

### Summary of work-in-progress paper:

#### *Objects as means of sustainability knowledge co-creation across the research-practice boundary*

Tackling grand challenges calls for dialogue and distributed experimentation among various stakeholder groups (Ferraro et al., 2015; Köhler et al., 2019), including business practitioners and researchers. Yet whereas research typically operates at the abstract level and aims at rigorous, generalizable, and defensible insights (Sharma & Bansal, 2020), practitioners search for relevant and context-specific knowledge, such as how to turn principles of sustainable development into business practices (Bansal, 2002). Academics can accompany practitioners in the search for new ways of thinking and doing (Miller et al., 2014), yet the ‘research-practice gap’, a result of academics and practitioners’ different knowledge systems (Sharma & Bansal, 2020; Kieser & Leiner, 2009), including different time orientations (Bansal, Bertels, Ewart, MacConnachie & O’Brien, 2012), impedes the translation of the managerial implications of research into action.

Boundary objects can work as means of facilitating and motivating knowledge development processes among people from different occupational communities (Star & Griesemer, 1989; Nicolini, Mengis & Swan, 2012; Carlile, 2002). In the case of researcher-practitioner collaboration, dialogue and perspective sharing can be fostered via temporally extended processes of knowledge co-creation (Sharma & Bansal, 2020; Mohrman, Pasmore, Shani, Stymne & Adler, 2008). While empirical studies illustrate how boundary objects can support cooperation and knowledge sharing as part of intra-organizational collaborative projects, we know less about their uses at the interorganizational, research-practice boundary. Moreover, how boundary objects can foster knowledge creation in the epistemic context of sustainability in business, deserves inquiry, as societally engaged research and tighter researcher-practitioner collaboration are increasingly called for (Williams & Whiteman, 2021; Wickert et al., 2021; Van de Ven, 2007).

This study examines objects as means of knowledge co-creation within these two contexts: the researcher-practitioner boundary and sustainability knowledge. Our research question is: *How can sustainability knowledge be co-created with the help of a boundary object in the research-practice context?*

Conceptually, we position this study at the crossroads of literatures on boundary objects (Star & Griesemer, 1989, Carlile, 2002, 2004; Bechky, 2003; Nicolini et al., 2012; Ewenstein & Whyte, 2009) and researcher-practitioner co-creation (Sharma and Bansal, 2020; Sanders & Stappers, 2008; Mohrman et al., 2008; Bansal et al., 2012). This literature stream intersection is set within the broader theoretical discussion on management research addressing grand challenges (e.g., George, Howard-Grenville, Joshi & Tihanyi, 2016; Ferraro, Etzion & Gehman, 2015).

The empirical context is the textile and fashion sector, an industry ridden with grand challenges. It is responsible for 10% of CO<sub>2</sub> emissions and 20% of industrial water waste globally, an estimated 30% of microplastics in oceans, and its supply chains face serious human rights problems (Ellen MacArthur Foundation, 2017). We examine two objects, both digitally materialized knowledge sharing instruments. These instruments’ preliminary logics and structures were developed by academics, and both were introduced to Finnish textile sector practitioners in 2020. The first is a consumer-facing list of sustainability-oriented companies, the other an instrument to map and communicate a product’s sustainability information.

This qualitative study draws on various data sources: real-time interactions among researchers, textile and fashion firm practitioners, consumers and not-for-profit organization members who participated in the two instruments' development and implementation processes (5 co-creation workshop transcriptions, chat discussions, email exchanges between researchers and practitioners), 18 semi-structured interviews of practitioners, researchers and middle-actors, and visual and textual records documenting the two instruments' development and testing with a first set of textile products. The transcribed empirical data (236 pages) was imported to ATLAS.ti. Our data analysis followed principles for constructing grounded theory (Charmaz, 2006; Locke, 2001) and encompassed three broad phases: initial coding, more focused coding and grouping codes into broader themes, and developing aggregate dimensions.

Our data analysis identifies five second-order themes that we combine into two aggregate dimensions. The objects: (1) frame the process and pace of researcher-practitioner interaction (the 'how'), and (2) foster new understanding of topic substance and participants' domains of activity (the 'what'). In relation to the first dimension, the findings illustrate how the two objects' respective visual forms and incomplete states invited researcher-practitioner interaction, which manifested in distinct temporalities that in turn ignited different emotions in the participant groups. As to the 'what', both objects contributed to expand understanding of sustainability in the textile sector, invite new temporal perspectives to this latter understanding, and encourage stepping into unfamiliar realms of activity as part of researcher-practitioner collaboration.

Our findings highlight four key features of boundary objects that facilitate knowledge sharing among researchers and practitioners in the epistemic context of sustainability: interpretive flexibility, visual form, temporal framing, and activity domain flexibility. The first two aspects are already identified as salient in the literature on boundary objects. We elaborate on their roles in the context of researcher-practitioner knowledge sharing around grand challenges. We suggest temporal framing and activity domain flexibility as two additional boundary object qualities that may be particularly significant in supporting knowledge sharing among researchers and practitioners. Temporal framing relates to the boundary object's capacity to both accommodate *and* challenge the two stakeholder groups' relations to time. Activity domain flexibility, in turn, relates to the objects' implicit invitations for researchers and practitioners to experiment new ways and rhythms of working and reimagine the possibilities of their professional roles.

### **Looking forward – next steps**

In developing this work-in-progress paper, we are searching for ways to sharpen our theoretical contribution, especially as we are currently drawing from various concepts. It might be helpful to focus on only one or two aspects of our current findings. One possibility would be to further explore the temporality dimension and make it a more central focus of the paper. For example, we could analyze how the study's two objects serve as both targets and media of temporal work (Bansal, Reinecke, Suddaby, Langley, 2021) in the sustainability and researcher-practitioner interaction contexts. As such, this study could offer an empirical foray into the role of artefacts in shaping temporal rhythms, patterns, and horizons in a context of collaborating stakeholders' divergent time orientations and an epistemic context characterized by ambiguity and uncertainty. We would welcome any and all feedback and suggestions to help us develop this paper and sharpen its theoretical framework and contribution.

## References

- Bansal, P. (2002). The corporate challenges of sustainable development. *Academy of Management Perspectives*, 16(2), 122–131.
- Bansal, P., Bertels, S., Ewart, T., MacConnachie, P., & O'Brien, J. (2012). Bridging the research-practice gap. *Academy of Management Perspectives*, 26, 73-92.
- Bartunek, J. M., & Rynes, S. L. (2014). Academics and practitioners are alike and unlike: The paradoxes of academic–practitioner relationships. *Journal of Management*, 40(5), 1181–1201.
- Bechky, B. A. (2003). Sharing meaning across occupational communities: The transformation of understanding on a production floor. *Organization Science*, 14(3): 312–330.
- Carlile, P. R. (2002). A pragmatic view of knowledge and boundaries: Boundary objects in new product development. *Organization Science*, 13(4), 442–455.
- Carlile, P. R. (2004). Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, 15(5), 555–568.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.
- Ellen MacArthur Foundation. (2017). *A new textiles economy: Redesigning fashion's future*. Available at [https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy\\_Full-Report.pdf](https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report.pdf). Accessed August 30, 2022.
- Ewenstein, B., & Whyte, J. (2009). Knowledge practices in design: The role of visual representations as 'epistemic objects'. *Organization Studies*, 30(1), 7–30.
- Ferraro, F., Etzion, D., & Gehman, J. (2015). Tackling grand challenges pragmatically: Robust action revisited. *Organization Studies*, 36(3), 363–390.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59: 1880–1895.
- Kieser, A., & Leiner, L. (2009). Why the rigour–relevance gap in management research is unbridgeable. *Journal of Management Studies*, 46(3), 516-533.
- Locke, K. (2001). *Grounded theory in management research*. Sage.
- Miller, T. R., Wiek, A., Sarewitz, D., Robinson, J., Olsson, L., Kriebel, D., & Loorbach, D. (2014). The future of sustainability science: A solutions-oriented research agenda. *Sustainability Science*, 9(2), 239–246.

Mohrman, S. A., Pasmore, W. A., Shani, A. B., Stymne, B., & Adler, N. (2008). Toward building a collaborative research community. In A. B. Shani, S. A. Mohrman, W. A. Pasmore, Stymne, B. & N. Adler (Eds.), *Handbook of collaborative research community* (pp. 615–634). Thousand Oaks, CA: Sage

Nicolini, D., Mengis, J., & Swan, J. (2012). Understanding the role of objects in cross-disciplinary collaboration. *Organization Science*, 23(3), 612–629.

Sanders, E., & Stappers, P. (2008). Co-creation and the new landscapes of design. *CoDesign*, 4, 18–5.

Sharma, G., & Bansal, P. (2020). Cocreating rigorous and relevant knowledge. *Academy of Management Journal*, 63(2), 386–410.

Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, ‘translations’ and boundary objects: Amateurs and professionals in Berkeley’s Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19(3), 387–420.

Van de Ven, A. (2007). *Engaged scholarship: A guide for organizational and social research*. New York: Oxford University Press.

Wickert, C., Post, C., Doh, J., Prescott, J., & Prencipe, A. (2021). Management research that makes a difference: Broadening the meaning of impact. *Journal of Management Studies*, 58(2), 297–320.

Williams, A., & Whiteman, G. (2021). A call for deep engagement for impact: Addressing the planetary emergency. *Strategic Organization*, 19(3), 526–537.