

Radical Learning through Semantic Transformation Capitalizing on Novelty *

Bas Bosma,[†] Robert Chia,[‡] and Ian Fowweather[§]

August 2015

ABSTRACT. That organizations exist in a fluid environment of unprecedented and discontinuous change seems beyond debate. We seem to find ourselves immersed in a world in which events have a tendency to unfold and overtake us in unforeseeable and novel ways that defy comprehension; a crisis of meaning takes place and conventional sensemaking is disrupted. Our need to imaginatively construct new meanings that allow us to understand what is going on and to work out how to respond becomes ever more pressing. We do live in interesting times. The emergence of the new, however, challenges current established ways of knowing and opens a creative space for radical learning to take place. Novelty stimulates the generative process by which organizations and individuals learn, adapt to and cope with the exigencies they face in order to survive and progress. Such radical learning occurs when creative linguistic interventions in dialogue opens up semantic spaces whereby new terms are coined and old ones broken up, combined and/or redeployed in novel ways, in an effort to give expression to the fresh circumstances experienced or new phenomena observed. We call this kind of imaginative linguistic intervention semantic transformation. In this paper we argue that it is this semantic transformation that promotes radical transformational learning. Such semantic transformation is predicated on the improvisatory character of dialogue as a form of communication. We explore how, through this dialogical process of semantic transformation, we discover the resources and means to respond to the vagueness and equivocality experienced, by exploiting language in novel ways in our attempts to make sense of and account for such experiences.

KEYWORDS. Dialogue; future perfect tense; language games; linguistic structuring; novelty; radical learning; semantic transformation; sense-making; stories; web of meaning.

Introduction

We live in *interesting times*. Old, established orders seem to be dissolving, and societies, organizations, and individuals are often confronted by unforeseen, unexpected, and previously unimaginable happenings that contrive to disrupt and/or unsettle our existing systems of comprehension. The world we experience is in a state of constant flux, and fresh challenges constantly appear on the horizon of our awareness that conspire to thwart our understanding and

* The final, definitive version of this paper will be published in *Management Learning* (OnlineFirst). SAGE Publication Ltd., all rights reserved. ©The Authors 2015.

The authors contributed equally and are listed alphabetically.

[†] Tilburg University, School of Economics and Management. Corresponding author: b.bosma@tilburguniversity.edu

[‡] University of Glasgow, Adam Smith Business School

[§] Bradford University, Faculty of Management and Law

¹ Page 50 of: Seidl, D. and D. van Aaken: 2009, 'Anticipating Critique and Occasional Reason: Modes of Reasoning in the Face of a Radically Open Future'. In: L. Costanzo and R. MacKay (eds.): *Handbook of Research on Strategy and Foresight*. Cheltenham, U.K.: Edward Elgar, pp. 48–66.

² See, e.g.: Brown, A., I. Colville, and A. Pye: 2015, 'Making Sense of Sensemaking in *Organization Studies*'. *Organization Studies* 36(2), 265–277.

³ Page 1203 of: Colville, I., A. Pye, and M. Carter: 2013, 'Organizing to Counter Terrorism: Sensemaking amidst Dynamic Complexity'. *Human Relations* 66(9), 1201–1223.

⁴ In this paper we do not seek to arbitrate upon this ontological debate.

⁵ See, e.g.: Cunliffe, A. and C. Coupland: 2012, 'From Hero to Villain to Hero: Making Experience Sensible through Embodied Narrative Sense-making'. *Human Relations* 65(1), 63–88.

⁶ Page 10 of: Lyotard, J.: 1984, *The Postmodern Condition: A Report on Knowledge*. Minneapolis, MN, U.S.A.: University of Minnesota Press.

⁷ Page 15 of: Weick, K.: 1995, *Sensemaking in Organizations*. Thousand Oaks, CA, U.S.A.: Sage.

⁸ Page 100 of: Vygotsky, L.: 2012, *Thought and Language*. Eastford, CT, U.S.A.: Martino Fine Books. Original edition published in 1934.

⁹ Page 50 of: James, W.: 1996, *Some Problems of Philosophy: A Beginning of an Introduction to Philosophy*. Lincoln, NE, U.S.A.: University of Nebraska Press. Original edition published in 1911.

¹⁰ Page 185 of: Schwandt, D.: 2005, 'When Managers Become Philosophers Integrating Learning With Sensemaking'. *Academy of Management Learning & Education* 4(2), 176–192.

¹¹ Page 54 of: Weick, K.: 1985, 'Sources of Order in Underorganized Systems: Themes in Recent Organizational Theory'. In: Y. Lincoln (ed.): *Organizational Theory and Inquiry: The Paradigm Revolution*. Beverly Hills, CA, U.S.A.: Sage, pp. 106–136.

confound our established categories of thought. Breakthrough technologies and social media are transforming our physical environment and how we interact with each other, having radical consequences for the way we manage aspirations, relations, and resources. Climate change and the depletion of natural resources seem to threaten both the planet and the existing socioeconomic order, creating wider ramifications for the sustainability of enterprise and for wealth creation. Globalization, shifting demographics, and mass migration are creating challenges for countries, businesses, managers, and administrators at all levels; threatening to redefine boundaries, identities, markets, and horizons of comprehension. These novel changes and unforeseen happenings provide a stark reminder that we face a *radically open future* in which our organizational worlds appear to be evolving "in ways that we are not able to conceptualize at present; ways that go beyond our given cognitive categories".¹

In such challenging times when we are constantly confronted by widespread equivocality, our need to imaginatively construct new meanings that allow us to understand what is going on and to work out how to respond becomes ever more pressing. Against this backdrop, Weick's work has been instrumental in drawing our collective attention to the ongoing processes of *sensemaking* constantly taking place in organizations. Sensemaking can be seen as both an individual cognitive process and a socially situated process,² whereby equivocality is reduced and rendered manageable: "people make informed bets as to 'what is going on' and 'what the story is' by ruling out a number of possibilities or 'might have beens'".³ Whether achieved individually or collectively,⁴ creating plausible stories allows us to come to terms with our current situation by referencing past events and experiences⁵ to comprehend present predicaments. Order, pattern, and organizational coherence are composed of "moves" taken within our *language games*,⁶ which are manifestations of effective sensemaking activities.⁷ Through these language games, we collectively create a shared *web of meaning*⁸ that we continuously reweave to accommodate our past experiences, and it is through this continuous reweaving that organizational realities are forged, maintained, and sustained out of the "blooming, buzzing confusion"⁹ of raw lived experience.

Learning and sensemaking are two mutually constitutive and interdependent elements of this weaving process. Both are "cut from the same cloth," but "the patterns of the final garment are somewhat different".¹⁰ Through sensemaking activities, we are able to contextualize and attribute meaning to events and thus learn;¹¹ and from the resulting knowledge we are able to make sense of other experiences, be they in the past, present, or future. Whilst sensemaking

is often seen as a *retrospective* activity,¹² relating present moments of experience to past moments of socialization to create meaning,¹³ it also allows us to extrapolate and make sense of the future. As Weick acknowledges, sensemaking is a “mixture of retrospect and prospect”.¹⁴ *Prospective sensemaking* occurs through the extrapolation from past experiences by which we are able to “retrospect about events yet to happen”,¹⁵ cognitively casting ourselves into a particular future, giving it meaning and responding pre-emptively, as if it were predetermined.¹⁶ However, if “the future is no longer a benign and distant place that can be understood retrospectively”,¹⁷ just quite how we are able to make sense of things when confronted by the genuinely novel and/or by unexpected events that conspire to disrupt our sensemaking process remains unclear. We may find it impossible to think in the future perfect tense and so be at a loss as to know how to proceed.¹⁸ Making sense of a radically open future has become a pressing issue for organizational researchers.¹⁹

In this article, we seek to explore just how we are able to proceed when challenged by previously unimaginable events that confound our attempts to make sense of what is happening. Since Weick’s 1988 work, there has been a steady stream of empirical research illustrating the consequences for individuals and organizations of unforeseen events that have led to crises in which sensemaking has been *disrupted*.²⁰ Weick describes these as “cosmology episodes”²¹ in which the everyday cosmos we have created is severely disrupted and “people suddenly and deeply feel that the universe is no longer a rational, orderly system”.²² Researchers have sought to understand retrospectively, using interviews and secondary data (often documentation from official inquiries), why and how normal sensemaking activities are disrupted by extreme events. Understandably, researchers have also sought to make sense of these events and to project them into the future so that organizations can build resilience to better cope with similar situations.²³ Additionally, the idea of managerial *sensegiving* (communicating the meaning of dramatic events to others) that takes place when the unimagined has disrupted sensemaking has become a greater concern.²⁴ Yet as Sandberg and Tsoukas point out, “a ‘sensegiver’ is also a ‘sensemaker’”, leaving the question of how the sensegiver is able to make sense of things in the first place unanswered.²⁵ This is especially crucial since “[w]hat makes such an [cosmology] episode so shattering is that both the sense of what is occurring and the means to rebuild that sense collapse together”.²⁶ Within the existing literature, consideration of just how sensemaking can be actively restored when such unimagined events disrupt the sensemaking process remains relatively unexplored.

We argue that in order to restore sensemaking activities (both ret-

¹² Page S8 of: Sandberg, J. and H. Tsoukas: 2015, ‘Making Sense of the Sensemaking Perspective: Its Constituents, Limitations, and Opportunities for further Development’. *Journal of Organizational Behaviour* 36(S1), S6–S32.

¹³ Page 111 of: Weick (1995).

¹⁴ Page 29 of: Weick (1995).

¹⁵ Page 623 of: Gioia, D., K. Corley, and T. Fabbri: 2002, ‘Revising the Past (While Thinking in the Future Perfect Tense)’. *Journal of Organizational Change Management* 15(6), 622–634.

¹⁶ Page 91 of: MacKay, R.: 2009, ‘Strategic Foresight: Counterfactual and Prospective Sensemaking in Enacted Environments’. In: L. Costanzo and R. MacKay (eds.): *Handbook of Research on Strategy and Foresight*. Cheltenham, U.K.: Edward Elgar, pp. 90–113.

¹⁷ Page 107 of: MacKay (2009).

¹⁸ See, e.g.: Wilson, T. and D. Gilbert: 2005, ‘Affective Forecasting: Knowing What to Want’. *Current Directions in Psychological Science* 14(3), 131–134.

¹⁹ See, e.g.: Brown et al. (2015); and Sandberg and Tsoukas (2015).

²⁰ See, e.g.: Maitlis, S. and S. Sonenshein: 2010, ‘Sensemaking in Crisis and Change: Inspiration and Insights From Weick (1988)’. *Journal of Management Studies* 47(3), 551–580.

²¹ Page 51 of: Weick (1985).

²² Page 633 of: Weick, K.: 1993, ‘The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster’. *Administrative Science Quarterly* 38(4), 628–652.

²³ See, e.g.: Weick, K. and K. Sutcliffe: 2007, *Managing the Unexpected: Resilient Performance in the Age of Uncertainty*. San Francisco, CA, U.S.A.: Jossey-Bass.

²⁴ See, e.g.: Maitlis, S. and T. Lawrence: 2007, ‘Triggers and Enablers of Sensegiving in Organizations’. *Academy of Management Journal* 50(1), 57–84.

²⁵ Page S24 of: Sandberg and Tsoukas (2015).

²⁶ Page 633 of: Weick (1993).

²⁷ Page 588 of: Gephart, R.: 1997, 'Hazardous Measures: An Interpretive Textual Analysis of Quantitative Sense-making during Crises'. *Journal of Organizational Behaviour* 18(S1), 583–622.

²⁸ Page 1203 of: Colville et al. (2013).

²⁹ The use of these terms for two differing forms of learning was used by Miner and Mezias (1996).

³⁰ Clegg, S., M. Kornberger, and C. Rhodes: 2005, 'Learning / Becoming / Organizing'. *Organization* 12(2), 147–167.

³¹ Feyerabend, P.: 1993, *Against Method: Outline of an Anarchistic Theory of Knowledge*. London, U.K.: Verso, 3 edition.

rospective and prospective), a new past, a new present, and a new future that are all radically different to the ones previously established have to be linguistically constructed. Accepting that sensemaking is “manifest in language”,²⁷ we draw upon theoretical work that focuses on language and dialogue, to illustrate how, when sensemaking is disrupted, we are nevertheless still able to improvise with the grammars (or rules) of our language games and thus transform our shared web of meaning, such that sensemaking (and learning) can be restored. We refer to this process in which old ways of knowing are not simply adapted but are replaced by new forms of knowing, through a process of linguistic improvisation, as *semantic transformation*. Semantic transformation involves a dialogical process in which fresh semantic spaces are creatively opened up, whereby new terms are coined and old ones broken up, combined, and/or redeployed in novel ways, in an effort to express the fresh circumstances experienced or new phenomena observed. It is through this process of semantic transformation that we are able to reconfigure our prevailing patterns of meanings such that our horizons of comprehension are extended, rendering what was previously unthought as comprehensible and thus re-taming “the ‘wild profusion of things’ ”.²⁸ We define the kind of learning that occurs through this semantic transformation as *radical learning* in contrast to the *incremental learning* that takes place through our ongoing sensemaking.²⁹ Radical learning stretches our imagination, taking us beyond established linguistic categories of thought that limit what is already known. Through semantic transformation, we create new stories that replace the ones that have been found wanting and pave the way for more adequate explanations of experienced phenomena, thereby allowing our sensemaking activities to be restored.

We begin by considering how the emergence of novelty disrupts our sensemaking activities, punctuating the ongoing process of learning/becoming/organizing.³⁰ Central to our narrative is the essential role played by language in the related ongoing processes of sensemaking and learning, but as our narrative proceeds we place particular emphasis on the searching role of dialogue. We maintain that dialogue plays a unique role in our evolving language games. The flexibility and addressivity to be found within dialogue allow us to improvise, and it is this creative freedom that enables us to adapt our language and transform our web of meaning. By so doing, we are able to create a *language of the future*³¹ that allows us to accommodate the novel. Without dialogue, there would be no semantic transformation and therefore no radical learning. Through dialogue, we are collectively able to respond when we can no longer think in the future perfect tense, and our sensemaking activities have been

disrupted. Importantly, it is the semantic transformation we are able to achieve through dialogue that provides us with opportunities for the radical learning that we increasingly need to cope when faced by a radically open future.

The Novelty Stimulus

The idea that the emergence of novelty disrupts conventional wisdom and understanding, leading to new learning, is well established; being captured in our shared imagery of Archimedes' *Eureka Moment*. An attraction to novelty and the impulse to assimilate and understand it are central to our speculative and scientific achievements.³² Novel events generate curiosity, stimulate our imagination, and provide "a sense of what might be".³³ The unfamiliar or unexpected provides a source of productive *otherness*³⁴ that interrupts our ongoing sensemaking efforts; and whilst we often find this psychologically unsettling,³⁵ it nevertheless provides a valuable opportunity to revisit our established understanding and to learn more about ourselves and our relationships with the environment. As Chia highlights, "[t]he element of surprise, and hence creativity and novelty, is necessarily built into the very core of change and transformation".³⁶

Novelty is all-pervasive in the raw flux of ongoing events that constitute our reality. The presence (or even omnipresence) of novelty has been highlighted by many writers.³⁷ Novelty is recognized as a defining characteristic of complex systems and central to all forms of life.³⁸ Yet, despite acknowledging the ubiquity and generative qualities of novelty, organizational theory has traditionally focused on counteracting novelty; creating stability and removing variation to produce an orderly and more predictable world. Organizing is ultimately about the reduction in variety and equivocality.³⁹ As Taylor and Van Every point out, management endeavors to control organizational processes so that a particular reality is achieved and maintained to the exclusion of possible others.⁴⁰ In trying to achieve this, the traditional approach to organizing "treats the new as a special case of things already understood",⁴¹ creating "self-defeating filters that reduce novelty".⁴² Such an approach fosters what Veblen termed "learnt incapacity"; in our attempts to eradicate novelty, we stifle our ability to learn. As March highlights, the opportunity for learning emerges only when our present moments of experience can no longer be assimilated into the frames we invented to encapsulate the experiences of history.⁴³

Perhaps not surprisingly given both its generative and disruptive qualities, the concept of novelty has proved problematic within the

³² See, e.g.: Berlyne, D.: 1950, 'Novelty and Curiosity as Determinants of Exploratory Behaviour'. *British Journal of Psychology* 41(1-2), 68-80.

³³ Page 37 of: Whitehead, A.: 1956, *Modes of Thought*. New York, NY, U.S.A.: Cambridge University Press. Original edition published in 1938.

³⁴ See, e.g.: Cooper, R.: 1989, 'Modernism, Post Modernism and Organizational Analysis 3: The Contribution of Jacques Derrida'. *Organization Studies* 10(4), 479-502.

³⁵ Page 943 of: Tsoukas, H.: 2009, 'A Dialogical Approach to the Creation of New Knowledge in Organizations'. *Organization Science* 20(6), 941-957.

³⁶ Page 223 of: Chia, R.: 1999, 'A 'Rhizomic' Model of Organizational Change and Transformation: Perspectives from a Metaphysics of Change'. *British Journal of Management* 10(3), 209-227.

³⁷ See, e.g.: Bergson, H.: 1998, *Creative Evolution*. Mineola, NY, U.S.A.: Dover Publications, Inc. Original edition published in 1911; and March, J.: 2010, *The Ambiguities of Experience*. Ithaca, NY, U.S.A.: Cornell University Press.

³⁸ See, e.g.: Crosby, D.: 2005, *Novelty*. Lanham, MD, U.S.A.: Lexington Books.

³⁹ See, e.g.: Weick, K. and F. Westley: 1996, 'Organizational Learning: Affirming an Oxymoron'. In: S. Clegg, C. Hardy, and W. Nord (eds.): *Handbook of Organization Studies*. London, U.K.: Sage, pp. 440-458.

⁴⁰ Pages ix-x of: Taylor, J. and E. van Every: 2000, *The Emergent Organization: Communication as Its Site and Surface*. Abingdon, U.K.: Routledge.

⁴¹ Page 194 of: Feyerabend (1993).

⁴² Page 210 of: March (2010).

⁴³ Page 51 of: March (2010).

⁴⁴ See, e.g.: March (2010).

⁴⁵ Page 356 of: Becker, M., T. Knudsen, and J. March: 2006, 'Schumpeter, Winter, and the Sources of Novelty'. *Industrial and Corporate Change* 15(2), 353–371.

⁴⁶ See, e.g.: Joas, H.: 1996, *Creativity of Action*. Chicago, IL, U.S.A.: University of Chicago Press.

⁴⁷ Page 75 of: March (2010).

⁴⁸ See, e.g.: Toulmin, S.: 1990, *Cosmopolis*. Chicago, IL, U.S.A.: University of Chicago Press.

⁴⁹ Page 91 of: March (2010).

⁵⁰ Page 97 of: Deleuze, G.: 2004, *Difference and Repetition*. London, U.K.: Continuum.

⁵¹ See, e.g.: Capek, M.: 1978, 'Towards a Widening of the Notion of Causality'. In: J. Sibley and P. Gunter (eds.): *Process Philosophy: Basic Writings*. Washington, D.C., U.S.A.: University Press of America, pp. 79–103.

⁵² Page 1151 of: Vedres, B. and D. Stark: 2010, 'Structural Folds: Generative Disruption in Overlapping Groups'. *American Journal of Sociology* 115(4), 1150–1190.

⁵³ Page 205 of: March, J.: 2006, 'Rationality, Foolishness, and Adaptive Intelligence'. *Strategic Management Journal* 27(3), 201–214.

⁵⁴ Page 15 of: Wittgenstein, L.: 1969, *On Certainty*. New York, NY, U.S.A.: HarperCollins.

⁵⁵ Clegg et al. (2005); and Hernes, T. and E. Irgens: 2012, 'Keeping Things Mindfully on Track: Organizational Learning under Continuity'. *Management Learning* 44(3), 253–266.

⁵⁶ See, e.g.: Berends, H. and I. Lammers: 2010, 'Explaining Discontinuity in Organizational Learning: A Process Analysis'. *Organization Studies* 31(8), 1045–1068.

⁵⁷ Page 156 of: Clegg et al. (2005).

organizational literature. The work of March suggests that efforts to provide an adequate theoretical explanation of novelty have proved unsatisfactory.⁴⁴ Schumpeter's assertion that an explanation of novelty was "the greatest unmet scientific challenge"⁴⁵ seems to have gone unheeded; it remains a 'residual category' in organizational theorizing.⁴⁶ Novelty is a very slippery and amorphous term, and this is partly due to its temporal nature; once it emerges, the very qualities that made it novel begin to evaporate. March's description of novelty as "deviation from established procedures or knowledge"⁴⁷ explains neither its origin nor its continual emergence. Novel events are those that we cannot accommodate within our 'decontextualized ideal'⁴⁸ of the universal, the general, and the timeless. Paradoxically, it is our ongoing battle to order and organize our world that creates the conditions for novelty to emerge.⁴⁹ Deleuze suggests that "difference lies between two repetitions" and it is mindfulness that "draws something new from repetition";⁵⁰ novelty comes out of the mundane and the repetitive. Thus whilst novelty is all-pervasive in the raw flux of ongoing events, it emerges from within our consciousness, at the edge of human understanding when prediction has failed and causal mechanisms cannot adequately explain the effects observed.⁵¹ This means that novel events are simply those that we do not expect and that disrupt our ongoing sensemaking and organizing activities.

Thus understood, it is the unexpected that serves as a *novel stimulus*, providing "the generative and productive friction that disrupts the received categories of "business as usual" and enables the redefinition, redeployment, and recombination of resources".⁵² This in turn generates *novel responses*: "unconventional, improbable, wild ideas and actions" that provide the sort of "major innovations and responses to change"⁵³ considered essential for organizational survival. Such responses constitute what we call *radical learning*, a form of learning that does not simply alter the "movement of the waters on the river-bed" of our collective knowledge, but shifts "the bed itself".⁵⁴ The work of Clegg et al. and Hernes and Irgens reminds us that while both learning and organizing are ongoing accomplishments, this does not mean that they always proceed incrementally.⁵⁵ Within this ongoing, stuttering procession, novel events will appear, disturbing our taken-for-granted conceptualizations and encouraging us to doubt and question our existing cognitive commitments. Such events highlight that the future is not constrained by existing ways of knowing, that our knowledge is necessarily incomplete, and that at times major revisions of our conceptual schemes become necessary.

Thus, learning can be understood to proceed both continuously and discontinuously.⁵⁶ Clegg et al. recognize that "[l]earning can be simultaneously repetition and difference".⁵⁷

Seen as the latter, radical learning is by definition non-cumulative, representing saltations — radical shifts or transitions that interrupt the ongoing and progressive refinement of organizational knowledge and routines by short-circuiting established stimulus-response patterns.⁵⁸ It is novelty that disrupts the incremental process of learning/becoming/organizing making us aware that we can no longer respond habitually to the new situations we face.⁵⁹ Importantly, it is the disruption of our sensemaking activities that paves the way for new forms of knowledge and action. Whitehead's assertion that the history of thought is "a tragic mixture of vibrant disclosure and of deadening closure"⁶⁰ highlights the difference between radical learning and a more incremental form of learning that rests upon existing ways of knowing and sensemaking.

To understand how novelty actively disrupts the living fabric of learning/becoming/organizing we need to acquaint ourselves with the evolving linguistic system from which it is fabricated.

Linguistic Structuring and Language Games: Creating Stories

Language is usually understood to be a neutral "means" for communicating already-formed thought. Yet, this is not the case. To conceptualize language as simply representational, providing "a system of normatively identical forms" is "merely a scientific abstraction".⁶¹ Language actively configures our all-too-familiar world so that we wittingly or otherwise construct and reconstruct it through our linguistic structuring. Our language games constitute "a continuous generative process"⁶² that transforms a "difficult and infrangible reality into a resource at our disposal".⁶³ "Words induce stable connections [...] to which people can orientate",⁶⁴ enabling us to make sense of our experiences and thus bring order to the ongoing process of organizing.⁶⁵

Language creates the shared web of meaning that gives texture and significance to our lives, allowing us to make sense of what is going on. Importantly, the act of attributing meaning "always implies a degree of generalization",⁶⁶ and through generalizing we create abstractions that solidify the boundaries of our knowledge. It is through storytelling that our stable abstractions are created and maintained. Stories infuse past events with meaning,⁶⁷ connecting the past with the present and allowing us to imagine cause and effect relationships.⁶⁸ Our stories are *myths* providing creative representations that allow us to organize our interconnected lives and against which future actions can be collectively determined. Stories allow us to share knowledge and apply existing knowledge in new contexts: we learn from our own inventions,⁶⁹ or paraphrasing J.L. Austin,

⁵⁸ See, e.g.: Garud, R., R. Dunbar, and C. Bartel: 2011, 'Dealing with Unusual Experiences: A Narrative Perspective on Organizational Learning'. *Organization Science* 22(3), 587–601.

⁵⁹ See, e.g.: Weick and Sutcliffe (2007).

⁶⁰ Page 81 of: Whitehead (1956).

⁶¹ Page 98 of: Voloshinov, V.: 1986, *Marxism and the Philosophy of Language*. Cambridge, MA, U.S.A.: Harvard University Press. Original edition published in 1929.

⁶² Page 98 of: Voloshinov (1986).

⁶³ Page 517 of: Chia, R.: 2000, 'Discourse Analysis as Organizational Analysis'. *Organization* 7(3), 513–518.

⁶⁴ Page 128 of: Weick (1985).

⁶⁵ See, e.g.: Cooper (1989).

⁶⁶ Page 91 of: Vygotsky (2012).

⁶⁷ Page 480 of: Gabriel, Y.: 1995, 'The Unmanaged Organization: Stories, Fantasies and Subjectivity'. *Organization Studies* 16(3), 477–501.

⁶⁸ See, e.g.: Boje, D., D. Fedor, and K. Rowland: 1982, 'Myth Making: A Qualitative Step in OD Interventions'. *Journal of Applied Behavioral Science* 18(1), 17–28.

⁶⁹ Page 51 of: March (2010).

learning occurs when we are able *to do new things with words*.

Doing new things with words means altering our stories and narratives. This is an ongoing process in which we all participate; maintaining, extending, and adapting our shared web of meaning. And yet as Wittgenstein notes, “*the limits of my language mean the limits of my world*”.⁷⁰ Language makes the world accessible to us, but it also constrains us. “People make sense of things by seeing a world on which they already imposed what they believe”,⁷¹ and it is only when we use words imaginatively and play games with our language that the way we see the world can change. Thus understood, both organizational stability and organizational change are necessarily linguistic accomplishments.⁷²

Despite these two competing functions, Whitehead’s *fallacy of the perfect dictionary* highlights our tendency to forget that our linguistic structuring is always a *work in progress*. While our abstractions may appear concrete, they are always incomplete, partial, and thus open to revision. Importantly, it is the unavoidable and inevitable emergence of novelty that reminds us that our gradual progression toward conceptual closure is a chimera. It highlights that our stories are selectively built upon the past and that the generative memory provided by their accumulation is necessarily incomplete.⁷³ Within our stories, the process of signification has already taken place. The signifier has determined what is significant from the past; events and characters have been selected and woven into a story with a plot that explains what has happened and what is happening. The story’s narrator has thought in the future perfect tense and woven a story foreshadowing the future. Our linguistic structuring creates a *language of the past*; built on Historical Foresight⁷⁴ which we rely upon to construct a particular future to which we can respond. We may think in the future perfect, but to do so we have to create a particular version of the past.⁷⁵ Novel events remind us that our sensemaking relies upon a past we have created. They disrupt our ongoing sensemaking activities and point toward the inadequacy of our existing knowledge (expressed in language and captured through stories). If sensemaking is about creating a coherent story, how do we proceed when our language games collapse and there appears no possibility of establishing linguistic coherence? In such times, we need “an entirely different system of grammar”,⁷⁶ or “a language of the future” in which we “*must learn to argue with unexplained terms and to use sentences for which no clear rules of usage are yet available*”.⁷⁷

Yet it is important to appreciate that we can only be “reflexive within the discursive quasi-constraints” imposed on us by the “narratives on which [we] draw, and to which [we] are subject”.⁷⁸ We

⁷⁰ Page 74 of: Wittgenstein, L.: 1922, *Tractatus Logico-Philosophicus*. London, U.K.: Kegan Paul, Trench, Trubner & Co., Ltd.

⁷¹ Page 15 of: Weick (1995).

⁷² See, e.g.: Brown, A., Y. Gabriel, and S. Gherardi: 2009, ‘Storytelling and Change: An Unfolding Story’. *Organization* 16(3), 323–333.

⁷³ Page 591 of: Garud et al. (2011).

⁷⁴ Page 88 of: Whitehead, A.: 1967, *Adventures of Ideas*. New York, NY, U.S.A.: The Free Press. Original edition published in 1933.

⁷⁵ See, e.g.: Gioia et al. (2002).

⁷⁶ Page 298 of: Tosey, P., M. Visser, and M. Saunders: 2011, ‘The Origins and Conceptualizations of ‘Triple-Loop’ Learning: A Critical Review’. *Management Learning* 43(3), 291–307.

⁷⁷ Page 194 of: Feyerabend (1993).

⁷⁸ Page 738 of: Brown, A.: 2006, ‘A Narrative Approach to Collective Identities’. *Journal of Management Studies* 43(4), 731–753.

cannot simply invent a new language; we are locked into our existing language. The stories we require to make sense of the world rely on the linguistic system we have inherited. Thus, language seems to be cast as both hero (language of the future) and villain (language of the past) and whilst our language may be found wanting, we do not have an alternative. When sensemaking is disrupted, it is to linguistic experimentation that we must turn and it is through the creative process of dialogue that we find fresh ways of adapting the rules of our language games and thus to transform how we see the world.

Dialogue and Semantic Transformation

Despite the importance currently placed on understanding organizations as “discursive spaces”,⁷⁹ management literature seems to struggle to explain how we “change dominating concepts and images of thought, to de-frame and think the unthinkable”.⁸⁰ Bakhtin refers to this as the “*semantic transformation of existence*”.⁸¹ The material world remains unchanged, but the events we experience (whether past, present, or future) acquire a completely different sense and meaning. When complete, the explanatory stories that have established our rules of action are rewritten, and thus learning has taken place.⁸² Yet it remains unclear just how we *learn* to do new things with words when our existing language and stories are called into question. We argue that it is through active participation in our language games that radical learning can take place; when novel stimuli bring about the “deterritorialization of language”.⁸³ It is this deliberate straining of language to give expression to the as-yet-unarticulated that differentiates radical learning from incremental learning.

To understand how language can be used in this way, it is useful to conceptualize language as having two different forms: dialogue and monologue. The first comprises the verbal utterances we use in informal conversations (and now in digital equivalents), when communicating directly with others. The second utilizes formal styles of language (that are typically written). Although the form of each varies depending upon context, they can be differentiated on the basis of their differing functions.⁸⁴ Within dialogue we index (signal or indicate), while monologue allows us to specify meaning (signify or symbolize). Similarly dialogue has a social communicative function, whilst monologue has a disembodied, intellectual function. Dialogue is *processional* — every exchange is a development of the one before and a preparation for the one following — whilst monologue is *successional*.⁸⁵

⁷⁹ Page 10 of: Brown (2006).

⁸⁰ Page 156 of: Clegg et al. (2005).

⁸¹ Page 165 (our emphasis) of: Bakhtin, M.: 1986a, ‘The Problem of Speech Genres’. In: C. Emerson and M. Holquist (eds.): *Speech Genres & Other Late Essays*. Austin, TX, U.S.A.: University of Texas Press, pp. 60–103.

⁸² Page 14 of: March (2010).

⁸³ Page 99 of: Deleuze, G. and F. Guattari: 1987, *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis, MN, U.S.A.: University of Minnesota Press.

⁸⁴ Page 89 (adapted) of: Wertsch, J.: 1985, *Vygotsky and the Social Formation of Mind*. Cambridge, MA, U.S.A.: Harvard University Press.

⁸⁵ Page 53 of: Ingold, T.: 2011, *Being Alive: Essays on Movement, Knowledge and Description*. London, U.K.: Routledge.

⁸⁶ Page 1699 of: Cooper, R.: 2005, 'Relationality'. *Organization Studies* 26(11), 1689–1710.

⁸⁷ Page 17 of: Morris, P.: 1994, 'Introduction'. In: P. Morris (ed.): *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev, and Voloshinov*. London, U.K.: E. Arnold, pp. 1–24.

⁸⁸ Page 272 of: Bakhtin, M.: 1981, 'Discourse in the Novel'. In: M. Holquist (ed.): *The Dialogic Imagination: Four Essays*. Austin, TX, U.S.A.: University of Texas Press, pp. 259–421.

⁸⁹ See, e.g.: Ingold, T.: 2000, *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*. London, U.K.: Routledge.

⁹⁰ Page 821 of: Raelin, J.: 2012, 'The Manager as Facilitator of Dialogue'. *Organization* 20(6), 818–839.

⁹¹ Page 74 of: Bakhtin, M.: 1986b, 'Toward a Methodology for the Human Sciences'. In: C. Emerson and M. Holquist (eds.): *Speech Genres & Other Late Essays*. Austin, TX, U.S.A.: University of Texas Press, pp. 159–172.

⁹² A trivial illustration of this is the emergence of the term 'selfie' to describe a social phenomenon made possible by new technologies in which people take photos of themselves using mobile devices with the intention of sharing them with friends using the internet. The term 'selfie' is now well established (being included in the Oxford English Dictionary) and arguably its emergence has shaped behavioural norms.

Using these distinctions, our web of meaning is formalized and maintained through monologues (abstractions/stories) whilst it is prepared, generated, and embodied within the dialogues that capture our ongoing and ever-evolving experiences. Thus, dialogue precedes monologue and our language games constitute a dynamic, linguistic system with primary and secondary impulses that are “not separate, static structures but actively constitute each other”.⁸⁶ There is a top-down process in which meaning is given to experiences and at the same time a bottom-up process in which experience changes the web of meaning. The first is defined as *monoglossia*, the second is *heteroglossia*.⁸⁷ Monoglossia is synonymous with linguistic structuring, while heteroglossia captures the indeterminacy and subjectivity of individual lived experience. The resulting enfolded and entangled whole is the “tension filled unity of two embattled tendencies in the life of language”.⁸⁸ Our sensemaking is both dependent upon and constrained by the pre-existing monologues available to us. This is our *language of the past*. But at any time, novel stimuli may puncture our web of meaning, thereby creating a crisis of interpretation, or a cosmology episode. Such events leave us needing to express and communicate things not catered for by established formal language. In such circumstances we instinctively turn to dialogue to experiment and to create our *language of the future*.

Dialogue is a co-creative, aesthetic endeavor, within which meaning is not something transmitted, rather meaning is *arrived* at through novel and experimental attempts at articulating dwelt experience. Dialogue allows us to ‘wayfind’⁸⁹ toward shared meaning. In dialogue, accepted meaning is discarded; we simply “look at things” together and explore them.⁹⁰ We become aware of each other’s thoughts, even if meaning is not yet established. Formal language rules are secondary to the utterance,⁹¹ as we collectively stumble around in search of meaning; improvising with words and groping our way toward the creation of a new language, a new term, or a new expression that is adequate to capture our experience.⁹² Tentatively we may begin by reconfiguring old words and inventing new ones, or combining them, thus creating the possibility for new meanings. Eventually we collectively figure out how to reconfigure our language, removing the novelty that had emerged and stabilizing our web of meaning with new stories. This is the intricate process of semantic transformation that is associated with radical learning.

Radical Learning: Improvising with Words through Dialogue

Stabilizing the web of meaning requires what Feyerabend termed fundamental conceptual change, presupposing “new world-views

and new languages capable of expressing them”.⁹³ We suggest our new language emerges from within Bakhtin’s “tension filled unity”⁹⁴ that exists at the confluence of our two linguistic streams. Dialogue is natural to us. As socio-linguistic creatures we learn from an early age to use the linguistic tools available to us to share and make sense of what we experience with those around us. When our language games collapse, we instinctively draw on our innate linguistic instincts and skills, so much so that from relatively early childhood we redeploy these innate abilities to create inner dialogues that allow us to explore our experiences privately.⁹⁵ Whether collectively or individually, we can surprise ourselves by revealing the latent within our capacities, through a spontaneous reaction “uncontaminated by a directing image”,⁹⁶ Our language games are not adapted but rather reconstructed, growing organically from our primitive forms of language.⁹⁷

Dialogue creates social relationships, providing “a bridge thrown between myself and another”.⁹⁸ It is this social function, or addressivity,⁹⁹ that creates a modality of interaction, the “tacit property of the dialogical situation, indicating the relational aspect of communication”.¹⁰⁰ This communication about communication allows a speech partner to tacitly indicate “what sort of utterance his utterance is to be taken as”.¹⁰¹ We learn these metapragmatics intuitively, and they allow us to navigate through dialogic exchange. Dialogues are intrinsically improvisational, and what emerges from them is never clear. They are prospective, searching exchanges which we work to maintain. Almost without thinking, we help each other out; remaining sensitive to the others’ emotional responses and constantly adapting. We use different styles of language (genres), intuitively selected to meet the conditions of the interaction.¹⁰² Within the boardroom a different style of dialogue is adopted to that we might use at the water cooler, but we can and do mix things up and in doing so often surprise ourselves. A joke or a casual aside allows us to manage the social environment (perhaps diffusing tensions, patch up strained relationships, or encouraging radical thinking) or say something that could not be expressed explicitly or directly. Addressivity does not simply relate to the audience but also to the social situation and topic, all shaping how the dialogue proceeds. However, addressivity does not guarantee understanding. Rather, we create workable relations that allow actors to agree how to proceed: the meaning of a particular utterance “amounts to understanding its novelty and not to recognizing its identity”.¹⁰³

⁹³ Page 193 of: Feyerabend (1993).

⁹⁴ Page 272 of: Bakhtin (1981).

⁹⁵ See, e.g.: Vygotsky (2012).

⁹⁶ Page 1001 of: Cooper, R.: 1976, ‘The Open Field’. *Human Relations* 29(11), 999–1017.

⁹⁷ Vygotsky (2012, page 72) defines primitive languages as ones that do not function as the carrier of concepts.

⁹⁸ Page 86 of: Voloshinov (1986).

⁹⁹ Page 95 of: Bakhtin (1986b).

¹⁰⁰ Page 944 of: Tsoukas (2009).

¹⁰¹ Page 944 of: Tsoukas (2009).

¹⁰² Page 64 of: Bakhtin (1986b).

¹⁰³ Page 68 of: Voloshinov (1986).

¹⁰⁴ Page 943 of: Tsoukas (2009).

¹⁰⁵ Page 516 of: Shotter, J.: 2008, 'Dialogism and Polyphony in Organizing Theorizing in Organization Studies: Action Guiding Anticipations and the Continuous Creation of Novelty'. *Organization Studies* 29(4), 501–524.

¹⁰⁶ See, e.g.: Weick, K. and K. Roberts: 1993, 'Collective Mind in Organizations: Heedful Interrelating on Flight Decks'. *Administrative Science Quarterly* 38(3), 357–381.

¹⁰⁷ Page 79 of: Bakhtin (1986a).

¹⁰⁸ Page 238 of: Pinker, S.: 2007, *The Stuff of Thought: Language as a Window into Human Nature*. London, U.K.: Penguin Group.

¹⁰⁹ Page 241 of: Pinker (2007).

¹¹⁰ Pages xxi–xxiv of: Massumi, B.: 2005, 'Introduction'. In: B. Massumi (ed.): *A Shock to Thought: Expression after Deleuze and Guattari*. London, U.K.: Routledge, pp. xiii–xxxix.

¹¹¹ Page 1 of: Boje, D.: 2001, *Narrative Methods for Organizational and Communication Research*. London, U.K.: Sage.

¹¹² Page 193 of: Feyerabend (1993).

¹¹³ Page 193 of: Feyerabend (1993).

¹¹⁴ Page 41 of: Gabriel, Y.: 2000, *Storytelling in Organizations: Facts, Fictions, and Fantasies*. Oxford, U.K.: Oxford University Press.

¹¹⁵ Page 591 of: Garud et al. (2011).

It is the recognition of difference that allows us to “understand the other in dialogue” and to potentially “alter our own understanding”.¹⁰⁴ This final point warrants reiterating; dialogues do not necessarily create a unity of understanding. When faced with the discontinuity produced by a novel stimulus, individuals may not be able to agree what is happening or how to proceed (to create a single narrative). Nevertheless, in dialogue polyphony is not a problem, voices are “combined but not merged”.¹⁰⁵ Multiple voices may foster a collective understanding that goes beyond the sum of individual knowledge.¹⁰⁶

Within dialogue, grammar and structure *play second fiddle* to meaning and emotions: metaphor, simile, irony, intonation, gestures, body language, communal language (in jokes, euphemisms, code switching, nicknames), silence, and repetition are used instinctively. Speech is “much more flexible, plastic and free”¹⁰⁷ than other forms of communication, and it is this that allows us to improvise. “To think is to grasp a metaphor”,¹⁰⁸ and when faced by novelty we instinctively make ideas tangible by using metaphorical imagery. To extend our web of meaning, we *stretch envelopes* and *think outside the box*, or allow others to do so. Through dialogue, we are able to hijack words and twist their meaning to accommodate our intent. Thus, our computers get *viruses*, our phones are *hacked*, and we operate on a *default setting*. By improvising, we create linguistic hybrids that enable us to express things that would be “otherwise inexpressible”.¹⁰⁹ In this process, our formal language is stretched, twisted, and made to groan so that it is malleable to a particular reality.¹¹⁰ When existing stories fail us, we use these linguistic skills to create what Boje calls *antenarratives*: “non-linear, incoherent, collective, unplotted, and pre-narrative speculation”.¹¹¹ Such fragments of meaning provide an “emergent speculation about what may be happening” (Garud et al., 2011: 591). As we tentatively try to come to terms with the novel, although we might stumble or stutter, we construct a rudimentary language providing the new words to create new worlds. Initially we might not be saying anything meaningful; our new words “sound absurd at first but [...] become perfectly reasonable once the connections are made”.¹¹² Collectively we establish what a new word means, placing it at the “centre of numerous lines connecting it with other words, sentences, bits of reasoning, gestures”.¹¹³ Using our new words and meanings, new stories begin to emerge as “a collage from a complex intersubjective process”.¹¹⁴ Plots take shape and with them a wider range of behaviors and social mediation. By moving between “salient details and plausible plots”,¹¹⁵ truly radical learning begins to emerge. Gradually we stabilize our existing web of meaning, weaving our new plots into it and creating a new everyday

cosmology to recreate the coherence destroyed by the novel stimulus. Our ongoing sensemaking activities are restored, though they have changed substantially; reflecting Deleuze's repetition and difference. The new languages we have developed give rise to the different world-views presupposed in Feyerabend's fundamental conceptual change. Existence has been semantically transformed and radical learning has taken place; we "behold the universe through the eyes of another",¹¹⁶ and importantly, we have found a way to make sense of it.

Towards Future Conversations

As we have already acknowledged, in these interesting times, the need to better understand how we make sense of a radically open future is considered pressing. Weick's (1993) seminal work on the Mann Gulch fire vividly draws our attention to the fact that novel or unexpected events can lead to the collapse of sensemaking. Like many researchers who have followed in Weick's footsteps, he offers a plausible and coherent story that explains *what had happened* and how similar events might be avoided in the future. His narrative is an artifact of his own sensemaking which has also enabled others to make sense of what happens during cosmology episodes when we can no longer think in the future perfect tense and engage in sensemaking activities. What the vast majority of published work shows is that irrespective of our focus (be it past, present, or future), our sensemaking is built on historical foresight; the way we get to grips with the future is by learning from the past. It makes the future a "special case of things already understood".¹¹⁷ The almost poetic question used by Weick, "How can I know what I think till I see what I say?",¹¹⁸ has become the recipe of organizational sensemaking that reminds us it is a retrospective linguistic activity. Whilst conversations around the nature of prospective sensemaking are ongoing, we echo Gioia, pointing back to Weick's seminal work: sensemaking is achieved when we are able to create a plausible narrative that links the past, present, and future.¹¹⁹

Whilst learning from the past enables us to manage similar events (should they occur), we exclude other events that do not enter our imagination. By definition, sensemaking creates a blind spot: to tame James' *blooming, buzzing confusion*, we compromise and (consciously or unconsciously) exclude possible futures that currently are unimaginable. It is the inevitable emergence of the unexpected that reminds us that all our sensemaking activities and the learning they generate are incomplete. Unfortunately, it is often crises that force us to reflect upon our existing ways of knowing. The Titanic, the Wall

¹¹⁶ Chapter 2 of: Proust, M.: 1993, *In Search of Lost Time, Volume V: The Captive*. New York, NY, U.S.A.: Random House. Original edition published in 1923.

¹¹⁷ Page 194 of: Feyerabend (1993).

¹¹⁸ Page 106 of: Wallas, G.: 1926, *The Art of Thought*. New York, NY, U.S.A.: Harcourt Brace.

¹¹⁹ Gioia, D.: 2006, 'On Weick: An Appreciation'. *Organization Studies* 27(11), 1709–1721.

Street Crash, Bhopal, Three Mile Island, Challenger, and 9/11 were cosmological events in which sensemaking blind spots were tragically revealed, drawing our attention to the incompleteness of existing knowledge. In each case, the unimaginable consequences disrupted sensemaking. When we face a radically open future, prospective sensemaking requires that we use the past imaginatively to create futures that are excluded by existing language. We need to generate “moving concepts that relax the boundaries of thought and complicate the ways we produce our realities”.¹²⁰ As Whitehead highlighted, we “cannot think without abstractions; accordingly, it is of the utmost importance to be vigilant in critically revising your modes of abstraction”.¹²¹ Without the constant revision of our modes of abstraction we start to think through our language games instead of into them; resulting in the unquestioned certainty that is ideological dogmatism.¹²² The question that needs to be asked is just how we escape our dogmas? Our article aims to encourage others to consider how this might be achieved, or how we can learn to think differently, whether through dialogue or other imaginative processes.

Finally, we also need to appreciate that there will be times when sensemaking fails us, when we are unable to attribute meaning to events. The central role of language within sensemaking, learning, and organizing is now central to our understanding of these processes. Without language and the stories we create to give meaning to our shared reality, organizations would not come into existence. To try and think about the world we inhabit without language is meaningless. Yet how we deploy our innate linguistic intuition when sensemaking is disrupted is overlooked in the existing literature. The role of sensegiving has been recognized, but not how the sensegiver came to make sense of events. The primary data presented in Maitlis and Lawrence’s empirical work on sensegiving reveal the importance of talk, but the work focuses on its role in giving sense, not creating it.¹²³ Similarly, Garud et al. consider how new narratives are created, although importantly they highlight the need to further explore “the cognitive and social mechanisms that enable narrative development”.¹²⁴ We have attempted to do this, emphasizing the generative dialogic micro-processes from which new stories emerge and give sense to experience. Since the early 1990s, the role of dialogue within organizations has been explored by a range of researchers. We hope that our contribution will encourage others to explore the essential role of dialogue in relation to essential organizational activities such as sensemaking and learning.

¹²⁰ Page 156 of: Clegg et al. (2005).

¹²¹ Page 59 of: Whitehead (1967).

¹²² Page 56 of: Chia, R. and S. Morgan: 1996, ‘Educating the Philosopher-Manager: De-Signing the Times’. *Management Learning* 27(1), 37–64.

¹²³ Maitlis and Lawrence (2007).

¹²⁴ Page 598 of: Garud et al. (2011).

Conclusion

Central to the concept of sensemaking is that through our ongoing language games both meaning and sense are established along lines of comprehension that enable us to connect the past, present, and future. At any stage this process can be disrupted by novel, unexpected, and seemingly incomprehensible events. This article is built upon a simple premise: *novel stimuli* disrupt sensemaking processes and trigger an alternative linguistic response that represents a *semantic transformation*. Semantic transformation requires the creation of a linguistic space in which new terms are coined and old ones broken up, combined, and/or redeployed, in an effort to give expression to the novel circumstances experienced or the new phenomena observed. Such *novel responses* almost invariably emerge through some form of dialogue. Furthermore, dialogues take place almost automatically; when pressed by the circumstances experienced, either collectively or singularly we experiment and improvise with the words in our language games through dialogue. In this way, we are able to do new things with words so that we are able to better account for the novel experiences we encounter. Gradually, through multiple iterations within this transformatory process, sensemaking is restored. A semblance of order is recreated but this time within an entirely different frame of comprehension. When such a transformation occurs, *radical learning* has taken place.

Dialogue is inherently plastic and malleable, far more so than any other form of communication available, and it is this feature that allows us to experiment and improvise and thereby to transform meaning. The use of metaphor, particularly in dialogical communication, is one such way by which we are able to “transport” (Greek *metaphorikos* meaning transportation) our thinking and hence stretch horizons of comprehension beyond the known and the familiar when faced by the stimulus of novelty. Through dialogical “wayfinding” we are able to hijack words, combine and recombine them in ways previously untried, and by doing so twist their original meaning creating linguistic hybrids that enable us to express what was previously inexpressible. When our existing stories fall short of our experiences we learn to speculate about what might be actually happening using words and phrases in different ways as we stumble and stutter our way toward a rudimentary but novel form of expressive coherence; a coherence that may initially sound strange or even absurd but that gradually becomes more and more reasonable as linguistic connections are made.

References

- Bakhtin, M.: 1981, 'Discourse in the Novel'. In: M. Holquist (ed.): *The Dialogic Imagination: Four Essays*. Austin, TX, U.S.A.: University of Texas Press, pp. 259–421.
- Bakhtin, M.: 1986a, 'The Problem of Speech Genres'. In: C. Emerson and M. Holquist (eds.): *Speech Genres & Other Late Essays*. Austin, TX, U.S.A.: University of Texas Press, pp. 60–103.
- Bakhtin, M.: 1986b, 'Toward a Methodology for the Human Sciences'. In: C. Emerson and M. Holquist (eds.): *Speech Genres & Other Late Essays*. Austin, TX, U.S.A.: University of Texas Press, pp. 159–172.
- Becker, M., T. Knudsen, and J. March: 2006, 'Schumpeter, Winter, and the Sources of Novelty'. *Industrial and Corporate Change* **15**(2), 353–371.
- Berends, H. and I. Lammers: 2010, 'Explaining Discontinuity in Organizational Learning: A Process Analysis'. *Organization Studies* **31**(8), 1045–1068.
- Bergson, H.: 1998, *Creative Evolution*. Mineola, NY, U.S.A.: Dover Publications, Inc. Original edition published in 1911.
- Berlyne, D.: 1950, 'Novelty and Curiosity as Determinants of Exploratory Behaviour'. *British Journal of Psychology* **41**(1–2), 68–80.
- Boje, D.: 2001, *Narrative Methods for Organizational and Communication Research*. London, U.K.: Sage.
- Boje, D., D. Fedor, and K. Rowland: 1982, 'Myth Making: A Qualitative Step in OD Interventions'. *Journal of Applied Behavioral Science* **18**(1), 17–28.
- Brown, A.: 2006, 'A Narrative Approach to Collective Identities'. *Journal of Management Studies* **43**(4), 731–753.
- Brown, A., I. Colville, and A. Pye: 2015, 'Making Sense of Sensemaking in Organization Studies'. *Organization Studies* **36**(2), 265–277.
- Brown, A., Y. Gabriel, and S. Gherardi: 2009, 'Storytelling and Change: An Unfolding Story'. *Organization* **16**(3), 323–333.
- Capek, M.: 1978, 'Towards a Widening of the Notion of Causality'. In: J. Sibley and P. Gunter (eds.): *Process Philosophy: Basic Writings*. Washington, D.C., U.S.A.: University Press of America, pp. 79–103.
- Chia, R.: 1999, 'A 'Rhizomic' Model of Organizational Change and Transformation: Perspectives from a Metaphysics of Change'. *British Journal of Management* **10**(3), 209–227.

- Chia, R.: 2000, 'Discourse Analysis as Organizational Analysis'. *Organization* 7(3), 513–518.
- Chia, R. and S. Morgan: 1996, 'Educating the Philosopher-Manager: De-Signing the Times'. *Management Learning* 27(1), 37–64.
- Clegg, S., M. Kornberger, and C. Rhodes: 2005, 'Learning / Becoming / Organizing'. *Organization* 12(2), 147–167.
- Colville, I., A. Pye, and M. Carter: 2013, 'Organizing to Counter Terrorism: Sensemaking amidst Dynamic Complexity'. *Human Relations* 66(9), 1201–1223.
- Cooper, R.: 1976, 'The Open Field'. *Human Relations* 29(11), 999–1017.
- Cooper, R.: 1989, 'Modernism, Post Modernism and Organizational Analysis 3: The Contribution of Jacques Derrida'. *Organization Studies* 10(4), 479–502.
- Cooper, R.: 2005, 'Relationality'. *Organization Studies* 26(11), 1689–1710.
- Crosby, D.: 2005, *Novelty*. Lanham, MD, U.S.A.: Lexington Books.
- Cunliffe, A. and C. Coupland: 2012, 'From Hero to Villain to Hero: Making Experience Sensible through Embodied Narrative Sense-making'. *Human Relations* 65(1), 63–88.
- Deleuze, G.: 2004, *Difference and Repetition*. London, U.K.: Continuum.
- Deleuze, G. and F. Guattari: 1987, *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis, MN, U.S.A.: University of Minnesota Press.
- Feyerabend, P.: 1993, *Against Method: Outline of an Anarchistic Theory of Knowledge*. London, U.K.: Verso, 3 edition.
- Gabriel, Y.: 1995, 'The Unmanaged Organization: Stories, Fantasies and Subjectivity'. *Organization Studies* 16(3), 477–501.
- Gabriel, Y.: 2000, *Storytelling in Organizations: Facts, Fictions, and Fantasies*. Oxford, U.K.: Oxford University Press.
- Garud, R., R. Dunbar, and C. Bartel: 2011, 'Dealing with Unusual Experiences: A Narrative Perspective on Organizational Learning'. *Organization Science* 22(3), 587–601.
- Gephart, R.: 1997, 'Hazardous Measures: An Interpretive Textual Analysis of Quantitative Sensemaking during Crises'. *Journal of Organizational Behaviour* 18(S1), 583–622.

- Gioia, D.: 2006, 'On Weick: An Appreciation'. *Organization Studies* **27**(11), 1709–1721.
- Gioia, D., K. Corley, and T. Fabbri: 2002, 'Revising the Past (While Thinking in the Future Perfect Tense)'. *Journal of Organizational Change Management* **15**(6), 622–634.
- Hernes, T. and E. Irgens: 2012, 'Keeping Things Mindfully on Track: Organizational Learning under Continuity'. *Management Learning* **44**(3), 253–266.
- Ingold, T.: 2000, *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*. London, U.K.: Routledge.
- Ingold, T.: 2011, *Being Alive: Essays on Movement, Knowledge and Description*. London, U.K.: Routledge.
- James, W.: 1996, *Some Problems of Philosophy: A Beginning of an Introduction to Philosophy*. Lincoln, NE, U.S.A.: University of Nebraska Press. Original edition published in 1911.
- Joas, H.: 1996, *Creativity of Action*. Chicago, IL, U.S.A.: University of Chicago Press.
- Lyotard, J.: 1984, *The Postmodern Condition: A Report on Knowledge*. Minneapolis, MN, U.S.A.: University of Minnesota Press.
- MacKay, R.: 2009, 'Strategic Foresight: Counterfactual and Prospective Sensemaking in Enacted Environments'. In: L. Costanzo and R. MacKay (eds.): *Handbook of Research on Strategy and Foresight*. Cheltenham, U.K.: Edward Elgar, pp. 90–113.
- Maitlis, S. and T. Lawrence: 2007, 'Triggers and Enablers of Sensegiving in Organizations'. *Academy of Management Journal* **50**(1), 57–84.
- Maitlis, S. and S. Sonenshein: 2010, 'Sensemaking in Crisis and Change: Inspiration and Insights From Weick (1988)'. *Journal of Management Studies* **47**(3), 551–580.
- March, J.: 2006, 'Rationality, Foolishness, and Adaptive Intelligence'. *Strategic Management Journal* **27**(3), 201–214.
- March, J.: 2010, *The Ambiguities of Experience*. Ithaca, NY, U.S.A.: Cornell University Press.
- Massumi, B.: 2005, 'Introduction'. In: B. Massumi (ed.): *A Shock to Thought: Expression after Deleuze and Guattari*. London, U.K.: Routledge, pp. xiii–xxxix.

- Miner, A. and S. Mezias: 1996, 'Ugly Duckling No More: Pasts and Futures of Organizational Learning Research'. *Organization Science* 7(1), 88–99.
- Morris, P.: 1994, 'Introduction'. In: P. Morris (ed.): *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev, and Voloshinov*. London, U.K.: E. Arnold, pp. 1–24.
- Pinker, S.: 2007, *The Stuff of Thought: Language as a Window into Human Nature*. London, U.K.: Penguin Group.
- Proust, M.: 1993, *In Search of Lost Time, Volume V: The Captive*. New York, NY, U.S.A.: Random House. Original edition published in 1923.
- Raelin, J.: 2012, 'The Manager as Facilitator of Dialogue'. *Organization* 20(6), 818–839.
- Sandberg, J. and H. Tsoukas: 2015, 'Making Sense of the Sensemaking Perspective: Its Constituents, Limitations, and Opportunities for further Development'. *Journal of Organizational Behaviour* 36(S1), S6–S32.
- Schwandt, D.: 2005, 'When Managers Become Philosophers Integrating Learning With Sensemaking'. *Academy of Management Learning & Education* 4(2), 176–192.
- Seidl, D. and D. van Aaken: 2009, 'Anticipating Critique and Occasional Reason: Modes of Reasoning in the Face of a Radically Open Future'. In: L. Costanzo and R. MacKay (eds.): *Handbook of Research on Strategy and Foresight*. Cheltenham, U.K.: Edward Elgar, pp. 48–66.
- Shotter, J.: 2008, 'Dialogism and Polyphony in Organizing Theorizing in Organization Studies: Action Guiding Anticipations and the Continuous Creation of Novelty'. *Organization Studies* 29(4), 501–524.
- Taylor, J. and E. van Every: 2000, *The Emergent Organization: Communication as Its Site and Surface*. Abingdon, U.K.: Routledge.
- Tosey, P., M. Visser, and M. Saunders: 2011, 'The Origins and Conceptualizations of 'Triple-Loop' Learning: A Critical Review'. *Management Learning* 43(3), 291–307.
- Toulmin, S.: 1990, *Cosmopolis*. Chicago, IL, U.S.A.: University of Chicago Press.
- Tsoukas, H.: 2009, 'A Dialogical Approach to the Creation of New Knowledge in Organizations'. *Organization Science* 20(6), 941–957.

- Vedres, B. and D. Stark: 2010, 'Structural Folds: Generative Disruption in Overlapping Groups'. *American Journal of Sociology* **115**(4), 1150–1190.
- Voloshinov, V.: 1986, *Marxism and the Philosophy of Language*. Cambridge, MA, U.S.A.: Harvard University Press. Original edition published in 1929.
- Vygotsky, L.: 2012, *Thought and Language*. Eastford, CT, U.S.A.: Martino Fine Books. Original edition published in 1934.
- Wallas, G.: 1926, *The Art of Thought*. New York, NY, U.S.A.: Harcourt Brace.
- Weick, K.: 1985, 'Sources of Order in Underorganized Systems: Themes in Recent Organizational Theory'. In: Y. Lincoln (ed.): *Organizational Theory and Inquiry: The Paradigm Revolution*. Beverly Hills, CA, U.S.A.: Sage, pp. 106–136.
- Weick, K.: 1988, 'Enacted Sensemaking in Crisis Situations'. *Journal of Management Studies* **25**(4), 305–317.
- Weick, K.: 1993, 'The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster'. *Administrative Science Quarterly* **38**(4), 628–652.
- Weick, K.: 1995, *Sensemaking in Organizations*. Thousand Oaks, CA, U.S.A.: Sage.
- Weick, K. and K. Roberts: 1993, 'Collective Mind in Organizations: Heedful Interrelating on Flight Decks'. *Administrative Science Quarterly* **38**(3), 357–381.
- Weick, K. and K. Sutcliffe: 2007, *Managing the Unexpected: Resilient Performance in the Age of Uncertainty*. San Francisco, CA, U.S.A.: Jossey-Bass.
- Weick, K. and F. Westley: 1996, 'Organizational Learning: Affirming an Oxymoron'. In: S. Clegg, C. Hardy, and W. Nord (eds.): *Handbook of Organization Studies*. London, U.K.: Sage, pp. 440–458.
- Wertsch, J.: 1985, *Vygotsky and the Social Formation of Mind*. Cambridge, MA, U.S.A.: Harvard University Press.
- Whitehead, A.: 1956, *Modes of Thought*. New York, NY, U.S.A.: Cambridge University Press. Original edition published in 1938.
- Whitehead, A.: 1967, *Adventures of Ideas*. New York, NY, U.S.A.: The Free Press. Original edition published in 1933.

- Wilson, T. and D. Gilbert: 2005, 'Affective Forecasting: Knowing What to Want'. *Current Directions in Psychological Science* **14**(3), 131–134.
- Wittgenstein, L.: 1922, *Tractatus Logico-Philosophicus*. London, U.K.: Kegan Paul, Trench, Trubner & Co., Ltd.
- Wittgenstein, L.: 1969, *On Certainty*. New York, NY, U.S.A.: Harper-Collins.