



#### Reflections on the First Five Volumes of New Horizons in Managerial and **Organizational Cognition**

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# Reflections on the First Five Volumes of New Horizons in Managerial and Organizational Cognition

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# ABSTRACT

In this chapter we reflect on our experience of editing the first five volumes of the book series *New Horizons in Managerial and Organizational Cognition*. We summarize some of the contributions of articles published in the series, including those comprising this fifth volume. From its beginnings as a follow-up publication of the second Frontiers in MOC conference, the series has moved in several directions exploring how the field is developing, and what new applications of MOC theories and methods are being explored. We identify and highlight several lines of investigation in particular: work that furthers our understanding of schema and cognitive mapping, work on framing, work on identity, work on heuristics and intuition, work on emotions, and modern methodological advances, enabled by IT and other technologies.

### **Keywords**

Emotions; Framing; Heuristics; Identity; Managerial and organizational cognition; Schema

## Introduction

When we embarked on the adventure of editing the book series *New Horizons in Managerial and Organizational Cognition* (MOC) we shared a sense that there was a need for a forum in which scholars could share theoretical and methodological insights, either extending the study of cognition, or applying cognition theory and methodology, in novel ways, to questions of management and organization. We had been organizers of respectively the first and second *Academy of Management Frontiers in MOC* conferences in Maynooth, Ireland, in 2012, and in Roskilde, Denmark, in 2015. We had both dealt with cognitive theories as part of our own research. We had both built a network of cognition scholars in several countries, people for whom we had a great deal of respect. Collaborating on the creation of such a forum therefore seemed very natural and it has been a successful and rewarding endeavour.

The concept was to be simple: establish a book series that would attract a mix of established and developing scholars to discuss *new horizon* topics in MOC. We also aim to encourage bold thinking that might not fit the standard journal format. As she had played an important part in the organization of the first two *Frontiers* conferences, Anne Huff was a natural person to approach as guest editor of the first volume, a role she thankfully accepted. The topic we chose together to kick off the series was uncertainty. The second volume was to concern methodological advances, and was guest edited by Gerard Hodgkinson, whose work has been very influential in the field. For the third volume, we wished to investigate the links between innovation and cognition, which we did with Stefano Brusoni as guest editor. The fourth volume focussed on the concept of business models from a cognitive perspective, an area that has become central to one of us, with Marcel Bogers guest editing. Finally, this fifth

volume is a more open book under the title *Thinking about Cognition* as we reflect on broader horizons in the field.

In this short chapter, we wish to outline some of the key themes and contributions that have been discussed in the pages of the series over these past 5 years. Not all published papers fall under these themes, and our attempt is thus not to outline every contribution but to consider a sample of the richness and breadth of contributions. For more details on the content of the previous volumes we would refer the reader to the introductory papers for each of these (Sund, Galavan, & Huff, 2016; Hodgkinson, Sund, & Galavan, 2018; Sund, Galavan, & Brusoni, 2019; Sund, Galavan, & Bogers, 2021).

## **Mental representations**

It will not be a surprise to cognition scholars that theories of schema, mental representation, or mental models have featured throughout the series. In the first book of the series Marcy and Berze (2016) use mental models to explore the challenges faced by public sector leaders trying to detect and define the weak signals of emerging crises. They conclude that organisations can improve their capacity to detect emerging variables in complex environments through training and development activities. For example, by training managers to better differentiate and integrate mental models, and in doing so, raise their self-awareness and ability to detect early warning signals.

In the second book of the series, we emphasised methodological developments and two chapters focussed, in very different ways, on methods for causal mapping. While causal mapping techniques have been an important part of the MOC field for some time, comparing or contrasting maps is challenging, both in terms of approaches that are either nomothetic or ideographic and in terms of their structure and content. Laukkanen (2018) opens a door to comparative causal mapping, and the potential for large-N studies through the development of CMAP3 software that facilitates the codification, analysis, and visualisation of causal maps, opening up possibilities of scaling elicitation techniques. Clarkson and Kelly (2018) set the challenge of establishing whether capturing cognitive map structure actually captures any more than random detection would and set out a method for evaluating maps using a Monte Carlo simulation. This work brings us a step closer to methods of elicitation and map structuring that allow for large scale quantitative studies. Considering a very different application of schema theory, Daood, Calluso, and Giustiniano (2021) explore the dark side of business models, where established schemas narrow the opportunities for more radical schemas to be considered, and in doing so establish schemas as cognitive barriers to business model innovation. In the same book, Massa and Hacklin (2021) use visualised schemas as a means of exploring activity systems, at the nexus of representation and cognition. Each of these chapters are wonderful examples of the innovative approaches that scholars are taking to explore new contextual horizons and extend the horizons of MOC to address these new challenges.

In the current volume, Öberg addresses challenges managers face in addressing complex and continuously changing environments through the use of network pictures. These 'pictures' capture not just the components of the network, but how these react to changes, and how others in the network strategize in parallel, creating, and ever-changing the strategic context. It brings the field closer to the examination of dynamic, contextualised interdependence, and managers' subjective and selective choices. In doing so, it highlights the socially interdependent and socially negotiated context, and the limited ability managers have to

capture it in a holistic fashion, instead relying on limited aspects and subjective interpretations.

#### Uncertainty, heuristics, and intuition

In the context of a worldwide Covid-19 pandemic, that at the time of writing is still affecting businesses around the world, the topic of uncertainty remains highly relevant. This was also the topic of the first book in the *New Horizons in MOC* series, and the related topics of heuristics and intuition have since been revisited in a number of papers in the series. At the time, we reflected in a conversation piece with Anne Huff, Frances Milliken, and Gerard Hodgkinson (Huff et al., 2016), that recent advances in the study of uncertainty have not only emphasized that there may be various types of uncertainty (Milliken, 1987; Sund, 2015), but also that uncertainty may be linked to emotional responses (Hodgkinson, Wright, & Anderson, 2015), or even to traits such as overconfidence (Sund, 2016), or in the case of responses to uncertainty, to self-efficacy (Ladd, 2021). Dealing with uncertainty during strategic decision-making, managers make judgments based on intuition (Constantiou, Shollo, & Vendelø, 2016), using decision rules that are both interconnected, and subject to emotional handling (Kazakova & Geiger, 2016). In the current volume, Nath discusses the role that faith traditionally played in reducing uncertainty.

#### **Emotions**

Emotions remain challenging to capture, but methodological advances are being made, and we document some of these in the series. Healey, Bleda, and Querbes (2018) take stock of progress in agent-based modelling and outline how such modelling can be used to build and test models based on the interaction of affect and cognition. Vuori (2018) reflects on interview techniques that can be used to capture not just cognitions, but also emotions

surrounding these cognitions. Capturing and theorizing about affective states have thus led to advances in the study of 'hot' cognition (Hodgkinson, & Healey, 2008; Hodgkinson, Sund, & Galavan, 2018), and how emotions may interfere with processes such as innovation (Bez & Chesbrough, 2021; Sund, Galavan, & Brusoni, 2019).

## Framing

Framing has emerged as another common theme in the series, its use being adapted to an ever-broader range of research challenges. From the first book in the series, we saw issues of framing contests and the challenge of reconfiguring capabilities in the face of environmental change. Altmann (2016) gives us insights into how functional areas in organisations diverge and compete for the validity of their disparate frames. Anderson and Galavan (2016) examine a public clash of frames between state and private actors as they each frame their positions. Rather than accept the frames at face value, a laundry list as it were, they unpick the details of the frames to establish how the actors contest the space.

In a more interactive setting, Slocum, Huff, and Balogun (2016) expose a detailed view of the recursive and cognitive processes involved in developing a frame of reference on technology in organisations. Ultimately, they conclude that integrating, merging, and juxtaposing structures facilitates reframing and change. A change they define as more about a change in use of knowledge than a change in the content of that knowledge. In the third volume, Snihur, Thomas, and Burgelman (2019) examine the performative skill of framing to different audiences, identifying framing as an important strategic process in facilitating the emergence of radical business models. Using a different approach, Zaman et al (2019) explore a fascinating shift from paper-based to digital systems used by medical personnel in hospitals.

They adopt interactive framing methods as an analytical lens to expose the socio-cognitive processes at play and uncover four distinct cycles that align with shifting frames.

# Identity

Perhaps one of the most traditional strands of MOC, identity has also been a later companion on the series journey. Van Boxstael and Denoo (2021) explore the challenges that founder identity has through its imprinting on business models. The current volume presents two chapters that examine identity theory and evaluate it through a more critical lens, setting some substantial challenges for the development of the field. Westgren and Foreman present a case for a new micro-foundational approach to organisational identity, to replace the more common approach of borrowing from individual identity theory. The approach proposed is a recognition of shared identity within the organisation, a collective cognition, rather than a collection of individual and external memberships of a category. In a related space, but following a different approach, Foreman and Whetten take a critical look at the organisational identity construct (Albert & Whetten, 1985) and take on the task of adding clarity, addressing both the identity conundrum, and the identity perspective.

#### **Concluding thoughts**

As we look back, we see other topics to mention, such as the promise of neuroscience methods (Laureiro-Martinez, 2018; Massaro, 2018), highlighted also in this volume by Sinha and colleagues, a space full of opportunity and fraught with technical, methodological, theoretical, and ethical challenges. We have in fact by now had the honour of seeing 47 papers published in the series, authored by 96 individual authors in total, a few having contributed more than once. We have also established a (more or less) yearly panel symposium at the Academy of Management meeting on the theme of the most recent volume,

that has been kindly sponsored by the MOC Division, and on occasion by other divisions (such as Technology and Innovation Management or Strategic Management ) and we are grateful for their support. Finally, we have organized paper development workshops and other activities around the series.

This series has been, and will continue to be, our small contribution to the relatively large group of scholars around the world engaged in the study of managerial and organizational cognition. We hope that many more scholars will continue to contribute in the years to come and send our best wishes and thanks, to those who already have.

# References

Albert, S., & Whetten, D. A. (1985). Organizational identity. *Research in Organizational Behavior*, 7, 263–295.

Altmann, P. (2016), "When Shared Frames Become Contested: Environmental Dynamism and Capability (Re)Configuration as a Trigger of Organizational Framing Contests", In K. J. Sund, R. Galavan, & A. Huff (Eds.), *Uncertainty and Strategic Decision Making*. Bingley: Emerald Group Publishing Limited, pp. 33-56

Anderson, K.S.J. and Galavan, R.J. (2016), "The "how" of Multiple Leader Sensegiving and Strategic Change", In K. J. Sund, R. Galavan, & A. Huff (Eds.), Uncertainty and Strategic Decision Making, Emerald Group Publishing Limited, Bingley, pp. 77-100.

Bez, S.M. and Chesbrough, H. (2020), "Barriers in Searching for Alternative Business Models: An Essay on the Fear of Looking Foolish", In Sund, K.J., Galavan, R.J. and Bogers, M. (Eds.) *Business Models and Cognition*, Bingley: Emerald Publishing Limited, pp. 187-202

Clarkson, G.P. and Kelly, M.A. (2018), "Quantitative Measures of Cognitive Map Structure: Probability Distributions Derived by Monte Carlo Simulation", In Galavan, R.J., Sund, K.J. and Hodgkinson, G.P. (Ed.) Methodological Challenges and Advances in Managerial and Organizational Cognition, Emerald Publishing Limited, Bingley, pp. 175-218

Constantiou, I.D., Shollo, A. and Vendelø, M.T. (2016), "Making Space for Intuition in Decision-Making: The Case of Project Prioritization", In K. J. Sund, R. Galavan, & A. Huff (Eds.), Uncertainty and Strategic Decision Making, Emerald Group Publishing Limited, Bingley, pp. 147-169.

Daood, A., Calluso, C. and Giustiniano, L. (2021), "Unveiling the Dark Side of Business Models: A Novel Framework for Managerial Cognition and Decision-Making", In Sund, K.J., Galavan, R.J. and Bogers, M. (Eds.) *Business Models and Cognition*, Bingley: Emerald Publishing Limited, pp. 39-56.

Healey, M.P., Bleda, M. and Querbes, A. (2018), "Modelling Affect and Cognition: Opportunities and Challenges for Managerial and Organizational Cognition", In Galavan, R.J., Sund, K.J. and Hodgkinson, G.P. (Eds.) Methodological Challenges and Advances in Managerial and Organizational Cognition, Emerald Publishing Limited, Bingley, pp. 23-57.

Hodgkinson, G. P., & Healey, M. P. (2008). Cognition in organizations. *Annual Review of Psychology*, 59: 387-417.

Hodgkinson, G. P., Sund, K. J., & Galavan, R. J. (2018). Exploring Methods in Managerial and Organizational Cognition: Advances, Controversies, and Contributions. In Robert J. Galavan, Kristian J. Sund, & Gerard P. Hodgkinson (eds.) *Methodological Challenges and Advances in Managerial and Organizational Cognition*. Bingley: Emerald Publishing Limited, pp.1 - 22

Hodgkinson, G.P., Wright, R.P. and Anderson, J. (2015), "Emotionalizing Strategy Research with the Repertory Grid Technique: Modifications and Extensions to a Robust Procedure for Mapping Strategic Knowledge", *Cognition and Strategy (Advances in Strategic Management, Vol. 32)*, Emerald Group Publishing Limited, Bingley, pp. 505-547.

Huff, A.S., Milliken, F.J., Hodgkinson, G.P., Galavan, R.J. and Sund, K.J. (2016), "A Conversation on Uncertainty in Managerial and Organizational Cognition", In K. J. Sund, R. Galavan, & A. Huff (Eds.), *Uncertainty and Strategic Decision Making* (pp. 1-31). London: Emerald Group Publishing.

Kazakova, T.V. and Geiger, D. (2016), "The Complexity of Simple Rules in Strategic Decision Making: Toward an Understanding of Organizational Heuristics", In K. J. Sund, R. Galavan, & A. Huff (Eds.) Uncertainty and Strategic Decision Making, Emerald Group Publishing Limited, Bingley, pp. 127-146.

Ladd, T. (2021), "Science and Swagger for Success: The Interactions of Hypothesis Testing and Self-Efficacy to Influence Business Model Performance", In Sund, K.J., Galavan, R.J. and Bogers, M. (Eds.) *Business Models and Cognition*, Bingley: Emerald Publishing Limited, pp. 233-252.

Laukkanen, M. (2018), "Causal Mapping in Practice with CMAP3", In Galavan, R.J., Sund, K.J. and Hodgkinson, G.P. (Eds.) *Methodological Challenges and Advances in Managerial and Organizational Cognition*, Emerald Publishing Limited, Bingley, pp. 147-174.

Laureiro-Martinez, D. (2018), "How Do Managers Really Think? Using Think Aloud and fMRI to Take a Closer Look at Managerial Cognition", In Galavan, R.J., Sund, K.J. and Hodgkinson, G.P. (Eds.) *Methodological Challenges and Advances in Managerial and Organizational Cognition*, Emerald Publishing Limited, Bingley, pp. 279-314.

Massaro, S. (2018), "Neuroscience Methods: A Framework for Managerial and Organizational Cognition", In Galavan, R.J., Sund, K.J. and Hodgkinson, G.P. (Eds.)

*Methodological Challenges and Advances in Managerial and Organizational Cognition*, Emerald Publishing Limited, Bingley, pp. 241-278

Marcy, R.T. and Berze, O. (2016), "Public Sector Leaders as Early Detectors of Crises: The Role of Mental Models, Expertise and Development", In K. J. Sund, R. Galavan, & A. Huff (Eds.) *Uncertainty and Strategic Decision Making*, Emerald Group Publishing Limited, Bingley, pp. 191-214.

Massa, L. and Hacklin, F. (2020), "Business Model Innovation in Incumbent Firms: Cognition and Visual Representation", In Sund, K.J., Galavan, R.J. and Bogers, M. (Eds.) *Business Models and Cognition*, Bingley: Emerald Publishing Limited, pp. 203-232.

Milliken, F. J. (1987). Three types of perceived uncertainty about the environment: State, effect, and response uncertainty. *Academy of Management Review*, *12*(1), 133-143.

Slocum, A., Huff, A.S. and Balogun, J. (2016), "How Recursive Dialogue Frames and Reframes Technological Change", In K. J. Sund, R. Galavan, & A. Huff (Eds.), *Uncertainty and Strategic Decision Making*, Emerald Group Publishing Limited, Bingley, pp. 57-76.

Snihur, Y., Thomas, L. D. W., & Burgelman, R. A. (2019). The Performative Power of Words: How Business Model Innovators Use Framing for Strategic Advantage. In Kristian J. Sund, Robert J. Galavan, & Stefano Brusoni (eds). *Cognition and Innovation*. Bingley: Emerald Publishing.

Sund, K. J. (2015) "Revisiting organizational interpretation and three types of uncertainty", *International Journal of Organizational Analysis*, 23(4), pp.588-60

Sund, K. J. (2016). A Test of Perceptual Accuracy and Overconfidence in a Strategic Issue Context. In K. J. Sund, R. Galavan, & A. Huff (Eds.), *Uncertainty and Strategic Decision Making* (pp. 101-126). Bingley: Emerald Group Publishing.

Sund, K. J., Galavan, R., & Bogers, M. (2021). Exploring the Connections Between Business Models and Cognition: A Commentary. In K. J. Sund, R. J. Galavan, & M. Bogers (Eds.), *Business Models and Cognition* (p. 1-13). Bingley: Emerald Group Publishing.

Sund, K. J., Galavan, R. J., & Brusoni, S. (2019). Cognition and Innovation: A Framework and Invitation to Explore. In K. J. Sund, R. J. Galavan, & S. Brusoni (Eds.), *Cognition and Innovation* (p. 1-11). Bingley: Emerald Group Publishing.

Sund, K. J., Galavan, R. J., & Huff, A. (2016). Introducing New Horizons in Managerial and Organizational Cognition. In K. J. Sund, R. Galavan, & A. Huff (Eds.), *Uncertainty and Strategic Decision Making* (pp. xiii-xvii). Bingley: Emerald Group Publishing.

Van Boxstael, A. and Denoo, L. (2021), "Escaping the Founder Identity Trap: A Process View on Business Model Design During New Venture Creation", In Sund, K.J., Galavan, R.J. and Bogers, M. (Eds.) *Business Models and Cognition*, Bingley: Emerald Publishing Limited, pp. 57-94.

Vuori, T.O. (2018), "An Open-Ended Interview Approach for Studying Cognition and Emotion in Organizations", In Galavan, R.J., Sund, K.J. and Hodgkinson, G.P. (Eds.)

*Methodological Challenges and Advances in Managerial and Organizational Cognition*, Emerald Publishing Limited, Bingley, pp. 59-71.

Zaman, T., Mount, M., Pitsis, T.S., O'Connor, R. and Dean, S. (2019), "A Socio-cognitive Model of Innovation Adoption and Implementation", Sund, K.J., Galavan, R.J. and Brusoni, S. (Ed.) Cognition and Innovation (New Horizons in Managerial and Organizational Cognition, Vol. 3), Emerald Publishing Limited, Bingley, pp. 45-70.