

BOOK REVIEW / COMpte-rendu

ROSÉN, A. P., SALOVAARA, A., BOTERO, A., & SØNDERGAARD, M. L. J. (EDS.). *More-Than-Human Design in Practice*. Routledge. (2024). 254 pp. \$52.99 (Paperback). (ISBN 9781032741208).

Co-edited by Anton Poikolainen Rosén, Antti Salovaara, Andrea Botero, and Marie Louise Juul Søndergaard, *More-Than-Human Design in Practice* is a book grounded in posthumanism, new materialism,¹ and relational ontology.² This edited collection serves as an entry point for educators and researchers interested in exploring pedagogies and methods that move beyond anthropocentrism. The call of ecological urgency compels us to reconceptualize education by using methodologies and approaches that are responsive to the complex dynamics of children's ecological world (Rousell & Cutter-Mackenzie-Knowles, 2020). Scholars in disciplines such as early childhood education, geography, anthropology, and environmental studies have been exploring different ways of engaging with the world around us (van Dooren et al., 2016). Specifically in the field of education, scholars have been considering diverse pedagogies (see Common Worlds Research Collective at <http://commonworlds.net/>) and the “possibility of enacting a new relationship” with the common worlds that we co-inhabit (Jickling et al., 2018, p. 2).

By acknowledging the agency and voices of more-than-humans (e.g., animals, plants, microbes, water, storms, and artificial intelligence [AI]), this book helps address the concerns of researchers and educators around fostering relational, ethical, and material engagement with more-than-humans. Boileau (2024) reminds us that while it is relatively easy to theorize about moving beyond the human, the true challenge lies in praxis. This is especially difficult in the field of education, where most pedagogical models are child-centric and methodologies remain anthropocentric (Pacini-Ketchabaw et al., 2016). *More-Than-Human Design in Practice* offers

both theoretical insights and practical methodologies, which makes it a valuable resource for researchers in education as well as across different disciplines. The book draws from feminist, posthumanist, and Indigenous epistemologies (Barad, 2003; Braidotti, 2013; Haraway, 2016; Kimmerer, 2003) to “enact pedagogies that challenge dominant models” (Jickling et al., 2018, p. 4), deconstructing dualisms, foregrounding relationality, and proposing practical methodologies that recognize diverse ways of knowing. Kohn’s (2013) reminder that “we are colonized by certain ways of thinking about relationality” (p. 21) resonates deeply here, as the book repeatedly encourages readers to move beyond reductionist and structuralist perspectives. The editors of the book emphasize the need to decentre the human and reframe design and research as a complex, messy, relational, and entangled process that accounts for multispecies coexistence.

More-Than-Human Design in Practice brings together 17 chapters by various contributors, including researchers, educators, designers, and practitioners. The first section of the book focuses on designing with/by/for/about more-than-humans. The second part explores methods and pedagogical approaches for incorporating multispecies perspectives into design and research practices.

The book opens with two chapters that highlight the significance of designing *with* rather than *for* plants and animals. The chapter by Westerlaken and Sandelin on the one hand, and that of Cerna et al. on the other, resonate with Kohn’s (2013) reminder that paying closer attention to our engagements with the animate world can help us reimagine how “our lives are shaped by how we live in a world that extends beyond the human” (p. 73). Both chapters argue that fostering more-than-human design requires adopting new ontologies and relational modes of being with other species. Chapter 3 by Campo Woytuk and Søndergaard then presents a particularly significant discussion on the entanglement of microbes with human bodies, emphasizing the agency of microbial life. This perspective aligns with Haraway’s (2016) assertion that we live in symbiotic relationships with more-than-humans.

Each chapter raises and highlights provocative questions at the end, which allows readers to reflect on what has been explored and sets the stage for upcoming chapters. Additionally, the practical applications that the book describes – including workshops, toolkits, and instruction sets – are valuable tools for educators and researchers. For example, Wilde and Lenskjold in Chapter 4 stress the importance of attending to mundane, everyday intra-actions³ with more-than-humans through participatory research and design methodologies. They also challenge dominant

ontological assumptions by advocating for listening and reflecting on complex factors in play. In the same vein, Chapter 5 by Laurien et al. emphasizes the entanglements with storms, while Chapter 6 by Rumo and Lauterbach discusses assemblages with bodies of water. This slowing down of research processes has also been stressed by Taylor (2013) in her book *Reconfiguring the Natures of Childhood*, where she urges us to bring “childhood back to earth” and ground it “within the imperfect common worlds” (p. 62). This section closes with a discussion of designing with planetary AI in Chilet et al.’s Chapter 7, and creative AI in Jääskeläinen’s Chapter 8, by highlighting our evolving relationality with AI. All the perspectives in this first part demonstrate shared epistemologies and ontologies, as well as bring forth diverse ways of knowing and viewpoints.

The second section of *More-Than-Human Design in Practice* delves into methods and pedagogy for more-than-human research, including providing practical tools for data collection. The book is full of compelling case studies that integrate methods like ecological mapping,⁴ stakeholder engagement, and ethnographic observation. A recurring theme throughout this section is the need to “move beyond research practices that confine themselves to human concerns and interests” (Taylor, 2013, p. 151). The inclusion of spatial and ecological mapping methodologies, supported by system maps, provides concrete examples of how researchers can integrate multispecies perspectives into their work. For instance, Chapter 9 by Biggs et al. focuses on multispecies ethnography. Boileau (2024) and Taylor (2013) have separately emphasized the need to extend multispecies ethnography within early childhood education so that we can move beyond the child-centric curriculum dominating pedagogy. Chapter 9 is useful in this regard, as the researchers outline specific methodologies such as noticing, embodiment probes, perception walks, multispecies observation, and biological empathy mapping, all of which can be used by researchers while working with children. In Chapter 10, discussion of agential cuts (Barad, 2014) is noteworthy; as described by the chapter’s authors Poikolainen Rosén et al., *agential* refers to the “inseparable flow of energy in the system” and cuts signify the “momentarily analytical separations of such agency when we choose to focus on particular phenomena” (p. 136). Additionally, Chapter 10 provides an analytical tool for navigating the tensions between entanglement and differentiation in more-than-human research.

Reflexivity emerges as a crucial theme throughout this second section, evident in Chapter 10, as the co-authors stress the importance of researchers’ interrogating their own positionality, particularly in relation to assumed hierarchies and the agency of more-than-humans. Discussion

of an I.N.S.E.C.T. summer camp in Chapter 11 by Keune et al. exemplifies how co-creation and embodiment practices can foster meaningful engagement with non-human life forms. Similarly, Chapter 12 by Lohmann, and Chapter 14 by Nystrup Lund and Hazim. discuss how we can design a multispecies mindset and envision multispecies futures in this environment. Additionally, Chapter 13 by Oktay et al. focuses on temporalities of care⁵ and suggests how sensitizing concepts⁶ can help decode the kinds of relations that inform care practices, while Chapter 15 by Sanchez et al. emphasizes how peering through time enables attention to the temporalities experienced by both humans and more-than-humans. The final Chapter 17 by Metcalfe extends the discussion to pedagogy and reflects on how educators can integrate multispecies design into their teaching and research. The emphasis on stepping outside the traditional classroom to engage with the more-than-human world is particularly noteworthy and reinforces the book's overarching theme of relational ontology.

This timely book serves as a valuable starting point for thinking about more-than-humans, especially, but not only, in education. The authors provide a rich theoretical foundation for such work and offer concrete methodologies and case studies, making the book relevant to researchers from various disciplines. The methodologies, workshops, case studies, and tools can be used by researchers and educators in primary / secondary classrooms or in higher education, especially within teacher education programs. Moreover, the authors do not shy away from acknowledging the challenges inherent in constructing more-than-human designs. The book includes discussion of ethical dilemmas, methodological complexities, and power dynamics, which adds depth to the analysis and ensures that readers approach more-than-human research with critical awareness.

In short, *More-Than-Human Design in Practice* can be an important resource for researchers, educators, and designers seeking to engage with multispecies perspectives. Its emphasis on relationality, entanglement, and ethical considerations makes it a compelling read for those interested in moving beyond human exceptionalism in design and research practices. The book's distinctive focus and theory-practice approach make it a significant – more, necessary – contribution to engaging with environment, design, and more-than-human epistemologies in research and the classroom.

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NOTES

1. *New materialism* is a theoretical orientation that emphasizes the vitality and agency of matter and foregrounds the entanglements of humans, nonhumans, and the material world (Jukes, 2023).
2. *Relational ontology* is the idea that beings do not exist in isolation but are formed through their relationships with others.
3. *Intra-action* is the mutual constitution of entangled agencies. It emphasizes that entities do not pre-exist their relations but rather emerge through their relations (Barad, 2014).
4. *Ecological mapping* is the process of creating visual maps that show the complex network of relationships between various elements in the environment.
5. *Temporalities of care* refers to how care unfolds across moments, rhythms, and duration.
6. *Sensitizing concepts* are lenses that help us notice and make sense of patterns in the complexities around us.

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