says he begins his classes on ‘scientific method’ by telling students: ‘scientific method does not exist’ and ‘subject matter’ does not exist, rather universities organise into a multiplicity of ‘administrative’ units whose *praxis* is ‘the myth of the subject’. In sum, scientific method is even more non-existent than the ‘non-existence of subjects’ (Popper, 1956/1983, p. 6). A paradigm is even more non-existent, as Popper (1994) later concludes in the book, *The Myth of the Framework*.

Therefore, ‘scientific method, and paradigm are not a way of finding scientific truth’, nor another to ‘*finding* a true theory’ (Popper, 1956/1983, p. 6). And there is no *method* of finding a true story, and no *praxis* of finding ‘absolutely’ true story. Rather ‘scientific method’ in *theory–method–praxis* consists of ‘*kind of criticism*’ with ‘critical conversation’ to refute or disconfirm the fake stories, the fake news the fake frameworks, and the ‘system of assumptions’ and all the ‘isms’ such as ‘positivism’ and ‘inductivism’ used to justify the ‘myth of the framework, itself’ (Popper, 1956/1983, p. 17), which currently in the United States means everyone can have a full-time job. That is why Popper does ‘critical metaphysics’ testing conjecture after conjecture that is a kind of self-correction to get ‘*closer approximation to the truth*’ by ‘*critically discussing*’ to show what is ‘*not true*’ (Popper, 1956/1983, pp. 20, 23, 25).

Oakum’s Razors prefer a choice of theory with the simplest explanation, to more complex ones. Each reduction results in fallacy. In inductive fallacy, ontologies get reduced to epistemology; ways of ‘*Being*’ become mere ways of ‘*Knowing*’ (Boje, 2019b). Physics envy reduces all other sciences rational/nature ontology, the physics fallacy. Sociology can get reduced to psychology and vice versa. Early anthropologists rejected indigenous metaphysics, called ‘animism’ in favour of WWOK. Gregory Cajete (2000) defends ‘animism’ as ‘Native Science’ in IWOK that comes from observing and revering Nature, including its ‘spiritual ecology’ (Cajete, 1993, 1994, 1999), how everything is living, spiritual, vibrant energy, and interconnecting with everything else.

Positivism commits several fallacies. ‘Logical positivism’ is double reduction of metaphysics to logical rationality and to positivism of confirmations without refutations. ‘Logical empiricism’ adds it metaphysics, only what is measured does actually exist. In business storytelling, all ethics gets reduced to instrumentalism and so on. These are reductions of the ‘metaphysics’ we will assert each to be ‘storytelling science’ is in need of various refutation tests. We will get to these. Metaphysics for Emmanuelle Kant (1785/1993, p. 1, #388) is twofold:

- i. Metaphysics of Nature.
- ii. Metaphysics of Morals.

Kant’s (1785/1993) review of classic Greek *sciences* is they are divided into three areas but have an additional set of ontologies to reduce metaphysics with their particular reductionistic *Oakum’s Razors*. The three science-ontologies and their correct understanding of necessary subdivisions reduce one or both of the Kantian twofold metaphysics:

1. Physics, a science grounded on:
 - a. Laws of Nature applied to differences of some Object
 - b. Laws of Rationality
2. Ethics, a science grounded on Universal Reason without regard to Object differences:
 - a. Laws of Practical Freedom
 - b. Laws of Morals
3. Logic, a science grounded on Reason without Empirical Part.

Kant's storytelling of sciences and metaphysics is that three ontologies have emerged since Classic Greek. In his historical reduction, there are antecedent metaphysical roots he does ignore.

4. Rational Philosophy:
 - c. Material Philosophy grounded in understanding Object
 - i. Grounding on Laws of Nature
 - ii. Grounding on Laws of Practical Freedom
 - d. Grounded in understanding of Reason
5. Natural Philosophy:
 - e. Empirical part grounded in Experience
 - f. Laws of Nature as Object of Experience
6. Moral Philosophy grounded in Experience:
 - g. Empirical part
 - h. Laws of Morals.

This background sketch of metaphysics brings us to our subject area in management and organisation studies. We propose a self-correcting AID semiotics to get closer to approximations of 'true', knowing we are never arriving at 'absolute truth' because of our own fallibilism.

7. 'Industry remains in the greatest barbarism' ([Kant \(1785/1993\)](#), p. 2, boldness, ours), one we contend is bringing us past tipping points of extinction ([Boje, 2019a, 2019b, 2019c](#)).
 - a. Empirical part is separated from the Rational part
 - b. Empirical Physics preceded sometimes by a Metaphysical part
 - i. Therefore a ground of obligation in the a priori
 - ii. Therefore a ground of obligation in the practical Anthropology of experience
8. Self-Correcting 'storytelling science' with several metaphysical variations of dialectic, anti-dialectic, dialogic, antialogic, antenarrative, anti-narrative from these sources:
 - a. [Paulo Friere's \(1970/2000\)](#) oppositions of dialectical and anti-dialectical with dialogical and anti-dialogical
 - b. David [Boje's \(2011\)](#) 'antenarrative' and 'anti-narrative' and colleagues' ([Boje, 2011](#); [Mølbjerg Jørgensen & Boje, 2018](#); [Boje & Sanchez, 2019a, 2019b](#)) antenarrative and anti-narrative notions and implications for 'quantum storytelling' ([Boje, 2014, 2016a](#); [Boje & Henderson, 2014](#); [Boje, Svane, & Gergerich, 2016](#); [Henderson & Boje, 2016](#))
 - c. Mikhail [Bakhtin's \(1981, 1990, 1993\)](#) anti-dialectical approach to several dialogisms ([Boje, 2008](#)):
 - i. Polyphonic
 - ii. Stylistic
 - iii. Chronotopic
 - iv. Architectonic

- d. Charles Sanders Peirce's (1933–1937) 'self-correcting' semiotics of triadic of AID (Boje, 2014)
- e. Gilles Deleuze's (1990, 1991, 1994, 1997; with Deleuze and Guattari 1987, 1994) anti-dialectics and retheorising Bergson's (1960, 1988) multiplicities as assemblages of intensive, extensive, and virtual multiplicities (Boje, 2019b)
- f. Karl Popper's (2008) 'zigzag' of scientific method in the dialectical (thesis–antithesis–synthesis) problem-solving to get closer to correct solution without falling into inductive fallacy in a moral ontology of middle ground between pessimism (Marxism) and optimism (positivism), and 'Metaphysical Realism'
- g. Henri Savall and colleagues' 'socio-economic' approach of dialectics (triadic of Peircean 'abduction-induction-deduction' and qualimetrics (triadic of qualitative–quantitative–financial) in moral ontology of socially responsible capitalism (Boje, 2018a; Savall, Peron, Zardet, & Bonnet, 2018)
- h. Hannah Arendt's (1978) series of dialectic cycles of thesis–antithesis–synthesis that become spiral of self-correcting
- i. Jean-Paul Sartre's (1960/2004) dialectics of 'negation of the negation' in a practical ensemble of multiplicities as applied by Rosile, Boje, and Claw (2018) to ensemble leadership
- j. Judith Butler's dialectics of 'negation of the negation' as a way of undoing gender and as applied by Riach, Rumens, and Tyler (2014) to Boje's (2001, 2008) 'antenarrative' and use of 'anti-narrative interviewing method' applied to Butler's (2005) giving account of oneself and (2004) undoing gender
- k. Slavoj Žižek's (2012) dialectics of 'negation of the negation' as a way to resurrect Hegelianism in relation to the Lacanian psychoanalytic.

How does this metaphysical ensemble work out in 'storytelling science'? We propose doing refutations to attain Popper's (1956/1983, p. xxv) 'metaphysical realism' by being critical of the stories, narratives, anti-narratives, and antenarratives of 'small s' 'storytelling science' and their relation to 'Grand Narratives' ['Master Narratives' & 'Petrified Narratives'] of 'Big S' 'Science Narratives'. We give seminars at universities around the world to help dissertation (and thesis) students do what we are calling 'little s' 'storytelling science'. Karl Popper (1956/1983, p. 13) was critical of 'Big Science' with a 'capital S' because of his life-long debates with 'Logical Positivism' of the Vienna Circle becoming the 'gospel of truth'. The Vienna Circle got its revenge on Popper by starting the myth that Popper is one of them, just one more logical positivist. Popper (1956/1983) countered that he is a metaphysical realist, and his 'metaphysical realism' (p. xxv), a postscript to his first book in 1935 (*The Logic of Scientific Discovery* (LScD) which did not get translated from German to English until 1959. As the story goes, Popper had to enter the English-speaking world, heading first to New Zealand, and then to the United Kingdom, in order to refute the myth of his logical positivism, and wrote his postscripts to the LScD. Popper's 'metaphysical realism' begins and ends with *fallibilism*, as does the work of Charles Sanders Peirce. Our purpose in writing this book is to show how the notion of *fallibilism*

means that while truth is the self-correcting aim of ‘little *s*’ ‘storytelling science’, the best we can do is show a theory–method–*praxis* is *not true* by the successive self-correcting tests:

1. Refutation test of *self-reflexivity conversations (autoethnography of your own living stories)*.
2. *Critical cross-disciplinary storytelling conversations with others to test and refute your own theory assumptions, abductive hypotheses, assumptions of your inductive tests.*
3. *Understanding scalability processes of nature (and what various sciences say about your research question)*, ‘for example, an area of the earth, together with its climate, hydrography, orography, flora and fauna, etc.’ (Sartre, 1960/2004, p. 43).
4. *Doing experiments and practice interventions to get closer to solutions to super-wicked problems such as relations of water cycle and carbon cycle in global heating of the atmosphere since the industrial revolution, and how this is ushering in more and more crises are larger and larger scale and scope.*

We aim for ‘true storytelling’, but the self-correcting ‘storytelling science’ continues, and in humility of fallibilism, we never quite get to ‘absolute truth’ so we keep testing our own assumptions. We can never justify our ‘storytelling science’ *theories–methods–praxis* reaches *truth*. On the other hand, in existentialism, ‘before there can be any truth whatsoever, there must be an absolute truth; and this one is simple and easily arrived at [by induction]’ it’s on everyone’s doorstep ‘it’s a matter of grasping it directly’ by intuition (Sartre, 1947, p. 43). We include ‘True Storytelling’ (Larsen, Bruun, & Boje, in press) in our exemplars of a storytelling paradigm, as one of the ontology interventions. Karl Popper, Charles Sanders Peirce, and our French colleague, Henri Savall, are in agreement about self-correcting as a science, and that *critical conversations* with *self* and with *others*, observations of *the multiplicities ensembles of Nature*, and if all else fails, actual experiments and interventions in *praxis* are required to refute *fake storytelling* and get closer to the ‘true storytelling’ (Boje, Larsen, & Bruun, 2017; Larsen, Bruun, & Boje, in press) while maintaining the humility of *fallibilism*. Peirce (1933–1937, 1.141) says this about fallibilism:

All positive reasoning is of the nature of judging the proportion of something in a whole collection by the proportion found in a sample. Accordingly, there are three things to which we can never hope to attain by reasoning, namely, absolute certainty, absolute exactitude, absolute universality. We cannot be absolutely certain that our conclusions are even approximately true; for the sample may be utterly unlike the unsampled part of the collection. We cannot pretend to be even probably exact; because the sample consists of but a finite number of instances and only admits special values of the proportion sought. Finally, even if we could ascertain with absolute certainty and exactness that the ratio of sinful men to all men was as 1 to 1; still among the infinite generations of men there would be room for any finite number of sinless men without violating the proportion. The case is the same with a seven legged calf.

For example, for the longest time, there was the theory and belief: ‘*all swans are white*’, but it was refuted when in May 1934, in Vienna, a black swan stood

between 10 and 11 a.m. for all to see (Popper, 1956/1983, p. xx). Fallibilism of certainty, exactitude, and universality is which ‘little s’ ‘storytelling science’ is self-critical, and self-reflexive about the metaphysics of its own assumptions. For now, as a starting point, you can imagine dialectical and dialogical, as well as anti-dialectical and anti-dialogical in a field of forces we call ensembles of multiplicities (Rosile et al., 2018). There are multiple ensembles constituting multiplicities, resisting other multiplicity ensembles, in a dynamic field in space (*spatium*), in time (or time out-of-joint), and in mattering. One take on space-time-mattering is separation, but recently Barad (2007) has taken out the dashes (-‘s) and focusses on *inseparability of spacetime mattering* (no – ‘s) in her quantum theory of ‘agential realism’, the *intra-activity* of materiality *with* discourse.

Popper (1956/1982) has a different paradigm of quantum theory. Whereas Barad’s socio-materialism of *agential realism* declares Neils Bohr the victor over Werner Heisenberg, in their Copenhagen interpretation of quantum theory, Popper sides more with Einstein, and systematically refutes what he finds as the ‘end-of-the-road’ thesis of Bohr, Heisenberg, and several other quantum mechanics physicists. Popper’s standpoint is *critical metaphysics*, a challenge to all the quantum theories, including some refutations of theories by Einstein. His contention is that to declare a winner is to declare the end of history, and that denies the possibility of new theories coming after that get us to ‘*a closer approximation to the truth*’ (Popper, 1956/1983, p. 20), but in the humility of *fallibilism*, the road of discovery does not end. Peirce (1931/1960, Vol. 6) is also focussed on ‘*scientific metaphysics*’, and in Vol. 5 (Section 587) includes quantum theory, ‘so that as far as purely inductive evidence is concerned we are very very far from being entitled to think that matter is absolutely permanent’.

Peirce (Vol. 8.110), concerning the relation of science, mathematics, and metaphysics, says they share this reasoning by preconceived idea, that

never reaches any conclusion at all as to what is or is not true of the world of existences. The metaphysician, on the other hand, is engaged in the investigation of matters of fact, and the only way to matters of fact is the way of experience

and such is the ontological metaphysics of this American Pragmatist. And to deny metaphysics of science, its theory–method–*praxis* is what Peirce calls ‘*reductio ad absurdum*’ (8.110). On this point, Popper the ‘metaphysical realist’ and Peirce the ‘metaphysical pragmatist’ do agree, and they also agree that to reduce abduction and deduction to induction experiencing is ‘*reductio ad absurdum*’. Both also agree that refutation, not mere accumulation of confirmations, is essential to metaphysics and to science, and much science begins with metaphysical conjectures. And this is what our indigenous scholar and friend, Gregory Cajete (2000) contends that there is a ‘Native Science’, and studies of the experience of nature need critical discussion by each tribe, in place, in time, and in the mattering observed. It’s the arrogance of colonialist science appropriating ‘native science’ and making it ‘Big Science’ that makes us appreciate the metaphysics in all sciences.

We find that Popper would agree with Peirce (1931/1960, 7.114) writing on ‘scientific method’ ‘It is the *post hoc ergo propter hoc* fallacy’ by ‘post hoc’ reducing Abduction (metaphysical guesses and hypotheses) to the Inductive

(experiences and observed fact) and claiming Deductive to be universal that is the fallacy of inquiry. 'Thereupon we make experiments, or quasi-experiments, in order to find out how far these new conditional expectations are going to be fulfilled' by AID triadics 'to bring the predictions to the test' (7.115). Peirce defines quasi-experiment in footnote to 7.115 as

the entire operation of producing or of searching out a state of things to which the conditional predictions deduced from hypothesis shall be applicable and of noting how far the prediction is fulfilled.

Popper would no doubt agree with Peirce that there is still the humility of fallibilism, because in a new test of critical conversations with others, observations of nature, and some new experiment, a new AID, a new theory–method–*praxis* will be a better approximation to true, but the road does not end.

Gilles Deleuze (1994, ff 14, p. 331, 'Notes to Chapter 5'), by contrast, aims to solve problems, by addressing multiplicities and their assemblages. He gives his derivation of Bergsonian 'duration' as a 'multiplicity' or a divisibility which does not divide divisibility which does not divide without changing its nature' and cites Bergson (1960, 84 ff). Deleuze goes on to say this is especially the case in Bergson (1988, pp. 206–207), and Deleuze (1994, ff 14, p. 331, italics original) continues with detailed elaboration:

There is therefore not only a difference in kind between duration and extensity, but duration is distinguished from extensity in the same manner as *differences in kind* are distinguished from *differences of degree* (two types of 'multiplicity'). Nevertheless, in another manner duration is indistinguishable from the *nature of difference* and, as such, includes all the degrees of difference: hence the reintroduction of intensities within duration, and the idea of a coexistence in duration of all the degrees of relaxation and contraction (the essential thesis of *Matter and Memory* and *La Pensee et le mouvant*).

Deleuze's (1994, p. 101) psychoanalysis relies on 'Melanie Klein's good and bad object', on 'Lacan's object', and on 'Freud's pre-genital sexuality', and it's a conversation with Bergson's (1960) *Time and Free-Will* and Bergson's (1988) *Matter and Memory* schema of the two centres, the 'real and the virtual' 'shreds of pure past' in the quality of the present and its passing. The history of 'pure past' is illusion, 'at the heart of forgetting' (Deleuze, 1994, p. 102). The 'little storytelling' in its social multiplicity that are 'multiplicities of imagination and phantasy, the biological multiplicities of vitality and "monstrosity", the physical multiplicities of sensibility and sign ...':

[...] Determines sociability as a faculty, but also the transcendent object of sociability which cannot be lived within actual societies in which the multiplicity is incarnated, but must be and can be lived only in the element of social upheaval (in other words, freedom, which is always hidden among the remains of an old order and the first fruits of a new). (Deleuze, 1994, p. 193)

We live in 'little story' discord those 'will o'-the-wisp, 'virtual trials of fire, from one faculty to another', without ever having the homogeneity of that natural light which characterises 'common sense' of 'will to power' of 'Big Story' and 'Big Narrative' (Deleuze, 1994, p. 194). Deleuze (p. 208) says our common sense opposes the virtual and the real, but following Proust, 'the *virtual is fully real*

in so far as it is virtual. Repetitions of multiplicities can be ‘intensive’ and turn ‘extensive’ (p. 24), and ‘coextensive with time’ (p. 76) or vice versa, and each can turn ‘coextensive with virtuality’ (p. 193) of the Idea. Deleuze (1994) is doing ensembles of multiplicities differently than Sartre:

While space may be irreducible to concepts, its affinity with Ideas cannot nevertheless be denied – in other words, its capacity (as intensive *spatium*) to determine in extensity the actualization of ideal connections (as differential relations contained in the Idea). (p. 231)

He pushes the relation of intensive, extensive, and virtual multiplicities to a limit where qualitative and quantitative deterritorialise and reterritorialise one another by rather crude resemblances (Deleuze & Guattari, 1987). Deleuze (1994, p. 242) put it this way calling forth Nietzschean memory of ‘eternal return’:

However, whether astronomical or physical, extensive or qualitative, this interpretation of eternal return has already reduced the identity that it presupposes to a simple and very general resemblance: for the ‘same’ qualitative process, or the ‘same’ respective position of the stars determine only very crude resemblances among the phenomena they govern.

It is this ‘double differentiation’ of qualitative with quantitative we find most intriguing understanding of *enveloped* ‘little storytelling science’ ensembles of multiplicities in relation to *enveloping* ‘Big Storytelling Science’ ensembles of appropriative and colonising multiplicities. Foucault is right because we are in the Deleuzian century:

One of these repetitions is of the same, having no difference but that which is subtracted or drawn off; the other is of the Different, and includes difference. One has fixed terms and places; the other essentially includes displacement and disguise. One is negative and by default; the other is positive and by excess. One is of elements, extrinsic parts, cases and times; the other is of variable internal totalities, degrees and levels. One involves succession in fact, the other coexistence in principle. One is static; the other dynamic. One is extensive, the other intensive. One is ordinary; the other distinctive and involving singularities. One is horizontal; the other vertical. One is developed and must be explicated; the other is enveloped and must be interpreted. One is a repetition of equality and symmetry *in the effect*; the other is a repetition of inequality as though it were a repetition of asymmetry *in the cause*. One is repetition of mechanism and precision; the other repetition of selection and freedom. One is bare repetition which can be masked only afterwards and in addition; the other is a clothed repetition of which the masks, the displacements and the disguises are the first, last and only elements. (Deleuze, 1994, p. 287)

We are coming out of a ‘*linguistic turn*’ that has dominated ‘storytelling science’ far too long. We are grasping a pendulum turned to the constituting of the future. We write about what Lyotard (1979/1984, p. 22) calls ‘little splinters of potential narratives’ as *antenarrative processes the splintering ante (before)*, as (*bets on the future*), as (*between*), as (*beneath*), as (*becoming*) and (beyond) processes constituting narratives and stories. Boje (2001, 2008, 2019b) and Svane (2019) ask six B-questions based in Heidegger (1923, 1962) fore-notions:

1. BEFORE: What was forehaving? ‘the anticipatory leap forward and running in advance’ of narrative or story sense-making (Heidegger, 1923, p. 13).
2. BENEATH: What is FORECONCEPTING? (Heidegger, 1962, #80, p. 110)
The language, symbols, and concepts needed to constitute narrative or story.

3. BEYOND: What is FOREGRASPING? Intuitive way of knowing directly of embodied and material engagement (Heidegger, 1962, #37, p. 61).
4. BETWEEN: What is FORESTRUCTURING? Putting structures in place, in advance, as preparation (Heidegger, 1962).
5. BECOMING: What is forecaring? Caring in advance, the ‘ethic of care’.
6. BETS: What is foresight? ‘A warning signal, what is coming’ (Heidegger, 1962, #90, p. 111).

Not just totalising the will to power in universities but also in corporations and governments as people have practically nowhere ‘the power to decide what the budget of their institution will be; all they can do is allocate the funds that are assigned to them, and only then as the last step in the process’ (p. 50). In neoliberal socio-economics, institutions of every stripe are on ‘the quest for performativity’ (p. 54), and we now work in ‘a politics of totalitarian surveillance’ (p. 72) called ‘outcomes assessment’ or ‘digital measures’ as ‘scientific knowledge and the capitalist economy’ fusion into the ‘Big Performative University’, the ‘Big Corporate University’, the ‘Big Social Media University’, and the ‘Big Technology University’ is more than just turns of language, semiotics, and culture, and there is also socio-materiality at every turn:

Language has been granted too much power. The linguistic turn, the semiotic turn, the interpretative turn, the cultural turn: it seems that at every turn lately every ‘thing’ – even materiality – is turned into a matter of language or some other form of cultural representation. (Barad, 2003, p. 801, boldness ours)

We are intellectually, it may be said, the prisoners of our language: we cannot think except in terms of theories (of substance, or of space and time, for example) which, unknown to us, are incorporated in our language; and we cannot escape by our own efforts – for example by means of a critical discussion – from our prison, for the critical discussion would have to be conducted with the help of our language; and it would therefore remain within the prison.... It seems to me there that there is a great deal in this doctrine of imprisonment, but that its consequences are exaggerated ... We may succeed in our own critical efforts in breaking down one or another of our prison walls ... it largely consists in our intellectual blindness to the prison walls. (Popper, 1956/1983, p. 16)

We are *critters* (critical scholars of ‘little storytelling’) in the ontological turn from Abstracting to Grounding, and from Rehistoricising to Futuring (all four are important, but now out of balance). In the Deleuzian century, doing critical storytelling science, breaking free of language prisons, and getting grounding in socio-material, in ecological crises, are relevant to dealing with climate warming. Like Nietzsche (1968, p. 550, bracketed addition ours), our standpoint is the world is what we call ‘quantum storytelling’:

[...] A monster of [quantum] energy, without beginning, without end; a firm iron magnitude of force that does not grow bigger or smaller, that does not expend itself but only transforms itself; as a whole, of unalterable size, a household without expenses or losses, but likewise without increase or income’ enclosed by ‘nothingness’ ... with an ebb and a flood of its forms’ out of the simplest forms striving toward the most complex ... *This world is the will to power – and nothing besides!*

The *ontological turn* is from humans are the centre of the universe to a post-humanism ethics, a respect for all species to have what is needed to survive. Here are some summary points for would-be Baradians:

1. Barad uses a post-humanist storytelling of discursive practices, materiality, and the relationship between them, rather than just humanist accounts.
2. Storytelling is agentic realism, when it is the *intra*-activity of materiality *with* discourse. It is never interaction, always *intra*-activity.
3. Concept of ‘ethico-onto-epistemological matter’ (Barad, 2008, p. 333) in inseparability of knowing–being–doing entanglements
4. Barad treats duality as a both/and ontology and dualism as an either/or epistemology.
5. There are agential cuts (dualities like subject vs object, internal and external, animate and inanimate, space vs time, spacetime vs mattering) in doing a method, telling a narrative or story that create self and othering.
6. An apparatus (such as research method, a survey, an interview protocol, a software for doing quantitative narrative analysis) makes agential cuts.
7. It’s never space, time, matter, but rather inseparability entanglement of *space-timemattering* in iterative reconfiguring.

We in this book will argue the Baradian *spacetimemattering entanglement of iterative configuring* relates to a new method inspiration we retrieve from C. S. Peirce, called *self-correcting induction*, or what Popper calls correcting our fallibility by testing our conjectures of the new, to have ‘little s’ ‘science’. Put simply instead of doing a bunch of interviews, and *post hoc* locking yourself in a room to fathom a typology, *in advance* one writes out abductive hypotheses *ante-to-going to the field*, then does a round of a couple of or several *storytelling conversations* of inductive inquiry, and writes up the findings, while being self-critical and self-reflexive about the deductions. This *abductive–inductive–deductive cycle* is done several times more until you have some confidence you have sampled enough to understand the population. This way you move from ‘crude induction’ to some combination of ‘quantitative induction’ what is between the ‘qualitative induction’ of self-correction and learning about the whole.

By ‘little s’ ‘storytelling science’, we mean both ‘Native Science’ (Cajete, 2000) of IWOK and IWOB of spiritual ecology, and the ‘Modern’ ‘Big S’ ‘Science’ of WWOK in which as Nietzsche (1968, footnote 39, p. 45) says, ‘God is Dead’ and so to the Pantheism of spirituality of caring for life itself. Barbara Nussbaum (2003) writes reflections on Ubuntu, and South African culture in the Americas, and how people in the West, the WWOKer’s receive negative and limited narratives of African people through the media: images of ethnic wars, dictator leaders, famine and AIDS, but know nothing of Ubuntu. Mzamo Mangaliso (2001) told the Academy of Management about Ubuntu, its inclusive, holistic, and emancipatory ways of Being-in-the-world. Of course, WWOKers cannot understand Ubuntu ontology and wish like Douglas Taylor to deontologise it into a rule-based framework for ethical business decisions, so CEOs can learn to distinguish

right from wrong. When did CEOs or Business School deans, adopt Immanuel Kant’s deontology of ‘good will’ in their decision-making?

I (David) asked Ubuntu scholar, Andani Thakhathi, to educate us. He told me (David) it’s a storytelling ontology that reinvigorates the existential and relation processes of Being he sees in my own work (Boje, 2019b). Ubuntu is African IWOK, a relational ontology, and not some deontology from Kant’s library. Andani summed it up with a quote from Arch Bishop Emeritus Desmond Tutu (2012, p. 34):

Ubuntu is very difficult to render into a Western language. It speaks of the very essence of being human. When we want to give high praise to someone we say, ‘*Yu, u nobunto*’; ‘Hey so-and-so has *ubuntu*’. Then you are generous, you are hospitable, you are friendly and caring and compassionate. You share what you have. It is to say, ‘My humanity is inextricably bound up in yours’. We belong in a bundle of life.

Somebody tell Trump, virtue is its own reward, that his ‘virtual wall’ has ‘real consequences’ for children and families, rivers and wildlife. Send him a copy of Kant’s categorical imperative, but tell him *Ubuntu* is ontology, about *being caring* and *being compassionate* because ‘we all belong in a bundle of life’.

PROPAGANDIST STORYTELLING AND THE CASE OF DONALD TRUMP

There is rampant mendacious propaganda become virtual objects: leaders not telling the truth, untruthful ‘fake’ storytelling organisations, disingenuous politics, hypocritical ‘triple bottom line’ sustainability reporting, fraudulent publish and perish activity of ‘Big S’ ‘Big Science’, double-dealing economics,

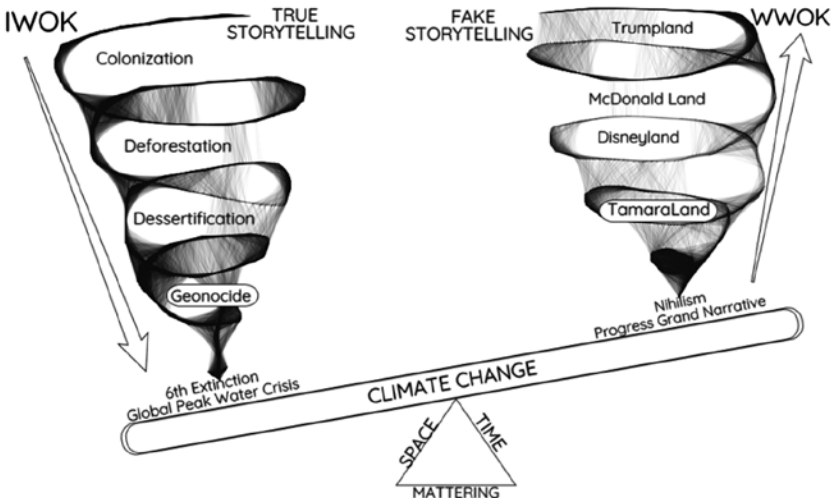


Fig. 2.4. WWOKer’s Western and IWOKer’s Indigenous Storytelling Science Imbalance. Source: <https://davidboje.com/Canterbury/> (17:56, 01/03/2021) #3.

Janus-faced legal system, and duplicitous fake news. Nihilism is an extreme position when we no longer believe in the ‘immortality of nature’ or a ‘belief in God and an essentially more order becomes untenable’ and we have ‘nihilism’ and ‘mistrust any “meaning” in suffering indeed in existence’ (Nietzsche, 1968, #55, p. 35). This is the existential crisis of TrumpLand! It is when the natured world, is what are calling ‘ensembles of multiplicities’ which we try to interpret with ‘True Storytelling’ by refuting the ‘Fake Storytelling’, and too often this reveals nihilism, and ‘it now seems there is no meaning at all in existence, as if everything were in vain’, except for the ‘will to live’ (Nietzsche, 1968, #55, p. 35) or to escape the nihilism, with Schopenhauer, into the fine arts. We offer this image of the downward spiral of IWOK ‘true storytelling’ colonisation by the upward spiral WWOK ‘Fake Storytelling’ in TrumpLand.

TrumpLand is the monological counternarrative to systems of belief and faith, the collapse of ‘previous valuations’ of dynamic multiplicities into interpretation of existence, the present-day *TrumpLand-Nihilism*. TrumpLand is the expansive spiralling iterations of McDonaldLand, DisneyLand, and TamaraLand (Boje, 1995). TrumpLand is the ultimate theatre of global capitalism (Boje, 2017a), a ‘comedy without bringing it closer to a solution’ and ‘without end or aim’ (Nietzsche, 1968, #55). Maurice Yolle (2019, in review) puts it this way:

Populist cynical frames tend towards post-truth and post-fact ..., embracing fake-news and/or lies/disambiguation ... masked by duplicity, misdirection, willful misrecognition ..., and conditioning repetitive sound bites ... that together create a populist playbook

Withdraw from the Paris Climate Agreement, trash the Environmental Protection Agency, declaring national emergency to not just construct the wall but to use Homeland Security to waive the Clean Water Act, Clean Air Act, and all laws of environmental protection. Trump’s wall for Native Americans is an imaginary line ‘created by colonial powers’ along the US–Mexico border that is ‘homelands of 36 federally recognised sovereign tribes’ of modern-day New Mexico, Texas, California, Arizona, and Northern Mexico.¹ Native rights are being violated by Trump’s wall that keeps native peoples from spiritual, historical, and cultural access to sacred lands. The official narrative is federal law, and treaties affirm native people’s rights to cross United States and Mexico, and Mexico and Canada. In practice, there are barriers, delays, long detours, and arbitrary paperwork tests, or event being asked to perform a Native ceremony with a song or dance, to confirm identity.

TrumpLand is the ‘most paralyzing idea’ the ‘progress Grand Narrative’, particularly ‘when one understands that one is being fooled and lacks the power not to be fooled’ (Nietzsche, 1968) by an alleged conman, and the Mueller report may never be released to the public. We live today in TrumpLand, an ‘existence without meaning or aim, yet recurring inevitably without any finale of nothingness’ ‘the eternal recurrence’ of the tyrant (Nietzsche, 1968). Every generation it seems has conditions of multiplicities in which there is an ‘eternal return’ of leaders negating life and we come to terms with the collapse of belief in some end goal, some cause-and-effect system which is ruled by Adam Smith’s invisible hand. Downward spiralling iterations of Colonisation, Deforestation, Desertification,

and more Genocide are collapsing into Sixth Extinction (Boje, 2019b) and the Global Peak Water Crisis (Boje, 2019b) while WWOKers keep searching for the last of the Peak Oil, stuck in the past with their death grip.

INDIGENOUS STORYTELLING AS AN EMPOWERED ANTENARRATIVE

It is the dialectical antithesis counternarrative that brings back spirituality of the pantheism for it to ‘compels a faith in the “eternal recurrence”’ a belief in Mother Nature (Nietzsche, 1968). How is this world, this ensemble of multiplicities constituted? Nietzsche (1968, #55, p. 36) asks, ‘Can we remove the idea of a goal from the process and then affirm the process in spite of this?’ IWOK and ‘True Storytelling’ are imbalanced by WWOKers upward-spiralling ‘Fake Storytelling’. What are these two storytelling paradigms balanced upon? It is nothing other than spacetime mattering. For WWOKers space, time, and mattering are separate so positions in space, machine time linearity, and mattering of dualities like cause and effect, subject and object, Western science progress narrative and indigenous animism story can be sustained. For IWOKers as for Baradians, *spacetime mattering* are quantum entanglements, and inseparable, and instead of cause and effect and other subject–object dualities, there are multiplicities, ‘ensembles of multiplicities’ as Grace Ann and David like to call them.

A book on doing ‘little s’ ‘storytelling science’ is a paradigm shift, not about single or multiple cases, but rather doing ‘self-correcting storytelling science’ in a series of AID cycles of self-correction inspired in the work of Charles Sanders Peirce, Hannah Arendt, Karl Popper, Henri Savall, and Jean-Paul Sartre. In this ambitious project, we get to the bottom of TrumpLand, and staring at the abyss of its ‘Fake Storytelling’, we welcome with a sense of triumph an exit from its nihilism, the seemingly powerlessness of today’s storytelling mendaciousness ‘against nature’ including all its animals, plants, and aquatic and biotic species. We live in yet another eternal return of ‘violent despots’ and ‘desperate embitterment against existence’ called TrumpLand (Nietzsche, 1968, p. 37). The common people elected Trump as their fearless leader so they would not have to reflect on their own complicity against nature, that the widespread morality is a mask for an opposite valuation, a ‘will to power’. As one studies the common people and the oppressors, and by most any calculation, we find four billion people that are in experiencing Sixth Extinction without a Planet B, yet we continue to seek oil for energy (Boje, 2019a) and water for life (Boje, 2019c). We face extinction of a million species, including our own humankind. Surely you see the need for a new Storytelling Science, one forged in the ontological turn, so we may study existential reality (Boje, 2019b).

Does Nietzsche overstate will to power? His thesis ‘there is nothing to life that has value, except the degree of power’ that once with ‘morality guarded the underprivileged against nihilism’ (Nietzsche, 1968, p. 37). TrumpLand is the epoch of self-destruction of planetary capacity to support life, and it’s the ‘will for nothingness’ in which Nihilism is the symptom of a great collapse of global

civilisation, four billion people banished to ‘terribly low rings of misery’ ‘active nihilism appears in relatively much more favourable conditions’ in a collapse of ‘a fair degree of spiritual culture’ (Nietzsche, 1968, p. 38). It is for these and other reasons David invokes pantheism, and has become a shamanic apprentice, exploring ‘Native Science’, in his ancient Celtic heritage. This is a counter-narrative to the ‘decadent life’ and to the TrumpLand ‘agents of decadence’, yet another eternal return, a solution to nihilism, and its lust for destruction of all that supports life and this ‘period of catastrophe’ because we are the ones answerable for the doomsday future (Nietzsche, 1968).

I am rereading the Nietzsche will to power and Schopenhauer now in some depth. I am finding the kind of nihilism of the destructive path of humanity. I am doing an inquiry into how it is that storytelling can be so fake, and so many people buy into it, while there is a method of self-correcting to get closer to true storytelling. Schopenhauer gives up on the fake storytelling of shall we say, business logic and mechanistic science, and follows two different pathways: One an escape into artistic fine arts (which is quite ironic given what is happening to higher education in the purge of humanities). The second pathway is the Maya who are aware of the ‘veil of deception’ and India in the ancient wisdom of the Vedas and Puranas (Sanskrit: पुराण purāṇa) because neither pursuit of form without ground nor ground without form can explain the *qualitates occultae* (what remains unfathomable after we observe the manifest *spacetime* mattering of things are *occult qualities* and *enchantment* that are not accessible to human intellect). Both are pathways to escape ‘Fake Storytelling’ Schopenhauer finds in the sciences and the practical (politics, business, etc.) as all that he finds there is the struggle of wills, a striving. I like how his project is to go beyond the (all is idea of Berkeley) and the dualism of subject and object of Descartes, as well as to go beyond Kant’s placement of space and time into the a priori. Then the surprise, his alternative is ‘the condition of multiplicity’ (p. 5 in the 1928 book on *The Philosophy of Schopenhauer*). His book is about multiplicities, and how we constitute the world as idea, yet, we can sense we have bodily existence in relation to Heraclitus’ ‘eternal flux of things’ (p. 9).

Nietzsche’s (1968) answer to Schopenhauer is to not escapism to the fine arts or to saintliness of the indigenous-Mayans or the -India spiritualities. Rather Nietzsche looks to nature, and it its will to power, in relation to human will to power, seeking to bring about change. Anyway, for Schopenhauer (1928, p. 7), there is a ‘kind of phantasm arising from’ constitutive ‘recurrence of experience’ to which Nietzsche gave the name eternal return. It is important to note that long before Deleuzian multiplicities, and Baradian *spacetime* mattering, Schopenhauer (1928, p. 86) wrote about multiplicities and the inseparability of space, time, and matter he identified as a ‘presupposition of causality’ when not all phenomena are explicable in space, time, and causality, that we can now call *spacetimecausality*. Schopenhauer challenged Kant’s *thin-in-itself* and form of knowledge and even refuted his own ‘principles of sufficient reason’ by morphology and by aetiology (p. 85). There is something beyond, beneath, between, before, and bets on the future, we call *antenarrative processes* (Rosile, Boje, Carlon, Downs, & Saylor, 2013) that is constitutive of indigenous living story and Western

narrative accounts, and what is for Schopenhauer (1928, pp. 85–87) ‘something groundless’, ‘withholds itself from investigation’ and from ‘sufficient reason’ and from being completely explain in ‘spatial and temporal relations’ we still ‘never penetrate the inner nature of things’, not even by ‘time, space and causality’ or *spacetimecausality*.

For Schopenhauer (1928, pp. 85–86) there is *spacetimecausality* that

can only become idea by means of ... namely *multiplicity* through co-existence and succession, *change* and *permanence* through the law of causality, *matter* which can only become idea under the presupposition of causality

and ‘does not in reality belong to that which appears’ because there are phenomenon *not* conditioned by *spacetimecausality*. Even the whole of logic, mathematics, and pure natural science is ‘groundless i.e., will’ (pp. 86–87). In sum, all is not as it appears in retrospective sense-making, and some science is groundless, ‘devoid of all content’ (p. 87), yet full of wilful striving. Morphology typologies of classification and aetiology case ethnographies without refutation, disconfirming cases, and falsification tests is just ‘empty bombast’ and ‘phantasies, sophisms, castles in the air’ sometimes socially constructed but still groundless and can never be Storytelling Science of ensembles of multiplicities, the ‘many multifarious phenomena in nature’, or the holiest thing in the temple of wisdom’ of ‘forces of nature’ (Schopenhauer, 1928, pp. 89–90).

David got into all this existentialism years ago, after writing his first postmodern book (Boje & Dennehy, 1993/2008, *Managing in the Postmodern World*), which is how he met me, Grace Ann. I was trying to get at change in the US organisation hegemony, and being all kinds of positive, just like Appreciate Inquiry, in my reading of Foucault, Lyotard, etc. Then Martin Parker, in a review of the book, called it and me, ‘McPostmodern’. I tried to dismiss it, but he was right. I asked Steve Best about ‘positive organizational scholarship’ and the ‘positive social science, positive leadership, positive organizational behavior, and all the positive appreciate inquiry scholarship’ (Cameron, Dutton, & Quinn, 2003). Actually, it was in 1996, but why mess up a good story with chronological sequence. Steve Best had me purchase every Nietzsche book in the Barnes & Noble in El Paso. Then I entered a couple of decades of doing as Parker asked of me ‘Boje, stare into the abyss’. Staring back at me was ‘Fake Storytelling’. Yes, late modern capitalism and global capitalism and all of academia are hegemonic. And in just the ways Schopenhauer’s disillusionment and meaninglessness of science, business, and politics is all about (as is Hanna Arendt’s) and in the ways of nihilism, the people engaged in self-destruction of themselves and of nature, clueless to its consequences to their own demise. David will stare into the abyss and see the ensemble of multiplicities that Deleuze (1990, 1991, 1994) writes about: extensive spatialisising ones, intensive temporalising ones, and the virtual object of the multiplicities of what Nietzsche calls ‘causalism’ as I wrote about, and you read, the psychology in storytelling of attributions of cause and effect, subject and object, etc. That is the ‘Fake Storytelling’ in a nutshell.

Schopenhauer (1928) is talking about consciousness and wisdom beyond or beneath *spacetimecausality*, and how we have this inner consciousness yet we

have a body in space in time, in the whole multiplicity of things in the world. I want to understand Marja Turunen's (2015, p. vii) take on it:

Consciousness-making is construed in actor network. Once construed, a process and result of consciousness making (CM) can become an actor participating in consciousness-making and other processes in the context of organizing.

If we are in a world riddled by 'Fake Storytelling' and 'Fake CM' and it is taking over most everyone's consciousness in 'collective consciousness', then what do we do to get to 'True Storytelling' that is not just world of illusion or some corporate marketing scheme?

THE QUANTUM POSSIBILITIES OF STORYTELLING SCIENCE

'On the whole, a tremendous quantum of *humaneness* has been attained in present-day mankind' and at yet it is in 'existence of much decadence' and 'the quantum of embitterment and eclipses that pessimism carries into judgments' (Nietzsche, 1968, #63, pp. 42–43). In Quantum Storytelling, there always remains something which no explanation unpacks, what Schopenhauer (1928, p. 88) called '*qualitates occultae*', an unfathomable something denied to 'Storytelling Science' be it by positivistic morphology of form-typologies of themes and subthemes meticulously coded in Grounded Theory (GT) or the aetiology storytelling of bodies observed in space, in time, in mattering, or the inseparability of *spacetime-mattering* (as Barad, 2007) stresses. Quantum Storytelling is split between those who limit *spacetime-mattering* to disenchantment and those of us who contend there is some remainder unknowable to intellect that is '*qualitates occultae*', the work of alchemy and enchantment, the vitalism of the forces of nature. In 'storytelling science', there always remains something which has no account, no explanation, and that is what we believe *indigenous wisdom*, and IWOK is all about, the *force of nature* which are without ground once one has tried to explain ground in what Gregory Cajete (2000) calls *Native Science*, there remain even in WWOK, or some of it, the *qualitates occultae* that is *groundless*. Jane Bennett (2009, 2010a) calls it *vibrant matter*, others including Bennett (2010b) call it *vitalism* of the *new socio-materialism*, or Bennett (2001) *re-enchantment*, or Bennett (2004) *ecology of matter* (and some like us just call it *spiritual quantum storytelling*).

BEYOND 'GROUNDLESS' THEORY'S TABULA RASA FALLACY

In pure materialism, pure 'Big Science', pure 'Big Theory', and pure Logic, knowledge is groundless in the Kantian a priori (Schopenhauer, 1928, p. 87). Immanuel Kant (1889) defined space and time, as a priori to sense-making, as antecedent concepts necessary to consciousness. Space and time are all for Kant, just idea, and the relation connection to some other idea, in groundless schemata, in what

Karl Popper (1994) called *The Myth of the Framework* and what Schopenhauer called the morphology, and what in GT is the theme and subtheme analysis after rounds of semi-structured interviews or ethnographic case studies done in meticulous aetiology without co-inquiry, lacking any historical depth without much refutation is just bombastic (high-sounding writing and speech acts) idea stacked upon idea without as Heidegger (1962) puts it, actually ‘Being-in-the-world’ in *space, in time, in mattering*, or its inseparability, in *spacetime-mattering*. Does something remain unfathomable, the ‘untold story’ (Hitchin, 2015) or is it the enchantment that is unfathomable to sufficient reason, evades logic, and is something more than pure materialism or even the socio-materialism of *spacetime-mattering*?

In *Quantum Storytelling*, there is no complete and finished storytelling aetiology historical account no matter its ethnographic meticulousness or morphology of thematic typology-building, no matter the logical positivism applied. Each case in its place, in time, and in mattering, and in the inseparability of *spacetime-mattering* does not penetrate the extensiveness multiplicities of ‘inner nature of things’ that is the forces of nature and ‘that which is without ground’ (Schopenhauer, 1928, p. 87). Therefore, when we say GT has *no ground* and *no theory*, we mean several insights.

First, unless the morphology search for typologies and/or the aetiology case comparisons have tests, refutation, and falsification steps, then it is impossible to claim either *ground* or *theory* that is pure or even empirical science. Second, to be *grounded* and to be *theory*, there needs to be more than *post hoc* accumulation by snowball sampling, and *after-the-fact* cherry-picking of inductive inference after more and more inductive inference. Third, the potentiality of GT needs to have some kind of methodology of *self-correcting induction*, which is what this book will explain to you, as a way of learning by reasons giving in advance of each round of inquiry, by performing disconfirmation of what Karl Popper calls *conjectures*, and doing what Charles Sanders Peirce calls *self-correcting induction* that brings an inquirer who is *fallible*, doing either *quantitative induction* or *qualitative induction* or their *combination* to something beyond mere *crude induction* that now passes muster as so-called GT. Finally, most so-called GT dissertations have not asked the question, *which wave of GT is being done?* When all is said and done, GT tries to inquire into the ‘insolvable residuum a content of phenomena’ that will not be explained by *spacetime-causality* or *sufficient reason* even by anal rounds of logical positivism coding of themes and subthemes, since there is ‘this unfathomable something’ in the ‘nature of existence’ and its Being, the ‘*qualitates occultae*’ that is ‘unfathomable because it is without ground’ (Schopenhauer, 1928, pp. 90–92).

Even logical positivist such as Carnap did not theorise logical positivism as foundationalism epistemology, which he absolutely rejected (Friedman, 1991, p. 508). Rather for Carnap, it’s like that classic fable of the blind philosopher-scientists making sense of the parts of the elephant, unable to fathom the whole outside their own *logicism* of their own foundational paradigm. Truth depends on the choice of which scientist philosophy, which *logicism*, is being selected by which paradigm inquirer. Sense-making scientist immediately chooses the logicism of

the five senses direct experience (except sight) for its logical empiricism of the nimble trunk. Linguists like Wittgenstein choose the logicism of language games of the elephant's floppy ears. Socio-materialism logicism feels the elephant tail with observer effect, it wiggles and becomes collapsed from particles into the wave effect. A logical positivism scientist notices the different curvatures of the tusks and says it's the intermediary between Kantian a priori and traditional naïve empiricism (this, of course, Carnap himself). The mathematician scientist notices the number of elephant feet is the square root of four is the logicism of choice. The naturalism scientist smells the elephant dung and is amazed by the logicism of naturalism. The Euclidean geometry scientist is arguing with the Gödel geometry logicism scientist and just cannot agree on the sex of the elephant. Friedman's (1991, p. 510) point is logical positivists get a bad rap, because most of the Vienna Circle were not epistemological foundationalist, and had this anomaly called Relativity Theory to fathom, which was shaking up Kantian a priori, Euclidian geometry, and in later years, the Copenhagen Interpretation of the double-slit experiment shook the foundation of Newtonian physics:

The first point to notice is that the positivists' main philosophical concerns did not arise within the context of the empiricist philosophical tradition at all. The initial impetus for their philosophizing came rather from late nineteenth-century work on the foundations of geometry by Riemann, Helmholtz, Lie, Klein, and Hilbert-work which, for the early positivists, achieved its culmination in Einstein's theory of relativity.

In sum, without attempts of GT to refute and disconfirm a specific paradigm by self-correcting induction, the false, the self-deceitful, the crude induction, the perfidious, there is only affirmed, confirmed without tests of refutation or disconfirmation, and early waves of GT remain a fraudulent science or worse a pseudo-science. Then there is the context, the *mendaciousness* rules the politics, and propaganda of *will to power* of TrumpLand denial of climate change science, just as *predatory* credit financing and exploitation rules globalisation in its wealth accumulation into fewer and fewer hands of multi-billionaires (Boje, 2019a). This brings forth Nietzsche's (1968, #109, p. 68): 'principle ... the element of decay in everything that characterises modern man: but close beside this sickness stand signs of an untested force and powerlessness of the soul'. This is the problem of the twenty-first century, how the heart of care can up-spiral above the down spiral of TrumpLand, which is the *nihilism* of what Karl Popper (1956/1983, p. 304) calls the 'inductive gambler' engaged in 'Fake Storytelling' while banishing 'True Storytelling' from the playing field, and all that will remain is junk science sponsored and purchased by lobbyists.

We met with Stephan Gössling at a conference at University of Canterbury. The theory is the people have a deep psychology reaction to climate change 'doomsday narratives', some people choosing denial, since it allows them to reinforce their status quo personal lifestyle habits. The storytelling idea is that 'doomsday scenarios' will result in deep psychology (subsurface) reactions and even defiance behaviours and attitudes. We discussed the idea of doing some 'deep psychology' lifestyle marketing about climate change, the water crises, and how to get people to wean off dependency on single-use plastic. For example, in Denmark, instead

of crying doomsday to get people to use their cars less and cycle more, they advertised Copenhagen as a cyclist lifestyle. We contend that ‘storytelling science’ has something important to contribute to the psychology of denial:

This may result in a psychology of denial (Stoll-Kleemann, O’Riordan, Jaeger, 2001), in which environmental problems including climate’ (Gössling 2017, p. 43) change are ‘rationalized’ (‘my personal contribution to climate change is infinitesimal’), and where convincing drivers to choose small cars will become increasingly more difficult. (Gössling, 2013)

Why do individuals choose denial in the face of empirical results of climate change studies? One testable proposition is their self-perceptions are threatened in specific ways, resulting in the selective information induction in order to resolve cognitive dissonance:

However, individuals will choose to interpret information that deviates from self-perceptions in specific ways that can be aligned with self-concepts or shun such information entirely in a complex psychology of denial (Giddens, 1991; Stoll-Kleemann et al., 2001). Even contradictory information can thus confirm or strengthen self-identity. (Gössling, 2017, p. 63)

To carry the example further, differences Gössling’s (2017a) study can give an account of why so many politicians are advocates of climate denial. Could it be that marketing campaigns of doomsday scenarios result in reactions of denial and defiance?

Differences in answers affirm, however, that while debates made some politicians consider their choices and buy less emission-intense cars, others reacted with denial or defiance ... For others, the campaign created feelings of shame, resulting in denial or defiance. Defiant positions are more likely to be justified on the basis of rationalization, however, and it is possible that the debate had two contradictory outcomes – it ‘convinced’ some politicians to change behavior, but it also reinforced denial. (Gössling, 2017b, p. 161)

There are also researchable questions about the impact of oil industry and Koch brother funding to turn climate science into a debate, thereby enabling more self-identity defences to elect denial or defiance in the face of hard scientific evidence.

NOTE

1. TheConversation.com ‘For Native Americans, US–Mexico border is an “imaginary line”’ by Christina Leza, 19 March 2019, accessed 24 March 2019 at <https://theconversation.com/for-native-americans-us-mexico-border-is-an-imaginary-line-111043>.

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