

Teaching More-than-human Invitation in Artistic Research and Pedagogy

Selena Savić

Attention to *more-than-human* in artistic and design research spans a wide range of concerns: from problematizing inclusion or authorship, to addressing environmental destruction. It raises the question on who is invited to act and how. More specifically, attention to more-than-human *invitation* problematizes human-centeredness in practicing and teaching art and design, engages with uncertainty in exact sciences, and offers to rearticulate the notion of performativity in humanities. These broad gestures are centered around core ideas explored in posthumanism and feminist new materialism¹, which, together with other post-anthropocentric philosophical frameworks² and approaches to studies of culture,³ unsettle human-centeredness and foreground the problems of indeterminism and uncertainty in exact sciences⁴. The notion of performativity is important as a concept that demonstrates the materiality of theory and language, by connecting materialist concerns in studies of literature and philosophy of language⁵ to materialist concerns in gender theory⁶. This text is a proposal to pay attention to the *more-than-human* by observing the directionality of invitations: where they come from, where they go and how they are received.

The reflections presented here are based on a workshop with doctoral students on the topic of more-than-human invitation. The workshop proposed a method based on stories, which integrates the questions of inclusion and anthropocentrism into a teaching agenda in art and design, and offers a possible mode of transferring new materialist research concerns into teaching.

To rethink invitation through a more-than-human lens requires a decentring of the act of inviting. Invitation as a concept, and as a social practice, is the key by which matters of difference and inclusivity are settled in specific contexts. One can actively extend an invitation to another, such as inviting a friend to dinner. And yet, it is equally important to be attentive to invitations we (do not) receive, as it happens in diverse forms of exclusion and discrimination. Rather than apprehending invitation as something that we send out, an extension of subjective desire or individual politeness, the core idea of this chapter is to recast invitation as that which has to be noticed, that which we might hope to receive. Inspired by contemporary articulations of good relations by Max Liboiron⁷, noticing and entanglement by Donna Haraway⁸, of posthumanism by Rossi Braidotti⁹ and of natural philosophy by Michel Serres¹⁰, this text paints three scenes in which invitation plays a role:

1. The house of Ancient Greek poet Agathon where the banquet described in Plato's *Symposium* took place in 416 BC and guests were invited to give discourses of praise;
2. The Galerie Schmela in Düsseldorf where Joseph Beuys performed *How to Explain Pictures to a Dead Hare* in November 1965, to which a dead animal was invited while audience had to remain outside;
3. The fishing wharf in Newfoundland, Canada, where researchers from the anti-colonial laboratory for pollution research, CLEAR, collected fish guts samples in 2015 and noticed different perspectives on the guts' disposability.

These three scenes problematize invitation and hospitality, while speaking of contemporary themes such as protocol, contract and social clues. Following a posthumanist sensitivity to articulation and difference, this chapter proposes an artistic pedagogy as a way to unfold the intricate implications of being invited, and engage with practice-based research methods such as storying¹¹. The participants were invited to translate the scenes in terms of their research and tell each other stories in small groups. Each scene discussed in this text is an opportunity to reflect on the capacity to notice an invitation in a specific context, to articulate the

research agenda as a story and to develop an engaged understanding and affective connection to a concept. The stories demonstrate the changing notion of the human, when human is considered to be the one who is included in society. They also reshape the position on posthuman, non-human and more-than-human invitation by mixing in one's own experience of having been invited.

The chapter proceeds with a consideration for *invitation* in the context of contemporary posthuman and post-anthropocentric theory, which problematizes the centeredness of invitation with the human. It continues to a detailed reflection of the teaching workshop at which storytelling as a practice-based method was used to unfold three distinct modes of inviting. Finally, the chapter develops into a set of associations with participants' research practices and outlooks of engaging with stories for their teaching efforts.

On invitation

Having the capacity to invite another is a clear recognition of an active, actionable agency that characterizes a modern subject. Such a subject can but does not have to be human. Extending such a perception of agency, Bruno Latour proposed to take into account the agency of hybrids – monsters, cyborgs, tricksters, collectives, imbroglis and other premodern (quasi) subjects.¹² This inspired ontologically-minded philosophical accounts of flat and object-oriented ontologies (OOO), pioneered by Graham Harman¹³, Levi Bryant¹⁴, Timothy Morton¹⁵ and others. Such a take on objects as quasi-objects¹⁶, while expressing a desire to think outside of dualist structures of subject and object, which OOO share with certain feminist and posthumanist thinkers, leaves behind an important complication, namely that quasi-objects are always already quasi-subjects too. The omission risks absolving objects and humans of human subjectivity, and “provides for the capital-S Subject to come back with a vengeance”, as Iris van der Tuin observed.¹⁷ Latour was aware of the mutual implication, which we can locate in his *Conversations on Science, Culture and Time* with Michel Serres.¹⁸ Serres extensively wrote

about quasi-objects, as entities that create relationships between living and inert things.¹⁹ Quasi-objects are not merely passive, they are at the same time quasi-subjects: like a ball in a game of football, objects establish and organize our relations with them and with each other. The quasi- in subjects and objects is the key to extending the perception of agency, and can be read as an intensity, rather than a binary distinction.

In human-decentring gestures, paying attention to invitation of the other plays a key role. The scepticism towards human primacy in sociology emanated from efforts to study and accurately convey the complexity of large technical systems²⁰ extending into and picking up from post-anthropocentric considerations in philosophy and history of science. With attention to non-human perspectives, Bruno Latour's ambition was to account for this complexity and consider people with other living non-living things as ontologically indistinguishable. In feminist theory, Donna Haraway's motivation to challenge human-centric thinking and her interest in more-than-human (while still partial) perspective extends from the writing on the Cyborg²¹ to later articulations of kinship in *Chthulucene*.²² Rossi Braidotti's theory of nomadic subjectivity that resists methodological and other nationalisms, characterizes a process of critical relocation in one's own situatedness.²³ Environmental destruction, and ongoing political crises can be read through the question of who or what gets to be considered human, why are they in the centre, in the centre of what, and how to decentre this view without absolving oneself of responsibility.

Invitation can be a key to read the materiality and directionality of teaching artistic research. In an article for *Educational Philosophy and Theory* journal, education scholars Stephanie Springgay and Zofia Zaliwska²⁴ discussed the use of feminist new materialism in education as a methodology that seeks to emphasize the materiality of matter in research, of both what and who participates in knowledge production. They wrote of learning to be affected, as an invitation to becoming something else. In the context of art and design, research and teaching implicate the researcher/educator on multiple levels which can be productively addressed through stories and their characters.

Storying as method

In this article, I present the teaching and learning experience from the workshop held within the international *Teaching Artistic Strategies* symposium in May 2022 in Basel, in presence of 10 participants, from different doctoral programmes in art, design and art education research. I will introduce the stories we engaged with in sufficient detail to enable a discussion on the way each story articulates the notion of invitation and further speculate on adopting a non-binary thinking tradition and a posthuman understanding of human.

The three scenes that will be introduced in the further text problematize invitation differently, and yet all potentially speak to contemporary experience in terms of protocols, contracts and (social) clues. At the workshop, the participants were invited to brainstorm and tell a story from their research based on the leitmotif in the scene presented. The storying of Plato's Symposium invited articulations on praise, Joseph Beuys exhibition scene invited articulations of an explanation, and CLEAR lab's sample collecting at the fishing wharf scene prompted the participants to speak about methods of search. All accounts were related to participants' research projects. The workshop offered a situated and contextualized way to teach contemporary positions on posthuman, non-human and more-than-human invitation in a non-comprehensive, practical way.

This teaching gesture starts from the intuition that engaging stories can prompt deeper reflection and an affective connection to a concept. Confirming this intuition, there is a sustained interest in the way stories facilitate learning and understanding in educational research. In her introduction to the translation of Jacques Ranciere's *Ignorant Schoolmaster*, Kristen Ross wrote of storytelling as an 'emancipatory method' which presumes an intellectual equality between the teacher and student, between the writer and reader.²⁵ Canadian scholars Michael Connelly and Jean Clandinin²⁶ traced the interest in the narrative method of inquiry back to ancient Greek theory, over John Dewey's work on knowledge and experience, to more recent references in the domain of psychology and education such as Donald Polkinghorne (*Narrative Knowing and the Hu-*

man Sciences, 1988) and Lakoff & Johnson (*Metaphors we Live by*, 1980). They explored and documented the use of narrative inquiry for school curricula and relations among teachers and education scholars. With regard to invitation, they highlighted the importance and ethical charge of negotiating the constitution of a situation, a shared narrative unity. An interest in interdisciplinarity, the way concepts travel across disciplines and knowledge they transport, prompted Mieke Bal's cultural analysis of narrative and her proposition for narratology as a method of inquiry.²⁷

In practical terms, it has been argued that a story successfully connects macro-facts to our lived experience.²⁸ As an example from exact sciences, Alistair Martin-Smith developed roleplay and narrative strategies to teach certain aspects of quantum theory.²⁹ On the artistic side, artist and educator Heather Barnett developed a participatory performance *Being Slime Mould*, which invites groups of people to engage with non-human notions of collective intelligence, following simple principles based on which we understand slime mould to move and search for food.³⁰

In *Staying with the Trouble*, Donna Haraway challenged human-centric thinking by interweaving personal experiences and the stories of artists and scholars³¹. Haraway suggested stories can be formative of practices as a tool for creating awareness and a call to action. Education and pedagogy scholar Heather Greenhalgh-Spencer problematized the direct import of Haraway's storytelling in teaching, in the sometimes unreflected aspiration to bring attention to important topics such as ecological harm, when these stories could have a side-effect of blurring the lines between fact and fiction in destructive ways.³² Specifically interesting for the present discussion on teaching more-than-human invitation is Greenhalgh-Spencer's account of the ways in which she used stories in her classroom. Greenhalgh-Spencer found that integrating factual narratives on electronic waste mismanagement in her classes on the use of technology for educational practice could both create affective connections and desire for change, as well as further entrench negative stereotypes and oppressive discourses around people who are systematically more affected by e-waste. Max Liboiron signalled the slip in directionality of "inviting" versus "being invited" by the kin

as a problematic consequence of assuming privilege and access to such choices. They wrote on the necessity to remaining open to consider both endangered animals as well as plastic toxins our 'kin' when addressing concerns for environmental protection. Similarly, the concern for more-than-human invitation discussed in this article encourages openness to the directionality of invitations and to articulating difference and inclusion through situated, story-based pedagogies.

Praising: On symposium and love

"Listen then," Eryximachus said. "It was our resolution before you entered that each of us in turn, beginning on the left, should make as fair a speech as he could about Eros, and eulogize him. Now all the rest of us have spoken; and since you have not spoken but have drunk up, it is just that you speak. And after your speech prescribe for Socrates whatever you want; and then let him prescribe for him on his right, and so on for the rest."

Plato, *Symposium*, 385–370 BC (214c)

The banquet described in Plato's *Symposium*³³ takes place in the house of Ancient Greek poet Agathon in the year 416 BC. Aristodemus, philosopher and a student of Socrates, arrives to the dinner uninvited. Having encountered Socrates by chance, bathed and well dressed, Aristodemus is urged to join him on his way to the dinner party at Agathon's house. Agathon is celebrating the prize he received for his tragedy at the Lenaean festival³⁴ the previous day. Aristodemus hesitantly accepts to accompany Socrates, who keeps falling behind, lost in thought, and urges Aristodemus to go ahead. As a result, Aristodemus arrives at Agathon's house without Socrates and is welcomed in alone. Socrates is still standing on a neighbour's porch and will not come in until he has finished thinking. When the meal is over, guests are invited to confer to the symposium each giving a discourse. One guest, Eryximachus invites others to present eulogies in praise of Love, starting with Phaedrus, another guest. The discourses they present are on a spectrum of positions

on love. Agathon encourages Socrates to join him on his couch so that he may share in the wisdom. But wisdom, Socrates reminds him, cannot be simply passed on by sitting next to him.

Invited, Included, Interrupted

People who speak at the *symposium*³⁵ are invited by the host. Michel Serres reminds us that the *Symposium* is an allegory, mimicking the feast of the gods.³⁶ The guests do not speak as themselves, but with the responsibility to represent a profession. People speak as allegories of their professions, a timeless, secularized form of the divine. They present placeholder positions. The relation of the host and the guests articulates the social contract that characterizes what it means to be human: the one who is able to receive an invitation, even if they failed to do so like Aristodemus, and show up uninvited. By giving a discourse, the guests earn their place at the table. Otherwise, they would act as “parasites”, eating next to the host, only taking and giving nothing back. Aristodemus however, did not get to give his discourse because of interruptions and changes in the protocol. Serres’ book *The Parasite* can be read as a re-reading of Plato’s *Symposium*³⁷. In it, Serres offered a series of images of parasitic relations, starting with the country mouse who parasites on the city mouse, who parasites on the tax collector, who parasites on society. While tracing these parasitic chains we must notice the directionality of benefits: city mouse invites the country mouse to admire his lifestyle; the tax collector wants to appear generous by inviting many guests to the table. In reality, every host is always also parasite, Serres demonstrated.

Explaining: On art and dead animals

“The idea of explaining to an animal conveys a sense of the secrecy of the world and of existence that appeals to the imagination... The problem lies in the word ‘understanding’ and its many levels which cannot be restricted to rational analysis. Imagination, inspiration, intuition and longing all lead people to sense that these other levels

also play a part in understanding. This must be the root of reactions to this action, and is why my technique has been to try to seek out the energy points in the human power field, rather than demanding specific knowledge or reactions on the part of the public"

Joseph Beuys, quoted in Caroline Tisdall, Joseph Beuys, 1979

The Galerie Schmela in Düsseldorf was a small, underground space where Joseph Beuys performed his avant-garde piece, *How to Explain Pictures to a Dead Hare* (German orig. *Wie man dem toten Hasen die Bilder erklärt*) in November 1965. Beuys spent three hours explaining his art to a dead hare. Beuys' head was covered with honey and gold leaf suggesting access to power and spirituality of these natural elements, to wisdom but also rebirth. The hare was invited to participate in this explanation alone. The animal was not alive, but dead. Beuys carried the animal in his hands, offering it a tour of the show and letting it touch the paintings. He then sat down and thoroughly explained it all to the dead animal while holding it carefully in his arms. During the performance, the audience remained locked outside the gallery where the explanation takes place. The performance was visible only from the doorway and the street window.

Knowing, Living, Communicating

The exhibition in Galerie Schmela was Beuys' first exhibition in the art world context. The present account of the performance is based on art historians' writing, such as that of Claudia Mesch,³⁸ Martin Müller³⁹ and Gene Ray,⁴⁰ Beuys was a controversial West German artist born in Krefeld, who spent most of his career teaching and practicing art in Düsseldorf. He became known for propagating the absurd and the irony with which one must confront the art market, while at the same time offering a hopeful position towards restoring life and good relations. The hare was a broader object of Beuys' shamanistic interest in an animal alter ego, as he was also known to wear a hare foot on the vest and even rabbit droppings in his pockets. The hare was for Beuys a model of

thinking, connected to myths of invention and writing (Greek Hermes and Roman Mercury) and the Egyptian hieroglyph auxiliary verb 'to be.'

Mesch explicitly theorized the action as a pedagogical method concerned with the desire and metaphor of knowledge. Positioning himself next to an electronic device that resembled a receiver, and then connecting an animal bone to the device, Beuys staged a form of mystical communication powered by the animal itself. For Mesch, this depicts a quest for explanation of the world, to the hare and to himself, in which Beuys establishes a metaphor of knowledge beyond rationality, inclusive even of a (dead) animal.⁴¹ The dead hare is an external organ of humanity.⁴²

Searching: On plastic, guts and kin

"I can never tell what most people mean by kin or Land, especially because both are usually positioned as inherently good (which is weird if you have any experience with family members or weather, to name two obvious manifestations of kin and Land that can be monumentally shitty and even dangerous)."

Max Liboiron, *Pollution is Colonialism*, 2021 (p.178)

At a fishing wharf in Newfoundland, recreational fishers were filleting their catch. Members of the CLEAR laboratory from Memorial University of Newfoundland in St. John's were at the wharf too, looking for discarded cod guts to use as samples in their research. Fishers usually discard the guts into the sea at the wharf, because of the legal ban to process cod while at sea. According to his own account, as well as the summary of this experience in Max Liboiron's book *Pollution is Colonialism*⁴³, Charles Mather, member of CLEAR lab, had a formative experience on complexity of Land relations while attempting to obtain the guts here. While considering these guts, something that will not have any use to humans, the researchers were surprised to encounter a person who was seeking to take the guts for food. Instead of generating data in the lab, the guts were given to this person because they clearly needed them more. Even as an isolated event, this encounter complicated the ethics of sample collec-

tion but also demonstrated the necessity to commit to humility in scientific research practice. It taught Mather, who was paying attention, about the impossibility to take resources and their disposability for granted.

Assimilation, Appropriation and Good Relations

The CLEAR lab's object of research is the presence of plastic in fish guts. The specific engagement of the lab is with methods to measure plastic pollution and act upon it, challenging the focus on permissible emissions which frames pollution and land's assimilative capacity as a manageable phenomenon.⁴⁴ Liboiron holds that the very understanding of pollution as "assimilable" carries an extractive relationship to land, which is supposed to serve as a sink for discarded stuff.

But how did pollution get there? Was it invited? Can plastic be our kin? Haraway's take on kin in *Staying with the Trouble* affirms the possibility and urgency of kinship with nonhuman and of collective practices of thinking, making, and copulating.⁴⁵ Max Liboiron however, offers a critique of recent claims in social sciences and humanities calling to extend kinship to "nonhumans". These invitations almost always work selectively: "They almost always mean albatross and almost never mean plastics."⁴⁶ For Liboiron, who references the work of Aileen Moreton-Robinson and Darryl Leroux, already hinting at the possibility to invite or choose kin instead of being invited by the kin is a sign of Whiteness. Multiple levels of appropriation and domination are at work here: exclusion of plastic as undesirable kin, inclusion of animals as a way to extend the definition of kin and by proxy appropriating the Indigenous term itself. Liboiron characterises this as "rude".

Any act of polluting is at the same time an act of appropriation. Michel Serres wrote about this co-incidence in his book about the ways in which pollution communicates power and hegemony.⁴⁷ The world is our host, and we appropriate it by filling the air with fossil fuel emissions, releasing toxicants in water or saturating markets with products we do not need; we turn the world into objects that can be owned, into property. Instead of placing ourselves at the centre, Serres suggests to reserve the centre for things, and consider ourselves within them,

like parasites.⁴⁸ While it is important to remember that saying “we” in context of pollution tends to obscure differences in responsibility and access to resources, Serres’ proposal could be read as a call to suspended judgement over entitlement. To be a parasite is to live off of the nutrient and energy of the host. Being a parasite and polluting is not the same, but they both manifest in appropriation and subversion of resources, eating the world next to one another.

Associations

Plato’s *Symposium* is the first of three images we revisit in terms of invitation. In Ancient Greece, only free, adult men could be explicitly included. It is very hard to relate to the concepts of freedom and inclusion as it was practiced 2500 years ago. In the class at the *Teaching Artistic Strategies* symposium, we tried to recognize these concepts in our current research practices through the original *Symposium* proposition: by giving a short discourse of praise from a professional position. As an exercise, participants were invited to deliver a short account on the appeal their research topics or methods have for them as researchers. They worked in small groups of three to brainstorm and come up with stories. The result was a joint realization of the responsibility when speaking in placeholder terms, holding the place for own research topic and everything that is implied in it. This strictly social endeavour of giving praise in front of others hints at the centredness of praised values in human society.

Reiterating the previous invitation to present a position, the people present in the class were invited to explain the object or topic of their research to each other in pairs. An explanation must remain open to being understood in terms of the other. The dead hare in Beuys’ performance was dead and deaf to his words perhaps, but Beuys kept talking. At the same time, the performance setup, in which only the dead animal was invited to attend, rendered the audience deaf to the explanation. The explanation was explicitly and solely meant for the dead hare, it was articulated in dead hare’s terms, or rather in terms of how Beuys understood the being of this dead animal. The explanation in Beuys’ performance is

intimately linked to invitation as a quality differently realized in the case of the animal and the human audience. In our workshop, explanations invited the participants to adopt the receptive but inaccessible position of the hare, as well as to concentrate on the explanation that is so close to the explainer's knowledge that it moves towards inaccessibility to the listener.

Finally, taking distance from praise and explanation as human-oriented protocols, participants were invited to conceptualize their research as search, and articulate searching methods that would remain sensitive to more-than-human invitation. They worked in groups to reflect on connections and distance they take from their research topic, context, and material conditions. This was specifically based on a critical understanding of kin, and on practicing to pay attention to the myriad of materialities that are entangled in our research topics and methods. The participants presented short accounts on search methods, spelling out what they consider as data (or datum – given) in their research, and critically reflecting on that.

Conclusion

More-than-human invitation requires unsettling and decentring the act of invitation from something that we send out, an extension of subjective desire or individual politeness, to that which is noticed. We increasingly exercise this question on whom or what can be invited in attempts to rehearse non-anthropocentric ways of worlding, challenge human exceptionalism and embrace a posthuman perspective. These efforts testify to an increasing interest and necessity to invite and work with more-than-human. Framing these relations in terms of invitation aims to provide critical distancing from the simplification of “kin” against which Max Liboiron warns.⁴⁹ We do not get to choose our kin, they insist, and yet we can pay attention to the relations with both the animals and the plastic animals ingest. In this text, as well as in stories and practices it describes, we exercised to pay attention to the *non-human* by observing the directionality of invitations. The attempt to do this through stories is part of a

method, and intuition, that enables and fosters a shared narrative unity and explores how engaging stories can prompt deeper reflection and an affective connection to the concept of invitation.

Stories, however, are not neutral. Haraway's critique of the doctrine of objectivity positions it as simply a story, one that loses track of its mediation.⁵⁰ Haraway also affirmed the way out of such tricks through telling different stories, or storying otherwise.⁵¹ Heather Greenhalgh-Spencer argued for telling the truth with stories, through critical fiction and narrative inquiry. She was sceptical towards Haraway's eliding of differences between facts and fiction. Because climate change is so widely doubted by the US public, she stressed that "There are political implications for creating slippage between fact and fiction."⁵² (p. 48) Fiction-induced beliefs are strong and may be persistent even after the reader is given true information. The use of stories in this text aspires to provoke and inspire an affective connection to more-than-human invitation, but distances itself from their "explanation" or such didactics. Rather than turning to something 'other' for instructions and storying otherwise, I suggest that we look at knowledge that is available and close to us and speculate on ways it matters.

Notes

- 1 Posthumanism and feminist new materialism as discussed here is mainly informed by the work of Rossi Braidotti, Karen Barad, Iris van der Tuin and Felicity Colman. See Rosi Braidotti: "Posthuman, All Too Human: Towards a New Process Ontology," *Theory, Culture & Society* 23, no. 7–8 (December 2006): pp. 197–208, <https://doi.org/10.1177/0263276406069232>; Karen Barad: *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007); Rick Dolphijn and Iris Van der Tuin: *New Materialism: Interviews and Cartographies* (Open Humanities Press, 2012), <https://doi.org/10.3998/ohp.11515701.0001.001>; Vera Bühlmann, Felicity Colman, and Iris van der Tuin: "Introduction to New Materialist Genealogies: New Materialisms, Novel Mentalities, Quantum Literacy," *Minesota Reveiw*, no. 88 (2017), <https://doi.org/10.1215/00265667-3787378>.
- 2 Post-anthropocentric philosophical frameworks are a vague association of theories that aspire to de-center the human, such as Bruno Latour's ANT or Graham Harman' OOO, with posthumanism as discussed in previous endnote; see Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory*, Clarendon Lectures in Management Studies (Oxford; New York: Oxford University Press, 2005). Graham Harman, *Object-Oriented Ontology: A New Theory of Everything*, Pelican Book 18 (London: Pelican Books, 2018).
- 3 See narratology and cultural analysis, Mieke Bal: *Travelling Concepts in the Humanities: A Rough Guide*, Green College Lectures (Toronto: University of Toronto Press, 2002).
- 4 See for example Isabelle Stengers: *The Invention of Modern Science, Theory out of Bounds*, v. 19 (Minneapolis: University of Minnesota Press, 2000).
- 5 John Langshaw Austin: *How to Do Things with Words*, Volume 234 of Oxford Paperback, The William James Lectures 1955 (Oxford [Eng.]: Harvard University Press, 1962).
- 6 Barad: *Meeting the Universe Halfway*.

- 7 Max Liboiron: *Pollution Is Colonialism* (Durham: Duke University Press, 2021).
- 8 Donna Haraway: *When Species Meet*, Posthumanities 3 (Minneapolis: University of Minnesota Press, 2008); Donna Haraway: *Staying with the Trouble: Making Kin in the Chthulucene*, Experimental Futures: Technological Lives, Scientific Arts, Anthropological Voices (Durham: Duke University Press, 2016).
- 9 Braidotti: "Posthuman, All Too Human"; Rosi Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory* (Columbia University Press, 2011).
- 10 The natural philosophy of Michele Serres percolates through his entire oeuvre; two core books for the understanding of nature discussed in this chapter are Michel Serres, *The Parasite*, trans. Lawrence R. Schehr (Baltimore: Johns Hopkins University Press, 1982); Michel Serres, *The Natural Contract*, Studies in Literature and Science (Ann Arbor: University of Michigan Press, 1995).
- 11 Haraway: *Staying with the Trouble*.
- 12 Bruno Latour: *We Have Never Been Modern* (Cambridge, Mass: Harvard University Press, 1993).
- 13 Harman: *Object-Oriented Ontology*.
- 14 Levi R. Bryant: *The Democracy of Objects* (Ann Arbor: Open Humanities Press, 2011).
- 15 Timothy Morton: *Hyperobjects: Philosophy and Ecology after the End of the World*, Posthumanities 27 (Minneapolis: University of Minnesota Press, 2013).
- 16 Michel Serres introduced the Theory of the Quasi-Object in his 1982 book, *The Parasite*.
- 17 Iris Van der Tuin: "Diffraction as a Methodology for Feminist Onto-Epistemology: On Encountering Chantal Chawaf and Posthuman Interpellation," *Parallax* 20, no. 3 (July 3, 2014): 231–44, <https://doi.org/10.1080/13534645.2014.927631>.
- 18 Michel Serres and Bruno Latour: *Conversations on Science, Culture, and Time*, 5. print, Studies in Literature and Science (Ann Arbor, Mich: Univ. of Michigan Press, 2008).

- 19 The notion of quasi-object and subject pervades Serres' entire work; a clear and specific take can be read in Michel Serres, *Angels. A Modern Myth*, trans. Francis Cowper (Paris: Flammarion, 1995).
- 20 Bruno Latour: *Aramis, or, The Love of Technology* (Cambridge, Mass: Harvard University Press, 1996).
- 21 Donna Haraway: "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s," *Australian Feminist Studies* 2, no. 4 (March 1987): 1–42, <https://doi.org/10.1080/08164649.1987.9961538>.
- 22 Haraway: *Staying with the Trouble*.
- 23 Braidotti: *Nomadic Subjects*; Braidotti: "Posthuman, All Too Human."
- 24 Stephanie Springgay and Zofia Zaliwska: "Learning to Be Affected: Matters of Pedagogy in the Artists' Soup Kitchen," *Educational Philosophy and Theory* 49, no. 3 (February 23, 2017): pp. 273–83, <https://doi.org/10.1080/00131857.2016.1216385>.
- 25 Jacques Rancière: *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation* (Stanford, Calif: Stanford University Press, 1991). Introduction.
- 26 F. Michael Connelly and D. Jean Clandinin: "Stories of Experience and Narrative Inquiry," *Educational Researcher* 19, no. 5 (June 1990): 2–14, <https://doi.org/10.3102/0013189X019005002> listed in footnote 1 on page 12.
- 27 Mieke Bal: *Narratology: Introduction to the Theory of Narrative*, 2nd ed (Toronto; Buffalo: University of Toronto Press, 1997).
- 28 William Cronon: "A Place for Stories: Nature, History, and Narrative," *The Journal of American History* 78, no. 4 (March 1992): 1347, <https://doi.org/10.2307/2079346>.
- 29 Alistair Martin-Smith: "Quantum Drama: Transforming Consciousness through Narrative and Roleplay," *The Journal of Educational Thought* 29 (1995): pp. 34–44.
- 30 Heather Barnett: "Many-Headed: Co-Creating with the Collective," in *Slime Mould in Arts and Architecture*, ed. Andrew Adamatzky, River Publishers Series in Biomedical Engineering (Denmark: River Publishers, 2019).
- 31 Haraway: *Staying with the Trouble*.

- 32 Heather Greenhalgh-Spencer: "Teaching with Stories: Ecology, Haraway, and Pedagogical Practice," *Studies in Philosophy and Education* 38, no. 1 (February 2019): 43–56, <https://doi.org/10.1007/s11217-018-9628-1>.
- 33 Plato, *Plato's Symposium*, ed. Allan Bloom, trans. Seth Benardete (Chicago: University of Chicago Press, 2001).
- 34 The Laenian festival was an annual event in Athens with a dramatic competition.
- 35 In the tradition of ancient Greece, the symposium was the key social institution, a forum for men of respected families to debate and discuss.
- 36 Michel Serres: *The Five Senses: A Philosophy of Mingled Bodies (I)* (London; New York: Continuum, 2009); Serres, *The Parasite*.
- 37 Vera Bühlmann: *Mathematics and Information in the Philosophy of Michel Serres*, Michel Serres and Material Futures (Bloomsbury Academic, 2020).
- 38 Claudia Mesch, *Joseph Beuys: Critical Lives* (London: Reaktion Books, 2017); Claudia Mesch and Viola Maria Michely, eds., *Joseph Beuys: The Reader* (Cambridge, MA: MIT Press, 2007).
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