

Michaela Fenske (ed.)

NARRATING THE MULTI- SPECIES WORLD

Stories in Times of Crises,
Loss, and Hope



[transcript]

Human-Animal Studies

Michaela Fenske (ed.)
Narrating the Multispecies World

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Assisted by Pearl-Sue Carper

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Acknowledgements

The present volume is based on a hybrid conference held at the University of Würzburg in August 2023. The conference was a high-risk project for the chair of European Ethnology/Cultural Analysis as the organizer of the conference. This was because of the COVID-19 pandemic, which had limited social exchange worldwide since 2020 and was still virulent in 2022 when the call for papers was distributed. It was also precarious because of the ongoing construction site that had been accompanying our work at the university for more than three years. Moreover, the conference was particularly tricky because of its open approach in a field in which we had only started to work since the end of 2017. The call for papers combined the established field of doing research within folklore or narrative culture studies with that of multispecies studies that had just been newly established in Würzburg. The call for papers, distributed in spring 2022, invited international colleagues in the humanities and social sciences to contribute to a conference dealing with the topic of “narrating the multispecies world”. We were interested in answers for and responses to questions such as: What are the stories of, in and about our multispecies world today? What is the role of the past – which parts of our narrative heritage do we maintain? What are the powerful new stories developing possibilities for a peaceful cohabitation in the multispecies world? Given the scope of the projected conference, we wondered whether we would receive a substantial number of submissions and if these would fulfil our expectations.

Our expectations were exceeded by far. Flourishing forbs and figures of wolves, mantes and wild bees narrating today’s multispecies world transformed the old-fashioned auditorium into a multispecies arena that became a place of vibrant exchange. Scholars originating from almost every continent participated by exchanging their ideas, discussing forms and ways of understanding and narrating the current multispecies world. After the first day of the conference, one of the participants expressed the common sentiment by saying, “I do not know any of the speakers personally, but for me, it is like coming home.” Even weeks after the event, our students were still enthusiastic about the experience.

Conferences and conference volumes are the result of many people’s efforts. The University of Würzburg sponsored the conference with budget resources. The Philosophical Faculty supported the conference with rooms and helpful advice. Special thanks go

to Manuela Ohlmann for her space management and to Co-Dean Jürgen Rauh for his charming welcome to the participants. Architect Isabell Bauer from the building authority halted the construction activities site during the conference ensuring peace and quiet. The refectory crew served drinks and snacks in the breaks. The team of the Botanical Garden invited the conference attendees and organizers to a wonderful summer evening meeting in the garden. Special thanks go to Markus Riederer and Gerd Vogg for introducing us to the history of this magic place in Würzburg and giving tours through its different areas. Colleagues, mainly from Würzburg, introduced keynote speakers and moderated panels; special thanks go to Catrin Gersdorf, Lisa Herrmann-Fertig, Marlis Heyer, Ulrich Marzolph, Christine Ott and Laura Otto.

This conference would not have been possible without the teamwork of the chair of European Ethnology/Cultural Analysis. From the beginning of the idea to the dismantling of the last posters of the conference, the team worked closely together, and as the head of this team, I cannot be thankful enough for its members' constant professionalism. The head of the conference office, Pearl-Sue Carper, took care of just about everything of importance for the conference participants. Student members of her team – consisting of Sherin-Michelle Grabenstein, Lenka Lalovic, Victoria Porcu, Tukina Sebastiao, Anna-Lena Seitz and Lyric Stott – had already supported the conference preparations as early as spring 2023. Pearl-Sue Carper also checked the first proofs of the present volume. Susanne Dinkl, although already burdened with her regular teaching responsibilities, offered herself as extra help for the conference team. Felix Linzner organized everything that had to be arranged at the last minute. Our secretary, Monika Schäfer, helped to solve all the questions of administration, organization and fluttering nerves before, during and after the conference. Luise Stark started to narrate the multispecies world from a Franconian perspective in early 2023: As our master of communication, she organized the conference website, the posters and the figurines of species inhabiting the auditorium during the conference together with the live forbs. She also designed the picture on the cover of the present book. Krister Steffens was the leader of the technical team. Together with his student colleagues, Maximilian Krug and Nils Waldmann, and the support of the computer centre of our university, he managed a variety of technical challenges to make intercontinental digital exchange possible.

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Finally, the editor and Pearl-Sue Carper thank the contributors for their willingness to invest the time, effort and passion in this project. Not all of the papers presented at the conference could be published here for various reasons. On behalf of the organizers, I thank all of the conference participants for their engaged and critical presentations. Regarding the present collection, we hope to contribute to the worldwide search for new stories to narrate the lively multispecies world and its flourishing.

Opening

Narrating the Multispecies World in Times of Crises

An Introduction

Michaela Fenske

Narrating in Times of Crises

Strange unidentified flying objects appeared in an orchard in Franconia, Germany, in the spring of 2006. The gardeners in the idyllic countryside were still panicking even after having successfully struggled against what they perceived as “UFOs”. The scene, as described by German entomologist Heinz Bußler, is horrible: twelve aliens were killed, and the gardeners were not sure whether some of them had been able to escape (2007). The first violet carpenter bees (*Xylocopa violacea*) arriving in a Franconian garden after having migrated from the river valleys with their mild temperatures were not welcome. Interpreted as unidentified flying objects, they had no chance to integrate into the Franconian biosphere. Gardeners who were unfamiliar with this predominantly Mediterranean wild bee felt threatened. The gardeners’ reaction made entomologist Bußler express his concern about the survival chances this newly arrived insect might have in Germany.¹

The story of the violet carpenter bee and its migration from the south to the north of Europe is just one of the many stories told today about the increasing mobility of other-than-human beings in the face of today’s global polycrisis (Henig and Knight 2023). The effects of the current crises significantly affect life on earth in our “planetary age” (Chakrabarty 2021). The mobility of other-than-human beings, similar to that of humans, links to a variety of experiences. Some are forced to leave their original territory and have to find new living environments; others, who are not as mobile, might die or even become extinct as a species; others again might even experience a resurrection or revival of their species in the course of their migration. We witness stories of newly arriving or disappearing species all over the world, whether they are plants or animals. Although the increasing mobility of living beings is only one aspect of today’s polycrisis, it is an important aspect that unfolds in multiple forms.

1 The story of the “UFOs” is told in more detail in my article dealing with the violet carpenter bee as my partner in reflecting the relationship of humans and insects, see Fenske (2025).

Today's polycrisis manifests itself in the shape of climate change, loss of biodiversity, soil degradation, and the pollution of air, earth and water that, in their turn, result in increasing poverty and famine, a continuous increase in the number of (poor) humans, a lack of participation (e.g. in education), multiplying social inequality, socio-economic separation, populism and related factors. There are not only many different aspects of the multiple crises, but these aspects are also intertwined. As a result, one crisis cannot be solved without considering the others. The loss of biodiversity, for instance, is closely connected to the increasing number of (poor) humans and the resulting social inequality. From a multispecies perspective, the socio-ecological crises have reached a dramatic state, as even those living beings whose existence we take for granted in our everyday lives are in danger of disappearing; in Europe, this concerns, for example, common birds, such as the sparrow, widely spread molluscs, like shiny snails, and various endemic trees, including the horse chestnut and mountain ash (European Parliament 2020).

International scholars of the humanities and social sciences have suggested various concepts to fathom today's polycrisis for a number of years: The term Anthropocene emphasizes the profound influence human beings have on life on earth (e.g. Horn and Bergthaller 2020). Terms such as Capitalocene (Moore 2018), Plantationocene or Anglocene mark a special set of ethics, and practices of exploitation, colonialism, sexism and racism (e.g. Mentz 2017); the term Novacene serves to reflect the world-forming power of hyperintelligence (Lovelock 2019); the designation Chthulucene underlines both the becoming of humans with other beings and emphasizes the differences of this becoming within space and time (Haraway 2016). Regardless of which of these scholarly concepts one prefers, the challenge lies in the undisputed certainty that human beings have become a planetary force, but do not deal responsibly with their unleashed power.

Times of crises are times of narrating. Crises not only ask for narrating as a means of coping with uncertainty and danger, it also constitutes a fundamental resource of survival within crises (e.g. Dinkl et al. 2023). Narrating the violet carpenter bees as "UFOs", for instance, served as a means to overcome the fear towards the unknown insects in the Franconian orchards and gardens. Narratives have currently increasingly developed an inherently ambivalent nature. This is a result of not only changing ethics, but also changed perspectives that result from the post-humanistic decentring of the human. The arrival of the violet carpenter bees in Central Europe constitutes a lucid example to illustrate this ambivalence. From a human perspective, the unknown insect is narrated as a threat; the wild bee itself would probably narrate the human reaction as an unjustified and unnecessarily brutal act of violence. The presumed perspective of the wild bee was imagined by the entomologist Bußler (2007), who was shocked by the brutality of the gardeners. If we take the example of the violet carpenter bees as representative, stories in our times are not as clear and unambiguous as they used to be. Although there has always been more than one perspective, only now do we become aware of the diversity of different perspectives. But stories have also become ambivalent in other ways. Traditional stories lose their relevance for the everyday experience; they are no longer convincing or supportive for managing the everyday lives of people. The metanarratives of modernity have lost their power of persuasion. The importance of storytelling has grown in times of polycrisis and, what is more, new stories are needed.

Experts from different fields – from business life to politics, the sciences and humanities – as well as members of societies worldwide ask for new stories more often and become more demanding than previously. Within academia, these demands are, at times, inspired by feminist approaches, queer standpoints, the perspective and knowledge of indigenous people or other marginalized groups. Within the field of environmental humanities, the new stories needed are intended to question modern world-views; they are expected to transmit fresh perspectives by communicating new paradigms (Heise 2017). The environmental historian Frank Uekötter, for example, is looking for new stories on monocultures (2023). The new narratives are expected to explain the logics of the damaging methods of food production. The new narratives Uekötter is looking for are expected to illustrate the complexity of agrarian food production beyond simple patterns of imagining rogue farmers and miserly consumers.

At the same time, new forms of storytelling are becoming popular in both traditional and new media (e.g. Bencke and Bruhn 2022). In the field of multispecies storytelling, previously uncommon practices of narrating, such as speculating, have become popular in the arts and sciences (Haraway 2016).

Especially those whose declared goal it is to live in a prosperous multispecies world – i.e. scholars of environmental humanities, artists, conservationists, gardeners and others – propagate new stories and forms of narrating. According to multispecies scholar Donna Haraway, these new stories will not only allow humans to stay “with the trouble” of a damaged planet (2016), but they also enable us to identify and apply new perspectives to overcome at least some of the negative effects that we are currently experiencing. In these ways, narrating increasingly becomes an extremely powerful practice.

Narrating as a World Building Practice

In the context of folklore studies, a field in which European Ethnology has come into being, the power of narrating is not a new feature. From the early interest in popular culture in the 18th century, narrating was perceived as an influential and powerful practice (Bendix and Hasan-Rokem 2014). For a long time, folklorists focused on what German scholar of humanities André Jolles named “Simple Forms” of narrative tradition (1930), such as fairytales, fables and legends. Folklorists have since the 1970s increasingly studied the everyday and popular forms of narrating, leading to performance studies and studies of the repertoire of specifically talented narrators. Today, the expanded focus of folklore studies includes communication in all its different forms. The plurality of narrative forms and genres studied now pertains not only to texts but also to two-dimensional illustrations, films, three-dimensional statues, enacted performances and other forms of storytelling. Ulrich Marzolph, German scholar of Middle Eastern narrative culture, and Regina Bendix, Swiss-American cultural anthropologist, outlined the new expanded understanding of narratives as follows:

While a narrative is primarily constituted by content, it may be rendered in writing or may exist as a two-dimensional illustration or painting or a three-dimensional statue or monument; narratives may be performed and enacted and often form the backbone

of customs and rituals. The cultural universe of narrative underlies novels and films; allusions to it may be found in fashion trends as well as in architecture. (2012: 1–2)

This understanding also strengthens the link to artistic forms of narrating that offer inspiring possibilities to create new narratives in the field of multispecies storytelling (e.g. Anker and Flach 2024; Kirksey 2014).

Folklore has always dealt with other-than-humans. Storytelling in Western tradition deals particularly with animals and plants which live together with humans, so-called domesticated animals, such as honeybees, cattle or pets. The anthropocentric perspective of Western storytelling also includes those living beings that are not part of the household (and here, I consciously avoid the reinforcement of modern binaries by not using terms such as feral or wild). This pertains to species living close to humans that are perceived by them as a nuisance, such as fleas or mosquitos, or even threats, such as bears or wolves. A look into the range of entries covered by the *Enzyklopädie des Märchens*, the concise handbook of historical and comparative folk narrative studies (Ranke et al. 1977–2015), helps to detail this assessment. The comprehensive collection of research on popular narratives in the *Enzyklopädie des Märchens* shows that folklorists from the 19th to the 21st century have rarely been interested in the diversity of animals and plants. Following an anthropocentric agenda, only those other-than-human beings were considered worthy of being narrated if this made sense from the human perspective. Instead of wild bees, such as the violet carpenter bee, honeybees attracted interest as a role model for industrious life. In this logic, it was enough to speak of trees, as such, without specifying different species of trees. In the Western tradition of thinking, other-than-humans were mainly narrated as objects and means for developing stories, in the terms of literary and media studies as “diegetic actors” (e.g. Borgards 2015).

This perspective has changed in the course of recent post-humanistic theories. Folklore studies now regard other-than-human beings as independent actors with their own agency (Fenske and Norkunas 2017; Magliocco 2018; Middelhoff and Peselmann 2013). With their change of paradigms, folklore studies and the field of narrative culture studies have become part of the transdisciplinary field of environmental humanities, including ecocriticism, econarratology and multispecies studies that, in their turn, incorporate animal, plant and extinction studies. Folklore studies enrich this transdisciplinary field with their wide understanding of narrating and their focus on narratives of the everyday of people worldwide.

Since humans are the main factor in generating the polycrisis, the humanities are challenged to contribute to solutions (e.g. Heise 2016). The field of environmental humanities commands a particular expertise in narrating and narratives. The field of multispecies studies and its subfield of extinction studies focus particularly on narrating. Thom van Dooren, multispecies and extinction studies scholar, once formulated a related programme:

Stories allow us to hold open simultaneously a range of points of view, interpretations, temporalities, and possibilities [...]. [It is] a [...] lively approach to telling stories about life and death in the shadow of extinction. It is an effort to weave tales that add flesh to

the bones of the dead and dying, that give some vitality, presence, perhaps “thickness” [...] in the minds and lives [...]. (2014: 8)

Within the field of environmental humanities, narrating and analysing narratives have developed into tools and methods of both understanding and forming the world (e.g. Gibson et al. 2015). Analysing narratives helps us to understand the polycrisis and its effects on multispecies communities. Narratives – as containers and fields of exploration of ethics, values and attitudes – provide insights into people’s world-views. At the same time, narrating allows us to discuss, establish and communicate new ethics and attitudes. The act of narrating constantly documents and creates relationships; it is part of our becoming with humans and other-than-humans; it expresses our “cultures of entanglements” (Anker and Flach 2024). Narratives communicate the multispecies world and invite humans to become aware of the fact that they are part of these entanglements. Narratives offer identification with and within the multispecies entanglements.

Narrating is also a practice of mourning loss – lost battles against environmental devastation, lost friends and relatives in our multispecies neighborhoods. They transmit what we have lost to a broader public. In the words of Belgian philosopher Vinciane Despret, they allow us to adumbrate that “every feeling of every being in the world causes all beings in the world to feel and think differently. When one being is no longer there, the world narrows at a stroke [...]” (2021: 39).

Narrating helps us to overcome obsolete perspectives, paradigms and ethics. It supplies a medium for dreams and hopes. Similar to speculative fabulation, narrating opens up a space for utopias (e.g. Haraway 2016). Especially in times of crises, utopian narratives allow us to rethink society and test “a less cautious and more imaginative engagement with possible futures” (Levitas 2013: 149) This approach includes looking for alternative ways of living and pushing the process of transformation into a better multispecies future.

The field of environmental humanities has prepared the ground for changing the anthropocentric perspective on narrating over the past 20 years. Most importantly, narrating today is no longer recognized as a practice exclusively germane to human beings (e.g. James and Morel 2020; van Dooren and Rose 2012). The wide understanding of narratives and narrating as popular within folklore studies today, and the consideration of more-than-human sounds in the humanities (e.g. Herrmann-Fertig and Fenske 2024) allow us to interpret narrating as a multispecies practice of interacting and connecting with the world (Despret 2022). This makes new forms of interspecies communication and understanding possible.

Day by day, people all over the world experience transformation in their everyday lives and cope with transformation by narrating it. At the same time, scholars in the humanities reinterpret human heritage and study the effects of transformation by analysing the narratives related. Transformation is a key term in times of polycrisis.

Narrating the Transformation – Transformation through Narrating

The mobility of living beings worldwide reminds one of the crucial importance of the everyday places in which we live. Where we live and with whom we share our lives matter. As geographers Owain Jones and Paul Cloke wrote some twenty years ago: “Nature-society relations are continually unfolding in the context of specific places, in which meanings will arise from particular interactions between different assemblages of social, cultural and natural elements” (2002: 1).

I listen to many narratives in my neighbourhood and my office, both situated in the warm vinery area of Franconia, that deal with the transformation of our environment. My neighbours tell me stories about cute rabbits coming close to their homes and eating the sprouts in their raised beds. Early in the morning, when my dog and I share a walk, I often see rabbits using the road to leave our neighbourhood before humans start their daily activities. A neighbour is engaged in the protection of beavers that have been reintroduced into the south of Germany since the 1960s and are now highly protected: he tells the story of how much this rodent loves to feed on sugar beets in the fields. Visiting a pub with a colleague, I hear the story of the amber forest cockroach (*Ectobius vittiventris*), a newly arrived insect from the Mediterranean that my colleague recently discovered in her warm city apartment. Other colleagues tell of their bird protégés whom they raise in spring and summer because they have become homeless due to heavy rainfall or drought, or because there is a lack of insects to feed them. On an excursion with students to the mountains, our guide laments the presence of wolves. Now also protected by law, the wolves menace the sheep and cause considerable extra effort for the shepherds.

Similar to any other region, my home area is distinct from other places in the world, as it is populated by specific multispecies communities. At the same time, people here share the stories of people all over the world: The former notions of wild and domesticated that were clearly separated during the cleaning campaigns of modernity (Latour 1993) are now blurred due to the expansion of humans. Protected retreats for those animals that are not accepted as parts of the household are becoming rare. Many animals not only experience the destruction of their original habitats, but also suffer from the effects of climate change. As a consequence, some people produce narratives of interspecies solidarity. Stories of “peppers” (i.e. people caring for the fledglings of wild birds, from an agent derivative of Middle High German *pepelen* “to feed or suckle”), tales of gardeners accepting sprout-eating rabbits in their gardens – similar narratives of interspecies love and care are told all over the world. The attachment to animals or plants living together with humans sometimes generate stories of tension that narrate conflicts with such species as wolves or beavers. The integration of other-than-humans generally seems to be all the easier the less they threaten human ways of life.

Analysing some of the narratives dealing with the transformation of our everyday because of the effects of the polycrisis, scholars of the environmental humanities argue that people in the everyday worlds have already narrated new stories that do not comply with the storylines of Western anthropocentric traditions. American psychologist Anne Beneventi, for instance, argues that a new meme of kinship for human-animal relations is part of recent stories in the USA that narrate the connectivity of humans and other

species (2017). Beekeepers in the Global North stop the old tradition of narrating the swarming of honeybees as something annoying that should be suppressed, while others challenge the supreme command of humans over honeybees. By changing the metanarrative, more and more beekeepers nowadays celebrate the swarming of honeybees as a sign of their vitality in narratives and beekeeping practice (Fenske 2017).

Comparable to this development, historians, anthropologists and scholars of political ecology publish their critical reviews of interpreting our world in the way of Western tradition, discovering alternative ways in the history of humans. They are aware that some practices of protecting nature stand in the tradition of exploitation, domination, racism and sexism. American anthropologist David Graeber and British archaeologist David Wengrow reinterpret the history of humanity and “begin to tell another, more hopeful and more interesting story” (2022: 4). In this perspective, it is the Western tradition of enlightenment that has enforced inequality and violence against Indigenous people and other living beings. Alternatives to modern ways of life have always existed, and Canadian political ecologist Audra Mitchell introduces the concept of “bioplurality” to offer a new paradigm against common narratives of extinction or conservation (2023).

Studies such as these demonstrate how important it is that we gain a better understanding “of the [stories] that long have been in circulation” (James and Morel 2020: 1). Moreover, we do not necessarily have to look for new stories elsewhere, but can trust ourselves to narrate new ones.

Narrating the World as a Better Place

The present anthology is situated within all these aspirations to find new stories for a better understanding of and supporting a flourishing multispecies world. The contributors, coming from different disciplinary contexts, are scholars in the humanities or social sciences, artists and/or activists. They feed their various perspectives, different traditions of thinking and communicating, as well as different experiences of life into this common book project. The contributors look for both forgotten and new stories harbouring chances of a peaceful cohabitation in the multispecies world. All contributions share a broad understanding of narratives, including different forms of art and media. Being aware that each contribution is a narrative itself, some contributors experiment with new forms of multispecies storytelling and the art of speculating. Others play with different forms of narrating, create pieces of art through narrating, reflect activism or are themselves part of activist movements. With its experimental ways of probing new stories and novel forms of narrating, this volume might irritate readers who expect to find familiar scholarly modes of writing. In general, we hope that readers value this irritation as another step needed for a worldwide transformation towards a flourishing multispecies world.

Concurring with the open character of the individual contributions, the volume is loosely organized into five different sections, each one focusing on a specific practice of narrating the multispecies world. These sections are labelled Communicating, Caring, Connecting, Remembering and Speculating. A concluding chapter by Regina F. Bendix

assesses the contributions from the perspective of a folklorist and international scholar of cultural anthropology.

The contributions in the section *Communicating* reflect on how to ameliorate human communication of and with the multispecies world. Sandra Eckardt's picture story illustrates how abstract statistics of extinction come alive in the form of multispecies storytelling as an anthropological practice of communicating knowledge to a broader public. But how does one communicate with other-than-humans? Utilizing Tomás Saraceno's arachnophilia project, Ally Bisshop demonstrates an artistic way of attempting to communicate with spiders through vibrations. In the third contribution of this section, Ute Hörner and Vanessa Wijngaarden introduce their artistic project of using intuitive inter-species communication to learn more about the ways in which parrots understand the world.

The section *Caring* brings together contributions that deal with different types of caring for a prosperous multispecies assemblage. Martin Abbott, Amy Cheate and Lisette Lorenz argue that people and plants come together, practice and reflect on multispecies relations in making both a garden and a zine. Siran Liang presents the attempts to not only keep land arable but also sustain a certain way of pastoral living by discussing narratives told in the context of the restoration of Tibetan grasslands. Arnika Peselmann narrates the story of modern apple breeding, with a particular focus on the tough challenges that producers face today. Eline D. Tabak's contribution is about storying the extinction of the monarch butterflies that also constitutes a practice of self-caring of the touristic industry.

The section *Connecting* presents a variety of proposals regarding how humans and other living beings become together through close relationships. Hilan Alkan shows how plants and humans develop new homes by rooting themselves together in new environments. Close and beautiful entanglements of humans and other living beings are the topic in the multispecies portrait art of Chinese photographer Ren Hang, as introduced by Ahmet Emin Bülbül. André Krebber and Zhonghao Chen demonstrate that being connected is always a practice of narrating with by bringing together different traditions of narrating the multispecies world. But how can we as human beings learn to connect with other living beings? Maria Ilhéu and Mariana Valente demonstrate once more the challenges of creative artistic practices for their work in places of environmental education in Portugal.

The section *Remembering* reminds us that in order to overcome the polycrisis, we also need to keep in mind historical dimensions of becoming with. Chiara Beneduce deals with the increasing number of floods and proposes that these might be managed if people remember premodern ways of not dominating rivers, streams and the multispecies communities living there. Christine Neubert's ethnodrama reminds us that the ongoing process of building and caring for the infrastructures in our compact cities is a steady process of interacting rudely with other species. Arguing with the wisdom of Gaelic folklore, Mairéad Nic Craith shows that a shift of perspective may help to overcome the effects of today's polycrisis. And Pauline Schuster-Löhlau reflects the traditional wisdom of the Mantesvami, a marginalized group living in the South of India, and their ethical agenda toward other-than-human beings.

The section Speculating deals with a powerful practice for finding answers for a thriving multispecies future. Fernanda Haskell invites us into a distant future in the fourth millennium when humans and other-than-humans live respectfully together. Siobhan Leddy introduces embodied mimesis as an artistic tool to re-narrate the human. Andrea Palašti and Sanja Anđelković mediate how to decipher the traces of Woodiana mussels, a so-called invasive species, in the Danube river, and how one might learn to understand them.

Altogether, the present volume suggests a considerable variety of new stories that might help to overcome the effects of today's polycrisis. Many of these narratives from multispecies laboratories all over the world are also stories of hope. As the prominent German scholar of narrative practices, Herrmann Bausinger, pointed out some years ago, our everyday lives need the light of utopia to give transformation a chance (1996).

The present introduction began with the unhappy story of the first encounter of the Mediterranean violet carpenter bees and Franconian gardeners. Despite the concerns of the entomologist Bußler, that story meanwhile has had a happy continuation, as the bee has integrated not only into the Franconian landscape, but also into the multispecies assemblages of other regions in Northern Germany and Europe (Fenske 2025). A leaflet recently published by the Federal German Ministry of Food and Agriculture even listed the originally Mediterranean bee as an important "indigenous" bee (BMEL 2023: 5). As this example shows, it sometimes takes less than twenty years to learn to live together.

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Communicating

The Sofa as a Habitat: Daisy

Sandra Eckardt

The love story of an unlikely couple begins on a day in July 2023, the month in which a new record is set for average global temperatures. A partridge chick, that has almost died of thirst, and a human meet on the asphalt of a supermarket parking lot in southern Germany. Based on the human protagonist's stories about "Daisy", as the partridge chick will be called from now on, and the photographic and videographic views of their everyday life together, I was invited to develop a piece of multispecies storytelling.¹ The story consists of 13 drawings. They tell of changes in the everyday life of the Anthropocene: the disappearance of species that were taken for granted, such as the partridge (*Perdix perdix*).

Drawing, just one of the diverse methods of visualization in ethnography, is a process of discovery (Hall 2020: 60–61). It is a particularly concentrated way of engaging with what has been told and seen. It takes place in an interplay of repeated viewing, finding details, and drawing lines again and again. This intensive observation, perception and the preoccupation with the partridge's way of life opens up a dialogue with the animal (see also Hasegawa 2020: 169–170). The habitat of partridges has been disappearing for decades.² Among other things, this can be attributed to the effects of the economic practices of modern agriculture, which is part of what Anna Tsing calls the "new ecologies of proliferation" (2020: 52).

What can drawings of a partridge defending a sofa as its habitat convey to a better understanding of today's polycrisis?

1 The idea of narrating Daisy's life goes back to Michaela Fenske, who first introduced it in her opening lecture on 3 August 2023 at the "Narrating Multispecies World" conference in Würzburg. Fenske encouraged more multispecies storytelling to make the challenges of the Anthropocene, such as species extinction or the effects of climate change, in our everyday more understandable. The story was first published under the title "Der Daisy"/ "Daisy" on the website of the Chair of European Ethnology/Cultural Analysis of the University of Würzburg: <<https://www.phil.uni-wuerzburg.de/eevk/forschung-projekte/multispecies-conference/anthropozoen-erzaehlen/>> [Accessed 4 May 2024].

2 See German Wildlife Foundation. Rebhuhn. Hochbedrohter Charaktervogel unserer Feldflur. <<https://www.deutschewildtierstiftung.de/wildtiere/rebhuhn>> [Accessed 5 March 2024].

These drawings are less precise descriptions than fragmentary translations of observations recorded in the research diary beyond the field. And yet, in their vagueness, they represent a descriptive reference to what was experienced and happened. The process of drawing makes it possible to get close to the partridge species and give it a voice. Drawings have the potential to generalize. They are, thus, representative of many and open a way to develop further and different ideas and stories: both at the moment of drawing and receiving.

As a method of ethnography, drawings offer “the possibility of opening up concrete unknown areas of knowledge and working out new interpretations of our present world in narratives” (Hasegawa 2020: 169, my translation).

Some of the drawings are collages that contain photographic materials. The photographs are drawing pads and, thus, tools that, with their characteristic richness of detail, quote from the meadows, the asphalt, or the partridge's plumage and gaze. The already large scope for interpretation, which is given by the ontology of photographs (Overdick 2002), expands once again in combination with what is drawn. The recipients ultimately decide which aspects are viewed and how. Therein lies the potential of this drawn narration.

The ambivalence of the Daisy picture story raises the question of how to interpret the current crises of our everyday lives, as we can encounter them here, using the example of species extinction, right in the neighbourhood. On the one hand, it is about a real perception of the other lives around us, for which the Daisy story stands. On the other hand, as a disturbing and, at the same time, positively hopeful story, it points to the necessary “experimental space” (Horn 2020: 123), which strengthens our imagination of the future and allows us to remain capable of acting. Only in this way can we develop ideas for the future coexistence of different species, which is indispensable for all life (Tsing 2020). The drawn line has a special power in this sense, because it “is something that not only traces how things have been, but also points to paths they might take. Drawing a line is speculative and experimental” (Ingold 2020: 8, my translation).



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Conversations with a Spider

Vibration as Interspecies Communication in Artist Tomás Saraceno's *Arachnophilia* Project

Ally Bisshop

It is late October. The European summer is over, but the dry crackle of its warmth still clings to the Madrid cityscape. I am here to lead a 'spider mapping tour': a conversational walk through the *Real Jardín Botánico*. The tour is a way of encountering spiders: conceptually, through sharing stories, anecdotes and scientific facts, but also materially, as we notice and interact with the spider/webs folded into the interstices of this garden.

The context for this tour is a large-scale exhibition in the nearby Museo Nacional Thyssen-Bornemisza, featuring works by artist Tomás Saraceno, emerging from his fascination with spiderly worlds.¹ Saraceno's public exhibition programmes often include spider tours; invitations to notice and think differently about creatures with whom we share spaces and ecologies, beyond the disgust, fear and abjection in which human-spider relations are often caught. These tours sit within the frame of Saraceno's web-like *Arachnophilia* project, in which I am also caught: a multidisciplinary research inquiry and community of interest that enrolls spiders as models and metaphors for imagining worldly relations otherwise.²

A tour participant sings out. She has found a web stitched between the leaves of a bush; it is unclear whether the web is still 'occupied'. With me is my *Arachnophilia* colleague Roland Mühlethaler, a specialist in biotremology: the science of vibrational animal signaling. He steps forward, holding a tuning fork – a tool historically used by field arachnologists. Tapping the fork on a nearby wall, he gently touches its tips, now humming with vibration, to the radial threads of this web. We watch as a spider rapidly appears from beneath the curl of a leaf under which she was concealed, darting towards this quivering object that seemingly summoned her.³

1 This exhibition, 'More-than-humans', was curated by Stefanie Hessler and presented by Museo Nacional Thyssen-Bornemisza and Thyssen-Bornemisza Art Contemporary (TBA21) in 2019.

2 See <www.arachnophilia.net and www.studiotomassaraceno.org>.

3 The use of feminine pronouns (she/her) for web-building spiders reflects the fact that adult females are predominantly responsible for building and maintaining the complex webs with which

The spider's *Umwelt* – its sensory-material or phenomenal world (von Uexküll 2010) – is wholly different to our own. Where a human *Umwelt* skews oculocentric (for those of us with sight), the web-building spider's vision plays a much less significant role. Her image of the world is sketched by the vibrations that hum across her web's tensioned threads, tickling the vibrational sense organs stippling her body. In our spider tour, interacting with the spider – becoming sensible to her – was a matter of introducing vibrations into her web; a speculative 'dialogue', mediated by patterns of tremor. A game of call and response, in which the spider may or may not participate.

This example sets up the speculative frame of this chapter's inquiry: how art-science experiments in human-spider communication can push us to rethink the edges of interspecies relations, within the broader frame of multispecies studies. At the time of this spider tour, I was (and still am) grappling with the limits of communication with a creature whose perceptual-semiotic world and ways of being are as strange, as seemingly unknowable, as the spider. This chapter extends and wobbles this query within a broader frame: how creative practices (especially those, like Saraceno's, operating in speculative and transdisciplinary registers) propose new ways of encountering non-human subjects and storyworlds; enlarging creaturely capacities, enriching and enlivening possibilities for relation. This inquiry unfolds through a diffractive analysis of Saraceno's attempts to build affective, perhaps even communicative, relations between radically different human and spider worlds, with vibration as the mediating force.

Two examples from Saraceno's creative praxis serve as case studies in this inquiry. The first is his vibrationally mediated human-spider concerts. He calls them 'spider jam sessions', which speaks to the collaborative and playful nature of these experiments, geared towards a creative riffing as cross-body attunement; a transformation of one's body and the shape of the interspecies encounter through an alertness to the emergent possibilities and transversal sensory affectations that it fields. Spider jam sessions are grounded in possibilities for communication that arise in and through the passage of vibration: vibration being not only the primary mode by which spiders grasp and make sense of the world, but also an *intercessor* that traverses species and sensory thresholds, linking and collecting different bodies. The second artistic example is Saraceno's *Arachnomancy* or spider divination project, which uses vibratory and symbolic tools to ask questions of a spider 'oracle'. *Arachnomancy* extends the sympathetic resonance of the vibrational jam to its speculative limit; a search for patterns that connect; for an intensive ground of relationality.

Human-spider musical improves, conversations with a spider oracle – these are *fiction*s: unimaginable within the current onto-epistemological limits of earthly relations, or of language, as such. But imagination is rarely content with limits, reading in them invitations to transgress. To understand human-spider communication as a fiction is to lean into the generative possibilities of artistic "fictioning": an imaginative and mythopoetic practice that draws from the real to invent "worlds, peoples and communities to come" in which interspecies dialogue is possible (Burrows and O'Sullivan 2019: 1). Saraceno's fictions use spider science and empirical observations to reimagine possibilities

we are familiar. On reaching adulthood, most male spiders forego web-building to focus on finding a reproductive mate (Foelix 2011).

for relation; to model this world otherwise. They, therefore, carry ethico-political potential, insofar as they work to “disrupt the dominant fiction” (ibid.: 16) – the hegemonic, romantic and hierarchical narratives – in which human and animal bodies have historically been caught: narratives that cleave natures and cultures and delimit worldly relations, narratives in which an affectivity or intimacy of human-spider relation is unthinkable.

Art-science fictioning is both the focus and method of this chapter’s inquiry: a research approach that creatively riffs on scientific and empirical data to develop concepts and protocols for reimagining multispecies relation. As a method, the fictioning of this chapter is transversal and diffractive, interrogating and recombining concepts across art practice, science and philosophy “in search of alternative images of inquiry” (de Freitas and Truman 2020). In order to write the fiction of human-spider communication, Saraceno’s artistic experiments are traced through different frameworks for understanding language and relation: theories of vibration in science and sound studies; ethological and philosophical accounts of animal communication; post-human refigurings of bodies and subjects. Concepts for interspecies worlding are invented in the knotting, via a Deleuzian spider strategy that “follow[s] different rhythms” and emergent lines of intensity that spring from a relational middle (Jackson 2017: 667–672).

This entangled research approach throws up more questions than answers – about the nature of language, (inter)subjectivity and the epistemologies that constrain what we think possible. But in the process, it diagrams a speculative framework for experimenting with interspecies communication. The contours of this framework are sensory-corporeal, vibrational, affective and intensive. Rather than glossing the gap between human and spider bodies and worlds, it sketches possibilities for communication via a ‘language’ of strange and partial affinities, sympathetic resonance and attunement *across* thresholds of difference. It also argues for a playful posture of openness and curiosity in order to ‘read’ the vibrational signs immanent to an encounter with a radically different other.

Two propositions are important for setting up what follows. The first is that difference – like that between human and spider – is a lure for relation; an engine that drives the “reachings” (Haraway 2003: 6) across thresholds of otherness that animate a multispecies world of beings-in-becoming. The second, via Alfred North Whitehead, is that it is more important that something be *interesting* than *true* – because interest invites “adventures with ideas” (1967: 3, 244), the fictioning of something new. In other words, concepts are not there to imprison thought, they are there for dancing with – and a curiosity about otherness is a fertile partner in this dance. Both propositions are grounded in an ethic of desire, where desire (whether for endless reachings or for the unbounded life of an idea) is understood as an affirmative force of creativity and self-invention, pushing us to imagine worlds and relations otherwise (Bisshop 2022; Braidotti 2011: 101).

Like Shivers: The Interspecies Promise of Vibrational Language

My speculation about spiders emerges from the generative middle of multispecies inquiry: between speciated bodies, but also between disciplines; a transdisciplinarity critical for understanding our entanglements with diverse life forms (van Dooren et al. 2016: 2, 5). Trained in both the arts and sciences, my research enrolls biological ideas as provo-

cations for post-human reimaginings of life and relation (Bisshop 2022, Forthcoming). This chapter's speculation not only draws on the different disciplinary habits cohering in my own body, but also leans into the soft knowledge born of my bodily entanglements with spiders and webs.

From 2017–2022, I was embedded in artist Tomás Saraceno's *Arachnophilia* lab, which takes up about half of the top floor of his studio in an old photochemical warehouse building in Berlin, Germany. It is a space both *multidisciplinary* (hosting conversations between scientific, philosophical and creative sensibilities) and *multispecies* (where human and spider bodies and worlds collide and collude). My role was in translating between these disciplines and bodies, and between the scientific and speculative aspects of Saraceno's experiments.

This lab allowed a physical proximity that rendered my "passionate immersion" (Tsing 2011: 19) in non-human lives intimate, tangible – allowing for more-than-intellectual engagements with spiderly worlds. Surrounding my desk were rows of open frames in which spiders of varying genus and geographical provenance were building species-specific webs: planar orbs, horizontal sheet webs, dome- and tent-shaped webs. For the spider, her web is more than a shelter, a species marker or trap for her prey. It is a floating instrument with which she extends and enacts her vibrational senses – a sensory modality far more acute and granular than her impoverished vision. Via specialized sensory organs of which we humans possess no cognates – the lyriform organ (slit sensilla) and trichobothria or 'hearing hairs' that cover her legs – the spider is exquisitely attuned to vibrations travelling through the air and across resonant surfaces. With limbs poised on the web's threads, the spider anticipates, produces and responds to these vibrations: the tremors she sends and receives rippling the immense silken body of her web along and through which her senses stretch.

These signals can be intraspecific: a warning or courtship message to speciated kin. They can be interspecific: a caution to predators; a siren song mimicking signals produced by prey. She also 'listens' to her web for vibrations that convey information (about atmospheric shifts or the integrity of the web itself), and to which she responds: reducing the 'webspan' in advance of a storm; finding and fixing holes made by falling twigs. For the spider, the web is an instrument and organ of mediation and sense that she continually tunes to adjust its ability to capture and relay vibrations: tightening threads to better hear the world, loosening them when she wants to retreat from it. The web materially extends her vibrational sense: spider and silk intimately interwoven in a sensory-material parsing of tremor. In effect, this web is both an extended spider body and a threshold between body and world; a *tissue* – meaning both fabric and text – on which the world's vibratory movements are written. Observing the spider from the intimacy of this shared space, I came to understand vibration as a kind of 'language' to which her body and web are exquisitely tuned; seismic signals that write her "perceptual and experiential world in specific ways" (Vint 2010: 71) and which move across thresholds of species, of life/non-life.

Language is, I accept, a risky word. The anthropocentric codifying of language (tied to human symbolic thought) is a pillar in the ontological wall between human and animal; its formal rules and structures used to exclude and delegitimize non-human expressive modes, and, therefore, ways of being. I do not argue *for* or *against* spider lan-

guage based on linguistic criteria; in such comparisons, “people always end up better at language than animals” (Haraway 2008: 234). But relegating spiderly forms of communication to a purely extra-lingual realm risks reifying the same speciated hierarchy of communication. Rather, I hope to probe the biopolitical axes along which the concept of language exerts its power – where to deny animals language is to deny them subjectivity, an interior world beyond mechanism, a voice with which to converse. If we wish to communicate with a spider, reading vibration as language is not only a speculative starting point, but an ethical one – part of the difficult task of “acknowledging [the] other as a fellow subject” (Vint 2010: 68).

Rather than grappling with language’s categorical limits, this chapter situates vibrational language within a broader spectrum of sign processes (semiosis) that gathers and links multiple forms of life and expression. It draws from ideas in biosemiotics (Hoffmeyer 2017) and multispecies anthropology (Kohn 2013: 9) that grant semiosis to all forms of life – describing a more-than-human semiotic web from which all forms of meaning-making emerge, from human symbolic language to bacterial quorum sensing. The difference between human and spider semiosis, then, is one of *degree* rather than *kind*: variations in the complexity and abstraction of semiotic patterns, rather than fundamental ontological divides. A difference across which we might find ways to share meaning.

While human and animal ‘language’ bud from a shared semiotic ground, each is, nonetheless, bound to the body that ‘speaks’ it: “tied to a form of life, produced by concrete and embodied experience that varies among species” (Vint 2010: 68). An embodied specificity of language presents its own problems. We do not share the spider’s acutely nuanced sensitivity to vibration; we need translational devices to render this vibroscape sensible. But we are, nevertheless, alive to the seismic realm: this underpulse, the rhythm of the world ‘vibing’. We sense or feel vibration, even if we read it differently to the spider. We have felt the hairs of our skin standing on end at a club when the sub-bass snarl of a speaker erupts on the surface of our skin, trembling our organs; a vibrant hum that arrests our senses as it passes between and links the buzzing bodies around us. Can we extend the promise of this shared feeling in the direction of human-spider communication? What possibility exists for a seismic conversation between spiders and creatures like us, for whom vibration is seemingly not signal, but noise?

As a sensory-affective language of touch and shiver that does not beg a shared symbolic code, vibration holds interspecies promise. Vibration is a language that *already* traverses domains of life, being increasingly understood as an important signalling mechanism for myriad non-human creatures – albeit sensed and understood differently among those bodies for whom tremor is a message. It is also a connective tissue on which the world’s patternings are written: from atomic and subatomic realms (string theory, molecular oscillations) to global phenomena (sound waves, seismic activity). In Saraceno’s experiments, vibration is a way of rendering the more-than-human semiotic web tangible: a resonant space of meaning-making in which human and spider need not know each other, but might affectively coincide

Spider Jam Sessions: Feeling, Not Knowing

Spiders are strange. Their queer carnality, bloodlust, segmented and hairy bodies all underscore a seemingly impassable barrier to understanding; a categorical divide written along speciated, sensory and ontological lines. And this difference seemingly challenges the very possibility, perhaps even desire, for human-spider relation. This challenge is echoed in philosophies in which non-human otherness renders their worlds (and by extension, semiospheres) unknowable – exemplified in Thomas Nagel’s musings about bats and their particular *Umwelten* (1974). For Nagel, our fundamental differences in experience mean that we cannot *know* or even *imagine* what it is like to be a bat – positing an unbridgeable gap between human and non-human worlds of meaning.

For Saraceno, a threshold of difference between human and spider is not an exclusionary edge, but a lure for creative invention; for imagining how we might make relations (make sense) otherwise. This is to understand otherness as a lure, in the sense of Braidotti’s neo-Spinozist biophilosophy (2011: 101), where difference is the very engine of relationality, and in a Whiteheadian sense, as an imaginative opening onto the lure of the possible.

Curious about the spider’s vibratory *Umwelt*, Saraceno worked with biotremologists and technicians to invent devices (modified piezo elements) for rendering the spider’s web-based vibrations audible and playing human vocal or musical acoustic signals back into the spider’s web (Saraceno et al. 2021). These devices allowed Saraceno to invite musicians and performers to encounter spiders in ‘sonified webs’: webs that, while already a kind of musical instrument for the spider, could now transform web-based vibrations into acoustic signals and vice versa, opening a tremological channel of interspecies dialogue: the spider jam session.

The event of encountering one another shapes what emerges in a spider jam. Now rendered sensible, the spider’s vibrational signals affect the human musician’s choices as the jam unfolds. Reflecting on his encounter with *Cyrtophora citricola* spiders, musician Evan Ziporyn (2017) reflected that jamming worked better when he placed the bowl of his saxophone on the table on which the spiders’ sonified web rested, thereby amplifying the possibility for substrate-borne vibrations to relay between human, saxophone, table, web and spider – also allowing Ziporyn to feel into the haptics of the sounds he produced. In so doing, Ziporyn experiments with gestures “as if” a vibrationally sensitive spider: creating a “partial affinity” as a “creative mode of attunement” (Despret 2013a: 71). Attunement is one way to name this inventive, reciprocal and embodied dance of interspecies communication: an affective, relational and transformational mode of feeling-with, expressing-with (Manning 2013: 11).

Difference is also what lures us to become curious about spiderly lives and worlds, where curiosity describes a “subject-forming entanglement that requires a response one cannot know in advance” (Haraway 2008: 312). Becoming curious is an active praxis of being open to the surprise of what happens. In the space of the jam, ideas about the capacities and fixed limits of human and spider dissolve – bodies now knotted together in vibrational loops of relational possibility. A polite curiosity also influences how human musicians prepare themselves for the jam. As electroacoustic pioneer Éliane Radigue was composing a musical piece for the spiders for Saraceno’s 2018 exhibition at the Palais de

Tokyo, we conversed about how she might best pitch this work; she wanted to know what frequencies the spiders liked. In these conversations, she was “enlarging” the spider’s desires and capacities (Haraway 2015: 5), responding in generous and curious ways to the speculative proposition of conversing (vibrationally) with the spider. Radigue wanted to understand and be understood across the human-spider boundary – and importantly, she believed it might happen. A fiction, but also a possibility.

In the spider jam, Saraceno’s devices also transduce the human performer’s verbal or musical signals into tremors that travel, like shivers, through the extended sensory-material body of spider and web. In response to these signals, the spider might try to wrap the ends of a vibrating element in silk, shake her web or freeze. In the attunement of the jam, we are not grasping at knowing the spider’s responses or seeking to assimilate the spider’s language. Rather, we are feeling-into the thresholds of intensive difference; looking for potentials, for cues, within them. We become “apprentice[s] to signs” (Deleuze 2000: 5), alert to the encounter and the qualitative difference that it fields.

Playful searches for patterns and modes of response, spider jams might be read as “language games”: dynamic and context-dependent behaviours through which its participants construct worlds of meaning, however partial that understanding may be (Wolfe 2003: 47). This concept extends from Wittgenstein’s claim that language is tied to particular ways of being, where (echoing Nagel) the vast difference between human and animal ways of being preclude possibilities for shared understanding (ibid.). However, as Cary Wolfe notes, access to the worlds of meaning constructed in a language game is not determined by species, but by participation in the game itself – opening a crack in the wall between human and animal worlds (ibid.). In the language game of the human-spider jam, a dynamic exchange of tremor and response creates patterns of meaning-making that might align across species boundaries, while acknowledging the partiality of understanding on both sides.

In this reading, we do not need to fully *know* the animal other in order to share forms of meaning. As Timothy Morton reminds us, we do not really even know *ourselves*, nor our human partners in conversation (2010: 39). Moreover, wrestling with the “fantasy of climbing into heads, one’s own or others” only hinders our ability to make “multispecies semiotic progress” (Haraway 2008: 226). Thinking in and with the world troubles the boundary between self and other (Morton 2010: 39) – and perhaps, by extension, between human and spider worlds. This reorients claims of interspecies unknowability, such that the uncertainty of self-knowledge also troubles the seeming gulf between species. The challenge, then, is not one of overcoming an absolute barrier of understanding, but of navigating a spectrum of partial understandings, resonances and shared patterns – as we do with our human others, with ourselves. We do not need to *know* what it is like to be a spider; through language games, we invent our own worlds of meaning.

The communication of the spider jam exists in a relational space of “not knowing”, which Marisol de la Cadena (2021) proposes as an antidote to an anthropocentric epistemological desire for absolute knowledge. Not knowing does not refuse knowledge; rather, its privileged perspective. Not knowing is a way to acknowledge the complexity of the spider’s sensory and subjective world as something that can be attended to, danced with but not metabolized. Not knowing is where an open and curious approach to encountering spiders must begin; an undoing of certainty that readies us to be trans-

formed by what emerges in an encounter. Not knowing also allows for the possibility that the fiction of human-spider communication might be *actual* – in the sense that the jam is a dialogue: it affects and transforms us both. The jam produces its own kind of meaning, perhaps its own kind of language, in a vibrational dance that communicates the nature of the relationship and is also the means of relating (Haraway 2008: 26). Not knowing becomes the epistemological ground for invention, for creative experimentation with modes of communicating that draw from the radical possibilities of art fictioning fields.

Vibrational Communion: Resonant Sympathy

Vibration's potential to open human-spider communication lies in its capacity to “cross distances between things, between people, between self and environment, between the senses and society” (Trower 2008: 133). Vibrations are transgressive, traversing and confusing bodily and species thresholds; a smudging between hearing and tactility (Friedner and Helmreich 2012) that rewrites our sensory subjectivity.

Opening ourselves to vibration, then, might offer a path for undoing our human habits of sense and relation; for displacing the hegemony of the eye – our oculocentrism – but also the ‘I’ – the way we think of ourselves as sensing subjects. What new sensorial intersubjectivities might arise from taking vibration seriously, from teasing open the promise of a “vibrational ontology” understood as “the basic processes of entities affecting other entities” (Goodman 2010: 81–83)? In its disruptions and transgressions, vibration is an alluring proposition for thinking about post-anthropocentric modes of sense and language, and, therefore, speculative modes of attunement with non-human others – like the spiders who express the human other's limit point.

In a spider jam, our wholly different sensory schema means that vibration will be felt and parsed differently; but there is yet space for something to be shared. An idea that helps us here is the resonant sympathy that vibration fields; a way of linking disparate and different bodies, where resonance designates a mode of being in sympathy with another body (McQuinn 2021: 2). For Bergson – who gave us an image of vibration as a universal continuity – sympathy is at the heart of intuition: a sympathetic effort to rhythmically “coincide” with that which is “unique and consequently inexpressible” within another body (1999: 24). Here, sympathy unfolds as a mode of “co-feeling” with the flows of energy immanent to the event, as it was for the Stoics, who grounded their divination practices there. The ‘co-’ is speculative but imperative: indexing the possibility of something shared between human and spider.

We already know something about vibrational co-feeling as a way of relating to one another. Recall the earlier image of being caught in the field of resonant tremor at a club. Luis-Manuel Garcia (2020) describes the resonance between bodies in techno clubs as a “vibe”: a shared, but not singular feeling – meaning felt differently, as it is for the human and the spider in the jam. The vibe is a feeling that arrests our senses and stretches between bodies, all caught in resonant throbs of intensive tremor. And this resonance, as Austin McQuinn (2021: 133) reminds us, brings us closer to the experience of “creaturely sound”; amplifying possibilities not only for a vibrational sympathy with non-hu-

man creatures but also for feeling into our own creatureliness, our own non-human becomings.

The resonance of a spider jam fields potential for a pluralistic sympathy that summons, collects, shapes and relates human and non-human bodies along vibrational axes of difference and intensity. Here, human-spider communication becomes a question of embodied attunement, curiosity about difference, affective vibrational resonance and sympathy, and radical undoings and becomings-other. In this context, artistic fictioning is not a flight from the earthy and corporeal ground of interspecies relations – but a provocation that asks: *What cues, what potentials for being, sensing, relating otherwise are already here, in the material and affective space of an interspecies encounter?* The fiction of the spider jam writes interspecies encounters in the form of a “radical mediation” in which there is “no discontinuity between human and non-human agency or semiosis” (Grusin 2015); in which the relating of bodies conditions their emergence. The spider’s vibratory language is not assimilated by the human in this co-constitutive emergence; instead, vibration – and the resonant sympathy and sensory smudging it fields – provides the conditions for drawing forth the non-human within the human; non-human-becomings as movements towards collective enunciation.

Arachnomancy: From Partial to Strange Affinities

Saraceno’s spider divination or *Arachnomancy* project quivers these cross-species vibrational attunements in even more radical ways – pushing the becoming-non-human of the spider jam towards a becoming-intensive of vibrational (molecular) alliance. The *Arachnomancy* project takes different artistic forms: an app by which users access a series of symbolic cards and a databank of recorded spider vibrations to mediate an encounter with a spider; ritualistic gallery performances; a website allowing users to recruit the services of Mambila spider diviners.⁴ Across these iterations, the spider is imagined not only as a communicative partner, but an ‘oracle’: a figure of wisdom, a teller of fortunes. In so doing, it effects a radical reworking of “the ethics and politics of relationality” across the human-animal divide (MacLure 2021: 509). The spider’s subjective and semi-otic world is not merely acknowledged but granted privileged status: offering access to parts of the world ‘we humans’ cannot reach.

Arachnomancy draws inspiration from *Nggam du*, a spider divination practice particular to the Mambila and Yamba people of Cameroon, and cues across both practices help sketch our speculative framework for human-spider communication. *Nggam du* uses a set of symbolic leaf-cards in a rule-based, but intensive, ritual for consulting the divinatory avatar of a ground-dwelling spider (Zeitlyn 1987). Cards and objects are arranged around the spider’s burrow, the scene covered with a pot. The diviner asks their question of the spider – tapping the pot for emphasis, sending tremors into its hide. On return, the patterns of the spider’s rearrangements are examined; symbolic assemblages from which an answer is gleaned (ibid.).

4 See <https://nggamdu.org/> [Accessed 27 December 2024].

Beyond a symbolic interpretation, *Nggam du* – like the spider jam – relies on cues given in the sensory-material relations that unfold between human diviner and spider oracle. This divinatory communication proceeds from embodied relations (of care and attention) that take effect even before the performative ritual of *Nggam du*: the diviner studying the feeding preferences and behavioural caprices of the chosen spider oracle in advance of the act (Gebauer 1968: 140). These pre-ritualistic relations might be read as behavioural ‘conditioning’ – the diviner cueing the spider’s eventual response – but an inversely reciprocal relation could also be at play: the spider conditioning the behaviour of the human who consults it, sketching a rhythm for this divinatory dance. Spider and human each preparing themselves for the open space of the divinatory event.

In an early iteration of *Arachnomancy* in 2017, a *Nephila* spider ‘oracle’ in a sonified web was hung in the centre of a dimly lit space in König Galerie Berlin, for Saraceno’s intervention in an exhibition by artist Jeppe Hein. Several human interlocutors (including me) posed questions to the spider, after which we lay back on banks of cushions, waiting for her reply – a vibrational relay now rendered sensible to both spider and human via transductive devices embedded in the sonified web. As we installed the web in this space, our *Nephila* oracle spent time adjusting the threads of this strange silken architecture to which she had been introduced: her web-tuning echoing through the space: *pluck, tap, purr*. But once the divinatory performance began, she became silent and still. Not a single tremor did she send in reply, at least not one audible to those of us gathered there, listening in anticipation.

What does it mean when the animal refuses to join the conversation? The spider’s refusal is a way to register – to sense or feel – her agency (Despret 2013b: 42). Reading her silence as a message, ‘I would prefer not to’, became a way to recognize her as a subject with “opinions, wills, desires and interests” (ibid.: 41) which may not coincide with our own. Her refusal to engage with our rules of conversation also exposes our expectations – about the temporality and pattern proper to conversation – which affect our ability to notice, attune, to the conversation we are already in.

As we waited for our oracle to respond, the spider’s silence became another affective provocation circulating within this shared space. In the slow and pregnant temporality of anticipating her reply, what emerged was not a recognizable signal from the spider, but a collective space of heightened receptivity: an intensification across bodies participating in the event. Our wait was not passive, we were tense and alive to the possible sensation of tactile sound. Was that a scratch? Had the spider moved a little, sending a shiver of reply? Resting gently on the floor, my fingertips were hypersensitive to tremor. Was I waiting for the right thing? Would I notice an answer if it came? In this pause, the entire room felt as if it were humming with vibrational potential: a shimmering and transductive force that never concretized as a perceptible (or quantifiable) response (signal) from the spider but which seemed to tend and prehend the potentiality (or virtuality) of mediation across species divides. This space of encounter became a threshold to possible threads of vibrant relation. It was this very space of affective and uneasy alliance that carried the intensive force of our voiceless interspecies encounter. Were we not already communicating, in the very ‘throb’ or hum of the room itself?

Like the spider jam, the *Arachnomancy* event used the technical mediation of vibrational signals to effect a speculative communication channel between diviner and spider

oracle. The *divinatory* frame, however, intensified the ways in which relations and signals are shared: at the level of preparation – the intensive work of opening to an encounter with an expanded sense of spider subject as ‘oracle’. There was also an intensification of the ‘communication’ at play, divination reaching for hidden forms of knowledge as well as language. In spider divination, communication proceeds not via representation or behavioural analogy – the “as if” of partial affinity – but via a “stranger affinity” (MacLure 2021: 502) that feels into the “abstract compositional” (Ramey 2010: 11) patterns – the backgrounded flux of vibrational oscillations – linking spider, human and world.

Detached from signification, the language of divination becomes one of intensive material force: an “experimental semiotics” (Ramey 2010: 10) of tremors immanent to the event, but hidden, not fully graspable (MacLure 2021: 502). What is grasped, then – this abstract composition – is a sense of the “pattern which connects” (Bateson 1979: 8) human and spider across a larger network of organisms, all composed of material forces vibrating at different contractions and speeds. Vibration, thus, operates differently in divination than in the spider jam, not as a relaying of sensible signals within a shared vibe but as a kind of “vibrational ontology” or ground: the moving field that remains “if we subtract human perception” (Goodman 2010: 83). A vibrant image, perhaps, of a living semiotic web of meaning-making beyond symbolic or human language (Kohn 2013: 16). The connective matrix of the cosmos from which an abstract composition – a divinatory message – is drawn.

If divination exposes vibratory connections between human and spider, it does not seek to flatten them onto a single plane. Vibratory patterning *requires* the difference, the separateness, of the entities it links. The relation is not one of assimilation but of an “uncanny resonance” (Ramey 2010: 19) between spider and human bodies, stretched along vibratory axes of intensive but disjunctive affinity. To consult the spider oracle, or attempt to divine something from the patterning of the spider cards, is to feel into the lure of the *possible*, including the possibility (or fiction) of knowing across language, material, species and temporal boundaries. It is also a practice of developing new relations with one’s own sensory/psychic grasp of the world: divination as a rewriting of both subject and world. It is, perhaps, to move from interspecies to transcorporeal (Alaimo 2010) communication – bodies not only linked but co-constituted in the linking.

Beginners in an Unknown Language

Narrating the multispecies world requires us to take seriously the idea of other-than-human storied worlds, modes of expression, even language. It, therefore, demands a full embrace of a nondualist and post-human paradigm for understanding the world – one that moves beyond the fundamental and hierarchical separation of human and non-human, those who have language and those who do not. It moves us towards a reading of the world that is post-anthropocentric (not simply of and for human species) but also emergent (endlessly creative, capable of surprising us).

To render the world differently requires a degree of improvisation and imagination, and this is where art can help us. Imagination is not the sole reserve of art – philosophy, science and theory are also imaginative territories. But art offers a way of materially

manifesting and testing imaginative concepts in multispecies studies: rendering real or tangible speculative possibilities for making relations otherwise. Art becomes what Andrew Pickering (2017) calls an “ontological theatre” that stages, rather than simply describes, an emergent and post-anthropocentric world in which multispecies storyworlds matter.

In this chapter, Saraceno’s *Arachnophilia* art-science project stages a world of inter-species relation via a language of vibration; an affective patterning felt by human and spider, through which we might find zones of resonant connection. The barriers to this idea are structural (biological/linguistic), sensory-corporeal and ethico-political, where the bodies who possess and use language also get to count as political subjects. The challenge, perhaps starting point, is to acknowledge spiders as subjects with their own strange language, desires and ways of being.

Extant limits to human-spider communication mark Saraceno’s works as fictions: speculative – meaning imagined, but also pointing towards a future where language, agency and subjectivity do not belong to humans alone. As such, they work to queer dominant narratives about life and relation, “not for the easy frisson of transgression, but for the hope for livable worlds” (Haraway 1994: 60). In so doing, they respond to an imperative in multispecies studies to rethink an ethics and politics of interspecies relation. They ask: *How might artistic experiments be mobilized towards an ethics and politics committed to more-than-human flourishing?*

Saraceno’s fictions widen the community of language beyond an anthropocentric frame, reaching towards intensive and embodied modes. In the process, new speaking subjects and possibilities for relation emerge through a radical vibratory mediation of human and non-human bodies. In this emergent semiosphere, the spider’s vibratory language is not assimilated by the human. Rather, vibration – and the resonant sympathy and sensory smudging it fields – summons a collective tendency for becoming-other that already exists as potential in a spiderly encounter.

The artworks examined also propose a conceptual framework for ongoing experimentation with interspecies communication, the contours of which are as follows:

- 1) The otherness of non-human worlds need not be flattened or grasped for a conversation to take place; difference is a generative force for relation.
- 2) Preparing yourself to “go visiting” non-human worlds (Haraway 2015: 5) involves a rupturing of a sense of self – “loosen[ing] the hold of reason” (MacLure 2021: 505); an intuitive movement beyond the human habits of perception and intellection (Bergson 1999: 24) in order to become curious about and open to the agencies and affects animating the encounter.
- 3) An embodied and intensive mode of communication – beyond formal language, intellection and the need for knowing – might be grasped via a sympathetic resonance between bodies, in which vibration is an agent of transgressive alliance.
- 4) To imagine communication beyond formal language is to seek and invent intensive patterns in which bodies might affectively coincide, and the sensory-aesthetic work of art-science fiction is the method proper to this query. The promise of vibrational interspecies communication suggests that we might reach across species divides and glean storied worlds not premised on a human subject or human sensory schema. It

is also, perhaps, an exquisite risk. If vibrational signals are normally hidden from us, it may well be that these dialogues are not ours to know; that we should resist the human hubris that seeks to colonize all language, that we should be content to rest in not knowing. On the other hand, as we continue to wreak ecological violence through globally distributed, anthropogenic vibrations – the machinic hum that is now the undertone to the world – then ‘human’ interference within a more-than-human vibroscape is our responsibility to understand and address. Understanding and respecting vibrations as language might offer a step towards cultivating this responsibility, in that it forces us to reckon with those who speak this language as political subjects. A third option, which embeds an affirmative premise, is that opening vibrational channels of interspecies communication might shift the anthropocentrism of our more-than-human relations precisely because we are beginners in this vibrational language; meaning that we cannot assume the sovereign position to which we are accustomed. As vibrational language effects a kind of sensory smudging not easily transformed into intellection, it writes our sensory-cognitive habits otherwise – drawing us differently into our bodies; provoking us to think and sense otherwise. To imagine ourselves as beginners – as not only apprentices to vibrational ‘signs’ but also students of those who ‘speak’ this language – is to invert the power dynamics of a human-animal conversation. It asks us to listen, rather than speak. Attentive listening is an active praxis of becoming porous, becoming curious; a way to open ourselves to emergent potential, to the fiction of relating otherwise. Perhaps we should search for signs of the conversation – the story, the pattern – that we are already in.

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Listen to the Birds

Using Intuitive Interspecies Communication to Work with African Grey Parrot Voices in an Art Project

Ute Hörner and Vanessa Wijngaarden

W: I don't know what to make of this picture, but he [Wild One]¹ is showing me a long line of people, walking in a line, traipsing along a road into the wilderness. A long journey that people are taking. He's showing me the animals and the birds moving with them, above them. To me, it feels like there's been a long journey of humans and animals together. He's showing me that, at the endpoint is a merge, an emergence. He was, at first, showing me the separation. The journey – it (initially) looked like separate paths: the humans and then the birds flying above the humans and the animals walking. As it goes further and further into the distance, they merge as one. It's all merging into one. One spirit, one soul, one heart, I suppose. From the human perspective, we're all so separate, but ultimately, we are all connected and one. It's about that feeling, not just saying the words, but actually feeling it.²

Introduction

The exact age of *Psittacus Erithacus* (African grey parrot, *Kasuku mkia mwekundu* in Swahili) as a distinct species is not precisely known, but they and other modern parrots as well as their societies probably evolved around five million years ago – long before homo sapiens entered the world stage. Perhaps it was they who made the first contact, playing with us by imitating our human sounds. This paper discusses a multispecies project in which we use different ways of communication with these birds to gain an insight into how they relate with each other and the world. It is part of a larger project and exhibition titled *Parrot Terristories*, carried out by the artist duo Ute Hörner and Mathias Antlfinger,

1 W: "He was calling himself Wild One. The Wild One kept on going through my head. The first thing I got from him: 'I see you, I see all. We are one, Clara and me. We are one'" (excerpt from interview 19 May 2023).

2 The excerpts set in italics included in this text are transcripts from IICs conducted in May 2023 for the benefit of the research project, during which animal communicators W and M 'translated' the parrot's expressions by employing IIC.

that revolves around the various habitats and territories in which African grey parrots and humans meet and have met historically. This includes such different time zones and spaces as natural history museums, private homes and the birds' natural habitats.

Ute Hörner and Vanessa Wijngaarden first met on a Human-Animal Studies Conference in Turku in 2018. We were both working with intuitive interspecies communication (IIC) (Barrett et al. 2021; Wijngaarden 2023) – Ute as an artist using IIC in her artistic work and living together with her animal companions; Vanessa as a social anthropologist in academic research, gaining insight into what IIC practitioners do and how their approaches and knowledge can be brought into conversation with post-human and Indigenous theory building (Wijngaarden and Hurn under review). In 2022, we started thinking about a collaborative project that would integrate the voices and perspectives of African grey parrots in the exhibition project mentioned previously, employing IIC to add a new layer.

Intuitive interspecies communication is a detailed, two-way, nonverbal form of communication with non-human beings that relies on a diversity of intuitive capacities. It is experienced as the mutual, direct

exchange of visceral feelings, emotions, mental impressions and thoughts, embodied sensations of touch, smell, taste, sound, as well as visuals in the mind's eye. While these can occur while in direct physical proximity to the animal, they can also occur over great distances [as they do not rely on] visual, auditory, olfactory, voice or other cues that humans normally associate with direct interactive communication (Barrett et al. 2021: 151).

Although not always recognized formally in the Global North because it does not easily fit the dominant Northern ontology, this kind of intersubjective communication is a quite common experience to many people worldwide, and generally associated with intuition. It is practiced commonly in a variety of southern and Indigenous societies, being integrated in and supported by local ontologies (Callicott 2013; Deloria 2006; Guttorm 2021; Kohn 2007, 2013; Marshall 1957; Michell 2005; Watts 2013).

Even if anthropological and other studies that include intuitive communications often continue to approach IIC exclusively as part of the culture of the Indigenous or southern 'other' (Blenkinsop and Piersol 2013), a lot of intuition-based exchange takes place outside Indigenous contexts. Scholars of science and technology studies and anthropologists have found that Euro-Americans actually do not hold to the dominant, supposedly characteristic Cartesian ontology as fervently as academic debates suggest (Candea and Alcayna-Stevens 2012; Ingold 1994 [1988]).

An important example of this is a group of professionally working consultants who are often referred to as animal communicators. They use IIC to communicate with domesticated and non-domesticated animals in the wild or captivity, often successfully assisting in resolving conflicts between animals and humans, understanding problems with animals' behaviours and health, and tracking lost animals (Barrett et al. 2021). On the rise since the 1970s, they can now be found mostly in North America, Europe and South Africa, but are also present in Australia, Asia and South America. A recent survey of about 400 animal communicators' websites and 136 non-fiction books by animal commu-

nicators shows they come from a wide range of educational backgrounds, up to doctorate levels, in fields from business and fine arts, psychology and education to homeopathy and veterinary technology (Barrett et al. 2023) and there is a steady rise in the number of IIC courses being offered, including an increase in professional certification programmes and training institutions, with several official associations and codes of ethics being developed.³

A variety of scholars have become interested in the phenomenon, and the latest multispecies methods symposium dedicated to IIC brought together about 700 IIC practitioners from both professional and Indigenous backgrounds, researchers and artists from different corners of the world. Vanessa's research explores IIC as a vehicle towards the development of novel, more dialogic multispecies methods. She previously completed a collaborative study with animal communicators in Europe and Africa, publishing on interviews with felines, in which animal communicators functioned as interpreters (Wijngaarden 2023). We used part of the approaches applied with felines and consulted two animal communicators (W and M) to engage with grey parrots for our current project.

Following Tsing (2005, 2015; Tsing et al. 2020), we set out to open new spaces in the public imagination, where we aim to find different, more decolonized ways of telling stories that bring together different forms of knowledge. Treating wisdom that is labelled as mythical and scientific, and both as knowledge, we aspire to place them in a horizontal dialogue that prevents favouring one onto-epistemology as an unquestioned basis for thinking. Similar to Mairead Nic Craith (this volume) in the keynote of the conference *Narrating the Multispecies World*, we do not approach knowledge as something that is solely human. We do this through the use of IIC as an approach that steps away from human scripted knowledge and human's dominant mode of communication, trying to become conscious of the ways in which we also remain bound by our human perspectives and expressions. In line with other conference participants (e.g. Krebber and Chen in this volume), we do not approach nature and animals as passive but as active, and ask how we can narrate multispecies expressions and recognize and register multispecies voices.

We mainly focus in this paper on our curiosity regarding how what the parrots may share with us through IIC can influence the developing work of Ute's artistic collective. In this, we will, firstly, describe the processes and questions we focused on in our interactions, followed by an introduction to several works of the interspecies artist collective. We will then outline some of the insights obtained through IIC and in what way these changed how we think about and carry out our artistic and research projects. Finally, we look into how research that engages IIC and animal communicators works as opposed to earlier academic methods to research communication with animals, and formulate a conclusion on how intuitive capacities in general, and IIC specifically, are of value in academic and artistic contexts.

3 Some examples across continents include Animaltalk Africa academy in South Africa, The Sedona International School for Animal and Nature Communication, the Ubiquity University graduate degree in IIC in the United States, and the federal association for animal communication (Bundesverband Tierkommunikation) in Germany and Switzerland. The upcoming special issue on IIC for the *Journal of Organizational Ethnography* will discuss this in more detail.

Asking the Parrots

Attempting to make our research process and choice of questions relevant to our non-human research participants and be open to diversions from the structures and questions posed, we engaged in a collaborative and dynamic research design in which humans and non-humans were invited as full research participants, consenting co-creators, beneficiaries and teachers. As reflexive agents, we were encouraged to adopt new skills, influence processes, and come to new understandings regarding (the value of) our practices and knowledges. This means that we opened ourselves as researchers not only to learn new skills and ideas through the encounters but also be changed by them.

We are cognizant in our approaches of risks of excessive anthropomorphism and the so-called Clever Hans effect (Dinamarca and Escayola 2013; Martinelli 2010), as well as anthropodenial (de Waal 1999) and the effect of distrust and behaviourist experimental treatment that might affect animals as adaptive learners and sensual and attuned agents to alter or stop responses (Despret 2015; McNeill 2022). Instead, we aim for a carefully informed, empathically generated “animalcentric anthropomorphism” that aims to enter animals’ perspectives (de Waal 1999). This means that we take into account that animals’ contrasting life-worlds, personalities, and sensual, mental and emotional experiences may all influence the content and illegibility of specific responses. When an animal, for example, communicates involving their unique sensory experiences (e.g. orcas’ echolocation [Wright et al. 2021], elephants’ infrasound [Garstang 2010], dogs’ stereoscopic smell [Andrews et al. 2022] and birds’ ultraviolet vision [Cuthill et al. 2000; Vasas et al. 2024]), these can be difficult for the animal communicator to fully grasp and express in words and gestures, even if the details provided can sometimes be confirmed through technological measurements (Getten 2002).

We have worked together with animal communicators M and W (names anonymized), from the United States and South Africa for our collaborative project *Listen to the Birds*. Each has over 20 years of professional experience with IIC, and a reputation as a very successful teacher of the technique. The animal communicators communicated with four wild African grey parrots living in Uganda and Ute’s grey parrot companion Clara, who is based in Germany. They worked with the parrots individually, but also approached the wild parrots as a flock. They used photographs as a means to connect to the parrots, as is common in (remote) IIC (Hinz and Barrett under review). Each used the same set of questions as a guide and engaged in a video conference with Vanessa and Ute (Clara being briefly present) to convey the answers and facilitate follow-up conversation using IIC.

We will not be able to represent all the answers and insights the animal communicators conveyed in response to our questions, but will provide a selection. The questions we asked included:

- Are wild living and captive grey parrots connected in any way? Do you know about each other? Do you communicate with each other? Do you support each other?
- Do you like to/Would you want to live with human people? Does it bother you/would it bother you to live in a confined area? Is it important for you to be free? What does freedom mean for you?

- What significance do your ancestors have for your life? Do you mourn your dead? Does it matter to you what human people do with the bodies of grey parrots (e.g. in natural history collections)?
- Many human people fear that your species – due to illegal trade and habitat loss – will become extinct in the wild. What do you think about extinction? How does it perhaps affect you already? Do you feel it is good if human people guard grey parrots? Do you feel it is good if human people keep grey parrots in confined places to protect your species' survival? How do you see yourself in the world? What makes your kind so special?

Each animal communicator worked independently, not knowing about the information the other had received through IIC. The interviews may be regarded as human-initiated or even -driven, because the ones who pose the questions are humans. However, as in some human-to-human interviews, there was no fixed hierarchy between the interviewer and interviewee, both influencing the trajectory of the conversation. The question regarding how far the responses obtained through IIC come from the animals and are filtered or spurred by the animal communicator needs further research, and several research projects zooming in on validity are in progress.

Existing studies have found that answers obtained through IIC often exhibit high detail and accuracy, as deemed by veterinarians when diagnosing and treating animals (Erickson et al. 2016; Wijngaarden and Hurn under review) and by guardians of the animals (Erickson 2014; Erickson et al. 2016). Researchers have further observed the effectiveness and usability of IIC to achieve behaviour changes in animals, and increase the empathy and cooperation between humans and other animals (Ballé et al. 2022; Hafen 2013; Kuppenbender and Barrett 2024). Personally, we found that the answers provided independently by the two animal communicators provided valuable insights and sometimes even converged, some of the details surprising us as well as the animal communicators involved. Perhaps even more importantly, IIC facilitated our process towards less anthropocentric ways of thinking about, communicating with and understanding another species, affecting our insights and practices. By no means assuming that work with animal communicators can overcome the limitations of humans' thinking of animals outside the human-animal relationship, we found that the perspectives we encountered through the animal communicators' use of IIC provided us with unexpected insights and perspectives, which sometimes even contradicted our existing points of view. Combining scholarly and artistic ways of thinking and working, we hope to cross-fertilize these new ideas regarding how we can engage with animal perspectives in our respective personal and professional realms.

Interspecies Artist Collective

Ute and Mathias are an artist couple who have been living with African parrots for 24 years. This may seem long or short, depending on which standpoint is taken: It is only a moment in evolutionary time scales. Birds are dinosaurs, and to get used to each other can be a real challenge for both – humans and birds. However, it is a long time when we

think about how deeply this encounter has transformed the members of the collectives' lives.

At the beginning of their journey, Ute and Mathias had a curiosity and interest in these parrots' ability to 'speak', learning human languages. They had learned about Irene Pepperberg's research with Alex (2004, 2009a) and the cognitive abilities of African grey parrots in the lab.⁴ Alex could use about 100 human words not only to build categories (colours, shapes, material) but also to express his wishes (want a nut) or feelings (being bored). Living together with their companions, Ute and Mathias soon realized that this kind of 'speaking' was not that interesting for them. Grey parrots communicate very elaborately with their own sounds, calls and noises that they make with their beaks and, very clearly, with their body language. Why should they learn human language? They also discovered that grey parrots are great sculptors, their beaks are very sensitive 'tools' with which they explore and shape their world, each in their own way. In 2014, they decided to share both – art and life – and together with the African grey parrots Clara and Karl, they founded the interspecies artist collective CMUK.⁵

(Fig. 1:) Clara and Karl immersed in their work. Photograph by the artists.



The Encounter with Karl

Karl had come to Ute and Mathias from an animal shelter near Berlin where Clara had chosen him as her companion. It took almost a year for Clara and Karl to find each other in the mating station that was specially set up for grey parrots, as grey parrots are very

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- 4 Other projects that were highly successful from a language research point of view have taken place with African grey parrots, such as N'kisi, with a recorded vocabulary of over 700 words and over 7000 original sentences; see Sheldrake and Morgana 2003.
 - 5 CMUK is an acronym made up of the forenames of the founding members – Clara, Mathias, Ute and Karl; in Serbo-Croatian this means something like a little kiss.

picky when it comes to partners. Karl was a bird that was highly sought after in the group of female grey parrots. Most of the birds at the station were hand-reared; they were animals that had been imprinted to live with humans from the very beginning. Karl was a wild-caught and the animal keeper suspected that his behaviour was more in line with the natural behaviour of a parrot, which helped him to communicate more clearly with his female conspecifics. Ute and Mathias were told that Clara won his affection by protecting him from other male birds. When the call came that they could take them both home, they were overjoyed.

At first, they thought Karl would be as hand-tame as Clara, but immediately after he had settled in with them, they realized that this was not the case. Karl did not want to be stroked. He did not want to be touched at all, at least not with hands (perhaps he had had bad experiences). Unlike their other companions, who preferred to roam freely in the apartment, he felt safest in his cage. It took quite a while to convince him that it was safe elsewhere in the house as well. What he surprisingly liked were trips to the park, where he would sit on his transport box in the sun and just look. They did not have to put him on a lead because he could not fly. Decades of being kept in a cage had atrophied his muscles to such an extent that he could no longer learn to do so.

Karl loved to gnaw and they bought him the first cork tubes to keep him busy. He could work for hours on one object, and soon Clara wanted to join in too. His presence changed the atmosphere in their flock – he was an old bird, older than his peers would become in the wild. You could tell he had experienced a lot. Despite his physical limitations, he had enormous charisma. Everyone who came to visit Ute and Mathias wanted to see Karl, wanted his attention. As he could no longer sit on a perch due to his arthrosis, they let him eat from a plate at their table, which Clara soon also demanded. After eating, he would often sit very close to Ute at the edge of the table and start rubbing the halves of his beak together, making a soft comforting sound, similar to the purring of a cat.

When Karl died in 2018 at about the age of 60, Ute and Mathias realized how little they knew about his past. No one could tell them where he had spent the first five decades of his life – the only thing they could tell with certainty was that he had been born in the wild before he was captured and sold. As they could not find out much about him as a person, they became interested in the history of African grey parrots in Europe, which is closely linked to colonial history. They think it was part of their mourning for him.

African grey parrots came to Europe via the same trade routes, on the same ships that companies used to trade sugar and enslaved people. Many of them (people and parrots) did not survive the passage, but a lot more died in their new environment. The trade with Karl's wild conspecifics over the centuries and the ongoing destruction of their habitat has pushed them to the edge of extinction. There are presumably more grey parrots living today as 'pets' or 'zoo animals' worldwide than in their original habitats.⁶

6 Between 1975 and 2013, according to the Convention on International Trade in Endangered Species, more than 1.5 million grey parrots were legally exported from African countries. Assuming a mortality rate of 40–60 % between capture and export, about 2.2–2.5 million birds did not survive. These are only the legal numbers not including the illegal trade in grey parrots. African grey parrots were uplifted to Appendix 1 only in 2016, which means any trade in wild-caught individuals of this species is prohibited.

Ute and Mathias' ongoing project *Parrot Territories* is a multispecies narration about how human and parrot histories, politics and cultures are connected. Based on the methods of multispecies ethnography, which include traces and perspectives of animal life, they use images, texts, videos, sounds and installations to explore the question of what relationships have been possible between parrots and humans, and what it means to care for and coexist with individuals of this species today. To this end, they are working with a network of human and non-human co-creators in their research endeavours, which includes a historian, curators of natural history museum collections, an anthropologist (Vanessa), a young nature guide in Uganda – the parrot companions of Ute and Mathias and the grey parrots they met in the wild.

The various encounters, ideas, sites and materials are organized in three main chapters: the colonial history of grey parrots, grey parrots in their natural habitat (in the so-called wild) and the story of grey parrots living with humans, in their environment – for the latter they chose their own cohabitation as an example. Cooperation with animal communicators who use IIC has become a crucial element in all the project's endeavours, as it inspires and helps the collective to ask and receive input on unanswered questions, tapping into novel perspectives.

Living with Humans

Ute: "What are the wild things that she (Clara) would like to do? Maybe she can."

W: "Well, it's flying and observing. Flying and observing the whole forest, she says to me, the whole forest. Do you live near a forest or are you in the city? It feels like her forest has got buildings, lots of buildings in it."

Ute and Mathias, artists living and working in an interspecies collective, are critically aware that there are inherent hierarchies and contradictions in the relationships with their parrot companions. As the philosopher Lori Gruen puts it: "Even the most thoughtful, compassionate domesticated relationships can't erase the fact that companion animals are forced to live by our cultural standards. Companion animals are, in a very real sense, our captives" (2014: 130).

In response to such problematics, Ute, Mathias and their companions have developed a body of works over the last eight years which revolves around the question of how they live together. These involve moments of affection, joy and trust, but also misunderstandings, failures and ideas that need to get revised. One of them is *Dollhouse for Dinosaurs* from 2021. It evolved in the middle of the pandemic when they all were forced to stay at home. In the style of the early cabinets of curiosities, they assembled a variety of objects together and a model of their apartment on a large table.⁷ The model was first inspected by their parrot companions and then extensively worked on. On its walls, the aesthetic

7 The materials they used for this piece largely came from within their four walls. From remnants of the parquet floor, which they put aside when they moved in, to photographs from their everyday life and books they 'read' together, as well as substances that came from their bodies, for example, a nest made of hair and feathers of the past year.

of birds, an intrusion to human ideal concepts of living, manifests itself. Traces of the birds' creativity can be found on windows, doors and even walls. Shredded magazines, cork crumbs and wood splinters covering the floor testify to the power of their beaks and their desire to shape what the human members of the flock already believed to be shaped. An audio recording inside the model gives an idea of the power and perseverance with which their companions tackle rectangular spaces; spaces that could also look quite different – more fragile, more permeable and, in the best sense, more insecure, as the artist and architect Gordon Matta Clark once claimed.⁸

(Fig. 2:) *Dollhouse for Dinosaurs*, 2021. Photograph by the artists.



Ute and Mathias took a lot of effort to make their apartment as permeable as possible for their companions; nevertheless, the question of how they as birds may feel in a human-designed environment, whether they feel trapped or isolated from what is meaningful for them, has kept them very busy. We heard in one of the conversations with the animal communicators that Clara is not unhappy being confined, but she feels the need to fly free. Ute and Mathias would really like that, but, at the same time, there is a fear, maybe also the human fear passed over to Clara, of getting lost. Communicator W: *“Not getting lost even, but being away from you, being away from her safe space [...] Clara feels safe with you. It’s almost like you’re her safe space.”* Very different from Wild One, who seems to feel safe wherever he is. They learned that Clara, although she feels guided by her wilderness inside, does not want to be literally free and wild – *“she can’t be wild in her human situation and she’s okay with that”*. *“She feels like she’s a very, very important part of your life, as you are [in] hers.”* However, they are not the only ones of importance. Although Clara was born in captivity, they learned from the animal communicator that she is still connected to her

8 Matta-Clark wanted to show using his artistic interventions in mostly demolition-ready buildings how conventional forms of architecture separate the inhabitants from their environment instead of connecting them to it. His work can also be read as an early proposal for interspecies architecture (Spector 1977).

wild fellows. Clara, for example, sees herself as a disciple of Wild One, she takes her guidance from Wild One and the wild, which sometimes confuses her when it comes to the question of what is possible in a human-designed environment. On another level, this connection might be capable of overcoming the limitations of their human household in a way that Ute and Mathias had never even considered.

Historical Beings

W: Their ancestral realms are in their present. It doesn't feel like it's something – It happened in our past, in our history, but their energy, the spirit of those beings that were captured and trapped and put on display, they're still very much in the ancestral realms, in the present. The Wild One's showing me that he connects with the ancestors, his ancestors, all the time, and they are part of him.

The second entry point to *Parrot Territories* lies in the colonial past. For this part, Ute and Mathias are researching at the Africa Museum in Tervuren near Brussels, the former Museum of the Belgian Congo, which was reopened in 2018 after reconception. The natural history collection includes more than 100 grey parrot specimens – from colonial times until the 1980s (including birds that came from zoos and private homes). Tervuren houses a total of 10 million animals – 150,000 of them birds. As Miriti and colleagues point out (2023), the research of the naturalists, their collections and the natural history museums were often funded by colonial interests. The Africa Museum has its origins in the World Expo 1897. “At the instigation of King Leopold II, a ‘Colonial Section’ was set up in Tervuren to win over investors and the Belgian population and glean support for the colonial project in Congo.”⁹ Naturalists profited from the colonial project, but also contributed to it: “The first role of naturalists was to map and study places, making them open to future exploration and control [...]” (Miriti et al. 2023).

The 113 grey parrot specimens in the scientific collection of Tervuren are located in the Centre d'Accueil pour le Personnel Africain (CAPA) building, which was built in the close vicinity of the Africa Museum.¹⁰ The specimens, labelled and stored in drawers, have become objects controlled by science. While the knowledge of the local people, on whom the naturalists were dependent, is rarely mentioned, the knowledge of the animals themselves has no meaning at all, only what can be extracted from their bodies counts.

9 The “Africa Museum traces its origins to the International Exhibition in Brussels in 1897. At the instigation of King Leopold II, a ‘Colonial Section’ was set up in Tervuren to win over investors and the Belgian population and glean support for the colonial project in Congo. No fewer than [...] 267 Congolese were taken by force to Belgium and exhibited to the public, like animals in a zoo. Seven of them lost their lives.” The work of the contemporary Congolese artist Freddy Tsimba in the collection of the Africa Museum commemorates these dead (Africa Museum n.d.).

10 During the 1958 Expo 58 *World's Fair*, 600 Congolese lived in the CAPA building far outside the city centre. One hundred and twenty of them were exhibited during the day in the Tropical Gardens. The ‘exhibition’ was cancelled prematurely due to massive protests (Africa Museum n.d.).

(Fig. 3:) Drawer with grey parrot specimens in the collection of the Royal Belgian Institute of Natural Science, Brussels. Photograph by the artists.



The separation of nature and culture in modernity has made it possible to deny the agency of non-human living beings, to turn them into objects, which, of course, cannot succeed, because these dead bodies also have agency – it costs an enormous amount of energy to have taken them out of the natural cycle of decay. This part of Ute and Mathias' work can be considered as an examination of this culture of modernity, but also a piece of mourning. The birds in this collection are, in a way, Karl and Clara's ancestors, and how could one talk about grey parrots without including them?

(Fig. 4:) This bird from Bomo is dated November 6, 1945. According to the label, it is a male bird. Royal Museum for Central Africa (RMCA), Tervuren. Photograph by the artists.



They began to approach the animal bodies by taking photographs of the collection. The birds had been arranged in drawers by the scientists according to the regions from

which they had come. Some of the drawers were so full that it was hard to get them closed again once they were opened. Next, they took the fragile bodies out and portrayed the individuals from the side, that is, in profile, to represent their characteristics better.

When they looked at the labels, they noticed that sometimes there was a number on the back, 500 g or 510 g – the weight of a living bird, the same as their companions Clara and Karl – except that these dried bodies weighed almost nothing, which caused an irritating feeling of ‘being cheated’. The label was false, so to speak, referring to something that no longer existed. They felt a massive and overwhelming impression of death.

When Ute and Mathias returned one year later, their perspective on the situation had changed. Through both animal communicators, they had heard the African greys describe that they live with their ancestors constantly, communicating with them and feeling the ancestors are part of them. They nevertheless mourn their death, because they can no longer connect with them through the body, and when one of them dies, they engage in ceremony, thanking the body of the deceased. The answer to our question “Does it matter to you what human people do with the bodies of grey parrots?” was answered contrary to our own assumptions, and M. expresses, also very differently from what she was expecting:

I was asking, for instance, would you like your bodies [...] buried? And they're like, ‘No’; or like, cremated? They're like, ‘No’. Then they're showing me this dried form of the body where you saw the leaves and the feathers and everything. They like it. They say they're revered in a way.

M goes on to explain that the parrots believe some of the Indigenous peoples used to keep their bodies in this way. Even if they point out they are not in the form, they like the representation. However, they do not agree to be killed just for this purpose. Their objective is for the body to be seen by a lot of people so that the bird's form can continue to impact humans after death.

Since Ute and Mathias had heard from the animal communicators that the parrots wanted to be seen, this part of the project now felt less mournful and more like a commission by the birds themselves. They decided to make video portraits of all the 113 grey parrots in the collection. They filmed each bird for a minute to allow future viewers of these videos to spend time with and become present with them. With every bird they recorded, they were more surprised at how different they were from each other, their physiognomy, postures and expressions. Where before, they could only think about the loss and the violence that had happened to them, the ecology of feelings (Despret 2021) changed – they started to feel thankful for their presence and confidence, that they as artists would find the right way to represent them. The grey parrots showed them a direction that was less about guilt than about healing, and that relationships can be carried on beyond physical life.

Wild One and his Fellows

W: I always get those messages from the animals, that we need to see the joy and focus on the joy in order to balance the pain and the suffering and to expand the joy, because that's what's needed. The expansion of joy. Then the Wild One's saying he celebrates with the sun every morning. He celebrates with the sun. He's showing me being in the sunshine, as the sun rises, he starts waking up. It's interesting, he's showing me a whole flock of parrots with him. I don't know anything about wild African greys. I always know that they're usually solitary as pets or as human companions. He's showing me a whole flock flying and celebrating and flying with the sun.

Ute: I saw them. It's flocks and sometimes really big flocks in Uganda. It's not the central region [of origin] but where they are, near the national park, they have a very good situation; humans like Nick and also the farmers care about them. It's a growing population, which is a singularity – everywhere else the populations are going down and they're doing a really good job. I saw them celebrate. We saw them in the trees when the sun comes and they really sunbathe first before they go for food.

In June 2022, Ute and Mathias visited a research camp in Uganda, on the edge of Kibale National Park, close to the border with the Democratic Republic of Congo, from where the grey parrots in the natural history collection came. Here, they met Nancy Jacobs, a historian from Brown University working on a book about the global grey parrot, and Nick Byaba, a young nature guide, environmental activist and founder of the Parrot Tree Caretakers Association,¹¹ who has devoted himself completely to observing, researching and caring for the grey parrots in his area.

(Fig. 5:) Grey parrots in the tips of a tree waiting for the morning sun. Photograph by Nick Byaba.



It was their first encounter with grey parrots in their natural habitat, and it was very impressive and touching for them to see how similar they were to their companions. They

11 Nick, befriended colleagues and local farmers founded this grassroots conservation project in 2020, protecting and planting Indigenous trees for the parrots, protecting them from poachers, and educating school children about African grey parrots, their needs and role in the environment.

watched them for hours every day – they saw how they met and played with each other, fought over food, and suddenly flew away screaming because something had frightened them. But also, their relationships with other birds, such as a grey harrier hawk, who waited patiently until the grey parrots had finished eating to get the nuts they had removed, which he/she could not loosen with his/her beak. And, of course, the parrots observed them and their behaviour towards the parrots very carefully.

From the way Nick spoke about the birds, it became clear that he considered them to be members of his community. He knew many of them individually and followed their stories. Ute, Mathias and Nick spent the whole week together. On the last day of the trip, Ute and Mathias asked Nick if they could return to one of the magnificent tulip trees, which he had shown them before because the birds use their buds to drink water high up in the trees. When they told him that they wanted to leave the ashes of one of their parrot companions under this tree, he was incredibly understanding. Not making a distinction between parrots and people, he uttered that his people would do the same.

Since then, they have stayed in touch. Nick sent them photos of his work almost daily – often the first messages Ute received that day. Photos of parrots, trees, edible flowers and fruits, the farmers and activists planting trees, and signs and sculptures that he erected to promote the protection of the African grey parrots. They started to document the emergence of this caring network including human and non-human actors in the form of an installation which they called SEEDS. Photographs of Wild One and his companions are also there. Ute had selected their portraits from a large number of photographs by Nick, not knowing that they would later give them to animal communicators to make contact with them. In retrospect, it may well have been that they had wanted to be chosen.

(Fig. 6:) SEEDS, 2023. Photograph by the artists.



(Fig. 7:) These are the photographs that were used to make contact with the parrots in the IIC sessions. Wild One is in the middle of the top row, and Clara is at the right end of the lower row.



What became clear through the animal communicators is that the parrots also play an active role in guarding the forest. Both animal communicators mention how the parrots explain how they oversee the forest, spreading seeds and fertilizer, and actively promote the well-being of the vegetation.

W: His [Wild One's] role, he's saying, he is the overseer. He watches over everything. It feels like he and his family watch over the forest. Guardians of the forest. From their height, because they can see so far and they can see so much and they feel so much. [...] He says when the forest is empty of them, of their species, it is not safe [...]. [T]he forest is prone to disease. It feels like they play a very, very important part, physically, in the ecosystem there. He's showing me his fertilizer on the ground assisting as well and the fertilizer being very healing to the ground, to the earth.

M: They tend to the plants. They prune them, and they also do things to facilitate the growth of more plants that they like. They're very responsible for the vegetation of the area... They've taken seeds to different areas, and they've actually looked at the whole area, and they work together to make it what it is [...] They're continually planting seeds for the future. It's a part of who they are as far as they'll take seeds from different plants and drop them off in different areas. They will even sometimes get on the ground and bury some seeds as well. They're cultivators. They're growers or farmers, and they will particularly choose different areas of where to plant based as well on the resources there as far as water and things like that, because they know what can be successful.

Details of the intentionality behind these activities can be further researched by, for example, ethnologists, and change our views of conservation towards perceiving it as a multispecies effort.

Intuition and Animal Communicators

The approaches followed in our artistic and research endeavours, contrast strongly with most academic attempts to study communication with animals. Academic approaches have traditionally involved an imposition of human language, focusing on language as a purely syntactic system. Furthermore, they highlight subjects that are seldom of personal importance to animals (Despret 2005, 2016). This was true not only for Alex the grey parrot, but also Kanzi the bonobo and Koko the gorilla. Pepperberg expressed in her memoirs that she felt that Alex, who died untimely of apparently natural causes, had been the victim of scientific protocols. The experimental regime that was used, required him to answer the same questions time and again, and in order to assure objectivity, Pepperberg had to keep a social and emotional distance from him (2009b). She felt that instead of scoring highly on (double-blind) tests, he actually longed for interactive communication with her. As other researchers of non-human animal languages have noted in research with their animal participants (e.g. Patterson and Linden 1981), Alex deliberately and consequently provided wrong answers as a result of being dissatisfied with the (social) circumstances and lack of relationship. Thus, the focus on objectively 'testing' language capacities of non-human animals actually obstructed progress in the field of study (Patterson and Linden 1981; Pepperberg 2009b).

By using intuitive capacities, we hope to go beyond an understanding of language solely in terms of verbal expression. We are more interested in relational and affective forms of sharing in our inquiries, including emotions, visions and visuals, and visceral and embodied sensations. In this process, it is our incentive not to take an anthropocentric measure as the starting point to 'test' other animals but, instead, to try to connect and meet the animals with whom we work more on their terms, being open to being changed by the encounter. This means that the outcomes of these engagements are not (just) producing strictly theoretical or verbal knowledge, but also wisdom and insights that are created through the body and physical and emotional interactions, and are often better expressed through artistic installations. For us, employing IIC to have an exchange that addresses the (inter)actions and (inner) lives of both human and non-human agents has produced deeper insight into how we can live, develop and understand these expressive processes.

Tapping into IIC has also helped us to explore intuition as part of a system of information processing humans share with other animals (Epstein 2010). Although intuition has many definitions, because it does not easily fit historically dominant academic frameworks, most describe it as the ability to understand or know something instinctively and immediately, without the need for observation, inference or conscious analysis (Epstein 2010; Oxford English Dictionary 2022). Following Cartesian categorizations, intuition, as an instinctive and immediate knowing, has often been associated with non-human animals and opposed to rational reasoning, which is classically regarded an exclusively

human trait. Such a dichotomization has, however, been refuted because a variety of species also display rational behaviour (Andrews and Monsó 2021; Buckner 2019; Hurley and Nudds 2006) and humans often use intuition to solve problems and make decisions (Fox et al. 2016; Kahneman 2011) in daily life and scientific contexts (Keller 1984). In the analysis of data, for example, hunches are often checked and verified. Some psychologists even argue that intuition tends to underlie or precede rational processes, such as logical argumentation (Haidt 2013). However, the mental activities accompanying verbal language regularly supersede more subtle intuitive cues (Petitmengin-Peugeot 1999) and, therefore, many humans may not be so practiced in or aware of intuitive communication. When they dominantly operate on the more rational plane of verbal knowledge, they may not perceive what is communicated on a more subtle level by non-human beings. By practicing and acknowledging our own intuitive capacities, as well as through help from intuitive experts, such as animal communicators, we can come to novel perspectives, entries and insights, as well as modes of expression, working towards an academic and artistic future that is less anthropocentrically, verbally and ethnocentrically focused.

Conclusion

M: The parrots were telling me they said they're the originators of this project. They're the ones that came up with it, and they wanted you [...] to really look into this. They're like, "Oh, we don't need an introduction [...] we're the ones that generated and created this project."

We have attempted to get into a conversation with our African grey parrot companions and research subjects. In this encounter, we have not set out to 'test' one framework or type of knowledge in the context of another, but intended to create a space of co-creative co-becoming where novel insights are born. Through our explorations, we aim to find out how we can access, integrate and interact with the perspectives and knowledge of non-human animals and find new approaches that allow us to do research and make art *with* animals, rather than producing works about them. Although translations into verbal language often still need to take place in interpretation processes, we have tried to move the burden of the communication effort between humans and other animals more onto the shoulders of the humans who are trying to access animal worlds: the animal communicators and researchers, and artists. Exploring how artistic and academic methods, ways of knowing and representation can be enhanced through IIC, we aim to work towards overcoming biases, anthropocentrism and human exceptionalism in research by bridging human and animal, academic and non-academic world(-view)s.

The answers that we received through IIC, as practiced by expert animal communicators, have provided us with fresh points of view regarding cohabitation, the storing of parrots' bodies, and the relationship between the parrots and the forest. Although aspects such as animals' agency, consciousness, communication capacities, engagement in ceremony and their roles in the ecosystem are increasingly discussed in academic research (de Waal 2017), exploring these more from an animal perspective is exciting as

well as challenging (Taylor and Hamilton 2014). This is not only because Cartesian pre-suppositions have left their legacy on (academic) reasoning, their binary logic limiting our ability to observe and understand meaningful human-animal exchanges, but also because, as humans, we may be limited in how we can think animals outside the human-animal relation at all. Information obtained through IIC provides us with novel perspectives, challenging us to rethink and more deeply explore animals' inner worlds. It also produces concrete incentives for future research and cooperation with natural science disciplines, in our case, for example, to investigate seed spreading activities by African greys. Finally, it can help us work differently with animals in research and art projects.

Although the animal communicators worked independently, there was a striking overlap and complementarity in the answers they received from the birds. The responses that arose often surprised us as well as the animal communicators themselves, providing new perspectives and contradicting our own views and opinions. Similar overlaps and complementarity of answers, as well as entries into unexpected and novel perspectives, have been observed before when working with multiple animal communicators asking the same animals the same questions (Ballé et al. 2022; Getten 2002; Wijngaarden 2022). Such a way of working may create a tapestry of partially overlapping perspectives on the same issues, producing fuller and more detailed descriptions and understandings, and diminishing the subjectivity of one interpreter (including the researcher) while adding to the voice of the animals. We found that IIC was a valuable contribution towards gaining a deeper understanding of animal subjectivity and agency, and experienced it as a powerful instrument towards changing our perspectives and practices in our professional and personal lives with animals. We hope that the continued cross-fertilization between academic methods and representations, and alternative and artistic ways of acquiring and expressing knowledge will involve more and more listening to voices beyond the human.

Intuitive interspecies communication has helped us to be more confident and outgoing in trying to interpret and express what is meaningful to the African grey parrots in the project and what they may want to share with us (humans). In the conception of the exhibition part of the project, for example, Ute and Mathias are guided by their indications, and the collective is in the process of developing the audio guide based on the outcomes of the IIC conversations. Instead of a curatorial tour, people will *Listen to the Birds*. For Vanessa, spending time with Ute, Mathias, Clara and the other parrot companions personally helped her to connect with other onto-epistemologies, and for Ute and Mathias, meeting the birds in the wild has connected them in a novel way with their own companions. Perhaps the most prominent change as a result of the conversations has been Ute and Mathias' views on the origin of *Parrot Territories*, as they opened up to the possibility that the project was initiated by the grey parrots themselves, and the human counterparts only needed to show up and follow their lead. The reassurance from Clara and her fellows that their human counterparts and the work they do is important, encourages them to go on.

The offer of Wild One to contact him with any questions concerning the project was happily accepted. Whenever we come to a difficult situation, we can ask him or other fellows of the group for advice, for example, when having difficulties writing this text together, coming from different scholarly and artistic backgrounds, involving different

ways of expression. It is our personal relationship that helps us overcome the different worlds of thinking and working, and this is the same with the birds. As many thinkers of the ontological and species turn increasingly come to consider the worlds of humans and other species as interactive and indivisible, we may face the discomfort and disjunctures involved in encounters across cosmologies (de la Cadena and Blaser 2018) and come to create knowledge that is more inclusive and transformative.

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Caring

Greening Our Thumbs

The Narrative Practice of Caring for Plants and People through Community Zine-making

Martin Abbott, Amy Cheadle and Lissette Lorenz

Thinking and Feeling through Stories from the Garden

Plants and people meet in the garden. Whether this meeting takes place in a bedroom (spider plants on a bedside table), the backyard (black-eyed Susans in a sunny border/vegetable patch) or the bush (where some people gather food), plants and humans care for one another. Sometimes this *care-full* growth occurs in unexpected ways. Plants and people also gather and grow together on the page: literally, when human hands grasp plant-derived materials (pencils, paper, glue) to produce words and images for a do-it-yourself (DIY) magazine known as a zine. And figuratively, when plants and humans share kins stories in the zine.

Before moving further, a note on multispecies pronouns: In this chapter, we experiment with indigenous scholar and botanist Robin Wall Kimmerer's proposal to use *ki* (singular) *kin* (plural) and *kins* (singular and plural possessive) pronouns to accommodate and honour all living things (Kimmerer 2013). Such an approach is based on kins proposal that nature needs a new pronoun, one that recognizes the subjectivity of other beings beyond humans. Kimmerer, who is a member of the Indigenous Potawatomi nation, chose *ki* because it comes from the Anishinaabe word *Bemaadiziiaaki*, which means "beings of the living Earth" so that "we can now refer to birds and trees not as things, but as our earthly relatives" (ibid.: 344–345). In making this narrative move, we seek to acknowledge and elevate the subjecthood and agency of plants and other non-human beings.

We ask in this chapter: How can the entangled practices of gardening and zine-making foster multispecies relations? How can the stories produced from these practices nurture, inspire and strengthen love among plants and people? To answer these questions, we search for experimental art-science methods (Rogers et al. 2021) that support plants and people by framing both the garden and the zine as a convergent narrative space. In this space, stories can be "feasts for mind, heart, and body" (Haraway 2016: 83) with transformative potential. During this time of mass extinction, the stories told through gar-

dens and zines can help us think and feel through, enact and nurture crucial interspecific relations. To this end, we argue that when gardening is paired with zine-making, a new shared action, or *relational praxis*, emerges. We define praxis as a reflexive blending of theory, methods and justice-oriented action(s) (Freire 2020; Furman 2012). Such praxis aligns with the relational ethics of care that are established between species in every garden and further developed in narrative cultural objects, such as zines. The first issue of our community-based zine, *Maybe the Mustard Will Save Us* (Ziney Gardeners 2023), includes 21 contributions of stories and artworks that describe the personal and collective experiences of those whom we call the “Ziney Gardeners” – people and plants who have come together in “matters of care”, transforming kinselves in the process (de la Bellacasa 2017).

In what follows, we discuss the emancipatory character of both zines and gardening and reflect on the relational praxis of *growing a zine*. We argue that linking the act of gardening to zine-making propagates stories and critical reflection about more-than-human collectives. As the anthropologist Natasha Myers and kins colleagues remind us, the stories that plants tell (and those that we tell about them) need to be told, “[...] again and again” (2023: 268). Zines can provide such a forum for elevating more-than-human community voices.

Putting down Roots in the Garden

The act of gardening reveals a complex interplay of symbiosis, care and transformation. Gardens and gardeners co-create and shape each other within broader ecological and socio-cultural contexts. Both Indigenous and scientific stories tell us that mutually supportive relationships between a wide diversity of living organisms have created cycles of symbiosis over millennia (Gershuny and Smillie 1999; Williams 2018); cycles that move according to kins own cadence and rhythms, unique timelines and equilibriums. At the same time, however, we learn that other species benefit from disturbing these cycles in unpredictable ways (Marris 2001). How do you articulate the unkempt garden gone wild? Circling around balance, it seems, lurks chaos. Where does the gardener fit into this ram-bunctious ensemble?

We shape these relations as gardeners and scholars by tending to them in whatever spaces are available. In turn, gardens shape us back, by appealing to our needs and desires (Pollan 2011). We garden for sustenance, art, intellectual curiosity or pleasure. We garden for novelty and nostalgia. We garden for calm, peace, joy or food. We surround our homes with gardens of all shapes and sizes. We fill our homes with plants in pots. Even the most neglected “plot” of land in the built environment can be considered a garden (Clément 2015), as a space where species meet, cooperate or compete in new kinds of gatherings (Gandy and Jasper 2017). Gardens are amalgamations and transmutations of time, place and bodies; flora and fauna in a dance of everchanging becomings from which we humans cannot be separated (Bateson 1972).

The gardener is in a dialogue with kins garden, and both are co-constituted; the garden begets the gardener. Both are transformed. This relationship is a form of *sympoeisis* for environmental philosopher Donna Haraway, a relation built on making-with (2016).

Similarly, Vinciane Despret writes of being-with, a transformative experience of multispecies becoming what *ki* calls “anthropo-zoo-genesis” (2004) – or in our case, such as mustard-with-human, the term might be anthropo-*botono*-genesis. By making- and being-with, our senses are sharpened towards the awareness that both the garden and gardener are not only caring for each other, kin are becoming each other (Barad 2007; de la Bellacasa 2017; Despret 2004; Haraway 2016; Kimmerer 2013; Thomashow 2002). Gardening (and zine-making) also becomes praxis (Wilson and Weinberg 1999), a way of enacting our beliefs about it. Plants have coaxed kin human companions to develop skills and tools to help us humans do more work in the garden. Human tasks, such as propagating, planting, weeding, digging, raking, trimming, picking, watering and feeding, happen repeatedly as we craft a garden space. Our bodies grow rooted to the ground and reach up into the canopies of trees. We plant and nurture and tend to our horticultural and ecological beliefs. We bring new plants into the space, remove or cut others back, divide kin as kin outgrow kin space, place kin in new beds with other plant species. All the while, commitments are made; routines and repetitions are built around our responsibilities to each other’s mutual care.

At the same time, gardening can be a radical act of DIY, one that occupies a set of heuristics historically removed from scientific experimentation and academic knowledge production (Polanyi 1964). Reminding us that “radical” was a term etymologically akin to “from the roots”, the feminist activist Penny Weiss demonstrates how the act of gardening allowed her to metaphorically define a powerful form of radical activism (2013). Flexibility, variability in tactics, open-mindedness, as well as relational and systems thinking all emerged as garden-based approaches to dismantling the patriarchy. Similarly, Peter Lamborn Wilson and Bill Weinburg in *Avant Gardening* (1999) explore the greening of urban environments through community activism, where plants are used to create liveable worlds transmuted from capitalism’s contaminated, debased and abandoned lots. Urban gardens created lively new narratives for invisible streets and neighbourhoods. In essence, both Weiss and Wilson and Weinburg underscore how gardening serves as a profound and transformative genre of activism, cultivating not only plants but also new possibilities for ecosocial justice. Gardening, thus, emerges as a multifaceted practice that intertwines stewardship, expression and radical activism.

Zine-making: A Brief and Situated History

How is a zine like a garden? Zines, by their nature as self-made objects, defy strict categorization. Our survey of zines turns up a variety of ephemera and online artifacts, paper or digital montages of text, images and ideas put together to communicate a message that operates outside of traditional publishing systems – and the hierarchies that support and uphold them. A zine is often collaborative and self-distributed, a subversive or radical action rooted perhaps in the first political pamphlets made on early mechanical printing presses (Rutter 2022).

Zines have historically amplified underrepresented voices. *Fire!!: Devoted to Younger Negro Artists* was published in 1926, featuring the under-represented works of Zora Neale Hurston, Aaron Douglas, John P. Davis and Langston Hughes among others (Nugent

1982). This act elevated single voices into a collective and creative power. Later, punk music subcultures in the 1970s developed a culture of “fanzines”, described by cultural historian Steven Duncombe (and quoted by Teal Triggs 2006) as “little publications filled with rantings of high weirdness and exploding with chaotic design”, where the makers “privilege the ethic of DIY, do-it-yourself: make your own culture and stop consuming that which is made for you” (Duncomb 2017: 1–2).

The zine aesthetic became a graphic language of resistance during this time (Triggs 2006). Authors used collage techniques, cutting text and images from various sources and recombining them in raw and radical ways to tell alternative stories. Kin claimed and remixed hegemonic cultural objects – the very culture that sidelined kin – to create new narratives. Queer and feminist zines of the 1980s and 1990s, for example, focused on raising awareness, education and community building. *ACT UP* and *gendertrash* both provided platforms for self-expression and documentation during the AIDS epidemic, enabling a strong advocacy community to emerge. By necessity, these communities operated outside of the mainstream media (Sheth 2022) which refused to recognize them. At times, zines were incorporated into larger political scenes where they could further the cause of marginalized communities (Nowakowski 2023). They operated on the fringes of mainstream culture, outside of academia and independent of the status quo of the art establishment.

Perhaps controversially, academic institutions and art museums have begun to collect and draw on the affordances of zines for their own pursuits.¹ Some scholars find that zines can communicate and make complex ideas accessible (Wang and Cruz 2023) or even act as low-carbon alternatives to in-person conferences (Rayner and Pasek 2023). For better or worse, zines allow information to be quickly assembled and narrated outside of the formal constraints (and sometimes safeguards) of peer review. With these barriers down, scholars-turned-zine-makers are free from the usual constraints of academia to assemble transdisciplinary information and sentiments into speculative montages narrated through multiple modalities – born-digital publications can use sound, animation, video or non-linear hyperlinking to their full advantage. Zines, in their various forms, provide scholars with the means to communicate research in more accessible ways (Borgdorff et al. 2019).²

While historically rooted, zines today remain “absolutely necessary” tools of emerging culture (Heins 2022) and continue to animate storytellers whenever their unique powers are needed. They gather and grow in alternative spaces where small-run and handmade publications are welcome, popping up between the cracks. Community bookshops, small art venues and local libraries have all been known to house zines. We encourage you to *dig a little deeper* (gardening pun absolutely intended) into your own community to find zine gatherings online or at your alternative community spaces.³

1 See, for example, Cornell University’s zine collection or the Watson library at the Metropolitan Museum of Art.

2 Moreover, it is not lost on us that we, too, are tapping into the historical praxis of and freedom afforded by making a zine.

3 In Ithaca, New York, for example, we know of such events occurring at Autum Leaf bookstore and the Downstairs event space.

The Garden as Zine, the Zine as Garden

We understand the garden and the zine to be transmuted extensions of each other: a (meta)physical meeting place; an (im)material location where human and non-human species gather and are gathered. These interspecific places are a forum for untrammelled expression. Like gardens, zines are collections and the repurposing of ideas and artifacts. They are art spaces to think and work through, from which a practice-oriented ontology (Harman 2011) can emerge. Our materials and tools, flora and fauna, have kins own agencies. Kin are dialogical and able to push back (Ingold 2007) on us, redraw our boundaries and transform them in kins likeness (Molander 2022: 379; see also Barad 2007; Bennet 2010). Our tools and materials offer kins own unique propensities. Similar to talking to your neighbour over the fence, growing a zine collectively is a form of knowledge creation and cross-pollination which helps foster a more-than-human community.

Through active engagement in gardening and zine-making, we link theory and action through praxis. Growth, sustainability and aesthetics are not merely abstract ideas, but are lived and experienced through enactments of both. The combined praxis of gardening and zine-making, whether in a pot, plot or page, triggers a reflection about our relationship with plants and space.

When we organize and make a zine or organize and make a garden, an awareness surfaces that our decisions are enactments and expressions of a value we hold, or an exploration of a value forming. These values circulate around a set of core questions in our work: How can we nurture and express an “evolutionary system of mutual aid” (Palmer 2023)? How do we do so in unison with others? How can these stories act as a balm, inspiration or motivation? In times of climate crisis, and ecological and social devastation (Dwyer and Viglione 2023), healthy plant-people relations are central to healthy futures.

Now that our defining work is done, we turn towards descriptions of our fieldwork and methods. We focus on how the zine evolved from the seed of an idea into a collection of stories on plants and people.

Working in the Field

How can we foreground plant-and-people relations? Research has pointed to a general unwillingness on the part of scientists to engage with “the public” in matters of scientific importance (Besley and Nisbet 2011) or called out the unidirectional flow of information from scientific communities to communities’ writ large (National Academy of Sciences, Engineering, and Medicine 2017). For these reasons, we were not looking for ways to share our own message with a “lay” audience – we asked contributors to share kins knowledge and expertise in ways with which kin felt most comfortable. This meant we accepted poems, paintings, photographs, short stories, digital drawings, audio playlists and other two-dimensional arts. Contributions were born digital or later digitized and laid out online by one of our contributors who designed the zine.⁴

4 Thank you Izzy for designing the zine!

Our invitation to participate was iterative, and our deadline rolling. We generated an 8.5" x 11" call for participation and posted a flyer around Ithaca, New York, our small college town. We made digital versions of our invitation and shared it on social media. Finally, we reached out to friends and family individually. We adjusted our expectations as we went along, learning what worked and what did not; finding what took root. We ended up with submissions coming from Australia, Germany and the United States. Altogether, 21 people contributed. The ages of our contributors ranged from young children to elders.

We presented our collective zine, *Maybe the Mustard Will Save Us*, at the "Narrating the Multispecies World" conference at the University of Würzburg in the summer of 2023. We also presented the zine in our academic home, at Cornell University's Science and Technology Studies Department's "Science Studies Reading Group" weekly workshop. We shared the finalized issue of the zine with friends, family and members of our respective gardening and zine communities. Conversations with others about the project often prompted opportunities for reflection. Personal stories were shared in surprising ways. And we continue to collect stories for future issues. Below we offer stories from this first issue *Maybe the Mustard Will Save Us*, and reflect on our understanding of gardening, zine-making and community building.

Maybe the Mustard Will Save Us: Meeting at the Table, in the Garden and across Generations

A Seat at the Table

Imagine this scene: two humans huddle over a pile of dried pinto beans splayed across a table. "I think five beans per envelope should do it", one says to the other. The pair, community horticultural volunteers called "Master Gardeners", have sat down in a corner of the public library in Hampton Roads, Virginia, USA. Kin count out the smooth, speckled crops-to-be in order to stock the free community seed cart for the summer. It is April, and the growing season is about to begin. Tasked with growing a zine, a third human approaches the casually chatting pair. After learning that there are some 200 Master Gardeners in the area, the visitor asks, "Do you know if any Master Gardeners would be interested in sharing a plant story with me?" "Let me think ...", a Master Gardener responds, an amused expression on kins face. Then ki quietly consults the beans. How do the beans respond?

(Fig. 1:) A black background with painted butterfly wings.



Seven Master Gardeners offered essays, poems and artwork to *Maybe the Mustard Will Save Us*. One gardener decorated a large seashell in decoupage – the decoration of objects with paper cutouts – which depicts a flower which is visited by a butterfly and a bee (Fig. 1). The scene is accompanied by the line, “Life begins the day you plant a garden” (Ziney Gardeners 2023: 24). Later, a line from another Master Gardener’s haiku reads, “Purpose, sharing gifts, and hope/Together we are better” (Ziney Gardeners 2023: 39). Master Gardener Vernelle Curtis wrote:

I get mental energy and physical joy from being part of a bigger community of people who want to learn, to share knowledge and to use horticulture to make whatever environment we have better. It is a privilege to watch others enjoy the display gardens, knowing I have helped to nurture them. It is rewarding to answer someone’s question from behind the ‘ask a master gardener’ table and I love to learn from knowledgeable people, whether members of the public or other master gardeners. (Ziney Gardeners 2023: 34)

Like a plate of summer squash dished out from the yard, here is some food for thought: Is it just humans who plant gardens? What if it’s the other way around, and it is the garden that has planted humans? What if more humans were to recognize that the joy they get from the garden is a gift bestowed from these more-than-human “communities of people” – people who live in shells, who photosynthesize, whose wings buzz in the breeze

in search of nectar? As yet another Master Gardener puts it, “pollinators float in and out while providing the essence of life – talk about pollen powder [...] now that’s garden *power*” (Ziney Gardeners 2023: 14). If we could learn to listen to the other Master Gardeners, like the beans who offer kinselves as gifts for the community seed cart, would we not then truly be better, together?

Planting Plants, Plants Planning

How do plants plan? In another set of entries, two contributors bring to the fore the challenges of plant planning. In one, the author discusses the beauty they find in the tree of heaven (*Ailanthus altissima*), a polarizing plant that, similar to so many other species, found kinself in a foreign land with little competition and favourable growing conditions. In this instance, the tree is host to a species of planthopper, the spotted lanternfly (*Lycorma delicatula*), highly damaging to productive orchards and vineyards in the eastern United States. Both are considered a blight. At the same time, lanternflies find the tree of heaven, which grows in almost any crack and crevice of a city (and which seems to prefer the disturbed earth of urban spaces), an emancipatory plant capable of transporting kins personal subjectivity from the forest to the city.

Contributor Annika Ross writes:

This one probably wasn't planted, it probably wasn't wanted. It's the preferred host of the spotted lantern fly, the moths you see on the sides of New Jersey buses, next to a child's foot and the big words: STOMP IT OUT. You've got to get rid of the tree of heaven too. Because it's a weed. Because it helps the flies. Because it spreads fast and creates too much pollen. Because it's a weed. Because it's invasive. But I like the way it branches over and over and over and twists and turns, so that by the time you look from the base of the trunk to the tops of its leaves, it feels like you start out of a city sidewalk and you end up in a tumbling forest of green. (Ziney Gardeners 2023: 28–29)

Ross dwells on relations between plants and people, between the moth and the tree, and between urban and forested landscapes. And between plants, and kins plans and plan(t)ings, and people, and kins plans and plantings. Decisions are made by plants as kins seeds disperse into the ecosystem. For human people, this wild freedom is outside of an order they have planned for kinselves.

Another contribution points to the careful attention given to starting a garden on a city balcony. Here, the author describes the delicate work of collecting the seeds of a strawberry, and the ways in which those tiny seeds could thrive first during germination in a clear plastic bag and later in the centre of Manhattan, New York. Ki discusses the collecting of strawberry seeds:

In an effort to brighten up our home in the city, we started a garden. We collected seeds from produce and saved them for spring. In the case of strawberries, the small seeds were harder to access. I shaved thin slices of the outside of the fruit and left them overnight to dry. In the morning, I could rub the seeds away from the soft, leathery skin [...]. (Ziney Gardeners 2023: 18–19)

Fathoming the tiny root of a strawberry seed is not easy. It must have been thread-like; it must have taken steady and gentle manoeuvring to nurture a plant on a windswept New York City balcony. The tender treatment of a strawberry seedling hints at the kind of skilful care people can bring to the garden.

On another balcony on the other side of the United States, a contributor described kins appreciation for a cherry tomato plant called Monster. From the beginning, Monster was “taller than the rest” of the seedlings (Ziney Gardeners 2023: 7). This particular cherry tomato plant grew on a balcony in Los Angeles, California, USA. During the pandemic, Monster took over a “large portion of the balcony [...]”. As Monster “grew and grew; it was an effort to keep up with picking the ripe tomatoes and finding ways to use them”. What a wonderful feeling that must have been during the pandemic. Seated at the kitchen table, trying to figure what to do with the cherry tomatoes, proved a challenge. From pizza toppings, vodka sauce, caprese salads, to raw cherry tomatoes straight into the mouth, some with truffle salt, and others used in *strapatsada*, “I made every dish I could find on-line” from Monster’s cherry tomatoes. The relationship grew tepid, however, when other forces intervened, and the relationship ended. Suddenly. This contributor wrote:

After almost three years, Monster developed a virus, speckling its leaves with purple. I pulled Monster from the planter with a reverent sadness and disposed of him carefully down the trash chute. (Ziney Gardeners 2023: 7)

What we are trying to hint at here is the organic-ness of the garden and zine as something that is compostable. Both are sustainable, easily put back into cycles in a caring way that is accessible to the community. You can experiment together. Throw materials and ideas across the table. Sweep them up when done. Then put it all back in the garden. We think it is worthwhile dwelling in the garden and repeating this exercise over and over, until we are transformed, we become each other, we care for each other in interspecies thriving.

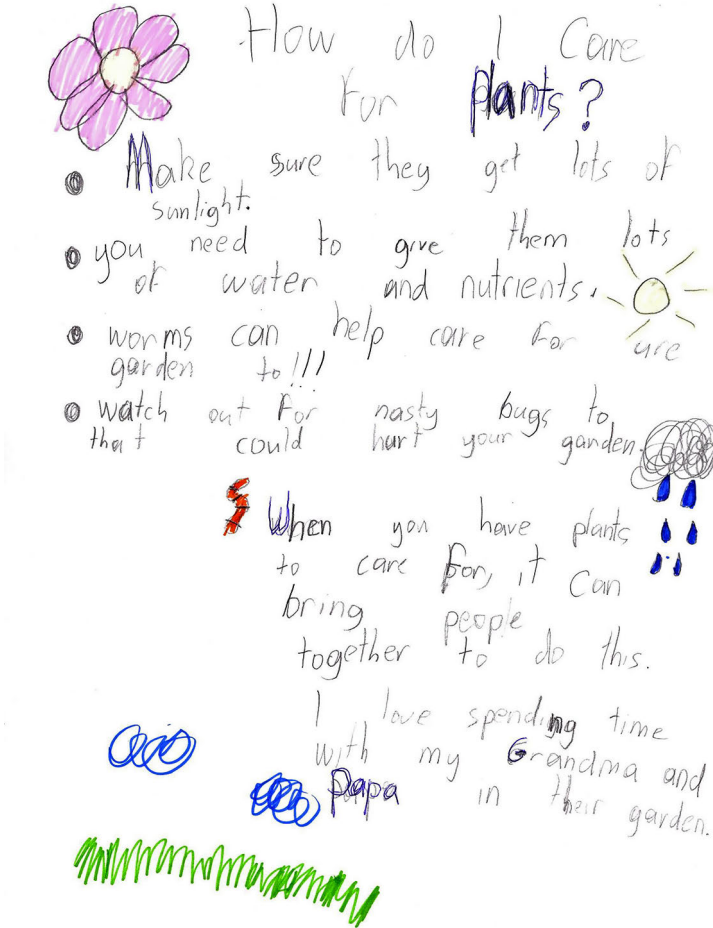
Or, we toss each other out.

Juxtaposing these balcony gardens with the child’s foot stomping out the lanternfly and the urban sprawl that the tree of heaven so enjoys gives us a range of human affects brought to bear in the garden. We try to decide what can live and thrive and what cannot, but plants have plans of kins own.

Sharing Intergenerational Wisdom for Equitable and Just Futures

A sampling of our contributors told stories of kins intergenerational meetings in the garden. Gardening and zine-making alike encompass a community, young and old.

(Fig. 2:) Evie's artwork and writing.



One image submitted was drawn by Evie, a young child. It features a portrait of kinselves working alongside kins grandparents in the garden (image 2). Flowers in many shades are growing along a garden row. Below are the indispensable words: *water*, *Remy*, *Grandma* and *Evie*. Below, *Remy*, the smiling dog, stands on a green lawn.

In another young child's submission, Olivia has drawn pictures of flowers, grass, the sun and a raining cloud. Olivia writes:

How do I care for plants? Make sure they get lots of sunlight. You need to give them lots of water and nutrients. Worms can help care for the garden too! Watch out for nasty bugs that could hurt your garden. When you have plants to care for, it can bring people together to do this. I love spending time with my Grandma and Papa in the garden. (Ziney Gardeners 2023: 28)

The relational ethic is not only evident between people and plants but the animals at home in the garden, including dogs, worms, bugs and other critters.

Drawing again on Vernelle the Master Gardener in kins 70s: “As a retired educator, it is exciting to be a part of the ‘Ready, Set, Grow’ project team, where I get to interact with first and second graders, as they plant seeds and explore plant life. This project keeps my pulse up” (Ziney Gardeners 2023: 11). This vignette points to the intergenerational meetings that happen in the garden, and how knowledge and techniques of care are shared among generations. While these contributions do not explicitly call out feelings of love, it is not difficult to feel love in kins drawings and expressions of nurture and pleasure at being in the garden.

Nurturing, Inspiring and Strengthening Love among Plants and People

We began *Maybe the Mustard Will Save Us* in an attempt to gather stories about plants and people. Our awareness of how we can connect with the (human and non-human) people around us grew throughout the project. Robin Wall Kimmerer, scholar, founder and director of the Center for Native Peoples and the Environment in New York State, recommends that one way to restore the relationship between land and people during these times of ecological devastation is to plant a garden. Kimmerer writes that a garden is “a nursery for nurturing connection [...] for cultivation of practical reverence [...]. Something essential happens in a vegetable garden. It’s a place where if you can’t say ‘I love you’ out loud, you can say it in seeds. And the land will reciprocate, in beans” (Kimmerer 2013: 126–127).

If we take Kimmerer’s words to heart as we reflect on the process of growing a zine in a community, we realize that growing together is transformational for all beings involved. A transformation occurs in individuals and collectives, with a recognition that the very act of growing together challenges any static lines drawn between individuals and collectives. It also occurs across generations, going back as far as the evolution of life on Earth and going forward as far as we can imagine. We observe this theme in the pages above when intergenerational wisdom is shared. In this way, growing a zine is not only an emancipatory way of telling stories about ourselves, but a way of world-building with others. Gardens-as-zines and zines-as-gardens provide us all with blank pages, holding space for sharing our reflections, curiosities and memories.

Growing a zine can also be a multispecies technique for subversive conversation with hierarchical knowledge structures. It is a praxis that encourages multivocality and more-than-self-actualization in a myriad of formats, visual and text. The mundane task of picking an unending harvest of cherry tomatoes that volunteered to grow on a balcony, for

example, can become the radical centre of a story. Monster reminded one of the authors of this chapter of kins own cherry tomato plant growing in a faraway backyard. In a sunny subtropical setting on Australia's east coast, a cherry tomato plant has long grown of kins own accord. The stamina of this cherry tomato plant knows no bounds. The plant was kinself transplanted from a previous vegetable garden. This cherry tomato plant continuously reproduces new plants from fallen fruits, over and over, to the delight of all who can effortlessly enjoy kins juicy tomatoes.

In the way that growing tomatoes on your balcony can be emancipatory during a pandemic, environmental author Annie Proulx points to the relationship between plants and people with the example of living root bridges and ladders in northern India as an example of infrastructure that is handmade in conversation with rubber trees (2022: 11–12). Similar to all infrastructure in the garden and beyond, the relationship requires ongoing maintenance and repair. Such relationships can require more radical and repetitive accommodations, as cultural anthropologist Bettina Stoetzer notes in a vignette about the “Berlin tree house (*Baumhaus*) or *gecekondur* [...]” (2022: 2). At the centre of this special home in Kreuzberg, Berlin, a tree of heaven grows. “As the trunk expands”, Stoetzer writes, “Osman and his son cut further into the wall [of the tree house] to accommodate its [sic] growth” (ibid.: 3). These stories signal to us a relation we might otherwise overlook – a relationship that exists between people and plants, between types of care and types of creative accommodation and growth. These defiant examples represent and symbolize the kinds of subversive stories that plants and people can pursue in conversation.

Narratives and stories told through (and during the creation of) the zine provided opportunities for voicing. We acknowledge that it can take a lot of time, patience and courage to voice a political idea, a creative thought or anything that might make us feel vulnerable or exposed. It is not always easy to share with others what we think. Creating together can be a liberatory, agency-developing practice. The conversations we are free to have while seated around the table sorting beans, or making a zine, are of a special kind; different from what we might experience in day-to-day life. They provide an opening for dialogue. And in this opening, a method of inquiry and sharing emerges. In this way, we found that gardens-as-zines and zines-as-gardens are as much a mode of listening as a method for speaking and sharing. Listening, along with making, is a necessary practice for nurturing forms of mutual aid.

How is making a zine like planting a seed? Each act is trusting in a future we can plan for but not control. Yet, we can keep certain guiding principles in mind as we turn towards that future. Indigenous law scholar Kayanesenh Paul Williams reminds us of the Haudenosaunee principle of seven generations: “in any decision [...] consider the effects of [your] choices on the seven generations downstream” (2018: 357). And let us not forget that plants, of course, have plans of their own. We do not know how it is all going to turn out. But somehow, through care and attention, and with a little bit of luck and skill and trust in the praxis, a zine-as-garden takes root. Something exciting starts to happen when we talk to plants and people about submitting to the zine. We hear kins stories of past, present and future gardens. Pains, pleasures, hopes, dreams. These are some of the best conversations. We could not have got to the heart of these stories without the zine as a transdisciplinary method of inquiry and co-production.

Growing down, Growing up, Growing forward

We have argued that tending to our plant kin opens us up to questions of care, ecological responsibility and relationships with others. Our aim is not to romanticize gardening or the act of making a small publication. Each surely has its limitations, especially in terms of who can participate. We acknowledge that not everyone currently has the resources or means to access the garden. This need not be the case. As a justice-oriented collective, we are committed to supporting community self-actualization for multispecies thriving.

Since the first volume of the zine, we have taken our practice on the road. We have set up tables to collect contributions at a variety of happenings, collaboratively creating zines that are thematically aligned with the event at hand. For future work, we ponder what can we draw from zine-making that we can bring back to the garden? How can community-based research be restorative and transformative for all involved? How else can the radical, relational praxis of growing zines facilitate diverse forms of partnership, coalition building and self-actualization for the many more-than-human communities of which we are a part – and especially those that have been historically oppressed – in order to bring justice to bear for all Earthlings? These questions will guide the Zine Gardeners as together we simultaneously grow future zine issues and plant-people relations.

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The Art of Narrating and Practicing Grassland Restoration for Tibetan Pastoralism's Cultural Survival and Revival

Siran Liang

Introduction

People always came to me to ask about how to sow grass. But once the grass is sown, that's not even what it's about anymore. What you really need to do has nothing to do with sowing grass. (Palsang)¹

When I was travelling in eastern Tibet, many Tibetan intellectuals, after I had told them I am interested in understanding the relationships between grassland, yaks and herders, the subject of my ethnographic research, pointed out right away that I should visit a Tibetan called Palsang. I looked him up on the internet. Many news articles, video clips and documentaries about him popped up. They are often titled “Palsang – desertification control practitioner”. Palsang's model has been inspiring for many communities on the Tibetan plateau. He is now often invited by other regional local government officials to tutor the local herders about the practice of sowing grass. A simplified version of his widely known grassland conservation story on the internet can be summarized as such:

One day during his holidays, Palsang came back from university to the grassland where he grew up; he was astonished by the severity of the desertification. He consulted a research institute about how to sow grass and which seeds to use. The experts told him about two ways of sowing grass. One is to spread the seeds all over the place. The second is to sow the seeds in rows. Due to the climate conditions of the Tibetan plateau, the first method does not suit the Tibetan grassland, as the seeds would be blown away by the wind and exposed to the blazing sunshine. They decided to sow seeds in rows by digging ditches, spreading premixed seed and fertilizer, and then covering them with sand. However, despite the increased survival rate of the grass seed, digging ditches is

1 Except for Palsang, all the names of people and places below county level in this chapter are pseudonyms. All of Palsang's statements are from the in-person interviews conducted in Dzögé in 2022.

a slow process and needs a large labour force. Whilst sowing the grass seed, he overheard two herder women saying that the yaks had strong feet and they could trample the seed deep into the soil. Yaks can replace human labour and also provide the precious fertilizer – yak dung. Inspired by his fellow villagers, Palsang let yaks and sheep graze moderately on the enclosed land where the grass seeds had been sown. Based on scientific experiments conducted by a research team from the Chinese Academy of Sciences, scientists endorsed the method by stating that Palsang's moderate grazing method helps the degraded grassland to recover. The herders' local method was approved by the experts.²

Films and videos praise Palsang's success in regreening the degraded grassland, highlighting the unique participation of fellow herders and livestock, as well as the incorporation of local knowledge.³ I was also intrigued by his story. I initially contacted Palsang, thinking it would be a perfect case study of local ecological knowledge. After my one-month research stay at the Ecological Culture Centre that Palsang had established in his hometown, I came to realize that the grassland conservation they have been practicing is neither just about the local nor only about ecology. To be more specific, this is a case about grassland conservation, as well as about legitimizing pastoralists' way of life through artistic visual narratives.

This chapter offers a case study of a grass sowing practice led by an iconic Tibetan environmentalist in Dzöge county (mdzod dge, or Ruogai County), Sichuan Province, China. This grassland conservation practice largely resonates with other scholarly observations in China that local environmental practices are as much about conserving the eco-biological sphere as they are about legitimating the long marginalized cultural practices (Bum 2024; Hathaway 2012; Yeh 2014). The alliance between global environmentalism and indigenous activism has been prevailing since the 1980s (Conklin 2006). The human stories and images of the Indigenous, which meet the projection from the mainstream global imagination of the local group, make the environmental activism narratable (Brosius 1997; Conklin and Graham 1995). The marginalized group was able to advocate their culture and own appeal by collaborating with global environmentalism (Brosius 1997; Conklin and Graham 1995). Although the Chinese state, the government in exile and Tibetans themselves do not identify Tibetans as an Indigenous group, Tibetans' self-representation has "a family resemblance to indigenous formation around the world" (Yeh 2007: 71). And "[m]ore specifically, Tibetan claims and representations about environmental stewardship and ecological wisdom resonate strongly with other indigenous formations" (ibid.). The global eco-indigeneity in China has also created a space for ethnic minority groups and their scholar-activists for their cultural expressions (Hathaway 2012; Yeh 2014). This case study argues that the alliance with modern environmentalism and science not only legitimizes Tibetan's cultural practices, which have already been observed by other scholars (Bum 2024; Yeh 2014), but more importantly, this alliance, which

2 This is summarized from a variety of online reports, videos and my interviews with Palsang. For English reports on Palsang, see: CGTN 2020; Feng 2017.

3 For films about Palsang, see: <<https://www.youtube.com/watch?v=hLQ6GaLzF3Q>> [Accessed 12 September 2024]; <<https://tv.cctv.com/2014/10/20/VIDE1413735487900677.shtml>> in Chinese [Accessed 12 September 2024].

is embedded with modernity and internationality, creates new meaning to contemporary Tibetan pastoralism.

This case study also points to the importance and power of narrating environmental stories. The latter matter, because “[n]arratives of decline and extinction or, conversely, of resilience and improvement in nature always intertwine ecological facts with cultural histories and value judgments [...]” (Heise 2017: 6). While both the Chinese rangeland management policies imposed on Tibetan pastoralism and herders’ own practice envision a healthy grassland, the narratives they tell are embedded with conceptual tensions of how to live with a healthy grassland. The state narratives suggest that the herders and livestock are the cause of grassland degradation and in need of policy interventions, such as limiting and even excluding pastoralism completely. Tibetan herders use media and photography to tell their multispecies stories which persuasively unsettle this dominant (mis)representation of pastoralism, arguing that pastoralism and their multispecies way of life are an integral part of a sustainable grassland ecology. It is an example of how Tibetan environmentalists take the state-endorsed conservation practice as an opportunity to achieve self-representation.

Herders’ storytelling through photography and films enable the herders to visualize their environmental narratives and share them with wider audiences in the digital era. This way of narrative resonates with the emergence of Eco-Fourth Cinema, i.e. “films displaying the intrinsic but dynamic connection Indigenous peoples have with the environment and other living beings” (Frey 2018: 22). The artistic articulations in this case study show the rapport between pastoralism, global conservation ideas, the charismatic and photogenic highland animals (e.g. snow leopard, black-necked crane) and the idyllic grassland. This makes pastoralism narratable, legitimate, modern and apolitical (or provides political expression in a subtle, not a confrontative manner). The hybrid images and narratives which blend global conservation ideas and traditional pastoral culture are also especially powerful to restore the pride of pastoralists. A pastoralist who graduated from university once told me: “People like Palsang and Tashi Dorje [another Tibetan environmentalist] made it possible for herders to walk with their heads up.” Thus, the narratives and artistic films and photographs are not only about presenting the relationships between pastoralists and other beings, more importantly, they create possibilities and imaginations of future pastoral life, which has confronted modernity and state interventions.

I stayed at Palsang’s Ecological Culture Centre for one month in May 2022. The centre itself is an interesting complex where Palsang and his members work, live and share their stories with visitors. It consists of a library equipped with a coffee machine and a fireplace, a hotel, an exhibition hall, a workplace for Palsang’s co-workers, as well as Palsang and his relatives’ home. They offer a discounted accommodation price of 30 Chinese yuan (about four euro) per night for people like me travelling there for fieldwork. As it was during the time of the COVID-19 pandemic, there were rarely other visitors. During this month, I conducted a total of 14 hours of recorded face-to-face interviews with Palsang and spent time in the centre with other members. In addition, I participated in one of the grass sowing events which lasted four days, during which I gained a better understanding of how the grass sowing was practiced on the ground.

In the following, I firstly explain how the dominant yet problematic narratives about Tibetan pastoralism can be understood in the context that the Tibetan Plateau, which is primarily a grazing grassland, is considered to be crucial for China's ecological security. Then, I show through the ethnographic account how the practice of grass sowing is an environmental conservation practice and an opportunity to reunite the community. After that, I illustrate how Palsang and the centre members use photos, documentary films and talks to convey the legitimacy of pastoral culture through global environmentalism and create a proud image of modern pastoralists. Finally, I show that the stories about pastoralism are aligned with global environmental conservation ideals, such as biodiversity conservation, carbon politics and charismatic animals to make the narratives appealing to wider audiences and give new meanings to pastoralism.

The Tibetan Plateau as an Ecological Security Barrier and Grazing Land

The Tibetan plateau is one of China's Ecological Security Barriers (*sheng tai an quan pin zhang*), a term referring to "a marginal area that protects the structure, function, and process of internal ecosystem from damage or threat from the external environment" (Tang et al. 2023). Scientists identified four ecological security roles of the Tibetan plateau in China; water conservation, biodiversity conservation, soil and water conservation, and a carbon sink (Sun et al. 2012). China's policymakers and scientists are aware of the potential detrimental effects of a degraded Tibetan grassland, such as floods and sandstorms, on its populous and wealthy cities located in the eastern lowlands (Harris 2010). The Tibetan Plateau is primarily a grazing land, therefore, discussions on pastoralism have been centred to discussions on whether and to what extent this anthropogenic activity has been causing grassland degradation. The causes of the degradation of the Tibetan grassland are generally considered to be a combined outcome of environmental changes (e.g. global warming) and herders' "unscientific" management of the grassland (e.g. overgrazing) (Harris 2010). A number of highly controversial state interventions on pastoralism which are supposed to improve the grassland ecology have been implemented since the 1980s, such as a household responsibility system (i.e. dividing and allocating pasture to individual household), livestock carrying capacity policy (setting livestock limits), livestock reduction, the ecological resettlement of the herders (i.e. moving herders to townships for conservation reasons) and eradication of grassland rodents (Foggin 2008; Harris 2010; Nyima 2015; Yeh et al. 2017; Yundannima 2006). The legitimacy of pastoralism, livestock and other critters on the grassland hinges on its status in relation to grassland health.

In the past decade, with the rise of social media and mobile phones, official media no longer monopolize the news and information. Alternative narratives and images have started to emerge and spread. Palsang's story is one of them, which shows pastoralists' knowledge of and efforts in conserving grassland. Palsang's home village has also been experiencing severe grassland degradation, mainly in the form of the appearance of 'black soil beach' (Chinese: *hei tu tan*), a term which describes patches of bare soil on the grassland. However, Palsang's talks and interviews run counter to the mainstream

overgrazing narrative, as he explains that the reasons for the degradation which has occurred at his home village cannot be simply attributed to the herders' bad management of livestock grazing, but are, instead, a result of multiple recent alterations of the political ecology of the grassland, with its own historicity and sociality. One of the reasons, for example, was the drainage of the grassland. Dzögé had a lot of wetlands in the 1970s. Livestock could not graze on these wetlands in the summer when they were swamps, however, they would become an excellent grazing place once the swamps were frozen in the winter. Yet, outsider experts had decided to drain the wetlands, so that the livestock can also graze the area in the summer. Elderly herders in Palsang's village attribute the historical wetland drainage practice to today's grassland degradation. In addition, there have also been mining activities, the poisoning of pikas,⁴ the privatization and segregation of the grassland with fences, the disappearance of sheep manure and climate change. All of which have directly or indirectly caused the local grassland degradation. These narratives highlight the historical contingency and the sociality of the grassland degradation.

Sowing Grass to Reunite the Community: A Day of Planting Grass

What we can see is grassland degradation, but what we can't see are the changes in human relationships. Human relationships are lost in development and fences. Grassland degradation is tangible and visible. But if you can also see the cultural loss, it is much, much, much, severer. To be honest, the international NGO [non-governmental organization] is not willing to do these kinds of things [the cultural aspects]. Because you can't see them. So, I thought, I need to make them [the NGO] happy, and I do want to restore the grassland. But can I also use the opportunity to do something more important? (Palsang)

Palsang was employed by an international NGO. The latter sees grass sowing as the most immediate and preferred way to restore the grassland, as it is measurable, effective and visible. However, in Palsang's opinion, restoring the loss of the pastoralists' cultural aspects is equally important. One of the main changes is the separation among families due to the privatization of grassland. Sowing grass together provides an opportunity to reunite the herders who have been separated by the fences which divide the formally common grassland into patches.

Although news articles often praise the different techniques in Palsang's grass sowing practice, he himself was less interested in the techniques themselves. He ridiculed his grass sowing techniques: "When you talk about these techniques in real pastoral area, such as spreading dung and putting up fences to conserve the new grass, these are not techniques. Who doesn't know this already?" In Palsang's opinion, creating possibilities for herders to have discussions among themselves and restoring the solidarity of the community are the keys to revitalize the grassland and pastoralism, not the grass sowing

4 According to Palsang, the poisoning of pikas has led to the deaths of the pikas' predators, which, in turn, have caused the explosion of the pika population.

techniques themselves. One of his reasons is that, as weather and grassland conditions on the Tibetan plateau vary from place to place and time to time, herders cannot rely on universally applicable techniques to restore the grassland. Restoring the grassland requires the flexibility, understanding of uncertainties, and constant negotiation and discussion among herders. Scholars in other parts of the world have also observed that local knowledge can inform environmental practice, for example, Australia's savanna's burning project benefitted from incorporating Indigenous fire-management practices, informed by both custom and the observation of the seasons (McKemey et al. 2020). However, it is important to note that Palsang's grassland restoration is not based on traditional practice. In the past, pastoral communities do not maintain a healthy grassland by cultivating the land but through mobile grazing, which has been restrained by grassland privatization policies.

Palsang has not asked the international NGO to pay for the daily wages of the grass sowing participants over the past 13 years, which is different from most grass sowing projects conducted by other NGOs and commercial companies. During our interviews, Palsang did not dismiss the grass sowing projects which hire workers to sow grass for daily wages. But he was proud that his grass sowing practice has been conducted through communication and understanding instead of in monetary terms. He has several reasonings for this choice. First and foremost, Palsang emphasizes that the herders whose grassland needs to be seeded with grass should ask for helpers from the village themselves. Asking for help, being indebted to others, is the first step to establishing and reinforcing the relationship among villagers and families which has been disappearing due to the privatization of the grassland. Palsang explains: "Pastoralist culture is about helping each other. I help you, and you help me. Of course, there will be frictions. It is like there are sounds when using a wok and spatula. But the relationship lasts for a long time." Secondly, the continuity of grassland conservation is ultimately dependent on the herders' own management and care, not on the NGO or companies' payment. Thirdly, he maintained that the self-determined action gives the herders a sense of dignity, which is more important than the petty payment, which is usually 100 yuan a day (about 13 euro).

Cooking together, eating together and having fun are important and integral parts of the grass sowing activity in Palsang's opinion. Although the participants are not paid daily wages in Palsang's grass sowing practice, he uses NGO funding to make sure everyone eats well during the period when the grass is being sown. Grass sowing is usually conducted in the early spring when meat is scarce. Palsang would purchase meat and soft drinks to have a feast. "On the one hand, we are working. On the other hand, we are gathering together with families and villagers", said Palsang. During the days of sowing grass, Palsang often took the lead in cooking. On the first evening, Palsang made our dinner: spring onion fried with yak meat. While cooking, he said to me: "I am cooking to lift the mood. I don't want them to think that doing this (sowing grass) is painful."

The day before the grass sowing day, we drove to the village centre in the grassland. We had to go there early in the morning before the checkpoint officials at the entrance of the village started to work, because it was during the COVID-19 pandemic time and outsiders such as me were not welcomed by local authorities. We loaded equipment from a storage house in the village onto the pickup truck, including sheepskins, rakes, seed buckets, carpets, different sizes of aluminium pots, an aluminium teapot, a chopping-

board, knives, water buckets and grass seeds packed in sacks. Two pickup trucks and a tractor fully loaded with goods and food set off to Tsering's pasture in the afternoon. Tsering was the herder whose grassland would soon be treated with Palsang's grass sowing this year. He had asked Palsang to help him to restore his grassland this year after witnessing that his neighbour's grassland had become much lusher after a grass sowing event.

Soon after we drove off the paved road onto the grassland, we had to stop in front of barbed wire fences and pull out the iron rods of the fences. After pulling up bars, two people must stand on the wires while the trucks and tractor drove over the wires. The iron rods were not easy to pull out. It was better to put on gloves so as not to get injured by the wires. Before pulling up the iron rods, you must sway the bar back and forth until the soil was loosened. One rod was so tightly rooted in the soil that it took three people to take it out. "Ouch, my eyes", a young herder shouted when some soil flew into his eyes. We had to repeat the same procedure several times every hundred metres before finally arriving at Tsering's pasture. I was astonished by the density of the fences on this grassland.

Pulling up the barbed wire fences brought me back to the countless conversations about grassland fences I had had with many herders and environmentalists. The grassland household contract policy started in Palsang's village in 2008, relatively late compared to other regions in Tibet. The size of the grassland allocated was according to the family size at that time, 157 mu (1 mu = 666 square metres) per person. The larger the family, the bigger the grassland to which they were assigned. The location of the pasture was determined by lottery. Fences were thereafter erected between the pastures. Despite the fact that many recent studies have shown the negative impacts of fencing on the grassland ecology and pastoral life (Harris 2010; Yeh et al. 2014; Yundannima 2017), there is still little sign of removing the fences.

The most labour-intensive part of sowing the grass took place on the next day. We woke up around 8 a.m. in the tent set up on Tsering's grassland. Preparational work included Palsang explaining the process to Tsering, mixing different grass seeds and making a "plough" out of a roll of iron fences. Palsang was very proud of the homemade "plough". He explained to me, "We could have just bought a ready-made tool from the market. But when we make it ourselves, it is about the group effort we made to make things work." This year, a part of the "plough" was defective. I asked him: "What can we do?" He said: "Don't worry, we will figure it out. You see, there will always be difficulties and problems. The important thing is to try to figure it out together."

Villagers started to show up at Tsering's pasture at 10 a.m., mostly coming by motorbike. Tsering had been worrying about the number of people who would show up for a long time. His concern was not without reason. Tsering was known for not being very sociable or willing to help others in the village. In addition, the day of the grass sowing this year coincided with a function at a local monastery. Around 30 villagers came to help him. The year before, a herder has been able to get help from 90 villagers.

The first step in the grass sowing was spreading the grass seeds. Some people filled up their buckets with seeds of local rye (*Elymus sibiricus*) and oats, and spread seeds over the bare soil, while others used rakes to mix the soil and seeds. After a while, a tractor dragging the homemade 'plough' went over the area where the seeds had been sown. Many lumps of the 'black soil beach' on the grassland were a result of zokor's⁵ digging. When the 'plough' brushes over the lump, soil would then cover the seeds, without damaging the existing vegetation. At 2 p.m., people gathered around the tent for lunch. Palsang invited two women, who were said to be the best cooks in the village, to make noodle soup. Many helped to break the dough into small pieces and throw them into the soup. The herders then sat on a white plastic tarpaulin laid out on the grassland scattered with cola, energy drinks and snacks, eating the noodle soup and chatting with each other. Groups from other parts of the Tibetan grassland who visited Palsang to learn grassland conservation techniques also often integrated the lunch feast into their own grass sowing practice.

(Figure 1:) Herders spreading grass seeds. Photograph by the author.



5 Asiatic burrowing rodents resembling mole-rats.

(Figure 2:) Tractor with homemade 'plough'; the driver was resting. Photograph by the author.



(Figure 3:) Herders throwing sheep dung into the air. Photograph by the author.



After lunch, it was time to spread sheep dung. A tractor loaded with sheep dung drove across the pasture, with one person pushing off bags of sheep dung along the way. Herders on the ground opened the sheep dung bags and filled their buckets with the dung which herder Tsering has been saving for this event. They threw the dung into the air, into the direction of the wind. Sheep dung is an important yet disappearing fertilizer

on the grassland. Herders have been using sheep dung for its excellent ability to make a strong fire. However, recently, more and more companies have started to purchase sheep dung from pastoral areas and sell it to other agricultural regions as high-quality fertilizer. Palsang wrote an article in Tibetan in a local nomadic magazine advocating the relationship between sheep dung and grassland health, in which he explained that where there is more sheep dung, the grass grows better, as the nitrogen in sheep and yak dung sustains the vitality of the grassland.

Before the herders went home, they gathered inside the tent to have a discussion. Palsang, as well as other herders, expressed their thoughts, experiences and learnings from grassland conservation. One herder, whose grassland was treated last year, suggested sowing the seeds selectively, such as only on bare soils and not all over on the grassland, to avoid wasting seeds. Another herder, who had witnessed much worse degraded grassland in Mongolia, encouraged others to give up on caring for their grassland. An elderly herder added that he thought small black turfs which are created by zokors do not need to be sowed with seeds, as they might seem big from the surface but actually the hole itself was very small and there was still grass underneath the pile of soil. After the meeting, Palsang told me that he was fascinated by this insight, “I have never thought of this before. This is wisdom!” Just as Palsang had learned from two female herders’ suggestion to letting yaks tread on soil and grass, such discussions have gradually improved, modified and localized the grassland sowing practice throughout the last 13 years.

Narrating with Photos and Documentary Films

During the entire grass sowing practice, it felt like I was on a film set. Drones were hovering over yaks and sheep. Multiple cameras were set on tripods to film and shoot the scenes from different angles. Professional filming equipment, such as cameras, video cameras, tripods, fluffy boom microphones and drones were all part of this conservation practice. Three young herders from the village filmed the entire grass sowing practice. They took, for example, close shots of herders sowing grass and spreading sheep dung, running beside the slowly driven pickup truck across the grassland to film the conversation between Palsang and herder Tsering inside the truck, documenting casual conversations in the tents and filming formal interviews with herders. The herders here were more at ease with the cameras than I was. I came to realize the environmental practice here is as much about doing the practice itself as narrating it to others, or, as Palsang puts it, “talking is more important than doing”.

(Figure 4:) *Filming the practices. Photograph by the author.*



These young herder-photographers are members of the “Dzögé Photography Group” (*ruo er gai she ying xiao zu*), which was first established in 2015. Palsang organized filming workshops and invited a Tibetan monk who is also a professional documentary maker to teach 15 passionate locals, including herders, farmers and monks, about documentary filmmaking and editing. After years of group discussion and practicing, many of the members have since produced high-quality and award-winning documentary films with their own distinctive ideas; they tell the social-ecological stories from local perspectives, such as stories of grassland fences, herders and wolves, herders and black cranes, and stories of sheep dung. Palsang’s centre provides free accommodation for them to sleep overnight, a kitchen to cook food and companionship. During my stay at Palsang’s centre, it was not uncommon to see herders and monks seated in front of Apple computers, editing videos, making jokes and discussing their films.

Palsang gradually learned about the importance of having photos as evidence when conveying their achievements to others. At the beginning of his grassland conservation career, when he showed casual photos of different grass growth as evidence of the grass sowing practice, audiences were suspicious about the authenticity of the photos, no matter how hard he tried to convince them verbally. Later, with the before-and-after photos taken at the same location and the same angle, his story became much more powerful and convincing. Since then, he has started to pay attention to the art of communication through images.

In his conversation with me, Palsang listed several motivations to make documentary films. Firstly, it could potentially influence others. During the grass sowing event, Palsang explained to the herders in local Tibetan dialect about the importance of sharing their ideas and images with others: “You see so many photographers are here. Maybe what we are doing is very small. But they can spread it to more people. We treat 100 mu, 200 mu every year. We make tools ourselves. If 1,000 herders saw this, this will be an

impact. They will have new ideas.” Secondly, it can help to preserve knowledge and document social-ecological changes, even if this knowledge will only be cherished in the future. Thirdly, the material filmed could be sold to television stations as a source of income. Part of the income is contributed to the funds of the Dzögé Photography Group to support their events and workshops.

These documentaries and photos contain stories and ideas that the herders want to convey to other herders, as well as to broader audiences. Palsang emphasized several times in our interview the importance of creating a “scenery”.

To be honest, I am doing everything I can to create a scenery. A scenery is also a role model, right? No one will pity you in today's world, right? It is like in nature. If you want to survive, even if you are scared, you must pretend that you are big. For example, I am a herder on the grassland. These days, some people see me as a role model. I can pretend that I am doing very well. For example, my Jeep Wrangler from 2008, a beautiful horse at home and the thing I did next to the yellow river, all these things are scenery.

The scenes he creates offer a possibility that pastoralism does not have to be separated from modernity. On the one hand, his horse-riding photos represent the Tibetan herder's culture, especially masculinity associated with horses. One of Palsang's photos, for example, where he is riding on a white horse with his young daughter sitting in front of him, has often been used in articles and posters. On the other hand, he uses a Jeep Wrangler and his Tibetan style home with contemporary design to represent modernity. It is a deliberate choice. Although his Jeep Wrangler is an old, second-hand one, often breaks down and is stopped by traffic police for excessive modification done by the former owner, it often appears in Palsang's social media, as it embodies a type of modern spirit in his “scenery”. I once met a young graduate student from a pastoral family who was unsure about his future and contemplating visiting and learning from one of the prominent environmentalists. I suggested that he visits a monk environmentalist who lived just next to his hometown. He spontaneously rejected my suggestion and told me: “No, I want to visit Palsang. I like his style.” Palsang's images are inspiring to many young people who yearn for both modern and traditional pastoral lifestyles.

A Global and Narratable Pastoralism: Aligning with Conservation Science and Charismatic Animals

I talk about what I do in terms such as biodiversity restoration, grassland ecology restoration. If I didn't do it this way and only talk about tradition or our culture, no one would listen to you. I don't talk about culture. The last thing people want to hear is culture. Repackaging is an opportunity to survive. (Palsang)

Concepts of global conservation ideas are crucial in getting project funding. Every time that Palsang applies for fundings from the international NGO to sow grass, he needs to add new ideas in each application, or, as he puts it, bring in “innovations which suit their taste”. Palsang kept his grass sowing practice in conversation with conservation sci-

ence. At the beginning, for example, he highlighted the “herders’ participation” in grass sowing activities, when, at the time, most of the grass sowing projects were top-down projects managed by companies. Then, the next year, he brought the participation of yaks and sheep and their dung as fertilizer into grass sowing. And in 2013, he emphasized climate change. After that, he incorporated the measurement of the carbon sink in his project, knowing the importance of carbon sinks in contemporary science. All these elements ensured that he would keep receiving project funding for herders’ grass sowing events. “What I want is their [NGO’s] support.” These innovations are the ones that suit the NGO’s taste, which align with global conservation ideals.

Global conservation ideals are not only appealing for NGOs but also for young people from pastoral regions who often face the dilemma of deciding whether to pursue their postgraduate life in the cities or go back to pastoral areas. Pastoralism has been considered to be at the bottom of the livelihood option hierarchy. It was not uncommon for teachers to warn students that if they did not study hard, they would end up being a herder. Even among the pastoralists themselves, people often consider becoming state bureaucrats as the ideal and stable job for university graduates. Palsang translates certain traditional values of pastoralism into the words which young people can embrace. He reinterprets, for example, how the traditional pastoralist way of life is today’s “sustainability”, “recycling” or “low-carbon emission”, as the comparatively low materialistic life of pastoralism has long been considered as “backwardness”. However, with a new interpretation, it has become a role model of modern environmentalism. Palsang explains, “If we use these kinds of words, at least they [young people] will start to listen. They will feel it [pastoralism] is not something to be ashamed of.” By re-interpreting of pastoralism and linking it to global course, pastoralism is endowed with a new meaning, in which pastoralist life becomes modern and international in the way that it connects the remote pastoral community with the global environmental missions.

Another strategy to legitimize the herders’ way of living is to make pastoral life relevant for conserving charismatic highland animals. “Nowadays, we say the luckiest ones are those first and second class nationally protected animals.” Palsang illustrated this by the example of another Tibetan environmental group that had managed to demonstrate that pastoralism was critical to the snow leopard’s protection. They had used scientific methods to analyse the faeces of the snow leopard. They demonstrated that 70 % of a snow leopard’s food source comes from pastoralists’ livestock. “Their conclusion is that if there are no herders, and if there is ecological resettlement, the snow leopards will die of hunger without these livestock.” Palsang clapped his hands and laughed out loud. “Now you [the snow leopards] are very useful, I [the herder] am not. You [leopards] are famous. Please, can you use your fame to protect me?” Palsang mimicked a conversation between herders and snow leopards. He explains further, “Perhaps using this way, people might say ‘then for the snow leopard’s sake, you [pastoralists] can stay here for now’.”

Palsang adopts a similar narrative by telling a story of how the yaks and sheep, especially their dung and treading it into the soil, are critical to the grassland’s ecology, indirectly stating the importance of herders and pastoralism.

I don’t say the herders are great. But I say the yaks and sheep are great. Their fertilizers are important. Going up and down on the mountain with livestock, who else is able to

it except herders? No one needs to give them a salary. Their way of life is conservation. Sowing grass, treating black soil, all these are an interpretation of the relationship between herder and grassland. (Palsang)

The herders' way of life in this story is legitimized through their livestock bringing ecological benefit to the grassland.

The herder photography group has been documenting the coexistent relationship between herders and the black-necked crane, *Grus nigricollis*, an endangered and first class nationally protected animal in China. In their documentary film, black-necked cranes often lay their eggs near herders' home. They have also observed that black-necked cranes feed on the worms growing in yak dung. Therefore, in a way, the black-necked cranes thrive with pastoralism. By interpreting the grassland way of life through how herders coexist and even help the charismatic animals, the story of pastoralism become narratable and relatable.

Environmentalists speak differently in various political climates. The Penan foragers' knowledge in Malaysia was reduced to "the sacred" to be narratable by environmentalists (Brosius 1997), whereas Tibetan local environmental knowledge needs to be "scientific" to avoid being labelled as "superstition" in contemporary China (Yeh 2014: 271). Adding to this, I argue that the narratives which interpret pastoralism through the lens of modern and international conservation science is not only for political correctness, but also facilitating the local knowledge to be narratable to wider audiences, both pastoralists and others. However, there is also a potential drawback that catering to the global discourse will inevitably simplify and even distort the understanding of pastoralism.

Conclusion

Based on a specific case study of a grassroots Tibetan grassland conservation practice, this chapter shows that this practice addresses both the ecological and social reality of the grassland: The grassland is degrading and the continuation of pastoralism is at stake. Tibetan environmental practitioners adopt the state- and NGO-endorsed conservation practice not only to improve the condition of their grassland but also as a medium to revitalize and legitimize the herders' way of living. At first glance, what makes Palsang's grass sowing interesting to many is the success of regreening the grassland and the stories of how the grass sowing practice constantly incorporates both the old and new local knowledge and techniques, such as letting yaks and sheep tread over the earth to mix seed with soil. These practices deliver a message that herders are capable of taking care of a grassland, which contrasts with the mainstream narrative that the herders are to be blamed for grassland degradation. Moreover, in reality, the aim of the practice of sowing grass is not limited to growing grass on the grassland, but also includes the restoration of solidarity within the pastoralist community that has undergone drastic social changes.

More importantly, this chapter has shown the art of narration embedded in the environmental practices, which points to the importance of narrations which give new values and meanings to pastoralism. The narrations include storytelling through group discussions, formal and informal talks, images, project proposal writing, documentary films

and new interpretations of pastoralism. These narratives adopt a wide range of rhetoric and aesthetic tactics, such as scientific terms (e.g. biodiversity, carbon sink), international discourse (e.g. climate change), charismatic animals (e.g. black-necked crane) and Tibetan landscape. Such deliberate choices of rhetoric enable the local stories to be narratable to both outsiders and locals. This chapter, therefore, points to the possibility of a hopeful future which is being built upon local herders' artistic self-representation which incorporates but also clearly diverges from global environmentalism.

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Breeding Apples: Stories of Loss and Hope in Times of Crises

Arnika Peselmann

The owners of the well-known Stark Bro's nursery in Missouri received a sample of three golden apples in April 1915.¹ They immediately recognized their potential as the perfect dessert apple – one that was even still in good shape in the spring and complemented well the red-coloured apple *Delicious*, which the nursery already had in its assortment and was later renamed *Red Delicious*. Eventually, in the fall the same year, Paul Clarence Stark set off on what he later called “The Trail of the Golden Apple”: a 1000-mile railroad trip and a 20-mile horseback ride through the West Virginia mountains with the aim of finding the tree growing the tasty apples. When Stark arrived at the farm of the Mullins who had sent him the sample, no one was at home, but he entered the small orchard anyway. He later wrote:

Back of the house I saw an orchard. But – here came the dismal disappointment! Every tree I could see was nothing but wild seedlings – miserable runts. Dejected and sick at heart, I turned around to leave – when – I SAW IT! There, looming forth in the midst of the small, leafless, barren trees, was a tree with rich green foliage as if it had been transported from the Garden of Eden. The tree's boughs were bending to the ground beneath a *tremendous crop of great, glorious, glowing golden apples!* [emphasis in the original, A.P.] I started for it on the run. (Stark 1919a)

Still, he was afraid that the tree might be just a regular *Grimes Golden*, a common variety of the time. But when he reached the tree, he realized that the fruits had a much bigger size:

1 Paul Clarence Stark depicts his journey to West Virginia searching for the origin of the Golden Apple in his article “The Trail of the Golden Apple” (1919a). He does not give an exact date of the apple sample's arrival, but just speaks about “one April day some years ago”. The letter attached to the sample, however, is dated 20 October 1914 (cf. Stark Bro's website: Little Old Letter: Big History. Online. Available at: <<https://www.starkbros.com/growing-guide/article/little-old-letter-big-history>> [Accessed 14 May 2024]). This gives reason to assume that Stark received the three apples in April 1915.

I came closer and I saw the apples were 50 per cent larger than Grimes Golden. I plucked one and bit into its crisp, tender, juicy-laden flesh. Eureka! I had found it. The long sought for *perfect* [emphasis in the original, A.P.] yellow apple had been discovered. The “Trail of the Golden Apple” had reached a successful end. (ibid.)

This is how the official “discovery story” of the *Golden Delicious* goes, today one of the most widely cultivated apple varieties in the world. The *Golden Delicious* did not originate from a systematic cross-breeding but was a chance seedling whose seed the Mullins had obtained from a peddler in the late 19th century. The parents of the *Golden Delicious* are suspected of being *Grimes Golden* and *Golden Reinette*, a variety first mentioned in 1795 and presumably originating from continental Europe. After the “discovery”, Stark paid off the Mullins for the tree, the surrounding land and the care work. He had a cage built with a battery-operated alarm system protecting his biocapital, the precious *Golden Delicious*, to prevent others from taking scion wood for propagation (Stark 1919b).

While the original tree reportedly died in 1958, millions of its clones continue living all over the planet. Their signature is the golden-green colour, an abundant harvest, an aromatic taste, a long storage life – and an enormous susceptibility to apple scab! Apple scab is a dreaded fungal disease in professional orcharding caused by the fungus *venturia inaequalis*. Harmless to humans, but in the case of a heavy infestation, it can affect the growth of the fruit and lead to scabbing and cracking of the fruit skin. However, the *Golden Delicious* has been used extensively in breeding programmes. Along with the varieties *Jonathan*, *Cox’s Orange Pippin*, *Red Delicious* and *McIntosh*, it counts as the “big five”, the five “founding clones” of modern apple breeding (Noiton and Alspach 1996). The *Golden Delicious* is, among others, mother of the varieties *Elstar*, *Pink Lady*® and *Jonagold*, father of *Gala*, and grandparent of *Jazz*™, *Envy*™ and *Honeycrisp*, and great-grandparent of *Cosmic Crisp*®. Besides inheriting the desired characteristics, such as taste and yield, many of these varieties are also prone to apple scab, among others, and in need of frequent applications of pesticides (Peselmann 2023). The serious consequences of the extensive use of synthetic chemical pesticides particularly for the environment, such as the loss of biodiversity, have been broadly documented (Leopoldina 2018, 2020). Criticism of existing breeding practices is voiced by pomologists, such as the publicly known German pomologist Eckart Brandt, who writes on his website:

This [the susceptibility, A.P.] is, above all, the legacy of the *Golden Delicious*, which represents a kind of “fall from grace” in the history of modern apple culture. It has been crossed over and over again, and in some modern varieties, it appears up to 5 times in the family tree up to the great-grandparent generation. (Brandt n.d., translation by A.P.)

Grown mostly in monocultural plantations, apples such as *Elstar*, *Golden Delicious* or *Pink Lady* are for many the epitome of the loss of varietal diversity through agroindustrial standardization processes under capitalist modes of production, a crucial characteristic of what Donna Haraway and others call the Plantationocene (Haraway 2015). Thus, the stories about humans and apples in the 20th and 21st century can be told as ones of loss and genetic impoverishment. But it is the apple’s particularity, namely, its enormous

genetic variability, enabling the adaptation to diverse environments and climatic conditions as much as large geographic areas, that also raises hopes and promises on how to encounter changing ecological conditions due to anthropogenic climate change.

My paper deals with modern apple breeding as a particular form of human-plant relationship² and asks how the interspecies “making” and “growing” (Hallam and Ingold 2014) of a new variety is narrated in Western scientific and legal discourse as much as in breeders’ everyday life talks and even in forms of vegetal storytelling. My perspective is, thereby, largely influenced by current studies relating to the vegetal or plant turn (Ernwein et al. 2021) within the humanities. Following the animal turn, the vegetal turn is a more recent attempt to overcome the longstanding plant blindness (Wandersee and Schussler 1999) in the humanities and develop new perspectives on human-plant relationships. Fighting a widespread picture of plants as passive, insentient, immobile and lacking willpower in Western academia and society at large (Lewis-Jones 2016), the vegetal turn aims at an ontological redefinition of plants as agentive beings (Elton 2021) and broadening and intensifying our perception of how plants and humans interact with one another as “companion species” (Haraway 2003) in different historical, geographical and social contexts. Their shared (hi)stories have inspired more-than-human storytellings (Fenske and Norkunas 2017; Gagliano et al. 2017; Jacobs and Kranz 2017; Laist 2013; Stobbe et al. 2022) and an exploring of vegetal narrative cultures “emerging when (1) plants co-author and shape narrative practices, (2) plant stories partake in the creation of multispecies societies, and (3) plant articulations are embedded in narrative contexts” (Middelhoff and Peselmann 2023).

The Shared History of Humans and Apple Trees

“It is remarkable how closely the history of the apple tree is connected with that of man.” (Thoreau 1862: 513)

In one of his last essays titled *Wild Apples*, American naturalist, essayist, poet and philosopher Henry David Thoreau (1817–1862) describes domestic apples – *Malus domestica* – which were brought to North America by European settlers³ as “the most civilized of all trees”:

It has been longer cultivated than any other, and so is more humanized [...]. It migrates with man like the dog, the horse and the cow: first, perchance, from Greece to Italy, thence to England, thence to America; and our Western emigrant is still marching

2 This paper is based on my research project “Äpfel handeln. Eine Multispecies Ethnographie ländlicher Ökonomien” [Becoming with Apples. A Multispecies Ethnography in Rural Economies] (2022–2024), funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – Project number 469261901. <<https://www.phil.uni-wuerzburg.de/en/european-ethnology/team/dr-arnika-peselmann/>> [Accessed 31 May 2024].

3 Canadian novelist Helen Humphreys has traced the complex history of apples and European settlement in her book “The Ghost Orchard” (2017).

steadily toward the setting sun with seeds of the apple in his pocket, or perhaps a few young trees strapped to his load. (ibid.: 514)

One of the Western emigrants depicted here was John Chapman, who travelled through the Midwest of the USA at the beginning of the 19th century. Chapman went down in US history as one of the most famous “frontiersmen” under the name “Johnny Appleseed”, who had his pockets full of seeds of the non-endemic *Malus domestica* (Bühler 2009). He repeatedly planted small orchards along the way and as soon as the seedlings developed into young apple trees, he sold them to settlers moving west who grew apple trees on their newly acquired land.⁴ Together with the European settlement movement, the apple also penetrated further and gave rise to new agricultural landscapes and the cultivation of what was understood by contemporaries as the “wilderness”, demonstrating the apple’s involvement in the claiming of territories and colonial endeavours (Besky and Padwe 2015; Humphreys 2017).

Other than in Thoreau’s short summing up, however, the shared history of humans and cultivated apples is much older and geographically more widely spread: The origins of *Malus domestica* lie in wild forms that are native to Central Asia, including the forests around the former Kazakh capital of Alma-Ata (*Kazakh*: father of the apples). There is molecular genetic evidence that it is related to the wild apple *Malus sieversii*, which was first botanically described in 1833. In contrast to other wild apples, which are sometimes only the size of cherries, *Malus sieversii* is large-fruited, sweet and has fruit colours ranging from red to yellow to green, making it very similar to today’s cultivated apples (Hanke and Flachowsky 2017: 187–188). The domestication of *Malus sieversii* took place in the Central Asian high mountains of Tien-Shan. From there, the apple spread westwards, repeatedly hybridizing with other wild forms. Around 4,000 years ago, a form of apple corresponding to extant domestic apples appeared in the Near East, at a time of first recorded uses of grafting (Cornille et al. 2012), a horticultural technique to propagate the very same variety.⁵ Apple plants crossed the Hellenistic world in Antiquity, and the Romans, who further refined cultivation technologies, spread them throughout Europe. There, hybridization with the native wild apple, *Malus sylvestris*, a small, astringent apple took place on a local scale. The Neolithic and Bronze Age inhabitants were already making use of the latter variety (ibid.). Medieval monasteries and the gardens of European nobles became places of apple cultivation and breeding. There were descriptions of 120 apple varieties in the 17th century, and by the end of the 19th century, which is considered the “heyday of orcharding culture” (Böge 2003: 50), in which an urban bourgeoisie was organized in pomologists’ associations and devoted to systematization, description, breeding and pruning techniques (ibid.), more than a thousand varieties were known (Hanke and Flachowsky 2017: 186). Systematic plant breeding gradually began to develop

4 As a measure against land speculation, the state of Ohio had decreed that at least 50 apple or pear trees had to be planted in order for newcomers to be allowed to keep their land (Pollan 2003: 17).

5 Grafting a tree is a vegetative instead of a sexual reproduction, whereby tissues of plants are joined so as to continue their growth together. The rootstock usually defines the tree’s growth, and the scion wood its leaves, blossoms and fruits. Known since ancient times and historically documented already among the Phoenicians, grafting reproduces genetically identical apples in an almost unlimited number.

at the end of the 19th century.⁶ It was boosted especially by the rediscovery of Mendel's theory of heredity, which had already been formulated in the 1860s. This replaced earlier agricultural plant breeding carried out by the selection done by practitioners who were said to have the special talent of a "breeder's eye" (Wieland 2004: 112). Nearly all commercial apple varieties today originate from systematic plant breeding. There is only one among German breeders who managed to place a variety onto the market who claims on his website that his variety called *Fräulein* is a chance seedling: one "that has been not bred in a laboratory" but was created "by the principle of nature" and "inspired by bees" (Fräulein n.d.). The breeder tries to promote his variety as a particular "natural" product by decentring the human share in making a new apple. Other breeders, however, take pride in choosing the most promising apple partners to create extraordinary offspring.

Becoming with Apples

As defined in Western sciences, cultivated plants are distinct from wild forms as they are bred from wild species, grown and cared for by humans to serve them as either crop, medicinal or decorative plants (Miedaner 2014). In the case of apples, their reproductive processes are manipulated to meet human needs, initially through selection, later through controlled cross-breeding and, finally, by means of biotechnological processes (Hanke and Flachowsky 2017). However, a post-human reading of the cultivation of plants objects to a linear and one-sided process that is accompanied by a steady increase in human control, right up to interventions in the DNA. Instead, human-(cultivated) plant relations are interpreted as a mutual domestication (Cassidy 2007: 2). Thus, the settling down of early arable farmers is often described as a human adaptation to the site-specific location of plants. The development of knowledge, practices and technologies in dealing with plants can also be understood as a multispecies "becoming with" (Haraway 2008: 244), including the emergence of specific professions: Embedded in colonial politics and world voyages, plants which were unknown to the European public aroused botanical interests and monetary desires alike and led to the emergence of plant collectors or even plant hunters (Hielscher and Hücking 2002). Georg Dieck (1847–1925) was a German botanist, plant collector and founder of an extensive arboretum. He describes an apple plant with an extraordinary feature in his catalogue of plant novelties from 1891:

A most remarkable wild apple [...]. It is widespread in both the wild and cultivated state in western and northern Asia but is apparently still undescribed. I received and still receive it from Kashgar and from the plateau in Talgar in south-western Siberia. [...] Apart from the green-red leaves, EVERYTHING [emphasis in original, A.P.] on this tree is red, bark and wood, blossom and fruit. Even the flesh of the pleasant-tasting fruit, which resembles a small sina apple, is dark rose-red! (Dieck 1891: 16, translation by A.P.)

6 Systematic fruit breeding instead means that the parent generation is determined in advance and the pollen from the father are transferred to the mother's flower stigma by hand. To avoid cross-pollination by insects, the pollinated flower is then bagged.

Dieck had received this “most remarkable” apple from the Russian lawyer Vladislav Niedzwetzky, who had assumably been exiled to Vernoe (now Almaty) and indulged his passion as a naturalist there. While the cultivated forms had already been given names in the local languages, such as the variety *Kisil Alma* which translates into red apple, Dieck intended:

[...] to name this wild plant after my esteemed patron, Mr. Medwitzky [sic!], President of the Court, who collected it for me along with many other beautiful trees and shrubs [...] in southwestern Siberia. (ibid.)

Malus niedzwetzkyana, i.e. the official botanical name, rapidly made its way via the well-known Berlin-based Späth nursery into the Royal Gardens in Kew, and across the ocean into the New York Botanical Garden as much as into private gardens. What can be demonstrated here is not only the well-connected plant trade at the turn of the century, but also the naming practices which are done in accordance with Swedish biologist Carl Linnaeus’ (1701–1778) binomial nomenclature: the first part defines the generic name and the second the species name, usually in Latin grammatical forms. A third element, often written in a different font, is the author citation, i.e. the person who first published the botanical name and a description of the plant in agreement with the requirements of the International Code of Nomenclature for Algae, Fungi, and Plants, a set of rules whose historical predecessors date back to 1867. This highly formalized act of ordering vegetal beings according to Western scientific taxonomies receives increasing criticism in the context of world voyages as part of European expansion, colonial exploitation and hegemonic knowledge production for overwriting Indigenous/local plant knowledge and taxonomies⁷ and even giving names with racist, sexist and colonial origins.⁸

It is unknown whether there was a local name for *Malus niedzwetzkyana* or not, such as Dieck assumes it. The practice of naming a plant, or, in this case, rather a plant species, can be considered as an act of appropriation and gaining social capital within the botanic scientific community. But it also relates people and plants in a way that can be considered as a form of interspecies kinship making, an act of baptizing, often accompanied by great human admiration and even emotional attachment to vegetal beings. Dieck’s botanical denomination including his surname is part of the extraordinary, red-fleshed apple species whose cultivated relatives spread – as attractive breeding partners – across Europe and the world.

7 The museum exhibition “Tiny Unpredictable Material Objects. Postcolonial Perspectives on Plants in the Georg Forster Herbarium (1772–75)”, curated by Susanne Wernsing and presented at Göttingen Forum Wissen in 2022, critically scrutinizes the narrative of discovering the world by European naturalists, such as Georg Forster (1754–1794): “His botanical preparations, drawings, and publications follow the standards of botany, which became a science in the course of the 18th century. They refer to the ‘indigenous’ knowledge of Polynesian societies that was overwritten in the process” (exhibition website: <<https://www.forum-wissen.de/en/tiny-unpredictable-material-objects-postcolonial-perspectives-on-plants-in-the-georg-forster-herbarium-1772-75/>> [Accessed 12 January 2024]).

8 There is an increasing call to start decolonizing botanic collections and gardens, such as in Sidney’s botanic garden (Summerell 2022).

The Beginnings of Systematic Fruit Breeding – Collecting and Sharing Apple Genes

The beginnings of systematic fruit breeding can be found in state research institutes in England and the USA in the outgoing 19th century. In Germany, the German Pomologists' Association had already advocated an apple breeding programme in 1912, but it was not implemented until 1929 at the Kaiser Wilhelm Institute for Breeding Research in Müncheberg, Brandenburg, which had been founded a year earlier. The aim of the programme was to increase the yield and fruit quality, as well as resistance to late frosts and widespread diseases, such as apple scab (Peil et al. 2011: 112) – all criteria which still apply to current breeding aims (Hanke and Flachowsky 2017: 190).

To this end, collections were also made of landraces and wild species, which were expected to provide relevant genetic material for breeding. One of these collecting activities was the large-scale German Hindu Kush Expedition in 1935 to Central Asian gene centres, i.e. regions where wild forms of cultivated plants occur. Plant genetic samples of cereal and vegetable plants, nut and fruit trees and, above all, legumes were collected there. Entangled in biopolitics, particularly the autarky policies of the National Socialist regime at that time and accompanied by “racial studies” of the local human population,⁹ these expeditions must be viewed critically in relation to the exploitation of plant genetic diversity and also of local plant knowledge, often referred to as biopiracy (Flitner 1995).¹⁰

Breeding with apple species that are considered ‘wild’ is challenging as not only desirable traits, such as disease resistance or the adaptability to extreme temperatures, are inherited but possibly also a strongly astringent taste or a tiny fruit size. The Russian botanist and fruit breeder Ivan Michurin (1855–1935) was one of the first who started successfully cross-breeding large, sweet, cultivated varieties with wild forms. He developed the technique of backcrossing to get rid of unwanted characteristics of the wild form.¹¹ Due to the apple plants' very own temporality, backcrossing is extremely time- and resource-consuming. Larger breeding programmes with wild species in Germany are, therefore, carried out by the state-funded Julius Kühn Institute for Breeding Research on Fruit Crops¹² in Dresden-Pillnitz. The institute also makes its cultivars avail-

9 During the Nazi era in Germany, the proximity of plant breeding and studies of so-called racial hygiene becomes clear, *inter alia*, in the “racial studies” with body and facial measurements that were carried out on local populations during this expedition and were intended to contribute to the question of the “homeland of the Aryan race” (Flitner 1995: 74).

10 To fight off the unauthorized usages of sources from nature and/or traditional plant knowledge, particularly from countries of the Global South and in unequal power relations, the Nagaya Protocol as part of the UN Convention on Biodiversity has been implemented aiming at “the fair and equitable sharing of benefits arising out of the utilization of genetic resources” (Convention of Biological Diversity n.d.).

11 That means the cultivar is crossed again with the cultivated part of the parent generation. Ground-breaking at Michurin's time, backcrossing is counted as standard in breeding with wild forms today (Hanke 2014).

12 The German state Julius Kühn Institute for Breeding Research on Fruit Crops in Dresden-Pillnitz conducts regular collection journeys to Central Asia, but with the permission of and in close cooperation with the local research institutes, such as the collecting in the North Caucasus region in 2011 (Hanke et al. 2012).

able to non-state breeders. Dirk Matthis,¹³ who works for a private breeding programme, told me in our interview:

We do not work with wild forms ourselves as it would take us too long to pimp up the cultivars again to reach marketability. Of course, with wild forms you can cross in resistances or tolerances but it takes forever to have them marketable again, 40 years is realistic. (Dirk Matthis, Interview 27 April 2023)

In order to obtain “their material”, as the relevant plant parts for propagation are usually referred to, private breeders have access to the German Genebank for Fruit Crops, co-ordinated by the Julius Kühn Institute, or they use breeder networks and pomological associations. Private fruit breeder Reinhard Schomberg-Klee, whose fascination with red-fleshed apples of the *Malus niedzwetzkyana* species is also reflected in his breeding, received his first material from a British breeder he met via the internet. As soon as he had some cultivars ready to be published online, Schomberg-Klee, in turn, was contacted by a South African fruit company which was about to establish their own breeding programme and was interested in cooperation to broaden plant genetic resources:

The problem is that the gene pool in South Africa is relatively small. For example, at the state institute, my colleague had access to 200 apple varieties. Just what the settlers, the Boers, the English have brought in [...] But here in Europe, we have gene banks with 2000 varieties. (Schomberg-Klee, Interview 15 May 2023)

The cultivation of apples in South Africa is a legacy of the European colonization and started commercially in the late 19th century, exporting apples particularly to the United Kingdom. By now, the South African apple industry plays a key role in the country’s agricultural economy and fresh apples are among the top ten agricultural export commodities.¹⁴ Through the collaboration of Reinhard Schomberg-Klee with the fruit company which started in 2009, genes of the *Malus niedzwetzkyana* species also made it eventually to South Africa. However, a tragic turn came about because the wild forms are meanwhile threatened by extinction in their place of origin due to the loss and degradation of habitat from agricultural expansion and genetic erosion, i.e. grafting of commercial varieties and hybridization (IUCN 2007).

Opening the Apples’ Miracle Box

In opposition to Thoreau’s assumptions that, in contrast to wild apples, cultivated and “humanized” apples are just like “a harmless dove” (1862: 514), breeding with cultivated apples is also a challenging, time- and resource-consuming act with uncertain outcomes: It usually takes 15 to 20 years from pollination to the market launch of a new variety. The

13 I have anonymized my research partners in this article unless they explicitly requested to be named with their real name. The interviews were conducted in German and translated by me for this chapter.

14 Referring to the first quartal 2023, see NAMC (2023).

reasons lie in not only the plant's life cycle – the long juvenile phase before bearing the first fruits – but also the pronounced heterozygosity causing offspring with widely unpredictable characteristics. Heterozygosity means that an apple plant requires a different variety, i.e. a pollinator variety, blossoming at the same time, and an insect partner (or sometimes just the wind) to pollinate a blossom and grow a fruit. The fruit then contains approximately ten seeds, all unique in their genetic composition and, therefore, could establish a new variety. This enables a tree to produce offspring with countless variations in characteristics. In Stark's diary entry, the *Golden Delicious* stood out from its siblings, a crowd of "barren and leafless trees" (Stark 1919a).

When I walked with breeder Reinhard Schomberg-Klee through one of his test sites, I immediately understood what he meant by referring to the breeding process as "opening a miracle box", where "you need to be open and just see what comes out" (Schomberg-Klee, Interview 15 May 2023). The sibling trees from one pollination sometimes barely resembled each other: one towering high, the next small and bushy, some bursting with health, others infested by mildew, one with deep red foliage, another lush green, and one even with thorns. These shoot thorns are signs of a de-domestication, as he told me:

Sometimes genes are triggered or those that have long disappeared show up again somewhere. So, it can happen that apples revert to their original form. Wild apples and also pears have shoot thorns as protection against predators, such as roe deer. But they have lost them in the course of domestication. (Schomberg-Klee, Interview 15 May 2023)

Looking at apple plants in a post-human perspective as "storied matter" (Oppermann 2018), the appearance of thorns can be read as if the long-shared history of apple trees and humans is shaken off and the DNA-stored script for another, more menacing multispecies relationship is activated. One that once became obsolete by the diverse defence mechanisms humans created to protect 'their' apple trees.

Thorns do not only generate throwbacks in the breeding rhythm, but are also unwanted in cultivated apple plants as they make harvesting more difficult. This particular tree will be sorted out, i.e. plucked out and thrown onto the compost, in the selection process, similar to sick ones and also those which turned out green instead of red:

Here are various babies again. When breeding red-fleshed apples, the *niedzwetzkya* type, 50 per cent of the seedlings have turned out red, the others green. I would actually have to take away the green ones now and only continue to cultivate the red ones, but since this is a columnar apple, I will continue to cultivate both for now. (Schomberg-Klee, Interview 15 May 2023)

Selection does not always seem an easy task after caring for a plant over several years and is sometimes postponed when affections towards seedlings, the "babies" (Chao 2018), or curiosity about how an apple will evolve comes into play.

Finding the Perfect Apple

It is usually just one or very few seedlings in the breeding process which stand out from thousands of nameless or just numbered, sorted out and destroyed young plants. These selected ones must meet several criteria that are crucial in today's highly competitive and globalized fruit market. When I joined breeder Dirk Matthis as he was applying pollen to a blossom, he cut one of the flowers open to show me how the damages of frost can be recognized. The flower turned out to be undamaged but was now lost for the breeding programme. Looking at his colleague, he said with a twinkle in his eye: "Oh, oh, what if exactly this blossom would have been it? The one with the perfect apple?" (Field notes, 27 April 2023). The "finding" of a suitable seedling, the "perfect apple" is like "hitting the jackpot" or a "hard-earned miracle", which is how Johan Nicolai, the breeder of the popular *Kanzi* variety described it in a newspaper interview (Böhme 2018: 74). The story of Nicolai's *Kanzi* is less elaborate and widespread than Stark's diary entry on finding the *Golden Delicious*. Still, it has some similarities: Nicolai remembers that one of his employees rushed excitedly into his office one day with the words, "I have found the apple of our lives" (ibid.: 77), an apple which caused a sensual explosion, a crunch in the mouth as if you had "bitten into a small water bomb with apple juice" (ibid.).

However, the selection does not usually take place spontaneously, but is a lengthy process that begins before the first fruit is borne with the assessment of the tree's shape, foliage and health. As soon as fruits are hanging on the tree, they are evaluated in terms of, for example, taste, consistency ('crispiness') and colour, including test eating with consumers. When a decision is made, the selected cultivar is appointed for registration and licensing.¹⁵ A licence grants a breeder the plant breeders' rights, an intellectual property right valid in the case of tree species for 30 years "to market propagating material (plants, parts of plants, seed) of the protected variety, or to produce, import or store it therefor" (Federal Plant Variety Office n.d.). The use of protected varieties to breed a new variety, however, does not require authorization. The plant breeders' rights are meant as a way to compensate the often decades-long breeding work and provide incentives "for the necessary breeding progress in view of future climatic challenges" (German Federal Ministry of Food and Agriculture 2019, translation by A.P.). Laura A. Foster, however, challenges Western law and legal concepts in her study on plants as inventors, in terms of their plant-blindness and the human exceptionalism in Western patent law based on the narrative of the individual human genius. She invites people to engage in a thought experiment I would like to propose here as well: what could be learned from attending to plants not as raw material but as inventors and producers of knowledge, resulting, *inter alia*, in the production of certain substances, or, in this case, apple fruits with particular characteristics (Foster 2023; also Braun 2019)

15 In Germany, "anyone who breeds or discovers a new plant variety can apply for national plant breeders' rights for all varieties of plants at the Federal Plant Variety Office under the Plant Breeders' Rights Act (SortG). Plant breeders' rights can be obtained if a plant variety is new, distinct, uniform, stable and designated by a suitable denomination." (Federal Plant Variety Office n.d.)

Food Storytelling – The Making of a New Variety

Turning a cultivar with only a selection number into a variety acquires several steps: granting it a variety name and sometimes even a brand name; a pedigree including its vegetal family tree as much as its human breeders; clarifying the ownership; and developing a whole marketing concept to transform a nameless cultivar into an individual apple plant persona with its very own biography. With reference to Slavoj Žižek's reading of Marx's commodity fetishism concept, Jón Þhor Pétursson states in his study on the consumption of organic apples that it is not only the commodity – the apple – which is fetishized but also its "making of" (2013: 21–22). The story of the *Golden Delicious* is an early but long-lasting example; the one of the *Pink Lady* is more elaborate, providing not only information on the variety's breeding history but also on its life cycle and the horticulture measurements carried throughout the year, not least about its nutritious values and the strict quality assessments (*Pink Lady* n.d.).

It is particularly the owners of so-called club varieties who, in fighting for the limited supermarket shelf spaces, invest in the "immaterial labor of food storytelling" (Pétursson 2013: 17). The idea behind club varieties, a concept that has emerged over the last 15 years and was introduced as a tool to counter falling fruit prices, is that varieties are not only licenced but also trademarked. They are being grown and marketed in a production and marketing club with access to grow the variety limited to club members (Brown and Maloney 2009). Producers profit from the strong marketing efforts of the club and the generally higher sales prices. However, these prices can only be achieved if an apple meets the high-quality standards of the club. An apple that fails to do so, because its colouring contains too little red, for example, may not be sold under the brand name, but only under the variety name. A hoped-for *Kanzi* then becomes a *Nicoter*, and a *Pink Lady* is then only a *Cripps Pink*. All farmers in a club are strongly bound to the licensor. That means if farmers withdraw from the contract, they no longer have the rights to continue cultivating their fruit trees and sell the fruits.¹⁶ The club variety concept can be understood as a further step into standardizing the production of food crops as much as propertizing vegetal beings, while, at the same time, underlining the singularity of a variety. Therefore, apple breeding and recent variety marketing can be interpreted as a form of "post-industrial economy of singularities", as described by Andreas Reckwitz (2017).

Broadening the Gene Pool – Old Varieties for New Problems?

In order to counter the club variety phenomenon and develop robust varieties apt to their regional climate conditions, fruit growers in the traditional orchard region *Altes Land*, by the Lower Elbe River in Northern Germany, have joined forces and started a breeding initiative that has already launched first varieties onto the market (Züchtungsinitia-

16 These contractual conditions have caused a farming couple in Southern Tyrol who had bought an orchard quite a lot of trouble: They were not allowed to sell the *Pink Lady* apples growing at their newly acquired farm because they missed out on buying the club membership along with the property. In the end, they were forced to cut down the trees (Fulterer 2020).

tive Niederelbe n.d.). Another breeding programme has been initiated by organic fruit growers throughout Germany, who intend to offer their new varieties as a common good (Züchtungsverein apfel:gut). Their central concern is to expand the gene pool by a particular breeding scheme crossing one modern variety with an old one¹⁷ and by excluding the “big five”. One variety that made it into the breeding programme is *Red Moon*, a red-fleshed variety first described in 1915 by Michurin, who had crossed *Malus niedzwetzkyana* with an *Antonovka* apple, a chance seedling from the early 19th century, deeply rooted in Russian traditional cuisine as much as literature.¹⁸

What makes *Red Moon* an attractive breeding partner is not only its extraordinary colour and interesting genetic make-up, it also comes with a high amount of anthocyanes, water-soluble vegetal pigments of the phenologic group which possess anti-diabetic, -cancer, -inflammatory, -microbial and -obesity effects, and helps to prevent cardiovascular diseases (Khoo et al. 2017: 2; Sadilova et al. 2006). The increasing interest in healthy lifestyles and the popularizing of scholarly findings on plant’s health-promoting capacities having turned some crops into “superfoods” (McDonell and Wilk 2022, who had a critical approach to superfoods) and have also transformed human perceptions and narratives of apples: it is not only about an ecstatic sensual experience, as described by Paul Lawrence Stark. It is the apples’ effect on human bodies helping to fight off diseases, often caused by a modern Western diet in the first place. This discourse has even been fuelled since modern breeding practices are suspected of having broken the millennia-old bond between apples and humans by sacrificing the edibility of apples to their aesthetics: Polyphenols, secondary plant substances that are responsible for an astringent taste and enzymatic browning of sliced apples, among other things, have been increasingly bred out (Kschonsek et al. 2018). A low polyphenol content, however, is presumably connected with the complex development of an apple allergy from which an increasing number of people are suffering (Becker et al. 2021).

Apple Breeding in Times of Climate Change – Technical Fix and Plant Ethics

The human perception of apples has long since transcended epidermis and core housing and arrived at the molecular level: The genome of an apple was fully sequenced in 2010, and in 2017, a Canadian biotech company was the first one to bring genetically modified apples onto the US and Canadian market under the trademark Arctic® Apples. The name was given due to the white shining colour of the fruit flesh, which does not turn brown after a gene was introduced that reduces the levels of enzymes responsible for oxidation (Canadian Food Inspection Agency 2017). No genetically modified apple variety has been

17 During my field research, I encountered different definitions of what counts as an ‘old variety’: some considered varieties from chance seedlings found before 1900 as old, others included varieties from systematic cross-breeding before the Second World War. What unites all definitions is that the “big five” should not occur in the family tree.

18 *Antonovka* apples are mentioned in Anton Chekhov’s 1880 published story “The Little Apples” and in 1900, Ivan Alekseyevich Bunin even wrote a short story called “Antonovka Apples” (Lewis 2023).

approved in the European Union (EU) so far. It became clear in my conversations with breeders and farmers that they either objected to techniques involving genetically modified organisms (GMO) or they were reluctant to employ it even it was legally permitted due to the lack of GMO acceptance in society: “in the end we would be stuck with GMO varieties” (Field notes 24 August 2023).

The EU Commission published a proposal in July 2023 to modify their existing GMO legislation that was passed in the European Parliament in February 2024 and now must be agreed to in negotiations with the EU member states: it provides for plants which have been generated by new genomic techniques, i.e. muta- or cisgenesis (the latter is best-known for the gene scissor CRISPR/Cas), that they should be exempted from labelling requirements.¹⁹ Cis- in contrast to trans-genesis means that the modified organism contains only genetic material of the same species, for example, the resistance genes from a wild apple added into the DNA of a cultivated one. Several leading scholars in Germany in the fields of botany, molecular biology or agricultural sciences welcome the proposal as a long overdue revision of the current regulations. They agree with the EU Commission’s argument that in view of the major challenges posed by climate change, leading to an increase in pathogens and abiotic factors, for example, drought stress, fast and efficient methods, such as new genomic techniques, are very necessary to breed resilient plants. In their opinion, this would also lead to fewer or no pesticides applications, making agriculture far more sustainable (Science Media Center 2023). Other scholars, however, such as Angelika Hilbeck, the head of the European Network of Scientists for Social Environmental Responsibility, described the EU proposal as “scientifically unacceptable”: among other things, she states that new genomic techniques are anything but new. They have been employed outside the EU for many years with large financial support from the private and public sector but with few results. “Countless of these plants are still in laboratories and greenhouses, few make it outside into the field and nearly none to the market”, she stated (Hilbeck 2023). Besides, she criticizes the “seemingly unwavering faith” that

DNA is a programmable code and that organisms are the sum of their DNA-encoded parts, which can be subjected to human design at will. [...] This belief is so deeply entrenched that the commissioners and their scientific advisors felt empowered to invent a novel term – “predictable DNA”. (ibid.)

In Hilbeck’s assessment of the EU proposal, she objects to a reductionist and mechanized understanding of DNA’s efficacy in a living organism, which is also reflected in metaphors borrowed from computer science, such as copy, paste, delete, code, programming and editing of genes or to switch them on and off. These show parallels to historic ontologies of plants and particularly animals as machines that can be traced back to Descartes and the Cartesian philosophy (Ingensiep 2019). The mechanization of plants in

19 The “Proposal for a Regulation of the European Parliament and of the Council on Plants obtained by Certain New Genomic Techniques and their Food and Feed, and amending Regulation (EU) 2017/625” was published on 5 July 2023 and can be retrieved from the official EU website: <https://food.ec.europa.eu/plants/genetically-modified-organisms/new-techniques-bio-technology_en> [Accessed 12 January 2024].

the discourse of today's molecular biology has raised ethical concerns regarding the implications this might have on plants' lives and, consequently, on whole ecosystems (Gerber and Hiernaux 2022: 13). Biologist and philosopher Sophie Gerber and her colleague Quentin Hiernaux, therefore, call for an utterly new perspective on plants and a relational ethic apt for vegetal beings:

The diversity of life forms makes wide-ranging ethical strategies ineffective, especially if they are based on the universalization of a single criterion. Inevitably, such strategies will unduly relegate certain individuals from the sphere of ethical consideration, into the realm of machines and technical objects. (ibid.: 17)

They refer instead to the Swiss *Federal Ethics Committee on Non-Human Biotechnology* and their interest in respecting the dignity of living organisms: "What is decisive for the respect of dignity is that an entity is not treated solely a means to an end' (CENH 2008), or, in other words, a being is respected when it is not treated like a machine." (ibid.)

Plants as Allies? – A Future Narrating of Humans and Apples

Classic systematic cross-breeding means treating plants as a means to a very concrete end given by "the vision" of a breeder (Kleinert 2020: 18), reflected in a breeding scheme and defined in breeding goals. I gained the impression in my encounters with breeders, however, that they had a rather realistic or even modest understanding of how much influence they actually have on the breeding process. Even though sometimes an act of "designing" (Germ. "*kreieren*") an apple was talked about, the most common phrase was "to find" or "to discover" one. In this perspective, it is the plant's merit to create 'the perfect apple', while the human contribution lies in the ability to recognize it – not to speak of the decade-long care work and the patience needed to endure the apple plants' temporality and the unpredictability of their offspring.

Considering the threats posed by climate change, the desire for faster and more effective breeding methods to grow more resilient plants seems very understandable and the promises of "predictable DNA" more than tempting. Opponents, however, warn that genetic engineering is only a short-term solution leading to an accelerated race between pathogens adapting and breaking implanted resistances, on the one hand, and a genetic technology rushing to insert new resistant genes, on the other. Instead, some breeders/orchard farmers, such as the ones of the *apfel:gut* association (apfel:gut n.d.), demand a slowing down of the breeding process to give the apple plants time "as a whole" to interact with their environment – climate, soil and pathogens, but also human care work – and, thereby, showing their robustness and adaptability. This holistic and relational approach to plants is a counter-narrative to the machine metaphor dividing the plant into small molecular pieces. The emphasis on the human-plant and multi-species relationships built along a breeding process might even raise associations to the increasingly powerful narrative of the plant-human conspiracy and ally-making in what Natasha Myers envisions as a Planthropocene (2018). Even though a comparison might

still be stretched too far when it comes to current commercial fruit breeding, new ways of becoming with plants are more necessary than ever.

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Storying Multispecies Worlds

Monarchs, Milkweed and the Spectacle of Extinction

Eline D. Tabak

It is the early morning of 26 March and my friend and I are driving to Santa Cruz to visit Natural Bridges State Marine Reserve. We are not visiting for the marine life, but for the Monarch Butterfly Trail next to the reserve's visitor centre to see the last of the season's overwintering butterflies. We are rather late for the season, its final week, really. I had not been able to make the trip to California earlier and when I finally arrived, the West Coast was experiencing unusual stormy weather for the winter season. Attempts at visiting small monarch hot spots in the Bay Area had been thwarted by cold days (monarchs only fly at a minimum of 13 degrees Celsius), storms and a bomb cyclone. Most disappointing, our earlier planned trip to Pacific Grove, which advertises itself as Butterfly Town, USA, was cancelled because the roads were flooded, and the town's Monarch Butterfly Sanctuary and the local Natural History Museum were closed. After what feels like a string of bad luck, we are on our way from Oakland to Santa Cruz on the final weekend of March. My friend is driving, so, I have ample time during the ride to focus on how I am feeling: the nerves, the excitement, the vague nausea. The overwhelming question remains: Will I finally see monarch butterflies today?

My trip to the West Coast is part of the last stretch of research for my project on storytelling and insect decline. There are over one billion insect species described in the world, many of them in decline or endangered (Saunders et al. 2023), and yet, there are not many individual species, including their unique and complex lives, that are the focus of creative storytelling. The monarch butterfly (*Danaus plexippus*), however, is one of those species. Monarch butterflies are amongst the most well-known species on the edge of extinction, a rare example of charismatic microfauna in decline (Ducarme et al. 2013; Lorimer 2007). When I started thinking about monarch butterflies, it was widely known and accepted that the iconic monarch was in steep decline and had been for a while. Still, the butterfly was not listed as 'Endangered' on the IUCN Red List, the most comprehensive list of global species' conservation status, until 2022 (Rodrigues et al. 2006: 71). Official categorization aside, there was already a decent amount of creative work, ranging from visual art and documentaries to novels and children's books, dedicated to the small critters and their decline. This is partially because the monarch has long since been an icon across

North America thanks to a wide array of narratives touching upon “beauty, natural wonder, scientific discovery, conservation imperatives, and civic duty” (Gustafsson et al. 2015: 612). The beauty and natural wonder in these narratives refer to the butterfly’s impressive migratory journey across North America: a spectacle. The phenomenon is not the same everywhere, as there are two monarch populations: the western and eastern. Both populations have their own migratory journey. Western monarchs travel across the West Coast to overwinter in the eucalyptus groves of California, while the eastern population travels from Canada to the oyamel fir forests of what is now known as the Monarch Butterfly Biosphere Reserve in Mexico. The latter of these two has been the focus of a significant part of contemporary extinction storytelling, which is generally concerned with charismatic megafauna (Heise 2016).

The stories told about insect decline and, more widely, practices of storying extinction, draw our attention to certain species and, with that, those that are left out via a variety of narratives (Rose et al. 2017). The call to bear witness to biodiversity loss and disappearing life, our human entanglements with the more-than-human world, seems like an ethical obligation, one often realized through practices of storying (Rose 2013). However, as critical theorist Eva Haifa Giraud (2019) reminds us, with any ethics of entanglement also comes a reality of exclusion. “Attention”, she writes, “also needs to be paid to the frictions, foreclosures, and exclusions that play a constitutive role in the composition of lived reality” (ibid.: 3). The question that follows is: What frictions and exclusions do we find in the storying of extinction and insect decline? What is left out? Storying, here, should be understood as an active process, a verb that refers to the act of telling or relating the story (or even history) of extinction. Through storying, meaning is made and remade (Phillips and Bunda 2020: 6). Through this storying, we, as audience and readers, learn to read between the lines and see what is considered important enough to be part of the narrative and the multispecies landscapes of extinction – and what is left out.

Using the monarch butterfly as an example, this chapter homes in on the question of what stories get told and which stories are left out in the current era of the sixth mass extinction. I use a combination of autoethnographic research and close readings of a short selection of literary narratives on the iconic North American insect. Ecocritical scholarship and other interdisciplinary research on narrative culture have long engaged with the possibilities of storying multispecies relationalities in literature (e.g. Brown 2006; Fenske and Norkunas 2017; Iovino and Oppermann 2014; Norris 1985). Similarly, work in critical extinction studies generally focuses on what story can do; multispecies ethnographic research ascribes special meaning to the practice of storying, especially through the mode of “lively ethnographies” (van Dooren and Rose 2016: 89). Extinction studies scholar Thom van Dooren, for example, writes that Australian-based ethnographer Deborah Bird Rose “taught [him] that stories are more than a mode of expression, they are a means of understanding, of thinking, of attending, of relating, and so a profoundly important opening into responsibility” (2020: 1–2). However, I will show throughout the course of this chapter that even the storying of charismatic microfauna, such as the monarch butterfly, is constrained by certain modes of storytelling and engaging with the natural world, popular narratives and problems, such as plant awareness disparity (Parsley 2020). I start looking for monarch butterflies in the first week of spring in West Coast and Santa Cruz County. My focus then shifts to the ways the monarch is storied in literature and pop-

ular fiction, particularly looking at how the western population and milkweed are often left out of these narratives because of the spectacle for which the eastern population is known. The aim of these analyses is not to criticize the works and their authors but rather to highlight certain modes of storytelling and blind spots when it comes to charismatic microfauna. The works I examine here include Barbara Kingsolver's critically acclaimed *Flight Behaviour* (2012), Peter Kuper's graphic novel *Ruins* (2015) and a novel, *The Butterfly's Daughter* (2011), by popular writer Mary Alice Monroe. In the final section, I briefly explore the importance of turning to the everyday and banal when storying extinction in multispecies worlds. But firstly, I will return to Santa Cruz, USA, and the Monarch Butterfly Trail.

(Fig. 1:) *Welcome to the Monarch Butterfly Natural Preserve. Photograph by the author.*



Looking for the Western Monarch

When we arrive in Santa Cruz, we first go to the waterfront. Although the sun is bright and feels warm, it is still rather chilly: only around eleven degrees Celsius. I know it is still too cold for the last monarchs to start their journey to the north. The stories I have read describe either clumps of roosting monarchs (always in their hundreds or thousands) as brown leaves, rustling in the trees, or, more poetically, as a fire. The underside of monarch wings provide camouflage and are significantly darker than the bright orange and black pattern of the familiar dorsal view of their wings. At the very end of the season, I do not expect to see branches full of butterflies, and I worry I will not recognize a single

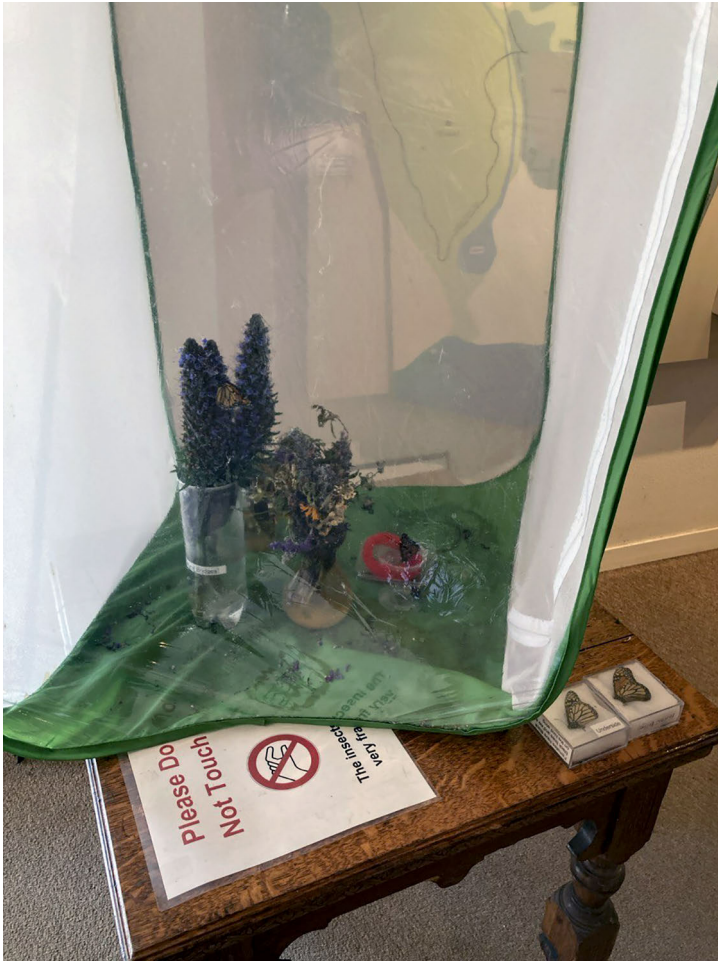
roosting monarch on a eucalyptus tree. We decide to wait a little longer, just until it is warm enough for the butterflies to fly. Before planning my travels to California, I was reassured by Emma Pelton of the conservation organization Xerces Society's Western Monarch Lead in our online correspondence that I would still be able to see monarchs all over California. But now, after ten days of walking around the Bay Area or hiding from the rain and storms without any certain sightings, I doubt if we will see them, even though we will soon visit one of the few dedicated monarch groves in Northern California.

And so, instead of facing the potential disappointment of a flightless grove, my friend and I get a coffee to go and walk to the beach to look at the waters of Monterey Bay. It is a good moment to think about the county in which this monarch grove is located. Two of the main industries in Santa Cruz County are education and tourism, and as of 2023, it is the most expensive county in which to live in the United States (National Low Income Housing Coalition 2024). Before the Spanish and, after that, the Mexicans arrived, the Santa Cruz area was home to the Awaswas nation of the Ohlone people. The Awaswas language is now extinct, with the last speaker having passed away in the 19th century (Shipley 2002). Coincidentally, the mid-19th century also saw the introduction of the eucalyptus tree groves – predominantly the southern blue gum or *Eucalyptus globulus* – from Australia (Morgan 2021). The trees were originally planted across California for lumber, but the wood was not suitable for woodwork. Nowadays, large numbers of the western monarch population overwinter in eucalyptus tree groves like the one near Natural Bridges, Santa Cruz.

In the early afternoon, we go Natural Bridges. We first go to the visitors' centre, which is right next to the Monarch Butterfly Trail. Even though Natural Bridges is a marine reserve, the parking lot's "Open during construction" plastic banner shows the iconic dorsal view of the butterfly's wings and the wooden sign in front of the centre also sports a small, orange monarch. The focus on the monarchs is immediate and makes me feel hopeful that we will still get to see some. Inside the centre, there is a small gift shop with a single volunteer and a permanent exhibition with some information on the local marine wildlife and monarch butterflies.

Close to the entrance to the exhibition, there is a small table with one of those cheap foldable nets that can be used for protecting plants or, indeed, breeding insects. There is a laminated card that warns visitors not to touch the cage. I walk closer and see what I think are several monarchs through the white mesh, before I realize that one side is made of clear plastic. Inside of the mesh cage are three small vases with flowers and what looks like a small dish with sugar water – and more monarch butterflies than I can count on one hand. Another cage, a slightly bigger one, holds several monarchs in different stages of emergence: the butterflies are exiting their pupal case. I see a split chrysalis with only black antennae and two legs sticking out, one that is still complete but clear, and a third one where the butterfly appears to be struggling to free the last of their body from the chrysalis while their wings are still crumpled and sticking together. Knowing how delicate the scales on a butterfly's wings are, it seems almost impossible that these tightly clustered appendages will form into four fully functioning wings that can and do take these animals up to 2,500 miles. While my friend and I are looking at the caged butterflies, we can hear the volunteer in the gift shop talk to another visitor about the monarchs she saw on the trail: it is our cue to finally go.

(Fig. 2:) *Exhibition in the visitors' centre. Photograph by the author.*



Stepping on to the boardwalk part of the trail, I immediately smell the blue gum trees. The first thing that catches my eye is not an orange monarch but rather the destruction the storm left. My friend and I talk about the storm: how her house was left without electricity, how I found myself walking around San Francisco on the day of the bomb cyclone because I forgot to check the weather report; how this extreme weather left humans and other-than-human animals defenceless. The storm is more than its external physicality, even the remnants we are seeing right now leave us worried and slightly uneasy (Lee and Ingold 2020). The boardwalk of the monarch trail has been cleared, but the grove itself is still filled with fallen branches and what appears to be uprooted trees. Looking at the many fallen branches, I am reminded of how my trip to Pacific Grove was cancelled because of a fallen Eucalyptus tree near the monarch grove's entrance. Eucalyptus trees, specifically the blue gum, can reach up to 45 metres high and pose a significant risk to both human and other-than-human life in stormy weather. In the grove, I think we are both overwhelmed by the visual reminder of the storm, which also functions as a sign of

sorts, showing just how fragile these groves and the butterflies that inhabit them are. The destruction left by the storm and lack of butterflies in these first few minutes serve as a “spectre”, a haunting view foregrounding “the diminishment[s] that may precede extinction” (Newman 2024: 11). Extreme weather events, such as the March storms, will continue, and threaten individuals and entire species in decline.

We continue our walk, but it takes a while before either of us see the first monarch. I only spot it after two other visitors point it out. From there, they seem to be everywhere. The butterflies are beautiful and bigger than I expected. They are also rather quick. Seeing them fly in front of me, I feel like I understand the draw of their corporeal charisma, which “involve[s] embodied practice and draw[s] on the full panoply of senses” (Lorimer 2007: 918). In the groves, the butterflies rest on leaves and branches and fly above the boardwalk. There is another sign mentioning the monarch’s “cluster culture” and shows an image of hundreds of monarchs roosting together in a eucalyptus tree. The image of the cluster is familiar, although I am used to seeing the oyamel firs (*Abies religiosa*) of Mexico’s mountains in the background of these photos and illustrations. We walk past the boardwalk and farther down the path, which is muddy and shows the many branches and tree trunks that had to be cut and cleared away from the footpath, to a clearing. In this open space, it is easier to spot monarchs by finding the shadows they leave on the grass and then looking up. There are flashes of orange everywhere: not the hundreds I had secretly hoped to see, but still dozens.

In this clearing, I also notice the glimpses of houses between the trees and start paying attention to the sound of traffic surrounding the grove. If anything, our walk in the grove highlights how vulnerable the western monarch population is. There are very few places where the butterflies can come together to overwinter safely. On top of that, the recent turbulent weather has decreased the western population after remarkably high counts in November (Pelton 2023). Extinction is not a linear process. The butterflies’ overwintering sites face multiple challenges: climate change and extreme weather, lack of funding and management, property development and more. Indeed, despite an overall focus on the eastern population in science communication, research and fictional narratives, the eastern monarchs are actually doing relatively better, with an approximate decline of 70 %, compared to a decline of over 95 % in the western population (Xerces Society 2022). Reading the stories about monarchs, you would not know that one population is doing better than the other. The exact reasons for their steep decline are unknown, but experts mostly agree that habitat loss is key, i.e. the loss of wildflowers and milkweeds, their host plants (Pleasants and Oberhauser 2013). Considering this, it may appear surprising that monarch extinction storytelling and the public’s attention are focused predominantly on the eastern population, which used to span hundreds of millions and is significantly larger than the western one.

Extinction is tricky like this: exciting stories, such as a four-generation migration spanning three countries, pull our attention in one direction, while absolute numbers can hide just how poorly the population in the other direction is doing. Despite walking slowly and pausing often to watch the butterflies and other wildlife, my friend and I are at the other end of the trail soon. There are no longer as many monarchs and we see the same signs welcoming visitors to the monarch butterfly grove, asking us to be careful and trying to tempt us into planting milkweed to protect and nourish the next genera-

tion of migrating butterflies. We decide to walk back to the car and return to Santa Cruz. During this short walk, we complain about the unleashed dog we see, I ruin my shoes by stepping in a puddle of mud trying to throw away litter, and I feel the strangest sense of relief. My own encounter with life at the edge of extinction does not come close to the scales in the stories I have read – the trees full of clusters, the fiery bushes – and I am mostly thinking about the sense of banality we encountered on our trip: the directionless violence that leads to loss of life (Yusoff 2012). Last year came with many celebratory messages regarding the increasing number of monarchs counted. Yet, we not only see here just how unsafe their roosting site is, but also how ordinary the butterflies' main threats are: wind and stormy weather, unleashed animals and noise pollution, lack of funding and encroaching development. Considering the ways extinction is currently storied, one would expect extinction to look very different, almost like a spectacle.

Storying the Monarch Butterfly

Rather than small reserves on the West Coast, the focus of many popular stories about the monarch and its potential extinction lies with the butterfly's three-country migratory journey, with its climax at their overwintering site in Mexico. The main character Luz, for example, in Mary Alice Monroe's novel *The Butterfly's Daughter*, follows the monarchs back to Mexico after the death of her grandmother (who is known as *La Dama Mariposa* and raises butterflies in her garden). In this tale, the monarch's migration is the framing story for the journey of the (human) main characters, echoing the sentiment that other-than-human animals often function as symbolism or an allegory for their human counterparts in stories (Norris 1985). To highlight this connection, every chapter in Monroe's novel starts with a short paragraph on monarch life and migration. The framing paragraphs in *The Butterfly's Daughter* are indented, with a smaller italicized font:

Monarch butterflies that emerge in the fall are unique. Butterflies that emerge in the spring and summer live two to four weeks. But the fourth-generation monarchs that emerge in the fall do not mate. They follow their instincts and migrate south. Called the Methuselah-generation, they live for six or seven months. (Monroe 2011: 35)

These informative epigraphs are a way of highlighting that the monarch butterflies and their journey are indeed special, or a natural wonder. Looking at their lifespan, they certainly are: Butterflies have an average adult lifespan of a couple of months. The parallel between a human journey and butterfly migration adds a certain dimension to the human part of the narrative. By this, I mean that by connecting the novel's characters to what has long been considered a natural wonder, the narrative implies that their human journeys are special, or unique, similar to the monarchs' migration. While highlighting the uniqueness of the monarch's migration, Monroe turns this migration into a secondary narrative by means of a frame narrative (or epigraphs) that supports the main storyline. Scholars in the fields of extinction and animal studies have argued that other-than-human animal lives come to matter when they matter for human lives, even in sto-

ries that celebrate a so-called natural wonder (Heise 2016; Jørgensen 2019; McHugh 2011). By emphasizing a single element, other parts are left forgotten.

The monarch's migration can also be an essential part of the plot and the literary narrative as a whole, but even then, there is a tendency to let the butterflies' lives reflect the human characters. The premise of Barbara Kingsolver's *Flight Behaviour* is an anomaly within the monarch's usual migration. The big question (and an important part of the novel's plot) is, of course, why the monarchs have decided to overwinter in the southern Appalachians rather than the warmer mountains of central Mexico, as this means the entire swarm (kaleidoscope) will die. This *new* mystery is how lepidopterist Ovid Byron first connects with Dellarobia Turnbow and her family. When Dellarobia invites Byron for dinner, the conversation inevitably turns to the butterflies residing on the nearby land. When Dellarobia asks Byron why people would study the monarch butterfly, he answers the following:

[...] as of today, the most interesting and alarming question anyone in the field has yet considered, I think. Why a major portion of the monarch population that has overwintered in Mexico since God set it loose there, as you say, would instead aggregate in the southern Appalachians, for the first time in recorded history, on the farm of the family Turnbow. (Kingsolver 2012: 121–22)

While Kingsolver places the monarchs elsewhere, their migratory choices constitute “the most interesting and alarming question” one can ask. A “major portion of the monarch population” not surviving because of their decision to stay in the Appalachians would, of course, result in a devastating loss for the overall population. In the novel, their potential death is an important part of what drives the plot, making *Flight Behaviour* an exemplar of extinction storytelling.

A comparative reading of monarch stories foregrounds the similarities and differences in a range of contemporary extinction narratives. Similar to Monroe's novel, the monarch butterfly's autumn migration is the focus of the frame narrative in Peter Kuper's *Ruins* (2015). The graphic novel's framing story starts with a single panel: a light blue square with a simple illustration of a monarch butterfly chrysalis hanging from a single bare branch on an otherwise completely black page.¹ After turning this first page, there is a fully black page on the left-hand side and a slightly bigger panel on the right: this time, the chrysalis is deformed and small squiggles around it represent movement. You can see the monarch butterfly inside: its iconic orange, white dots and black veins are already visible through the chrysalis. The following pages, with each square gradually gaining in size, the newly formed butterfly carefully emerges from the cocoon, and the reader has their first sighting of the iconic orange wings. The butterfly takes time to dry, and then flies over Interstate Highway 87, which is fully located in the state of New York, running south. Further localizing the narrative, the following pages show the Manhattan skyline. The colour of the panels slowly changes, signifying the end of the frame narrative (for now) and the beginning of the main story.

1 The graphic novel *Ruins* does not have page numbers to cite.

The frame narrative is its own story, weaving in with the main narrative through a subtle change of colours and the appearance of the bright orange monarch, but it also divides the different unnamed and unnumbered chapters of *Ruins*. Despite the two main characters – Samantha and George – spending most of their time in Oaxaca, Mexico, the main story is not about monarch butterflies or their decline. The rest of the frame narrative shows the monarch butterfly flying southwards to the oyamel forests for the winter, coinciding with Samantha and George's visit to and the story's climax at the *Reserva de la Biosfera Mariposa Monarca*. As the perceived climax of the butterflies' own migratory journey, this reserve has become an important place in monarch storytelling.

La Reserva de la Biosfera Mariposa Monarca

There are certain parts of the monarch butterfly's life that recur in storying their lives and decline. Their four-generational migration is one; another is the *Reserva de la Biosfera Mariposa Monarca* or the Monarch Butterfly Biosphere Reserve. The reserve is a well-known protected area in Mexico, located between the states of México and Michoacán, where the eastern monarchs overwinter in the oyamel forests (Brenner 2006). It is also a place where people go to encounter a natural wonder and witness life at the edge of extinction. The reserve features prominently in monarch stories, unlike the different monarch groves and sanctuaries on the West Coast. As a well-known place in monarch storytelling, the reserve can be understood as what Sheila Hones describes as “a spatial event [...] which happens at the intersection of agents and situations scattered across time and space, both human and non-human, absent and present” (2008: 1302). For Hones, the way that these forces intersect can produce different meanings and, just as the story of the monarch has changed over time, the meanings associated with the reserve also differ across time, space and communities.

In the context of extinction – and conservation – the importance of storytelling for the reserve is twofold. Not only is the reserve an important place in monarch narratives (both fictional and non-fictional) as a site where people encounter both a natural wonder and life on the edge of extinction, but from its initial designation, storytelling itself has been an important tool for interested parties, including Mexican writer and activist Homero Aridjis, who campaigned for the site to become a protected area (2008; Aridjis and Ferber 2020). While there were already people living and working in the oyamel forests centuries before the location of the monarch's overwintering site became more widely shared, publicizing this location turned space into place: a destination for not only butterflies and locals, but also tourists wanting to see a natural wonder. The Monarch Butterfly Biosphere Reserve exemplifies that, when it comes to life on the edge of extinction, the idea of the public – i.e. what is done in public view or concerning people in general – only goes so far with conservation in mind. Convinced that illegal logging was one of the main reasons monarchs were in decline, Homero Aridjis made a personal request to Miguel de la Madrid, who was then the President of Mexico, to turn the oyamel forests into protected land in 1986 (Aridjis and Ferber 2020). The *Reserva de Biosfera de la Mariposa Monarca* was established in honour of his request. The monarch's overwintering site became a protected area. This meant that the Mexican government had a greater

say in who was allowed to enter and use the resources of the forests. The reserve became less accessible to some and more accessible to others, paving the way for organized crime in these supposed human-free zones (Gonzalez-Duarte 2021). On top of an increase in human violence, monarchs have continued to decline over the years. The designation of a protected area did little to increase the monarch population. In 2008, Aridjis lobbied the World Heritage Committee during his tenure as Mexico's ambassador to UNESCO, and the reserve became a World Heritage Site (Aridjis 2008; Aridjis and Ferber 2020). The reserve raises important questions: What is the function of a single element in determining and (re)directing people's attention in the context of extinction, both inside and outside of literary narratives? And what are the consequences if one such event or place is deemed so extraordinary it overshadows other important parts of a story?

The Spectacle of Extinction

However, while there are many reasons to go out and visit a new place to witness something beautiful, there are just as many (if not more) reasons to not go to certain places and see certain animals (Guasco 2022; Pick 2015). While the establishment of the reserve in Mexico made way for a new wave of ecotourism, a trip like this is not accessible or even desirable for everybody. The draw is still strong and, as a result, the reserve has become an important place in non-fictional and fictional monarch storytelling: it is the long-searched-for overwintering site; the place where people can encounter the spectacle of the monarch butterfly. (Incidentally, the word 'spectacle' is derived from the Latin *spectaculum*, which means public show.) While some authors (e.g. Kingsolver) decide to move the spectacle elsewhere, other stories take the reader right to the reserve, the place where people encounter monarchs, as happened in Kuper's graphic novel (2015).

Near the end of *Ruins*, Samantha and George travel to the reserve. On their way, George reads a book on the monarchs that informs him (and the reader) of deforestation and monarch habitat loss. As they approach the reserve, Samantha calls to George that it is time to put down the book in order to properly appreciate the moment and witness where they are. True to its grandeur, the spectacle of the monarchs cannot be contained on a single page. The graphic novel includes a page that can be opened, revealing a large drawing of the roosting butterflies. Unopened, there is a mostly green panel, showing the oyamel firs and around twenty monarchs (most not large enough to warrant detail like the white dots). After opening the page, the reader is immediately confronted with a sea of orange-red butterflies. A floating panel briefly zooms in on Samantha and George's faces. Their mouths and eyes are open wide with disbelief and Samantha says: "This doesn't seem... possible!" Their initial disbelief of the view mirrors Dellarobia's in *Flight Behaviour* when she does not comprehend the sight of the displaced monarch roost (Kingsolver 2012: 14).

The medium of the graphic novel allows for a very visual encounter with the monarchs: the open pages are overwhelmingly orange. There is a murky green in the background, but the fiery orange of the monarch butterfly dominates both the fore- and middle ground. Samantha and George's figures are small compared to everything around them. The monarchs are everywhere, from detailed butterflies, including antennae and

compound eyes, that seem to fly off the page, to small butterfly-like shapes made up of orange and brown lines. Samantha makes a reference to the butterfly's aesthetic charisma: "It's so beautiful, but I doubt I'd feel this way if they were another creature... like, say, cockroaches [...] or flying monkeys!" The couple walks further, stepping away from their initial encounter and, with that, the sense of wonder that characterized it. Instead, they talk about the monarchs' prognosis, and see a large group of tourists. When Samantha notes how crowded the place is, George comments that the forest probably would not have survived without tourism. *Ruins* is set in Oaxaca during a time of political upheaval, and Kuper does not shy away from showing the violence of these times. By contrast, the scene in the reserve is a quiet trip, seemingly devoid of politics, violence and any form of unrest. Although there is a single panel that shows people other than Samantha and George, it depicts ecotourism as a mostly positive thing. Especially taking into consideration the double page, the overall sense is that of a close and personal encounter with the classic idealized monarch spectacle. The Butterfly Reserve is a popular destination for both real and fictional people: tourists, writers such as Halpern and Kuper, and the characters in *Ruins* and *The Butterfly's Daughter*. In bringing the story of the monarch butterfly to readers across the globe, the Butterfly Reserve plays a perhaps unexpected, yet, important role as the site where people encounter not only a natural wonder but life on the edge of extinction. Through storytelling, the site crosses cultural and spatial boundaries. Yet, as we see in *Ruins*, the history and politics of these are sometimes left behind when trying to convey that sense of wonder. And one cannot help but ask: What gets left behind when telling the story of the monarch butterfly? What places are left untold?

Placing Milkweed

Extinction, however, does not merely take place in spectacular encounters and conservation areas, such as the Monarch Biosphere Reserve – or even among animal species. Extinction is, after all, a multispecies event that goes beyond the animal kingdom. Thinking about charismatic insects alone often ignores or erases entire (or parts of) ecologies being destroyed, which, in turn, causes decline and extinction. The deterring state of the butterfly groves in California are a prime example of this. Moving away from the vast oyamel forests in Mexico, in this section, I will scale down to a different configuration of life. Here, I (re)turn to milkweed, which is perhaps the most charismatic of all plants that are important to the monarch's survival, and the place it inhabits in monarch storytelling. Ecocritic Jessica White writes: "When we take the time to pay attention to plants, by reading them on the page and in real life, their intricacies become apparent" (2019: 103). Milkweed is certainly worthy of attention when it comes to the monarch butterfly, as the butterfly and plant co-evolved. The butterflies only lay their eggs on milkweed plants, and its leaves are the only food the caterpillars eat. In short, having developed a dependency on the plants, the monarch cannot survive without milkweed.

This is not a mutually beneficial or desired relationship. As part of its evolution, milkweed has developed defences against the monarch by producing toxic chemicals, a rather milky latex (after which the plant is named) and, of course, its bristly leaves (Agrawal 2017). Experts mostly agree that habitat loss due to industrial agriculture,

meaning that the female butterflies do not have enough milkweed plants on which to lay their eggs, plays an important factor in monarch decline (Pleasants and Oberhauser 2013). On top of that, milkweed has long been considered a *weed*, something undesirable or unwanted and, thus, unwelcome, yet resilient (Argüelles and March 2021). Lawns in the United States, especially considering the longstanding American culture of perfectly mowed and manicured grass, have made urban areas inhospitable spaces. These are spaces that, when filled with wildflowers and other plants, have become incredibly important hotspots for insects. Cultural geographer Anna Lawrence puts it succinctly: the weed “reveals the limits to a more-than-human ethics of care” (2022: n.p.). Despite this, the monarch needs milkweed to survive and, in turn, milkweed has become a relatively charismatic plant over time, especially considering that it is viewed by humans and most other animals as a poisonous weed. Initiatives across North America have long since used milkweed to convey the importance of wildflowers for other-than-human life, feeding new caterpillars and encouraging monarchs to breed on their migratory routes. After extremely low numbers were recorded in 2014, a campaign to plant milkweed was initiated, which included governmental agencies, agricultural firms, lawns and the White House (Gustafsson et al. 2015).

Knowing all this, it is peculiar that milkweed does not often star in extinction narratives, specifically in the spatialization of the monarch butterfly. The monarch-milkweed relationship works on a particularly small scale: with a single butterfly, after a long migration, laying one or two eggs on a single plant so the caterpillars can eat the leaves and pupate. From tiny egg to chrysalis, a substantial part of the monarch's life is spent co-existing (being born, eating, pupating) with milkweed. Similar to the forests in Mexico, the places where milkweed grows are incredibly important to monarch life and survival. And yet, milkweed seems to be a victim of “plant awareness disparity” (Parsley 2020) or “plant blindness”, a term first coined by James Wandersee and Elisabeth Schussler that refers to “(a) the inability to see or notice the plants in one's environment; (b) the inability to recognize the importance of plants in the biosphere and in human affairs” (1999: 82) and more. Here, attentiveness (or the lack thereof) to the ordinary seems to be key. This does not mean, however, that milkweed is completely absent in the spaces of monarch storytelling; rather, the way the plant is incorporated in literary narratives differs in such a way that indicates inequalities of perception and care.

Some scholars argue that literature and literary storytelling are sometimes in a unique position to bring together the complexity of simultaneous environmental, political, social and economic forces (Hoydis et al. 2023; Trexler 2015). Reading the novel *Flight Behaviour* as a climate change risk narrative, Americanist Sylvia Mayer (2016) explores the different spatial instabilities and alterations climate change poses. The realization of shared risk, Mayer argues, creates an ethics of connectivity rather than proximity through the deterritorialization that climate change causes. Connectivity, in the novel, is achieved by creating new connections through the rather unexpected and literal relocation of the monarch butterflies' overwintering site, which shows that connectivity should not be dependent on proximity. As Mayer astutely notes, this is achieved by displacing the monarchs and the ways the novel's narrative incorporates Dellarobia's increasing awareness of changing regional and global processes (ibid.: 497).

These processes not only include monarch migration and climate change but also how they are related to politics and global economics.

And indeed, in *Flight Behaviour*, the complexity of it all, with the monarch butterflies at the centre of it, starts to materialize in Dellarobia's narrative: "[Byron's] 'complicated system' began to take hold in her mind, a thing she could faintly picture. [...] This was a living flow, like a pulse through veins, with the cells bursting and renewing themselves as they went" (Kingsolver 2012: 146). And amongst this living flow, between climate change as something "she knew to be wary of" and "hundreds of factors [that] came into play" (ibid.: 147), there is a fleeting reference to milkweed:

Fire ants, for example, had now come into Texas, where the monarchs were vulnerable. Ants ate the caterpillars. And farm chemicals were killing the milkweed plants, another worry he mentioned. She wondered if she should tell Ovid about the landslide in Mexico. (ibid.: 147)

In this enumeration, only a few out of hundreds of factors, the brief mention of pesticides killing milkweed on agricultural land appears inconspicuous. This is despite the fact that pesticide use, according to experts, has been detrimental to monarch populations (Pleasants and Oberhauser 2013). While the fire ants and the landslide (which is mentioned earlier in the novel) are highly localized threats to the monarch, all of the latter need milkweed for survival and the plant is decreasing throughout their migratory route. Instead of putting the monarch and milkweed next to each other on the same narrative level, in Dellarobia's mind, milkweed has become part of a slightly more abstract list of factors that includes climate change and landslides. Milkweed, it seems, becomes part of the narrative on a larger scale that does not allow for individual plants to be present and, thus, shows the intimacy of the monarch-milkweed relation. Despite an ethics of connectivity, it seems that plant blindness prevails, and milkweed is lost in the scales traversed by the novel; just like the western population of monarchs is lost among the spectacle of the eastern population.

The Everyday of Extinction

Back in Europe, thinking about my journey to the butterfly grove, I am once again struck by the realization of how banal the reality of extinction can be; how much risk there is in looking past the everyday: the often small (butterflies), the sometimes undesired (milkweed), the relatively unimpressive (the western population's migration). I think about the questions that encouraged me to go to California: What becomes part of the narrative of insect decline, or more broadly extinction, and what does not? What stories are used to tell stories (Haraway 2016: 12)? In the face of a more exciting story – the mystery and spectacle of the monarch – an entire population is left out. The same goes for milkweed when compared to the monarch butterfly itself. I do not blame the cultural imagination, or the stories out there, for the lack of care for the eastern monarch. There is more to it, of course. But I do think that storying is an active verb, an act of putting something out there, of creation. With our eyes focused on the spectacular, these everyday violences

against vulnerable species are not the most popular or exciting story to share. However, they are necessary stories. Banality is not a bad thing: looking for the small and mundane means that we do not lose track of life on the edge of extinction. It means opening our senses to what is out there while it is still there.

In the comfort of my house, I remember and can now laugh about how worried I was that I would not recognize the monarchs, because I was only used to images of branches full of roosting butterflies or single monarchs resting on colourful milkweed. Narrating the multispecies world, or storying multispecies worlds, is a powerful practice, especially in what is now widely known as the sixth mass extinction. These stories, then, should also reflect the complexities of multispecies life and include different populations and other species – such as the eucalyptus groves of California and the milkweed that sustains monarch butterflies all across North America. Echoing my own decision to go the West Coast instead of the famous reserve in Mexico, this paper is a call to turn away from grandiose narratives and spectacles, and, instead, turn attention to what is there: those small animals and weeds stuck between the busyness of life. To pay careful attention to everything that is out there before it slips away. The everyday of extinction is also the everyday of life. Instead of critique or damnation, I share my work as an invitation, to look at those small everyday stories that are right there yet untold. The next step is to find creative, compassionate and careful ways of telling these stories to respond to and reshape the current narrative of insect decline.

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Connecting

Of Roots Here and There

A Vegetal Story of Migration in Three Parts

Hilal Alkan

I made a panel submission, together with a colleague, to an international anthropology conference in 2022. The title of the panel was “Rooting with Plants: Towards a Multi-species Anthropology of Displacement and Migration”. While accepting it, the organizers also said, “the scientific committee felt that some visiting the call for papers might find the metaphor offensive.” We were asked to revise the abstract so that “nobody would be upset.” Surprised by the reaction, we asked for clarification. Much later and after some insistence, we finally received a brief reply from the scientific committee: “it is the equivalence drawn between migrants and plants that might be read as offensive by some people.” According to the scientific committee, “some people” would feel dehumanized because of the metaphor of rooting.

But plants are hardly ever referred to in order to dehumanize people on racial, religious, ethnic or sexual grounds (with the possible exception of invasive species). The more common trope is to liken migrants, Indigenous people, women, minorities, and all those to be suppressed and ruled to animals – a trope that projects speciesism onto racism, misogyny, homophobia and the like. On the contrary, plant metaphors are widely multivalent and their production is polyphonic.

Referring to one of these meanings, the conference organizers’ reaction can be read as a response to hostile migration discourses that liken migrants to invasive species or that point to people’s supposed ‘roots’ in places other than the country in which they have been living or even born, to disqualify them from fully belonging. In the German discourse, roots refer to ethnic identity that is defined by the ethnicity of the elders one is connected to via a blood relationship, independent of where they are born, raised and which nationality they hold. So, independent of the generations that have passed in between, a born and bred German citizen can be identified with the Turkish or Palestinian roots, and people who have been living in places thousands of kilometres away from Germany for several hundreds of years are entitled to citizenship immediately thanks to their German “roots”. But the organizers could not deduct such conclusions from our abstract; quite the opposite was plainly out there already. Therefore, I read their reaction as a continuation of the debates that have marked anthropology since the spatial turn.

The spatial turn in anthropology, following human geography, took issue with the fixity of place and offered a paradigmatic change in our understanding of space as a human construct at several levels: material, legal, practical and imaginary. It provided a rich toolbox that allowed an examination of the formation of space as a product of power (Massey 2005) and the tracing of the movements of the matter and the people (Marcus 1995). Especially in critiques of sedentary views of people's relations to place, authors argued against the metaphors of roots that were seen as ascribing people to territories, and exceptionalizing and abnormalizing mobility – most importantly of migrants and refugees (Malkki 1992). Botanical language has been thoroughly critiqued, and routes were offered to replace roots (Friedman 2002), or rhizomatic understandings to replace thinking through roots (Gibas 2019 following Deleuze and Guattari 1987). Hannah Pitt suggests in her illuminating short essay (2021) that this negative view of roots illustrates a lack of knowledge about the roots, as well as a lack of curiosity about them. The primary function of roots is not to keep the plant in place but to help it extend and expand both under and above the soil. Alongside their commonly known vital role in plant nourishment, roots also connect plants with other plants and subterranean species. They communicate with their surroundings and signal deliberate messages to attract and deter other species from coming into contact. As the neurobiological core of the plant, they detect, respond and connect (for more about roots, see Baluška et al. 2006; Gagliano 2018; Holdrege 2013; Simard 2018). In brief, roots are not comparable to the foundations of concrete buildings, as we often imagine them to be – immovable, unchangeable. To quote at length from Pitt:

Roots are active and vital, neither simple, not natural opposites to routes nor rhizomes. Rooty metaphors informed by knowledge of plant worlds suit spatial relationships of diaspora, multiple homelands, or none. Drawing on roots being for metaphors of human-place relationships offers many threads to follow: nourishment, symbiosis, communication, coemergence. Roots need not be what we go “back to,” or convey reactionary belonging favoring past times and places with one authentic identity. Plant roots suggest potential to move forward and become. (2021: 473)

Roots, in this moving forward and becoming, are also significant metaphors for people who have migrated when they reflect on their own condition. Hence, the metaphor of roots is *emic* as much as it is *etic*. Vegetal metaphors and especially roots are uttered by those who are building their lives through, within and despite migration, as much as by those who want to govern migration.

Examples of *emic* uses of roots abound in literature and film, but the roots as a metaphor keeps inspiring migration scholars and those working on contemporary mobilities as well (see, for example, Christensen and Jensen 2011; Gustafson 2001; Hage 2013; Lems 2018). In this line of literature, roots point to senses of belonging that do not necessarily imply a single-sited attachment and sedentariness. Unlike migration governance schemes, migration scholarship has long-established and accepted what Peggy Levitt and Nina Glick Schiller neatly say: “migrants are often embedded in multi-layered, multi-sited transnational social fields, encompassing those who move and those who stay behind” (2004: 1003). This formulation sits nicely with roots, but sounds coincidental, because there is hardly ever an exploration in migration literature into why

roots are actually apt metaphors to understand people's senses of belonging, connection, emplacement and displacement. This essay is an attempt to open up this field.

I will introduce three protagonists in this essay, who reflect on their lives, struggles and who they are by employing vegetal metaphors. However, their relationship with plants does not remain at the level of representation. They also have a daily, intimate connection to plants. Thus, their metaphors do not come out of pure imagination but rest on concrete, caring relations and an intimate and sensorial knowledge. The relations between migrants/displaced people and plants is an understudied subject. We know more about the significance of gardens in migrants' lives in terms of a continuation of culinary cultures (Gerodetti and Foster 2016), recreation, an enlargement of private spheres (Hondagneu-Sotelo 2017) and claiming urban citizenship (Rosol 2010); but in this literature, the intersubjective and relational dimensions of plant care is not the focus. Plants are not taken very differently than objects or landscape – things without their own biological, organic vitalities. A multispecies approach to displacement and migration is yet taking baby steps (as examples, see Alkan forthcoming; Tsybalyuk 2023).

My interlocutors, Onurşah, Işıl and Zeliha,¹ whose accounts of their lives include ample references to roots, have been participants of the research I have been conducting (2021–2024) with migrants who came to Germany from Turkey at different times and various points in their lives, with a particular interest in their homemaking together with plants. I meet these Turkish and Kurdish migrants in their homes, balconies and gardens, and they tell me their life stories. I also ask them about the plants that have touched their lives in the past and present. They introduce them to me, reconstruct their biographies, often in entanglement with their own, and illustrate how they care for them. They also talk about past relations with the plants that populated their childhood homes and landscapes in their hometowns.

Onurşah, Zeliha and Işıl's accounts shed light on the different meanings of roots in migrants' lives and the temporal dimensions of thinking through vegetal symbolism. While narrating the multispecies worlds unfolding in their homes, they reflect on different meanings of roots. Onurşah tells how he has slowly become emplaced in Berlin together with and in close relation to plants. His narrative attests to a co-rooting, which takes time, patience, diligence and the mobilization of many other human and non-humans as companions. Zeliha explores rooting simultaneously in different places and re-rooting. She questions who she has become with migration and what the roots that were left behind could still hold, support and transfer. She wants to imagine the roots of her sons as "an extra pair of wings" as Ghassan Hage (2013: 149, quoted in Lems 2019: 22) elegantly puts it, which would give them a grounding from which they can successfully launch. Finally, Işıl asks the question of whether it is possible to root in the air and develop a fully nomadic existence that is still connected to places. Yet, as time passes, she turns more towards underground roots. As will be made clear by the parallel reading of their narratives around their plants and themselves, and by juxtaposing the three to each other, temporal dimensions of migration and the life-courses have a strong effect on the companionship of the plants and people in migration contexts. Narrations

1 Two of these names are the actual names of my research participants, who wanted to be presented as such, and one is a pseudonym.

are shaped by time – the time spent in the new land, away from the homeland, raising children, building support networks and getting older. The reader is invited to see the parallels and contrasts in my migrant interlocutors' narratives that I cite and paraphrase at length below and witness to the multiple meanings and affordances of roots through these snapshots.

Onurşah: Growing Roots

Onurşah's flat has a warm feeling to it. Cosy and sunny. It is a one-bedroom in a housing estate built in the first half of the twentieth century. Large trees dot the open lawns between the five-storey buildings, but it is still possible to see the neighbours living across the way and wave at them occasionally. Onurşah lives alone in a flat on the second floor of his building. Or rather as the only human-being in the flat. Otherwise, he shares it with several plants, some of whom he calls his friends.

Onurşah, a primary school teacher in his thirties, had come to Berlin to continue his studies 11 years before we met. After receiving his degree, he worked as a social worker until he changed track. When I approached him to take part in my research, Onurşah generously invited me to his flat, and before I asked him anything he started talking. He was bursting with stories about plants, migration and making Berlin his home, so much so that he was surprised about this abundance himself. "I was not feeling settled until five years ago," he said,

I always had this idea of going back home, back to Turkey. Although I loved it here; although I had my job, my friends and my life here, I always felt a little doleful when I had to leave [Turkey] after my visits. Especially when I was leaving my family. I am from Antalya. In that city, surrounded with relatives, I always nursed the notion of return. I had these thoughts: I would come back one day, I would have loved to come back. I developed many return projects. Even my family developed some [...] However, in the past four–five years, it started to diminish. In the last two years, I go back very reluctantly and without much desire. Now I feel I belong here.²

Onurşah did not tell me all these as a response to a question about his migration story. He actually took off with talking about his interest in plants, which also started to develop around the same time, about five years ago. While drifting from plants to settlement, he recognized that plants made his flat their home when he started to feel finally at home. But the causal direction was not clear. Did he start to feel at home and bring home plants? Or did plants make their way to his flat and he started to feel at home in their presence? While Onurşah's narrative suggested concurrence, he was not exactly sure which led to the other, and he switched between the two formulas during our conversation.

2 All conversations took place in Turkish. All translations are mine.

(Figure 1:) *Onurşah's cactus (belonging to the Italicize Ferocactus). Photograph by the author.*



The first plant to come was a cactus. It was given to Onurşah by his supervisor at work. This woman and her husband, both migrants from Turkey, were formative in Onurşah's migration journey. Onurşah became very good friends, especially with the husband, and frequently visited their house. On one such visit, the supervisor gave him a small cactus:

There were many succulents in their flat. I developed a liking for this cactus. She dug this little cactus out from a pot which hosted many of them, stuck closely together. And she told me that it was 35 years old! Can you believe it?

He then continued, "This 35-year-old plant is going on with its life with me here, and it is also living there in its original home. I find this amazing."

In this way, by leading two lives in two different places, the cactus effectively connected them. This connection of two places, one that makes Onurşah feel at home as a guest and the other he was trying to turn into a home, eventually affected Onurşah's own attachment to place. The cactus was a surrogate of the warmth and welcome he received from his friends. This cactus and two other plants he received from this couple have a special place in Onurşah's heart, as he calls it. They are his first plants and also the ones to which he is most attached.

His friends did not only give him companion plants, they also gave him roots – the roots he has since been growing and tending patiently. When he first arrived, he did not know many people in Berlin. Cut off from his family and network of friends, he struggled:

I came here after a certain age. One of the first things I noticed was that I would not be able to make friends as easily as I could when I was a child. You are in a foreign country. A feeling of rootlessness. What can a tree do without its roots? My aloe vera rotted; it did not work out for it. [This was a very large one he found on the street and brought home. But the plant did not survive because it was cut from the beginning of its stem.] It did not have roots. I felt like that for a long while. Feeling so rootless, you realize that you need to invest time and energy in new friendships. I am talking about something almost mechanical. I am talking about a very deliberate decision. For

example, you pick a few decent people around you. I tell myself: create time for these people, make something out of it, build something together. Otherwise, you are very lonely. You are all alone.

Onurşah then deliberately invested in his social network, put effort in making close friends – like his supervisor and her husband – and worked in civil society initiatives with like-minded people. He slowly built his own circle which made him feel that he belonged. His own labour-intensive rooting was matched by the labour he extended to his plant companions. He decisively created a systematic care schedule for them: washing the rose, who occupies a significant space on his small balcony, every two-three days to save it from spider infestation, maintaining a strict watering regime for his houseplants to meet their needs best, identifying the different soil types they need and repotting them regularly, and, most importantly, keeping a close, attentive eye on all of them to register and act on the minute changes in their outlook and behaviour. Onurşah's own rooting is similar to the rooting of his plant companions: Both require time and care given in abundance.

These roots also require protection; a careful possessiveness that mostly manifests itself as doting:

[talking about the creation of civil initiatives together with other migrants from Turkey] All of this is a struggle to root. We come back to plants again. I give plants huge symbolic significance. I mean it. They are very meaningful to me. For example, I have a close friend, D., whom I really love and get on with well. I cannot hurt her and I would not let anybody hurt her. Just like that, and I really mean it, I would not let anyone to hurt this rose. They would pay for it! That's it, that's it. Very symbolic. Just as I have rooted here, it has also rooted here. We belong to each other. I see it like that. I would not let anyone to do it harm.

In Onurşah's account of migration, his own story is constantly interwoven with the stories of his plant companions. They share space, struggle together and come to belong to each other. Yet, most importantly, as Onurşah constantly emphasizes, the plants provide a blueprint of emplacement for him. They are a testament to the importance of roots and how one can root well. There are two social constellations that Onurşah interprets as roots.

Everything goes parallel to each other. Once you are well-settled, you also have good friendships. Once you have a job, [...] rooting becomes possible. Being a foreigner is very hard. I did not know it before I came here. I really didn't know. If I knew [...] People ask me in Turkey: shall we go abroad? I am not like, "Don't go, there is racism there." It is not the problem. Can you cope with all this? This is the most important question. It is very hard. Coming here together as a family is a big advantage. I can tell you for certain. Of course, it also has its own hardships but having a family here means having a head start. To be able to hold on to somebody [...] Like you come with your roots.

Onurşah did not have a partner at the time of our meeting and his birth family lived in Turkey. While his parents find the great distances between them painful, they also sup-

port Onurşah's decision to live in Berlin. He goes to visit them a couple of times a year. When he is in Berlin, they communicate with messaging apps and send each other photographs of their plants. Although Onurşah does not have his family with him, it does not mean that he still feels rootless. Alongside the new friends he has made, he finds his teaching job to be a significant step towards finding "his place in the sun" (Alkan Forthcoming).

[After telling me about how precarious his job was as a social worker] Being a teacher means being a public servant. The standards are good, I mean the pay. I feel more accepted now. This job makes me equal with a German person who was born here, who studied here. You then feel more at home. It is independent of the routine, small-scale racism you encounter every day at school. We are foreigners everywhere. It is clear [...] But I have the same rights as my partner teachers. The same social status. Not that I value it so much but [...] All of these make you a little more settled somehow [...] It allowed me to take part in daily life more, as a civil servant I mean. And this leads me to root more here.

As metaphors go, Onurşah is more invested in the process of rooting as an expression of emplacement, than the roots as a noun, which might, in the conventional understanding, refer to where he came from – traditions, ethnicity, homeland. He recognizes the demands of rooting – the care, time and structures that facilitate it – as much as its rewards. His roots are an accomplishment: a multispecies accomplishment of co-rooting.

Zeliha: Connecting Roots

Zeliha lives on the outskirts of Berlin, with her husband and three sons, in a house surrounded by a very large garden. The garden hosts a number of large trees, planted decades ago by former owners, and younger ones planted by Zeliha and her husband. Uncommon in Berlin, and typical of the central Anatolian steps, there are silverberry trees on the perimeter of the property, which Zeliha brought from Turkey as cuttings. There is an apricot tree, which her husband grew from a seed, in another corner of the garden. The husband ate an apricot when they were in Turkey one summer. He loved its taste and aroma so much that he kept the stone. Once in Berlin, he planted it in a pot and tended it until it became a robust sapling. Then he planted it in their small hobby garden in Neukölln. When they decided to move out of the city and buy a garden house, they had to sell the hobby garden. Yet, they uprooted the apricot tree, together with the cherry tree they had planted when their youngest son was born, and transplanted them both in the new garden. Both of the trees survived the stress of transplantation and flourished through their human companions' care. They even give fruit every two years or so, depending on the weather when they blossomed.

(Figure 2:) Zeliha's apricot tree. Photograph by the author.



Transplantation is also an important theme in Zeliha's account of herself. She came to Germany through marriage to a young Turkish-German man at the age of 19, as an "imported bride" as she calls herself. When we met she had been living in Berlin for more than 20 years. She struggled not only with the language and climate but also with the special needs of her first born. Her mentally disabled son thrived with her heroic efforts, and Zeliha received a job offer from the family centre to which she had brought her son regularly. She learnt German, received training and became a social worker, supporting other migrant families in their struggles.

Zeliha is known among her friends to have a great sense of humour and a green thumb. She makes everybody laugh, brightens up the darkest moods, and whatever she plants, lives and flourishes. Like her trees, she also brings lots of seeds, seedlings and cuttings from Turkey and they all survive under her care. But when I asked her if there were any plants that she could not make live in Berlin, she gave a reply that caused a big protest from her friends, with whom we were sharing a rich breakfast.

Only myself. I could not make myself survive here. I could not make the former Zeliha live. [After exclamations such as "But you live really well! Zeliha is alive!"] Yes, this is a new Zeliha. But I miss my old self a lot. I know I look cheerful to you, but I am not as cheerful as I used to be. I do not laugh as before. I do not feel so vivacious anymore.

To this, I had to ask why, and she went on explaining,

It must be the gloom of Germany. It is not like I have experienced something or my husband gives me any trouble. It is because people here are very cold [...] Imagine a sapling. You bring it here, plant it, but it dies. But a new one emerges from below. Is it a good thing? Yes. Would that sapling live? Yes, it would live. Maybe even give fruit? Yes it would. But could it replace the original one? No, it could not. This is how I think of myself. I was a sapling. I brought myself here but I could not keep myself alive. I know I am no longer the same person.

For Zeliha, this feeling of loss is related to not living, changing and growing together with the people she knew pre-migration. After she made this comment about the sapling that is herself, she told me about how strange she felt when she did not understand a joke her nephews made during a visit to her hometown two years after her departure. Even then, the colloquial humour had changed and she felt as if she was left out.

Then they told me that I had changed. I said, no, I had not, you had changed. I understood what they really meant five years later. When you share less and less with some people, your ties become loose. Those ties cannot die, however loose they are, but you cannot make them live either. These roots are there, but you cannot resurrect them. Because you no longer have a shared life.

While Zeliha established strong connections with friends in Berlin, founded her own family and slowly built a new life for herself, the feeling of being cut off from her roots has always lingered. Yet, actually, as she also acknowledged, those roots did not die. They still connect her to her homeland, to her own people, however loose and fragile the ties have become. She still spends almost all of her summers in her hometown and keeps what is precious to her heart also close to herself materially. She plants poppies and wheat in her front yard to recreate the scenery of her childhood in arid central Anatolia. She goes to great lengths to bring plants from Turkey and care for them during the long and dark winters in Berlin. She also dotes on some garden flowers and house plants, which are reminiscent of her sisters and good old friends. When they show signs of distress, she cleans their roots, gives them special treatment and pours affection on them, until they come out healthy again. Her plants keep her people close.

Zeliha talks about her children as her flowers too, imagining herself as the plant again. These flowers need constant and fitting care, depending on their personalities and special needs. Her eldest is an orchid, she says. He is beautiful but delicate. Her 12-year-old youngest son is a violet. Elegant and down-to-earth; resilient and independent. She does not need to do much for him, he flourishes almost by himself. Yet, her middle born is a cactus, flowering gorgeously once a year but spiky and hard to handle. All of these plants she also grows at home. So, her metaphors are nothing but superficial. She raises her sons together with the plants, with attentiveness to their particularities, be they human individuals or plants.

However, the challenge about the children is that, unlike plants, they are not emplaced in one place and one place only. They again, according to Zeliha, have roots in Turkey. And her main struggle is to “make sure that they do not lose their roots.” These roots need tending; just like her plants’ roots need to be checked occasionally, cleaned and cared for.

This particular attention to roots became visible to me only when I read Zeliha’s transcript. Among my many interview partners she was the only one who talked several times about her struggles to save the roots of her plants; and she was also the only one who talked so much about her anxiety about losing her roots and her children losing theirs. Tending to children’s roots involves taking them back regularly to her hometown so that they would know their soil, the people, and the place that nurtured and shaped their parents. It also involved taking them to a Qur’an school, where they learned to read the holy

book in its original Arabic and received religious education, and also to cultural activities of the Turkish community. It involved designing her garden house almost like an Anatolian village house, with chickens and pigeons in the garden, and a wood stove in the living room. She, who is well emplaced in Germany, is still busy with roots, as nouns, that refer to an elsewhere.

Many trees establish root systems to allow communication under the soil and they even exchange nutrients, as has been made famous by Suzanne Simard's (2009, 2018) research. Roots do not have to be individual. Roots of others and roots elsewhere can support an individual plant, protect it from pests and infections, and provide it with vital support when the plant cannot survive on its own. In Zeliha's attempt to keep herself and her children embedded in other root systems by keeping them connected to another land and their family there is an attempt to keep them healthy, resilient and well-supported.

Işıl: Rooting in the Air

Işıl is a 40-year-old artist. In 2023, when we met in her lovely turn-of-the-century flat, she was about to finish her PhD at the University of Arts (UDK). Before moving to Berlin in 2017, she lived in a top-floor flat at a central location in Istanbul and grew a garden on her terrace. While practicing her art and becoming known in the art scene in the city, she was also enrolled in a PhD programme and worked there as a teaching assistant. Her life was full, and she had the feeling that "life was beautiful, I would work here and live here." However, the political climate changed drastically after 2013 and became suffocating. When she launched one of her feminist artworks, which was installed on top of a hotel at the Taksim Square, she felt particularly threatened. She experienced 2016 as an awful year because of the bleak developments that led to the purge of academics, journalists and many opposition intellectuals, and, finally, she applied for a paid PhD position in Berlin, which she was offered and accepted.

Before her move in 2017, Işıl photographed every single one of her plants and shared the images on Facebook, asking who would like to adopt them. Her friends volunteered. She also photographed the plants together with their new owners and kept track of who got what. She later stayed in touch both with her friends and her plants as they shared homes. She occasionally received their pictures and reunited with others when she went to visit them. She is particularly fond of one non-flowering houseplant which lives in a close friend's flat and receives a hug from Işıl whenever she visits.

Işıl's Berlin flat is also full of plants. She brought a few of them from Istanbul and from her mother's house as cuttings and grew them here. This is indeed what she loves the most – growing a baby plant and watching it thrive. This is a new phase of rooting for Işıl. Initially, she said she rooted into her private life and did not cultivate much connection to the city. During that time, she also made an artwork called "Willem Flusser and I", where she explored the possibility of rooting in air. Here is how Işıl described her photography project on her website (Eğrikavuk 2018):

Due to my current move to Germany, I am thinking a lot about the position of the exile. Even though I am not necessarily a forced exile, however, as an artist, as a woman, as an intellectual, an academic, I feel unrooted.

In his essay "Exile and Creativity", Vilem Flusser says, "(A human) may discover that a human being is not a tree. And that human dignity may consist precisely in not having roots. That the human being becomes human only when she hacks off the vegetable roots that tie her down."

Inspired by Flusser's text, I did a series of performative photographs, where I pose with used and thrown away Christmas trees in different parts of Berlin every day for a week in January 2018, thus, uniting with the rootless plant. I consider this position is also an act of empowerment, meaning that instead of being the victim of the exile condition, we become grounded in the air, together.

The trees in the photographs stand upside down supported by Işıl. Their short trunks pointing towards the sky and the pointy crowns touching the ground, they are contrapuntal to Işıl's firmly placed feet. The performance carries an optimism about the endless possibilities uprootedness creates. It invites freedom and imagination to the lexicon of exile, which is overburdened by loss, displacement and thrown-out-ness. It, therefore, echoes Deleuze and Guattari's famous statement:

We're tired of trees. We should stop believing in trees, roots, and radicles. They've made us suffer too much. All of arborescent culture is founded on them, from biology to linguistics. Nothing is beautiful or loving or political aside from underground stems and aerial roots, adventitious growths and rhizomes. (1987: 15)

Unlike Deleuze and Guattari, though, Işıl is not tired of trees. Her art makes a playful use of rootless Nordmann firs (*Abies nordmanniana*). The Nordmann firs that are widely cultivated as Christmas trees are endemic to Caucasia and Turkey, and by way of migration, they now populate German forests, mostly planted eventually to be cut very young. They symbolize a seasonal festivity, joy, family and warmth. They are then discarded on the streets. The trees in Işıl's photographic performance are not only rootless, they are lifeless. They are displaced and appropriated for a seasonal fantasy, only to be disposed of once they became unpleasant, with their needles drying and falling.

Hence, despite the hopeful text, the photographs communicate a sadness. Compared to the photographs I took at her flat five years later, capturing her intensely loving touch and compassionate gaze, Işıl in her artwork has a rather grim expression. When I asked her what she thought about rooting in the air now, she said she had never really thought about it before I asked the question. But, she said, she is putting more effort to root in the city now. Her practice of growing plants attests to that as well. She propagates many plants (such as olives, succulents, inch plant, devil's tongue, oranges, lemons, tomatoes), some of which she brought from home as cuttings and others she received from her friends, as well as those she bought from supermarkets in Berlin. She takes pleasure in seeing their roots grow in glasses of water and later firmly establish themselves in soil. She enjoys and takes pride when they thrive under her care. She attests to the physiological transformation of the rootless mobile cuttings and seeds to fully established plants with the help of the roots they have grown to take nutrients. For Işıl, rooting in the air

was a statement of hope, rooting in the soil, on the other hand, is a practice that aims at emplacement in a multispecies world.

(Figure 3:) Işıl Eğrikavuk, 'Villem Flusser and I'. Credit: Işıl Eğrikavuk.



By Way of Conclusion

Roots often refer to a notion of origins in the general discourse around migration – whether governmental or literary. They are about where one, or their ancestors, were born; their traditions, beliefs and ethnic identity. Roots are what lay behind, sometimes unnoticeably connecting a person to somewhere they no longer inhabit. Roots are also what lay behind in the temporal sense; they refer to the past. The narratives I related above, of living together with plants and reflecting on them, present a much more colourful and heterogenous picture of roots. We see multivalence, plurality and

primarily an orientation towards the future in Işıl, Onurşah and Zeliha's dwellings on roots and rooting, as well as connections to multiple places at once.

Roots, both as plant organs and metaphors, invite us to reflect on connections to place: what do we, plants and humans, get from a place, how are we emplaced, how do we find support and care at a place? The three accounts I laid out in this essay illustrate how migrants, who have an emblematic relationship to place by way of being displaced or having changed places radically, refer to roots and engage with them. So, when my interlocutors talk about roots, they talk about place and the relations that make up that place. What they are referring to is emplacement, which can be defined as a positive situatedness in a place (Vigh and Bjarnesen 2016); being well embedded in relations of care and worth (Alkan forthcoming).

The second important point about different uses of roots is temporality. How the metaphor of roots is differently employed by Işıl, Onurşah and Zeliha reflects the questions they dealt with at that given time in their migration trajectories and life-courses. For Onurşah, rooting is about finding his place in Germany. It is a question of settling, referring to a process. For Zeliha, roots are a question of where she came from and how to raise children who do not forget where their parents came from. Roots for her is a noun. Being a migrant for over twenty years, having a home, a job and family in Berlin, she is already well-settled. Rooting in Germany is no longer a question for her, however, losing her roots elsewhere is, because those roots, along with her roots in Germany, are what nourish her and her family. In her first year in Berlin, Işıl proposed rethinking what roots come to mean for an exile with a gesture of hope – rooting in air. Her question carries the openness of a fresh migrant, who found herself in a welcoming city after leaving an increasingly suffocating political environment behind.

Finally, roots refer to significant relations with other human beings. Onurşah describes making friends as an act of rooting, while Zeliha discusses roots as meaningful connections to relatives and kin. Telling how she rooted mostly into her private life and not so much in the city in her first few years in Berlin, Işıl also points to how roots do not necessarily tie one to a single place but possibly to people, through relations of care.

So, roots come in different forms, textures and depths. They extend both temporally and spatially, connecting places, people and their nonhuman companions in webs of care and support. They are essential to the well-being of plants and people alike, yet, with their multivalence and plurality, they resist essentialization. Stories of migration abound with roots but they are not the roots hostile migration politics imagine.

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Honorific Ecology

Multispecies Portraiture of Ren Hang

Ahmet Emin Bülbül

Deep in the woods, at night: we barely see the dark green shrubbery in the background, having no motion, attracting no attention. Rather, it is this sudden illumination in front which immediately guides our eyes. Excluding the crown, the flash portrays as well as reveals the anonymous textures of a tree trunk with three thick branches. The tints and shades of brown, metallic green and a toned-down scarlet stand out, and we both perceive map-like shapes on the surface and sense the tactility of the bark, created by the rough, irregular, jagged tissues. Yet, this nocturnal representation does not seem classical. Not only because it does not separate the human element from its surroundings, but also on account of the strange yet curious spot where the face looking at us in the eye seamlessly fills the emptiness left by the branches of the tree. Central, peripheral or ornamental to the same extent, the way the human and more-than-human elements relate to one another form a weird sense of belonging, a radical complication of the matter and the bodily in this very moment. Doing away with the conventions of portraiture, Ren Hang's photograph, in short, enables us to share a transformative companionship.¹

Influenced by the divine, mythological statues of early Greek culture as well as by the consolidation of the individual in the Renaissance period, classical portrait photography has established human beings as the central elements of the viewing experience, particularly employing the aspects of "face, pose, clothing and location" (Bate 2009: 73). As an indexical "representation of a historical personage", it has traditionally aimed at contextualizing and remembering the existence of the sitters in the form of the "honorific" portrait (Keesling 2017: 1). In doing so, photographic portraiture has predominantly depicted people who had "power and status", often maintaining "social hierarchies" (West 2004: 71). However, problematizing the ideological dimensions of portraiture, which reflects predominantly white, high-class, patriarchal values, modern 20th-/21st-century art has given voice to sitters who have been marginalized throughout the history of visual aesthetics. Women, black, queer, low-class, disabled: underrepresented groups, as both photographers and sitters, have started to produce critical counter-narratives in

1 The image may be viewed at <https://api.time.com/wp-content/uploads/2017/03/ren-hang-tasche-n-photographer-china-05.jpg>.

the process of rewriting the histories of photography.² Yet, despite those liberating instances, portraiture still seems to be an anthropocentric practice.

This paper attempts to explore the aesthetics of multispecies portraiture. I analyse Chinese photographer Ren Hang's oeuvre regarding two theoretical concepts: *more-than-human sociality* and *mesh*.³ The first concept belongs to Anna Tsing (2014), who suggests that nature and society are not exclusive to one another; rather, sociality is an interaction and collaboration, an entangling connection also performed by non-human actors. One of the key conceptions in Timothy Morton's (2010) "ecological thought", *mesh*, on the other hand, accounts for a queer, liquid and fluid conjunction that does away with any strict boundary among worldly matter and fosters new modes of intimacy. My overall argument is that Ren Hang's multispecies photographs build an anti-hierarchical, non-binary space where vital organisms coexist, and radically reform and deform each other. The emergent, ecologically engaged sociality his aesthetics visualizes is not only honorifically more-than-human but also deeply intimate.

While the Sitter's Story Unfolds

The responses of classical photography theory to portraits differ, yet, they have something in common: the aesthetics of portraiture cannot be confined to its literal outlook; there is always more to it. According to Roland Barthes, for example, a portrait photograph would hit us with its *punctum*, an unexpected "accident, a certain shock, a power of expansion" that exceeds the limits of the socio-culturally coded image and throws us into the streams of involuntary memory (1981: 27–45). The past and present tenses of our experience radically merge, constantly transforming one another throughout the journey we make. Whereas, for Susan Sontag (2005), apart from the individualistic, fortuitous experience of remembering, portraiture might also be emblematic of different realities. Sontag writes that particularly in American photographer Diane Arbus's oeuvre, it reverses and complicates the dominant gaze by signifying the presence, "detachment and autonomy" of the marginalized communities that surpass the boundaries of photographic representation (ibid.: 29). The resistance of the other undoes the often one-directional power relationships between the bearer of the look and the subject observed. Portraits are "fascinating" to the famous French photographer Henri Cartier-Bresson, because they allow us "to trace the sameness of" humanity by "[p]roducing a factual testimony", which not only visualizes personal details of the sitters, but also relates them to our biological species (1999: 30).

2 For the analyses of the photographic depiction of underrepresented groups, see, for example, Bourland 2019; Brown and Phu 2014; Peffer and Cameron 2013; Sheehi 2016; Solomon-Godeau 2017.

3 Exhibited in numerous art galleries as well as reviewed by such popular magazines as *Vault*, *Dazed* and *Frieze*, Ren Hang's oeuvre has often been examined in the context of queer studies. While Maite Luengo Aguirre puts an emphasis on the "genderless aspects of his work" (2021), Hongwei Bao investigates how his "queer representations" reflect the "underground" culture set in China (2021). Underpinning Bao's account, Liangyu Peng also notes that Ren Hang's photographs communicate an "alternative queerness" which is formed collectively "within a subcultural community of 2010's Beijing" as a "countercultural practice" (2023: 2–48).

However, distinct from the views of Barthes, Sontag and Cartier-Bresson, German thinker Siegfried Kracauer underlines the rather undervalued fact that photography also “brings to the fore the entire natural shell; [...] the inert world” manifesting “itself in its independence from human beings, [...] alienated from meaning” (1993: 435). Kracauer particularly refers here to the indexical and mechanical essence of the camera, which captures both organic and inorganic things without any form of human intervention. Unlike painting realized through our perception, imagination and creativity, photography’s automatism founds a machine vision that complicates the human-centric outlook of the world in which we live. Similar to Kracauer, Walter Benjamin also praises the automatic capabilities of the medium by drawing attention to German artist Karl Blossfeldt’s plant photography:

Structural qualities, cellular tissues, which form the natural business of technology and medicine are all much more closely related to the camera than to the atmospheric landscape or the expressive portrait. At the same time photography uncovers in this material physiognomic aspects of pictorial worlds which live in the smallest things, perceptible yet covert enough to find shelter in daydreams, but which, once enlarged and capable of formulation, show the difference between technology and magic to be entirely a matter of historical variables. Thus Blossfeldt, in his plant photography, revealed the most ancient column forms in pewter-glass, totem-poles in ten times magnified sprigs of chestnut and acorn, gothic tracery in teasel. (1972)

In fact, paralleling Benjamin’s curious interest, the Victorians’ fascination with photographs in 19th-century Britain was grounded particularly in capturing both plants and other species in those emergent, mostly non-human forms waiting to be exposed to view. Jennifer Tucker notes that photographic observation was key to producing “scientific evidence”, because researchers were able to accurately represent natural phenomena, such as “bacteria and star clusters”, for the first time (2005: 7–63). Charles Darwin, one of the most influential British naturalists, also “began to use photography in his work and became a prominent voice” regarding the symbiotic relationship between science and photographic medium (Prodger 2009: xxiii). However, rather than intentionally aiming to create faithful portraits of different species, such early photographic attempts (or what we would call *species photography*) were interested in collecting empirical proof to observe how natural phenomena took place at both macroscopic and microscopic scales. Indeed, we had to wait for the subgenre of animal portraiture to witness the full acknowledgment of the agency of species apart from humans.

This type of portraiture has long been debated by thinkers interested in the idea of animal agency and its differing representations created by humans. In certain contexts, evocative of the marginalization and taming of species throughout the industrial revolution, portraying more-than-human beings parallels John Berger’s conception of the zoo as “a place where as many species and varieties of animal as possible are collected in order that they can be seen, observed, studied” (1980: 21). Akira Mizuta Lippit underpins Berger’s view by emphasizing how animals have been rendered by “technological media”, objectified and ultimately become part of a wider human-centric “discourse and discipline” (2000: 2–22). Securing our viewing position, photographic images particu-

larly appear to “keep us at an appropriate distance from nature” (Brower 2011: xiii). The very definition of anthropomorphism encapsulates those views: “the attribution of human form to” more-than-human beings (Daston and Mitman 2005: 2). It is not a matter of “the animal itself, [b]ut rather a human subject drawing on animal imagery to make a statement about human identity” (Baker 1993: ix); “repressing the question of nonhuman subjectivity, taking it for granted that the subject is always already human” (Wolfe 2003: 1). In this sense, from the earlier, prominently empirical illustrations to aesthetic presentations, visual depictions of the more-than-human have seemingly been absorbed into an anthropocentric perspective. However, even though such thoughts offer critical insights, they overlook how the central position of animals or other species in photographs disrupts our classical engagement with the art of portraiture. Regarding the concepts of agency, bodily experience and ecologies of connection, what actually happens when we encounter an animal portrait?

Environmental humanities scholar Nicole Merola’s (2010) response to this question is twofold. Examining American artist Jill Greenberg’s hyperrealistic animal portraiture, Merola suggests that, as viewers, we perform “projection and overidentification (the ‘natural’ anthropomorphism of an uncritical engagement), on the one hand, and underknowing, on the other” (ibid.).⁴ However, while the first stance maintains already established modes of engaging with photographs, because of the highly stylized outlook and the “technonature” of Greenberg’s work, we experience a constructive alienation in which a “location for opening up the possibility of non-anthropomorphic relationality” emerges (ibid.). For Merola, “[p]ositionality, not emotion, undergirds all aspects of this model of ethical engagement” (ibid.). Similarly, Linda Kalof, Joe Zammit-Luca and Jennifer Rebecca Kelly have found in their study of the audience reactions to animal portraits exhibited in a museum setting by using the Personal Meaning Map assessment that “after viewing”, there is a dramatic “change in visitors’ perceptions” in terms of “kinship” and “personality” (2011). Rather than ascribing anthropocentric qualities to photographs, participants in the research both acknowledge the peculiar characteristics of each animal figure and critically reflect on our expanding relationship with and “closeness” to the more-than-human, keeping the critical distance between human and animal agency (ibid.). Animal portraiture as a subgenre, therefore, cannot be confined to scientific, empirical data or the aesthetics of anthropomorphic representation. It also has something to do with the ontological dimensions of being more-than-human. In what follows, I aim to show that Ren Hang’s work adds to those productive attempts by exploring the possibilities of multispecies portraiture. Manifesting how closely knit we are with our surroundings, his works invite us to rethink the notions of correspondence and coexistence.

4 Greenberg’s animal portraits may be viewed at <<https://www.jillgreenberg.com/monkey-portrait>> [accessed 14 September 2024].

Lures of Multispecies Portraiture

“Emergences”, Eben Kirksey writes, “can [...] figure into collective hopes; [f]alse starts in one direction can become significant beginnings along a new vector” (2015: 1). But he also asks in what ways: “How do certain plants, animals, fungi, move among worlds, navigate shifting circumstances and find emergent opportunities?” (ibid.: 1). Incorporating human beings along with the more-than-human, Ren Hang creates a transformative proposal in his photographic oeuvre regarding such emergences. Exterior, night: red nail polish clouded by the smoke of a cigarette; a human skin surrounded by thin, dark brown branches in bloom, reminding us of ivies clinging to manifold surfaces; a foggy, still water, embodying shades of blue and the deep shadows of the leaves.⁵

(Figure 1:) Untitled. Ren Hang 2016. Image Courtesy of the Artist and the White Rabbit Collection.



In another image, we see a bathtub where a group of coral-coloured fish swims around a human; all organisms are naked (Figure 1). While circular currents liquify the image and deform the figure, we witness a strange moment illuminating the multiplicity

5 The image may be viewed at <https://www.instagram.com/p/BDdfp9HLYwu/?igsh=dWNsYjNkajgwYXV3>.

of things: bubbles glowing, eyes half-open, a torso becoming fluid, shared inhales and exhales. Reflecting on how organisms move among worlds, in other words, these photographs speak to what Kirksey calls “*emergent ecologies*” in which “[b]eings are coinvented in relationships of reciprocal capture, forming a shared milieu, an environment” (ibid.: 4). Moreover, with their peculiar encounters, unexpected forms and fruitful togetherness, Ren Hang’s works have something to do with multispecies communities that make emergent ecologies possible.

Multispecies are of several beings, changing organisms, becomings. As a point of inquiry in different academic disciplines,

a multispecies approach focuses on the multitudes of lively agents that bring one another into being through entangled relations that include, but always also exceed, dynamics of predator and prey, parasite and host, researcher and researched, symbiotic partner, or indifferent neighbour. (van Dooren et al. 2016: 3)

Celebrating biodiversity, it is a view of life that reconsiders the ways we approach our surroundings and invites us to be more environmentally conscious. However, such an approach is not limited to data produced by life sciences, nor does it particularly foreground the sensibilities of the human species or a form of “human exceptionalism” (Haraway 2008: 244). Multispecies ethnography, for instance, aims to investigate “the host of organisms whose lives and deaths are linked to human social worlds” (Kirksey and Helmreich 2010: 545) with particular attention to “political, economic and cultural forces” (ibid.), shedding light on the “contact zones where lines separating nature from culture have broken down” (ibid.: 546). Sundhya Walther points out that multispecies views “challenge dominant understandings of community, space, nation and narrative” (2021: 3), and Theresa L. Miller remarks that they search for emergent forms of “care, survival and well-being” (2019: 2).⁶ From this standpoint, it is a matter of divergent collectivities involved in changing and growing associations, which, ultimately, enable us to (re)constructively respond to the current, uncertain ecological outlook and environmental problems of the planet Earth. Standing out as significant methodological instruments incorporated by ethnographic research, multispecies narratives are key to witnessing and understanding various manifestations performed by beings, as well as imagining possible compositions and assemblages of plurality.

Multispecies storytelling, Michaela Fenske and Martha Norkunas describe, explores how organisms “story their places [...] experience the world” and how humans “seek new connections with nonhuman others in this metamorphosed global web”, providing “insights into what it means to be human in a posthuman world” (2017: 105–106). In the process of unfolding, while worldly species as “agential subjects” become the narrators of entangled stories, human figures are “orienting to other kinds of creatural life” (Herman 2018: 7–18), approaching the idea of “doing environmental politics differently” (McEwan

6 Recent research in multispecies studies continues to challenge our thinking, experience and orientation with its diverse problems, such as veganism (Oliver 2022), domestication and landscape formation (Swanson et al. 2018), memory and senses (Yates 2017), literary soundscapes (De Bruyn 2020), archaeology and urban space (Birch 2018) and juridical-legal systems (Chao et al. 2022).

2023).⁷ Yet, despite being communicated through different media consisting of textual, visual, aural or other sensory layers, multispecies narratives do not claim an anthropocentric power to express the thoughts or feelings of more-than-humans. On the contrary, Ida Bencke and Jørgen Bruhn write that it is a “generative, open-ended and ongoing [...] morphology in which bodies, materials and ontologies are always negotiated” (2022: 10). Ren Hang’s photography is a significant case in point. As we have already seen, the genre of classical portraiture predominantly narrates the journey of human beings, creating photographic moments in which questions of identity, subjectivity, body and soul arise and intersect. By contrast, Ren Hang’s pluralistic works, I argue, invert those narratives by generating multispecies storytelling. They are an open-ended, ongoing practice of negotiation related to emerging, merging and mutual modes of being. Referring particularly to concepts of *more-than-human sociality* and *mesh*, I suggest that his oeuvre forms what we would call multispecies portraiture.

In front of a white background, a green shrubbery is embraced by the long hair of a human being, dressed in red, seen in profile.⁸ It is a highly intimate coupling as well as a strange twist. Parts of the black hair function as a climbing plant clinging on and aiming to swathe the leaves. However, such a moment of drawing near is not exclusive to this photograph. The inextricable fusion of the tree and the head, the blooming branches around the body and the shared breaths of fishes and the being in Figure 1 also exemplify this metamorphosed global web in which new correspondences between agential subjects, both more-than-human and human, arise. All those figures, in this sense, resonate with Tsing’s suggestion that “if social means ‘made in entangling relations with significant others’, clearly living beings other than humans are fully social – with or without humans” (2014). Amalgamating earthly matter and bodily forces, sociality is a vast, interconnected, constantly evolving network that cannot be confined merely to a human-centric view. It is of multispecies. As Tsing remarks:

It is dynamic relations among these species, not their individual enrollment as human tools, that create the [...] web of social relations. Many histories, human and otherwise, come together in sites of more-than-human sociality. One is not enough. Changes in the species mix have social consequences for both humans and non-humans. Species change is not just about metaphors. Social worlds pulse with multiple rhythms. (2014)

Ren Hang’s multispecies portraiture, with its entanglement of the diverse elements of ecology, manifests the idea of more-than-human sociality, proposing further modes of exchange, accordance and coexistence. Each vital organism makes unexpected interactions that produce “a mosaic of open-ended assemblages” (Tsing 2015: 4). Moreover, his photographs, parallel to their collective outlook, pertain to what Timothy Morton calls “*mesh*”, which, at the heart of his ecological thought, accounts for “the interconnected-

7 For mind-opening forms of storytelling embedded in multispecies studies, see Höckert 2020; Höhti and Tammi 2023; Miller 2020; Rantala and Höckert 2024; Russell 2020.

8 The image may be viewed at https://www.instagram.com/p/or_2TLYy1/?igsh=emNudWZuaWtpZzZ5.

ness of all living and non-living things” (2010: 28). Echoing Tsing’s line of thought, for Morton,

[E]xistence is always coexistence. The ecological thought is a practice and process of becoming fully aware of how human beings are connected with other beings – animal, vegetable, or mineral. The mesh of interconnected things is vast, [...] [e]ach entity in the mesh looks strange. Nothing exists all by itself and so nothing is fully “itself”. (2010: 4–15)

Mesh offers habitual possibilities; it is a composite, a blend, a mixture in which organisms are present and interacting. However, different from the concept of more-than-human sociality, it embodies a “radical intimacy” freed from the dominating discourses of patriarchy (ibid.: 37). *Mesh* also has something to do with the joy of being together, with “care and concern for beings” (ibid.: 19). Ren Hang’s portraits, as visual forms of *mesh*, open up an anti-hierarchical, non-binary space where different species meet and socialize. Their multispecies storytelling is more “about making, rather than representing, worlds” (McCormack 2019). It is not just a matter of coexistence, though. While navigating through this interconnected *mesh* and becoming intimate, beings overlap, reshape one another and, ultimately, gain strange, unfamiliar forms in Ren Hang’s visual world. His portraiture presents a social and intimate point of departure for multispecies stories to unfold.

Conclusion

Concerning the aesthetic ways they are depicted, one of the persistent questions is whether more-than-human beings remain ornamental in artistic works. No matter how visible the elements of the organisms are, they seem secondary, because the representation itself is still the very product of a human agent. However, as we have already seen, set free from underlying hierarchies, the process of creating multispecies narratives, first and foremost, defies any dominant gaze. Rather than aiming to clearly define a being or establish precise boundaries in between, it is an exploration of the plurality of agencies that is in continuous action. Sunflowers, bushes, fishes, branches, trees, birds, peacocks, butterflies, water lilies, green grass, human bodies are forming and deforming in a *mesh*; this is also what we experience in Ren Hang’s works. Odd but attractive, unfamiliar but welcoming, not only human but also more-than-human, social but intimate: His photographs are in search of being.

It is a journey ‘we’ multispecies make, not only the modern human subject ‘I’. Artists created narratives of historical human figures in the form of honorific portraits in early Greek culture. In Ren Hang’s multispecies portraiture, it is the other way around. Adding to one another, those photographic images celebrate the contingent, surprising and diverse entanglements to which we belong. Their multispecies storytelling honour ecology, they offer a base for honorific ecology of which the human being is only a small part.

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Narrating With Nature

Adorno, Benjamin and Shanshui Imaging Techniques

André Krebber and Zhonghao Chen

Narrating is a specific way of making sense out of the disjunctive manifoldness of events and our experiences of the world. Giving something a narrative is to furnish it with a structure and order that leads to a progression and a sense of orientation and direction of where things come from and where they (might) head towards. Narration, thus, is a powerful cultural technique for humans to provide them with a hold and orientation in reality and history that constantly passes us by (Meretoja 2014). It weaves a thread into the manifoldness of the world that serves as an orientation for how things and the world (should) become and pass through time and history. Narration then turns into world-making.

Against the background of evermore aggravating ecological challenges, the functionalistic, instrumental, quantitative stories of nature told, often couched in the tradition and epistemic ideals of the Enlightenment, no longer seem adequate for reflecting our reality (James and Morel 2020; Plumwood 2002: 5–6). They neither match nor live up to our situation, or even seem to contradict it, while we appear to struggle both to materially come to terms with our environmental situation and establish new narratives to capture our situation. In light of this challenge, existing, rehearsed and familiar narratives about nature, such as the one of a passive nature and a solely active human culture, or that of humans as nature's rulers, have been questioned and found failing. Although such fractures in our narratives have probably always existed, over the past few decades it appears to have become ever more difficult to maintain instrumental narratives against our experience of and with nature. Instead, it has been increasingly recognized that we are not the only ones shaping the world, even if we now have to answer for a disastrously outsized harmful effect on it. It is acknowledged that other species and creatures, as well as objects, particles and matter, are crossing and intersecting with the human production of the world, co-creating the world with us; the enormous interest in and amount of scholarship on non-human agencies that tries to account for this recognition are a poignant example of this very realization (e.g. Herman 2014; Knickerbocker 2012). But the failing of narratives and the struggles to (re)narrate our current situation are also owed to the fact that the world is actually changing, with climate change and the sixth mass extinc-

tion and their effects providing pertinent examples, while many of these processes are difficult to determine with precision or certainty, and the future generally appears uncertain, not just because of this.

Moreover, it is narration as a phenomenon and practice that manifests as a problem. The failing narratives have been well-rehearsed, handed-down and, thereby, etched into culture. Thus, they provide guidance, hold and orientation for making sense out of our situation. As a consequence, the very narratives and approaches to narration that are currently failing to capture the circumstances in which we find ourselves, are being reproduced and, thereby, extended into the future in a vicious cycle, whether by their own accord or to bolster up a claim for mastery in times where such mastery is challenged, or even obviously failing. The summer of 2023 with its boiling devastation across the globe exemplifies this: While the house was literally on fire, narration was peddled to tell us that we would still have time until the year of reckoning and, therefore, still be in control. Yet, precisely this idea of 'still having time until x', reproduces an almost mechanistic image of nature, with exactly measurable processes and points of no return, rather than that processes have been set in motion decades, maybe centuries ago that will continue long into the future, aggravating with every day that we continue our exploitative activities, and that tipping points are flexible; the very claim of 'still having time until' becomes nonsensical otherwise. The existing approaches to narration, thus, get in the way of responding to our situation, even if it requires ever more energy, caprioles, artifices and ignorance to maintain an image of nature as a resource that could be governed through management and engineering.

We turn to cultural critique Theodor W. Adorno to open up a path into addressing these narrative challenges in coming to terms with our current environmental situation. He muses in his *Aesthetic Theory* in diametrical contrast to the image of an instrumental, functional, managerial human relationship to nature:

Technique, which is said to have ravished nature, according to a schema borrowed ultimately from bourgeois sexual morality, under transformed relations of production would just as easily be able to assist nature and on this sad earth help it attain whereto perhaps it wants [ihr zu dem zu helfen, wohin sie vielleicht möchte].¹ (Adorno 2002: 68)

In this quote, Adorno not only already brings the weight of nature as an independent agent to bear on the challenge of its exploitation and destruction, thus, reflecting today's condition, but goes even further by presenting nature as striving towards something itself and culture as a potential help in nature's quest, turning modern relations between humans and nature on their head (Krebber 2020). Nature serves and appears here, in the vein of Gunzelin Schmid Noerr's analysis of the concepts of remembrance of nature and mimesis in critical theory, as a *Grenzbegriff*, a border-concept (cf. 1990: 147). Rather than a clearly defined or determinable something, the term represents a refuge against appropriation and determination, both conceptually and materially, of that which exists

1 To recuperate specific meanings from the original, we quietly throughout adjust the existing translations of Benjamin's and Adorno's work that we reference.

beyond human culture, and, as such, defies and indeed forbids definition. Nature necessarily and crucially remains historically fuzzy then, oscillating between a (non-human) constructive principle in the world, the world beyond human definition, and a collective term for things as they appear for themselves rather than for humans. On a phenomenological level, these dimensions are all mediated through each other, while also being always mediated by human culture (Cook 2011; Krebber 2017). In the following, we take recourse to and understand nature throughout the sources we engage in this very sense, while our approach is precisely an attempt to further narrow-in, make visible and concretize slowly what nature might be on its own accord – although we far from claim to provide a definitive answer to this. Following Adorno, we want to suggest that considering nature as striving towards something indeed helps to make sense out of our narrative challenges and current situation, while narration foreshadows as a potential technique for nature's assistance. We propose a narration *with* nature as a way of challenging relations of production, by countering established narrations *about* nature that uphold and continue existing (capitalistic, nature-dominating and -appropriating) relations of production, to open up the possibility for assisting nature to attain where it might want to head.

A lead for such narration came from a European artist friend of Zhonghao's a few years ago. Traversing the Li River in the city of Guilin together on a bamboo raft, his friend remarked that the landscape would exactly resemble an ink Shanshui painting. Shanshui – 山水畫, meaning 'mountain and water' – is one of the major image-making genres in traditional Chinese art (Clunas 2004; Sullivan 1984). His friend's remark led Zhonghao to ponder how an image consisting of mere ink on paper, devoid of vibrant colours and optical tonality, could capture the essence of nature and evoke a sense of likeness? It is from this question that our conversation ensues. Building on our reading of literati aesthetics, on the one hand, and Adorno's critical theory, complemented by the writings of Walter Benjamin, on the other, we found common ground in the idea of a (self-)expressivity of nature. In response, we set out blending Adorno and Benjamin's theoretical considerations on language, nature and (visual) art with Shanshui painting traditions and co-conceiving a theory-driven research process to empirically explore such expression in or of nature; Benjamin's review of an exhibition of Chinese paintings at the Bibliothèque nationale in Paris in 1937 provides an important link between the two (2008). We argue that, via the link of Benjamin's philosophy of language, the likeness of Shanshui paintings relates to Adorno's promise of assisting nature by way of nature's expression and eloquence (Gilloch and Kang 2016; Pinotti 2014). Interrelating Adorno with Benjamin, we, thus, explore Shanshui in the following as a technique to recognize and make visible that voice.

Adorno and Benjamin's Eloquent Nature

Adorno makes his observation on nature's striving as part of a reappreciation of natural beauty in and for aesthetic theory. Whereas in the passage quoted above he proposes that nature itself wants to head somewhere, and, thus, strives for something, natural beauty

complements this recognition as a recognizable expression or forceful impartation of this tendency upon the human subject:

A qualitative distinction in natural beauty can be sought, if anywhere, in the degree to which something not made by human beings speaks: in its expression. Without receptivity there would be no such objective expression, but it is not reducible to the subject; natural beauty points to the primacy of the object in subjective experience. Natural beauty is perceived both as authoritatively binding and as something incomprehensible that questioningly awaits its solution. (Adorno 2002: 71)

According to Adorno, in the experience of natural beauty, nature or natural elements express to the human subject what they desire from and for themselves in ways where the human subject steps outside herself and perceives nature on its own terms. But this expression is both a task and incomprehensible, thus, requiring translation (Adorno 2002: 73). Nature reveals itself within this expression as longing and with its own emotional states, as Adorno clarifies earlier in the text:

What nature strives for in vain, artworks fulfil: They open their eyes. Once nature no longer serves as an object of action [that is, as a resource of human (re-)production and appropriation or its own self-preservation, the authors], appearing nature itself imparts expression, whether that of melancholy, peace, or something else. (Adorno 2002: 66)

That nature here requires the human artwork to achieve what it wants already foreshadows the possibility of an inter-ecological comprehension, alongside a central role that art or aesthetics might hold in this comprehension (Hogh 2016; Krebber 2020; Tao 2018).

A concrete fleshing out of what such striving by nature might mean or how it manifests can be found in the work of the ornithologist Richard Prum. In his book *The Evolution of Beauty* (2017), he reconsiders Darwin's widely underappreciated concept of sexual selection. Comparing mating rituals in different bird species, Prum argues that they tell a story of historical female evolutionary agency. He ties the emergence of elaborate courtship displays in species such as birds-of-paradise, bowerbirds and especially lance-tailed manakins to an excitement and preference of female birds for exuberant, showy and vigorous males. Mating acts prove enormously violently submissive in some species. Ducks, for example, are infamous for their multiple acts of rape that even lead to the death of fought-over females. Such behaviour is older in evolutionary terms than the complex and drawn-out courtship in other bird species. Thus, according to Prum, the elaborate courtship rituals emerged as a guard against the risk of assault and rape. Through sexual selection, the birds thereby shape(d) the morphology and social behaviour of their species. However, the agency displayed here (by choosing mating partners) is importantly twofold: on the one hand, the females act to safeguard themselves from harm, but, on the other, they independently from the former also act to intensify their pleasure. Whereas the pursuit of self-preservation, i.e. the reduction of harm, would have resulted in blander, less vigorous males as opposed to the highly exuberant appearance and showy behaviour of the males of the species, enlarging their

pleasure that they derive from the exuberant males highlights aesthetic pleasures and desires as motivations independent of self-preservation. By channelling the violent energy of males into evermore elaborate, time- and energy-consuming mating displays that preoccupy the males, the female birds pacified the mating act, while equally working towards heightening their pleasure from the more elaborate displays by allowing them to take extended pleasure in the appearance and behaviour of their male contenders. The birds, in other words, make their own species and history in the pursuit of not just self-preservation, but also preferences for aesthetic pleasures that serve no other function, while evolutionary-historically shaping their species' behaviours, morphology and products. Reconnecting Prum's exploration to Adorno, the element of aesthetic preference widens to nature, or more precisely, its myriad entities, pursuing personal desires, whether consciously or unconsciously, that shape both their own biology as well as the ecological communities in which they live.

Walter Benjamin complements Adorno's perspective now (both were, of course, heavily influenced by each other) with a theory of inter-ecological communication and understanding (Bracken 2002; Procyshyn 2014; Schweppenhäuser 1992; Smith 2001). His 1916 essay "*On language as such and on human language*" already makes it explicit in its title that he thought of language not only as a human trait. He further elaborates that:

The existence of language, however, is coextensive not only with all the areas of human mental expression in which language is always in one sense or another inherent, but with absolutely everything. There is no event or thing in either animate or inanimate nature that does not in some way partake of language, for it is in the nature of each one to communicate its mental contents. (Benjamin 2004: 63)

Accordingly, everything natural or non-human, and not just humans, is also expressive through language, expresses mental content within that language and communicates this content (Gasché 1986). As a consequence, there is also the possibility of understanding non-human expression by humans, as he goes on to argue:

Through the word, humans are connected with the language of things. The human word is the name of things. Hence, it is no longer conceivable, as the bourgeois view of language maintains, that the word has an accidental relation to its object, that it is a sign for things (or cognition of them) agreed by some convention. Language never gives *mere* signs. However, the rejection of bourgeois by mystical theory of language likewise rests on a misunderstanding. For according to mystical theory, the word is simply the essence of the thing. That is incorrect, because the thing in itself has no word, being created from God's word and known in its name by a human word. This cognition of the thing, however, is not spontaneous creation; it does not emerge from language in the absolutely unlimited and infinite manner of creation; rather, the name that man gives to the thing depends on how the thing communicates itself to him. (Benjamin 2004: 69; original emphasis)

Similar to Adorno, Benjamin registers here the capacity of humans to recognize and understand things on their own terms, and, thus, beyond an anthropocentric and anthropogenic bias. All things, furthermore, express themselves in their own medial languages

that, in turn, can be (and strive towards being) expressed through the human word and language in the name, which is, according to Benjamin, the form of language as such (Benjamin 2004: 67–68; Procyshyn 2014; Smith 2001). Within such reaching of the expression of things into language, humans – and by extension nature and the non-human itself – become reflexive, for in translating the language of things into language as such, humans “cannot but add something to it, namely knowledge [or cognition, i.e. *Erkenntnis*]” (Benjamin 2004: 70; see Gasché 1986).

Benjamin's textual production can generally be subsumed under the effort to bring things, or that what it is that things are in and for themselves, to cognition, a task that he performs by immersing himself into the things and approximating his thinking, language and understanding to the things' own expressions (Procyshyn 2014; Steiner 2010: 42). Representation through language is key to this effort. Through his specific use of language, Benjamin attempts to make concrete, within his language, the things and their being – not to explain them but literally manifest them in what they are according to their very own essence in ways that they become recognizable to us and, thereby, to themselves (Schweppenhäuser 1992: 21–22). Adorno perceived Benjamin's efforts and capacity in this respect as second to none (1977: 242). This effort, however, is not one of simply reading and translating intentions into human understanding – instead, it is surrendering such a human perspective (Gasché 1986).

Such a reading of things and their expression now occurs through and in images, as both Benjamin and Adorno make explicit. Drawing on the work *Adam's First Awakening and First Happy Nights* by the 18th-century German poet Friedrich Maler Müller, Benjamin points out:

In the same chapter of the poem [the third: *Adam's Awakening in Paradise*, the authors], the poet expresses the realization that only the word from which things are created permits the human to name them, by [way of that word] communicating itself in the manifold languages of animals, even if mutely, in the image: God gives each animal a sign, whereupon they step before the human to be named. In an almost sublime way, the linguistic community of mute creation with God is thus conveyed in the image of the sign. (Benjamin 2004: 70)

Adorno compresses this insight in *Aesthetic Theory* by stating: “The rhinoceros, that mute animal, seems to say: ‘I am a rhinoceros’” (2002: 112; Flodin 2022). Similarly, he echoes and expands on Benjamin in his re-evaluation of natural beauty, by pointing out that the latter's experience “takes recourse to nature exclusively as appearance, never as stuff of labor and the reproduction of life, let alone the substratum of science. Like the experience of art, the aesthetic experience of nature is that of images” (Adorno 2002). However, precisely in this aesthetic experience, nature “is not perceived as an object of action”, i.e. an object on which humans act, but the experience represents a “sloughing off of the aims of self-preservation” (ibid.: 65). According to Adorno, aesthetic experiences of nature foreshadow both a possibility of human-nature relations beyond the instrumentalization of nature for our own self-preservation as well as a recognition of the desires of nature beyond its own self-preservation, and as a sphere governed by more than self-preservation. Aesthetic experience of nature, where aesthetic, it should be noted, exceeds

the narrow meaning of a theory of art and widens to sensual experiences, hence, becomes the space wherein we can access, perceive and recognize those strivings of nature that exceed both the functionalistic context of its self-preservation and the nature scientifically determinable.

However, as Adorno highlights, there is no immediate reflexive, analytical access to such experiences and images (Krebber 2020).

The more intensively one observes nature, the less one is aware of its beauty, unless it was already involuntarily recognized. [...] Nature's eloquence is damaged by the objectivation that is the result of studied observation [...] If nature can in a sense only be seen blindly, the aesthetic imperatives of unconscious apperception and remembrance are at the same time archaic vestiges incompatible with the increasing maturation of reason. Pure immediacy does not suffice for aesthetic experience. Along with the involuntary it requires volition, concentrating consciousness; the contradiction is ineluctable. [...] Adequate knowledge of the aesthetic is the spontaneous completion of the objective processes that, by virtue of the tensions of this completion, transpire within it. (Adorno 2002: 69)

Although Adorno focuses his reflection on the experience of beauty in relation to nature, we must assume that the eloquence of nature's expression is equally diminished in other aesthetic experiences of it. Reflexive recognition of nature's expression, hence, cannot be accessed directly or immediately deduced from aesthetic experience. Instead, it requires art, "for in art the evanescent is objectified and summoned to duration" (Adorno 2002: 73) and, thus, becomes analysable and experienceable in a reflexive way. Here, we again complement Adorno's considerations by turning to Benjamin to ask how we might understand and apprehend nature's desires.

Benjamin challenges the European disregard for paintings from the Ming and Qing dynasties in his review of an exhibition of J.-P. Dubosc's (1903–1988) collection of Chinese paintings at the Bibliothèque nationale in Paris in 1937, curated by George Salles (1889–1966). Readily integrating – or rather not even separating in the first place – calligraphy, poetry and painting, Benjamin emphasizes via a quote by the collector that the literati's approach to painting would be completely anathema to literature. Quoting the writer Lin Yutang (1895–1976), Benjamin, furthermore, evinces in relation to Chinese calligraphy

that practically all the organic forms and all the movements of living beings that exist in nature have been incorporated and assimilated. [...] The artist [...] seizes upon the stork's thin stilts, the hare's bounding contours, the tiger's massive paws, the lion's mane, the elephant's ponderous walk – and weaves them into a web of magical beauty. (Yutang, quoted in Benjamin 2008: 259)

Most importantly for our consideration of narration as a form of world-making, Benjamin adds that

Chinese calligraphy [...] appears as something eminently in motion. Although the signs have a fixed connection and form on the paper, the many "resemblances" they contain

set them moving. Expressed in every stroke of the brush, these virtual resemblances form a mirror where thought is reflected in this atmosphere of resemblance, or resonance. (Benjamin 2008: 259)

Thus, the “image embodies something that is fluid and ever-changing” (ibid.). The literati paintings represent unfolding narratives within themselves. Quoting the exhibition’s curator Salles that “in China [...] the art of painting is first and foremost the art of thinking” (Salles, quoted in Benjamin 2008: 259), Benjamin eventually highlights a quality in Qing and Ming dynasty paintings that positions them at the intersection of “thought and image” (Benjamin 2008: 259; Gilloch and Kang 2016; Richter 2007). This particular effort and quality places the paintings at the intersection of nature’s expression and our aesthetic experience in ways that we might become cognizant of nature’s expression(s).

Approaching Nature’s Expression through Shanshui Image-making

Diverging from the historical trajectory of optical images in Western literature (Kemp 1990), our project’s exploration into the concept of “likeness/意象” (Gao 2018) as evoked by Chinese Shanshui imagery (Sullivan 2008) in today’s era of photographic and digital representations commences by intertwining this very notion of likeness with the concept of “expression” in Adorno and Benjamin. The connection, achieved through Benjamin’s language of things, intricately binds the realms of the human and the non-human. This relation allows for a nuanced understanding of Shanshui traditions and their relevance in contemporary visual culture. The artistic practice of Shi Tao (1642–1707), a distinguished Chinese Buddhist monk, calligrapher and landscape painter of the early Qing dynasty, provides a model for our artistically contemplative journey (Clunas 2004) (see Fig. 1).

Shi Tao’s legacy is encapsulated by the phrase “借古開今”, translating to “borrowing the past to open up the present” (Han 2013). This concept serves as a testament to Shi Tao’s exceptional ability to repeatedly draw inspiration from historical traditions while forging innovative paths that further open up the field of both image-making and perception. Drawing upon the rich tapestry of Shi Tao’s methodologies and frameworks, our reflexive exploration takes a similar turn towards their innovating application in our contemporary creative endeavours. This transition is a deliberate effort to incorporate Shi Tao’s insights into our own creative project, seeking to make accessible (and potentially legible) the expressions of nature through a lens that synthesizes tradition and contemporaneity. In doing so, we embark on a transformative journey, where historical legacies intertwine with present situations, providing an alternative framework for understanding and engaging with the expression of nature. Tao’s Shanshui images, we want to propose, are profoundly attuned to the natural world, akin to the way the name of a rhinoceros is seemingly suggested to us through non-human expressions. This deep connection grants Tao’s Shanshui art a unique permit from nature, allowing for an authentic, symbiotic and interactive relationship, much like a dialogue between the human and the non-human realms. Tao’s images achieve this interconnection through four charac-

teristics derived from Shanshui traditions: perspective, non-space, Shanshui spirit, and action.

(Figure 1:) Shi Tao 1698. *Landscape, ink on paper*, 136.0 x 58.2 cm. A landscape painting by Shi Tao depicting a serene natural configuration. Source: National Gallery of Viktoria, Melbourne, Australia.



Diverging from the Western approach to image-making, which often relies on optical technology and scientific precision, Shanshui art defies conventions of singular, static or linear visual perspective (Alpers 1990; Gombrich 1960). Shi Tao's Shanshui images transcend fixed viewpoints, inviting viewers into a dynamic journey through the landscapes depicted. This approach aligns with the literati concept of 卧游 ('wandering and contemplating'), fostering a more immersive and reciprocal dialogue with both nature and the artwork via viewing (Liu 2017).

The deliberate incorporation of blank spaces or non-space in Shanshui images serves an important purpose by creating an appearance of being ostensibly incomplete; the limitations of human understanding and the enigmatic aspects of the universe are revealed from a state of perceived nothingness (Hu 1995). This visual representation of non-space becomes a fertile ground for the nurturing of imagination, offering infinite possibilities for the existence and expression of the non-human and nature.

Beyond the immediate realm of image-making, Shanshui embodies a dynamic mindset known as the *Shanshui spirit* – an open, flowing mental state seeking harmony with the environment (Gao 2020). This mindset acknowledges human partiality, fosters communication with non-human entities and promotes a profound sense of self-orientation within the cosmos.

In traditional Shanshui practice, images are not merely outcomes of representation. Instead, literati artists, such as Tao, emphasize Shanshui action, involving a physical engagement with nature; as such, they are removed from the acting-upon-nature to which Adorno contrasts the aesthetic experience of nature. This experiential approach, as articulated by Shi Tao's mantra “搜尽奇峰打草稿” ('searching for all peculiar peaks to create a preliminary draft'), underscores a dynamic and comprehensive interaction with nature (Su and Hu 2008). The act of active immersion into nature becomes an integral part of the imaging process of nature, inseparable from the creation of art. This connection, as practiced by Shi Tao, unfolds through the expansive medium of creative expression, bridging the gap between the artist and the natural world in a reciprocal dance of creation.

In order to trace the intricate and expressive narratives potentially embedded in nature, we pursue a multistage approach that draws on these Shanshui characteristics, while updating the traditional perspective with the present by bringing it into conversation with technologies such as three-dimensional scanning, XR (Extended Reality) and the construction of interactive environments. In the initial phase, a process was devised that interweaves the key aspects of Shanshui mentioned previously – image, perspective, spirit and action. This process was implemented at Tai Lake in Suzhou, Jiangsu Province, China, a locale of significant environmental and economic importance (Sun et al. 2015). Additionally, in contrast to Suzhou's garden heritage, which highlights human ingenuity, the lake demonstrates a long history of underscoring nature's role in shaping Suzhou's landscape (Henderson 2012).

Our process started with developing a theory of nature's expression from our reading of Adorno and Benjamin. From there, we relied on previously taken, shared boat excursions on Tai Lake. Zhonghao continued the first empirical step of the study over a period of several weeks by placing primed canvases in select locations around Tai Lake. We then discussed and collectively reflected the material gathered, in the form of the canvases, to guide Zhonghao's further artistic treatment of the images. A next step, currently in

preparation, is to further develop the images in a similar manner into an installation. The process, therefore, is shaped collaboratively by shared reflections and conversations that closely intertwine empirical engagement, critical reflection and artistic production in our attempts to narrate with, rather than about, nature.

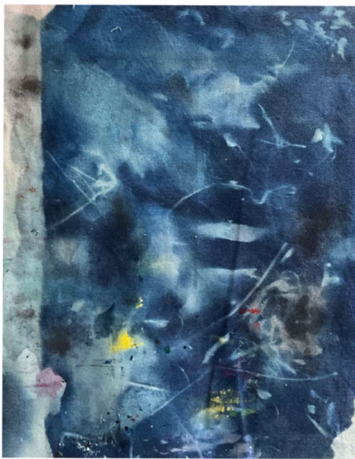
In alignment with the philosophy of Shanshui action, we ventured into less explored areas of Tai Lake through kayaking and sailing (see Fig. 2). This active and embodied mode of travel allowed for a relational engagement with the surroundings, presenting a contrasting perspective to traditional modes, such as roads and jet planes, where the processes of viewing and imaging nature become submerged. Most importantly, these excursions opened up the ignored, overlooked and forgotten spaces of Tai Lake – the flip-or backside to the reworked and appropriated materiality of the lake's waterfront, which drowns out any expressions and merely reflects aesthetic experiences of human industry. Of course, we do not want to suggest that the background is not affected by human activity, hardly so. But human industry focuses all its efforts of appropriation and remodelling on the parts of the lake that face human dwellings while deliberately ousting the rest from memory. As a result, the expanse beyond potentially provides a space where nature expressively reacts and responds to its appropriation and submersion precisely because it is deliberately forgotten and, thus, gains space to express itself.

(Figure 2:) Photograph capturing a field research expedition into Tai Lake. Zhonghao Chen 2023. Courtesy of the artist.



Cyanotypes and assemblage techniques were initially applied to provide a double substrate for the expressivity of nature in the locations engaged (Hooker 1995; Ware 1998). The coated canvases and materials placed onsite created a hypersurface documenting the existence and activities of elements, plants and animals through the interplay of light, time and space. Weathering, including the transformative effect of rain on cyanotypes, added an unexpected dimension where the environment participated in the artistic process with its own ink medium (see Fig. 3). Here, a reversion into naïve realism is most imminent. However, rather than a direct capturing of nature's expression, this step is one of collecting material for artistically further processing, unfolding and bringing out the expression from these utterances by way of Shanshui techniques; nature's expression is the result of this process, not its origin. This painstaking and immersive journey, often spanning days, redefines the role of the image-maker. Collaboration, adaptation and response to an expanding visual sphere and beyond are becoming paramount and highlight the agency of the otherness encountered in the process. This process presents a stark contrast to the classic image-making of the individual human author or artist dominating the visual world at their convenience.

(Figure 3:) Photograph displaying field samples of cyanotype retrieved from the Tai Lake area. Zhonghao Chen 2023. Courtesy of the artist.



Upon completion of the cyanotype process, the canvas, now imbued with an environmental contribution, was relocated to the studio. Close investigations led to the incor-

poration of painterly interpretations that co-fabricate and -interpret expressions based on the journey imprinted into the image's surface. The canvas was further painted, photographed and digitally developed, continuing the creative process through transmedia procedures (Jenkins and Deuze 2008). Layering and juxtaposition, common strategies in Shanshui painting, were employed to expand the democracy of the documented expressivities in the realm of digital imaging (see Fig. 4 & 5). This process transcended linearity and fixation, constructing a hyperimage that traces diverse narratives of nature's expression (Thürlemann 2019).

(Figure 4:) Zhonghao Chen 2023. *Digital Fold in Transition 1*, digital artwork. Courtesy of the artist.



(Figure 5:) Zhonghao Chen 2023. *Digital Fold in Transition 2*, digital artwork. Courtesy of the artist.



In the sense that we have introduced it via Adorno, Benjamin and Shanshui practitioners, this process needs to be perceived as an attempt for us to step back behind our anthropocentric and anthropogenic perspective and let nature express what it wants to say. Adorno makes this explicit, especially in relation to the expression of natural beauty, but it applies to the expression of aesthetic experiences of nature generally:

Goethe's "Wanderer's Night Song" is incomparable not because here the subject speaks – as in all authentic works, it is, rather, that the subject wants to fall silent by way of the work – but because through its language the poem imitates what is unutterable in the language of nature. (Adorno 2002: 73)

Adorno attests Goethe here that he brings to expression what nature says. This process is not to be understood as a translation in the common sense, however, but rather as a continuation of nature's expression and co-production – co-narration – between nature and the human artist that allows for more than just its translation into human language for us to understand (a translation in the Benjaminian sense, see Gasché 1986). Rather, through human linguistic, intellectual, reflexive capacities, evolved in and through nature but, simultaneously, enabling resistance to the compulsion that the chaotic natural process comprises and drives it forward, nature comes to know itself in ways that its desires (strivings) can be advanced against its own compulsion. It is a *narrating with* nature

that makes nature's expressed desires visible, accessible and considerable. In this sense, human (artistic) capacities are an extension and continuation of nature, the evolutionarily emerged tool of nature to express its own desires in ways that it becomes possible for them to be activated. Here, then, materializes Adorno's hope for helping nature to attain its wants (2002: 68).

The adaptive and recursive imaging process undertaken in our project, thus, seeks to 'listen' to and bring forth the expression of nature, thereby challenging the prevailing anthropocentric interpretations dominated by linguistic language. The project's culmination envisions transposing these images into the context of an installation. The progressive and expansive nature of our imaging project, extended into the studio environment, facilitates a diverse array of techniques and technologies in addition to field practice in this venture. This expansion extends dialogues between humans and nature through means of image-making and a participative sphere of imaging action, fostering a networked input and distribution. Furthermore, constituting the surficial index into a hyperimage continually unfolds and entangles itself in the domain of image and imaging.

Shifting Relations of Narrative Production

Explorations of narration for recognizing other-than-human contributions involved in the making of the world tend into two directions. On the one hand, they pursue how other creatures make narrative sense out of their world, or how they etch narratives into the places they inhabit. They, thus, attempt to inherit the place of non-human others (plants, organisms, animals) and how they make places their home. On the other hand, they tell stories of cohabitation and -shaping places, i.e. of how the world is one that is always already more-than-human, and, thus, make visible and write into the human world how the world is made not just by humans (Bencke and Bruhn 2022; Donly 2017; Jacobs 2024; Nitzke 2020; van Dooren and Rose 2012; cf. Fenske and Norkunas 2017: 105). Our own experiment expands on these explorations by engaging the relations of production in narration. By recognizing, giving space to and furthering nature's expression in collaboration with nature, we argue to shift these relations and, thereby, provide a crucial opening for nature to become eloquent and make known, in collaboration with the human, its own desires. This, however, then makes potentially visible where to nature wants and strives to go, and, thus, manifests nature's impact and influence on the world's making. The in-progress images presented here as part of our text offer a fragmented entry point into these intentions and crystallization of the project's current phase (see Fig. 4 & 5). Currently and continually folding, transmitting, duplicating and evolving, they showcase documented expressivity from the localities engaged, expressed through a language of things, which is communicated by connecting field research, assemblage, documentation and further artistic expansion in the Shanshui tradition. In this process that is both recursive and expansive, contemplating the sporadic non-space on the image's surface reminds us of human partiality and the otherness embedded in and contributing to this serial of images – a plural Shanshui of our time, a Shanshui that facilitates a multispecies sphere that is co-fabricated and -narrated.

Both images and envisioned installations aim at expressing nature's longings and desires, while also providing an opportunity to engage nature's expressions, potentially vis-à-vis Tai Lake's human appropriation. In this respect, they are an experiment in narrating *with* nature that contributes a specific way of narrating nature that responds to the narrative challenges that we lay out above. We imagine this form of narration not to be exhausted by merely recognizing a space of *unknowability* though. Instead, if anything, such narration is determining and deciphering the object of knowledge even further. But this deeper infiltration of the object is one of negotiation *with* the object that requires a form of communication and conversation with it – a getting-to-know – that enables the expression of what objects themselves strive for, while working through their nature-scientific determination. Narrating with nature, then, is not a way of understanding nature better or more comprehensively by calculating its unreflexive, automatized functioning from the outside, but by negotiating and communicating with nature in ways that it makes legible whereto it strives to go. Thereby, we focus on the *inter* of interspecies relations in multispecies worlds, environments and socio-ecological communities, while the narration that ensues, in the form of the images, always already considers and has nature's desires and strivings inscribed into them. Thus, it shifts the narrative making sense of the world from narrations where human desires take centre stage and other, non-human desires are hidden, suppressed and disregarded, to ones that integrate and bring these latter desires to expression. The artistic process – as the process of narration – is then, furthermore, one of negotiation of different desires, although this does not necessitate their reconciliation; the process can also make visible and retain tensions and contradictions between desires. Precisely by experimenting a narration with nature, our project hopes to challenge established, handed-down, well-rehearsed but thereby also automatically reproduced ways of narrating *about* nature that prove so inadequate today.

We, thus, understand the hindrance for helping nature that is implied in Adorno's promise not in the fact that a co-narration would not yet be possible. Rather, existing (cognitive, capitalistic) relations of production, as they are evinced by Adorno as an obstacle to helping nature, do not allow for the acknowledgement of nature's voice(s) and both recognition and further determining of what it has to say, let alone acting in their accord, and, thus, help nature in attaining what it wants. Nature itself speaks and has always spoken to us, as both Adorno and Benjamin recognize, and Shanshui literati never questioned, and non-human voices have, since their emergence, found continuation in human language and artistic production, but humans have set and hardened narratives of a passive nature and the like against the recognition and furthering of the expression of these voices. By pursuing narration that refuses to talk about nature and insists on letting nature speak, and speak together with nature to make its striving known to itself and the world, our project reflexively shifts the relations of production and, thereby, challenges them beyond art, by both revealing nature as speaking and striving for itself and showcasing different relations of production – without, of course, saying that this already represents the required changes in relations of production towards cultural-ecological production with nature on a societal level.

What our project, hence, presents and aims for is not a narrative determining and rendering in deterministic, fixed, anthropocentric and anthropogenic human terms

what nature might want, but a practice of narration in which nature is enabled to express what it wants itself. Maintaining this position of narrating with nature is crucial not to fall back into anthropocentric anthropomorphism. What nature might want, then, will potentially be expressed in and through the images and installations that the project yields, which, in turn, provide an opportunity for audiences to engage with nature's expression. Such narration with nature potentially breaks with and resists the reproduction of those approaches to narration that keep us bound to instrumental relations to nature and undermines deterministic views of nature by making nature visible as self-expressing and longing. To be clear, this also leads to a different narrative about nature, of course, but crucially one that is negotiated and continually emerges in collaboration with the object by pursuing a conversation with the objects of knowledge, and that recognizes – and supports – others' desires and strivings in the world beyond functional needs that they also hold.

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Learning to Notice and Love in a More-than-human World

Maria Ilhéu and Mariana Valente

“Writing is a way of training our sensibilities, of working on our ways of living in this world with its other inhabitants, humans and non-humans, perhaps even of making us another body.” (Caeymaex 2019: 43)

Introduction

We live surrounded by life with the most diverse forms and modes of existence; we co-habit with thousands of other creatures beyond the human spectrum, beings to whom we are intimately connected, which we do not see but from whom we receive so much, yet, who we do not honour. This abundance of intertwined beings is a great wealth, an evolutionary legacy that we must recognize, revere. It is urgent that we help to develop an art of living in which noticing the multispecies world and caring for it is at the centre. Cultivating attention to the “things of the world”¹ is probably the greatest intent of education, in that it should nourish recognition and love for this multispecies world in which we live, so that with it, we continue “worlding”.²

We use the word ‘world’ because the concept of nature is often determined as a “system of objects from which we draw information, and not like an animal, a living immensity, a singular abundance of particular beings” (Molder 2007: 81). This way of telling nature, has an effect on the way one pays attention to that world of a “singular abundance of particular beings” (ibid.). It arouses curiosity and puts in motion the awareness that we inhabit a world of a differentiated abundance of particular beings. We need to pay attention to the intelligence of connections (Stengers 2019: 46) and learn to see them happening in this “living immensity”, so that nature appears full of meaning. It is this nature that we want to make present!

1 An expression often used by Michel Serres in his book *Contrat Naturel* (1992). All quotations in languages other than English in the original have been translated by the authors of this chapter.

2 Worlding, in the sense of Donna Haraway, is the capability to produce enriched worlds by becoming-with each other in unexpected collaborations and combinations (Haraway 2016).

Feeling and developing the awareness that we are not alone makes us more involved and happier beings in the process of becoming with these others “definitely others”.³ We generally live without intimate bonds with other-than-humans, in the paradigm of the exceptionalism of human life and the consequent misappropriation of a common space. For the most part, we are deaf and blind in relation to other living beings, excluding them from our homes, schools and cities. We have become depleted and live in a state of impoverishment that we impose on others without realizing what an opportunity it is to live in extended communities with many other beings; to learn from a pepper tree, a blackbird, a river, a frog, a spider, a stone. To learn worlding with them intentionally, delicately and lovingly.

We have dedicated ourselves for many years to finding strategies in order to join different processes of knowing the “things of the world”, hoping to have an effect on the ways we inhabit the earth. In this sense, we have taken inspiration from the anthropologists Anna Tsing and Tim Ingold, the philosophers Donna Haraway and Vinciane Despret, and many others. With them, we learn modes of noticing⁴ and the importance of diving passionately into the lives of other-than-humans. We learn to practice the “becoming with”, in other words, becoming another with other beings, that may ultimately mature the ability to make kin with other-than-humans. We compose with these ideas and practices in dialogue with the “delicate empiricism” (*zarte Empirie*)⁵ of Johann W. Goethe.

We have conducted different projects in ecology and education, embodied by these ideas and practices. They were carried out in both semi-natural and urban areas in the south of Portugal. We catch the elegant words of Tim Ingold to explain the aim of these projects:

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- 3 The quote “definitely others” refers to beings from other species, aligned with the French expression “autres très autres” of Vinciane Despret (2018: 13).
 - 4 This practice has been developed in several of Anna Tsing’s writings, particularly in one of her latest books *The Mushroom at the End of the World* (2015). It is a method that aims to mobilize encounters with beings in devastated areas. This encounter is multidimensional, resulting from diverse practices, for example, from musicians to cooks, from biologists to mushroom lovers and from engineers to social scientists. Anna Tsing says in a 2015 interview in Finland conducted by Maija Lassila: “We should start noticing the plants and animals around us too. In fact, there’s a lot we can learn just by paying attention. That’s one of the basic ideas that I’m trying to promote” (Lassila 2017: 28). In educational contexts, this practice produces an awareness of what is present and raises questions about how we got here and where we are going. We transform ourselves and the things of the world in these practices of attention and affection. Writing or any other form of expression takes on a poetic form, translating an art of attention.
 - 5 “Delicate empiricism” is an ethically compromised way of knowing nature, created by Johann Wolfgang von Goethe and reclaimed by some current thinkers, such as Isis Brook (2021), Lee Beavington and Heesoon Bai (2018), and so many others. It is a search for empathy and meaning with other-than-human beings. Imagination and intuition are developed and crucial in this method of knowing. In this Goethean approach, the phenomenon/being under attention participates with the learner in this process of knowing. The phenomenon/being is free in its way of existence, and we must learn to attune with it. Isis Brook (2021) states the four stages of this method/process: exact sense perception, exact sensorial imagination, seeing in beholding and being one with the object, and elaborates them. We have been working with this method in many projects (Ilhéu and Valente 2019, 2022; Valente and Ilhéu 2021; Valente et al. 2022).

[...] to forge a different way of thinking about how we come to know things: not through engineering a confrontation between theories in the head and facts on the ground, but rather through corresponding with the things themselves, in the very process of thought. (Ingold 2021: vii)

To rephrase, while still referring to Tim Ingold: “there’s a thinking that joins things up, and a thinking that joins with things” (2021: 13). In these projects, we aim to contribute to a way of thinking that joins with things. We have been training ourselves in the practice of “delicate empiricism” and have joined others, teachers and students, to learn together how to think with the “things of the world”. The brief narratives we have composed, assembling events from two of the latest projects we have worked on – *Being Stream* and *Outgoing project: children, nature and culture in relationship* – bear witness to modes of attention, communication, connection and affection with other-than-humans.

These projects resonate with some educational concerns shared by Isabelle Stengers and Donna Haraway. Stengers raises a crucial question: “What do we have to make today that could possibly be a resource of thought and life for others to come?” (2019: 43). Some answers emerge throughout her book *Résister au Désastre*, where she highlights ecological intelligence in which interdependences are cultivated, instead of dependences, with other-than-humans. To make us feel this sensitive intelligence, she gives the example of collective gardens:

The humans who tend these gardens know that they may argue about an infinite number of things, but during this time the plants are growing, and they know that they have to put themselves in relation with this temporality, the temporality of growth and the care that it implies. If we take it seriously, it will transform us. (Stengers 2019: 44)

It is this sensitive intelligence that she inspires us to cultivate and about which she says it is “our way of belonging to nature” (ibid.).

In an interview, Donna Haraway raises the question: “How can education nurture a radical ontological transfiguration of our relations with each other, with other species, and with the Earth?” (Common Worlds Research Collective 2020). The answer for her relates to the developing of a “culture of sympoiesis” (ibid.), in the sense of learning to make-with others, create-with others in a more-than-human world. These paths of creation culminate with making kin with others from different species.

We give voice here to continuous generative experiences that may produce a culture of sympoiesis. These experiences are expressed through small stories with and between the “things of the world”, definitely a multispecies world.

Three Short Stories

The short stories we present here are forms of correspondence between humans and other-than-humans. The stories highlight intimacies established at various moments and display correspondences between and with the things of the world; trees, children,

streams, students, mosses, educators, birds, researchers, sounds, colours and others are corresponding through direct, sensitive and affective experiences in outdoor places. In these experiences, we treasure their time and continuity and stress their meaning, while stimulating the use of imagination and different languages.

Stories develop the imagination when we write or read them and allow us to approach a situation in its particular way and make it interesting for others. They contain meaning in themselves, allow us to grasp the sense of their importance and develop particular writing styles. A poetic way of narrating events often emerged in the participants' writings, which we have tried to maintain in the construction of the stories we present. We want to contaminate others and worlding with these stories.

The following short stories were composted⁶ and composed from different fragments of writings and utterances by young students, children and early childhood educators. The active voice of each story is corresponding with many other voices, representing, therefore, correspondences between the things of the world. Each short story is followed by a commentary that aims to emphasize some of these correspondences and their importance in the development of a thinking that joins with things.

The first story is framed under the work of a collective of researchers, art teachers, sculptors and students of various ages from Évora's schools and from the University. *Being Stream* was the project this collective has developed over the last two years, with the intention of making-kin with an urban waterway, Torregela stream. A set of outdoor eco-art workshops were developed with Torregela stream, in which different languages were used, including photography, drawing, eco-acoustics, sculpture and writing. The use of these different eco-artistic languages was very important in forging an intimate correspondence between the students and Torregela. The *Being Stream* culminated in an exhibition at the Arts Centre in the city of Évora. This exhibition showcased the ideas, experiences and eco-art works produced during the project, calling for an immersion in the stream and the urgency of caring for it. This project continues to influence others through the practices of the participating teachers, who developed a love for the rivers and streams in distress.

The stories *Becoming with a lemon tree* and *Noticing the other-than-human in the playground* are based on testimonies of early childhood educators who participate in the *Outgoing project –children, nature and culture in relationship*. One of the first challenges of this project was practicing different stages of delicate empiricism, themselves and with their children, as a method of knowing nature and becoming other(s) with others-than-humans. *Becoming with a lemon tree* was composed with the experience of an early childhood educator who was challenged to go noticing and elect a singular non-human

6 In the sense that "in a compost, identities break down and new compositions become possible" (Stengers 2019: 26).

being to dedicate attention to him/her through time in the sense of “go visiting”⁷ of Hannah Arendt (1982).

The story *Noticing the other-than-human in the playground* relates an event with the educator and their children in relationship with an olive tree. So many encounters and discoveries! They were mediated by the educator who had reported the sayings of all the children in this adventure. We composted and composed with all these voices producing an active voice that translates in a rigorous way what happen there. This very short story contains so many precious events!

The *Outgoing project* is being developed by a collective made up of researchers from various institutions and early childhood educators. The practices developed by these educators are shared and discussed at monthly meetings, together with a number of immersion sessions in different contexts.

Being Stream

A new visit to the riverside. Getting up early and going somewhere other than the classroom is something we should all have the chance to experience. It is a different feeling. I loved arriving and seeing everyone delighted to be there, eager to do something different and get to know the stream. As we walked along the stream, we were encouraged to actively observe the events that caught our attention, elements that were calling us. We kept being told: go noticing! And over the course of several visits, we came to understand what this meant. We drew, photographed, wrote and recorded sounds from the stream. The continuous encounters with the stream changed our mindsets and opened us up to new ideas and experiences. So many beings; we saw some, sensed others and observed traces of a few that we would not have identified on our own. We were amazed at the diversity of beings living in those places. We wanted to get to know them. We researched and made watercolours, drawing and painting the shapes and colours of their bodies with our own. As we got closer to the Torregela stream, we grew. We learned to see more and more exuberance, even in a degraded urban stream. This stream may be of little importance to many humans, but it is so important to other beings that live there. Under my feet I see a bag of rubbish, various branches and little plants. I see more rubbish and weeds. Several cigarette butts on the ground. Plastic bottle tops, pieces of glass. I see whitish water. I see various stones, leaves and animals. A large bicycle tyre, clearly in a place it does not belong. I see a hole that looks like a sewer. I see the human signs of those who are not yet friends of the stream. I see tree branches that meet and intertwine, as if to say we also talk to each other. This experience makes me look at these beings differently and imagine multiple forms of communication. It is only now I am starting to notice.

7 “Think we must!” wrote Haraway (2016: 67), stressing, with Arendt, the difference between disciplinary knowledge and thought. This is a practice that requires the ability to develop active interest in other beings (Haraway 2016). It involves the whole body, and that multiplies perspectives. The world is very important; without the world there is no thought. Arendt stresses the role of imagination: “To think with an enlarged mentality means that one trains one’s imagination to go visiting” (1982: 43).

The stream shared sounds with us and we shared our favourite music, softly. I felt like the stream. Sitting on this green stone, with the stream in front of me, I hear the sound of the water mingling with that of the birds and the wind. I imagine these sounds in communication. The moss on this rock joins the soft, vivid green of every plant I can see. A tiny web, barely visible, connects two plants. I imagine the web carrying words between the two trees.

The blue and grey sky is present in all our adventures and those of many other beings. It is the home of clouds and road for birds. Soon, it will be a shelter for the stars. That same sky I see in the stream.

(Figure 1a + b:) Learning with Torregela stream. View of a greenish distressed stream site. Photographs by Maria Ilhéu.



(Figure 2:) Panel of the Being Stream exhibition composed by art student drawings. Photographs by Maria Ilhéu.



Commenting...

We are struck by the importance of the experiences which arose outside the classroom, in direct connection with an urban stream. We emphasize the students' joy in experimenting, in learning to connect with the world, a world they are beginning to perceive as plural, in learning to see and listen, in feeling such a wide range of emotions! We further emphasize, according to William James (cited by Drumm 2023: 231–232), the becoming aware that “the smallest thing is always exuberant, overwhelming and impressive”. As expressed in many of the participants' testimonies, these direct and sensitive experiences are an opportunity we should all have.

Diving passionately into the lives of beings who are other-than-humans implies different ways of knowing the world, as Tsing (2010) and Ingold (2021) propose, undoing the hierarchical practice of knowing and fuelling a thinking that joins with things. These learning processes are uncommon in educational contexts, but it is important to make them present. We learn from Tsing (2010, 2015) the importance of paying attention to degraded areas. It is not a question of contemplating a landscape that we deplore but of learning to understand what is happening there, to pay attention to beings who do not give up on these places, which are indicators of possible collaborative resurgences. The testimonies we collected echo this. So, from all our composting, the feeling grows; “I felt like a stream”.

Correspondences are very present through forms of communication that participants imagined between different beings; reaching this point was a great achievement. We highlight the sensitivity in the correspondence between the active voice and the stream; “the stream shared sounds with us and we shared our favourite music, softly”.

Becoming with a Lemon Tree

It had been raining throughout that December afternoon. I stared at my lemon tree through the glass window and saw how the top branches were shaking in the wind. His inner part was a sheltering place for two tiny birds. There he stood, firm and proud to be as such. By looking at him, I felt at peace and a huge desire to seek refuge under his branches as well. On another day, in the early afternoon, when a few rays of sunshine were peeking out in shame, I seemed to be called by the lemon tree. He remained serene, thus, conveying serenity upon me. He was accompanied by his ‘children’, the lemons, as well as the cobwebs and other tiny beings. Neither the dogs barking in the distance, nor any other noises breaking the silence seemed to affect him. We spent some time together; I spoke to him and he listened to me. Sometime later, on a different day, we occasionally came across each other; as I made my way to the patio so as to feel the sun, I looked down. There you were, also catching some sun with your highest branches dancing in the breeze. I looked at them and the way they had grown and become intertwined, the ants as they walked on you. Each time we met, I noticed things I had never noticed before. It is March now and as we meet again, I cannot help but feel closer to you. Sometimes, just like today, as I make my way to do something else, it unexpectedly feels as if you are calling me and I cannot but approach you, look at you, touch you and feel you. And what about you, how do you feel towards me?

(Figure 3:) View of the lemon tree in the patio. Drawing by an art student



Commenting...

In this story, there is an attentive and poetic description of a teacher's successive encounters with a lemon tree and with much that is related to it, producing new encounters, multiplying sensations and discoveries. There is a dance of giving and receiving attention that stems from time dedicated to the intimacy of a loving correspondence between two beings. There is a closeness, an appearance between the human subject and the lemon tree subject, and a bond is woven. This intimacy, this becoming with, implies time. In that time, there are sensations, perceptions and affections. At some point, there is a change

in the perception of the lemon tree that is evident in the writing; the lemon tree goes from being narrated to participating in communication. These gestures are processes of exteriority and interiority, in so far as they involve the lemon tree and the human being. One and the other acquire other possible existences; they mutually transform each other. The question that appears at the end of the story “And what about you, how do you feel towards me?” emerged later in our discussions with her. Now she recognizes a world where others-than-humans have their own interests and intimacies. At this point, she is experiencing the world with a sensitivity that is approaching Vinciane Despret and colleagues in their ability to attune with other beings:

A world where plants existed without emotional life would not be the same world, it would be diminished, uninteresting, devitalized. The fallow deer and the insects that live with them know this. For them, this affective mode makes all the difference. And it can make a difference to us too. This question is not merely theoretical, it relates directly to our ways of inhabiting the world, and the intimacy of the relationships we can hope to weave with it. (Despret et al. 2023: 197)

This short story also shows us how the early childhood educator incorporated the first stages of delicate empiricism; active attention and a sense of admiration for the others, establishing an intimate relationship, getting closer to the others in becoming and maintaining a correspondence with them. This correspondence lasted several months.

Noticing the Other-than-human Life in the Playground

It is so nice to touch this tree. I caress her and she tickles me. I am going to climb up her. I notice a hole in her. I am going to climb up her. I notice a hollow on the tree. I look through. Many tiny animals seem to live in there. They are black. Oh, I can see a monster! It must be a black spider; I can see her foot moving. It is not a monster at all, it is a spider! How has she made her way in? Look! There are quite a few animals inside; the trees are big, and they have become a home to spiders, leaves, soil, wooden sticks. I cannot see everything that goes on deep inside, it is too dark, and the spider seems too strong! She is standing right at the entrance! In the lower part of the trunk there is another hole; it must have been through there that the spider made her way into the tree, that must be a tunnel, it starts down here all the way up there! There are many more holes; this tree is magic; there might live quite a few more animals in it. I touch her and feel her embrace.

(Figure 4a + b:) Child with olive tree in the playground. Photograph by Susana Alves de Sousa. Olive tree trunk. Drawing by an art student.



Commenting...

After some work with kindergarten teachers in the exercise of delicate empiricism, their attention to the elements of nature has developed and a sensitivity has been established which has allowed them to see more in the world and be worlding with her children. This early childhood educator confessed that she had never paid attention to the olive tree standing in the playground, for endless years, waiting to be visited by her and the children. And then, it happened! She developed an interest in natural beings with the practice of delicate empiricism. On the day they went for a visit, she stimulated the children to pay attention to this being. So much surprise, so much curiosity, so much interest, so much attention; it was the children who 'taught' her to see more, to speculate, to imagine, to touch, go worlding with the tree and all its inhabitants.

What do we give to the things of the world that give so much to us? This is a question that the philosopher Michel Serres inspires us to ask constantly (1992). And the answers keep coming.

A small caress in exchange for a tickle, what a charming reciprocity!

Epilogue

The short stories tell of the ways in which we have been becoming with so many others; streams, trees, ants, spiders, the sky, birds, sounds, stones, water, little bubbles in the water, whitish water, and many others. We remember how the younger ones were perplexed by those little bubbles that appeared in the water. They wanted to know everything about them, how they were formed, and we remember how happy they were to learn that it was air, air that is also crucial for aquatic beings. By being by the stream, noticing what was actually happening there, they become aware that those little bubbles emerged more vis-

ibly when the speed of the water flow increased, in a change of level or around the outline of a rock. Trees are seen as shelter for other beings in two of the stories. In one, the early childhood educator feels the need to find shelter in the lemon tree herself, and she does in a way, in the serenity it communicates to her. This story takes place at the beginning of the *Outgoing project* mentioned above. It results from the challenge of developing initial practices of delicate empiricism with beings other-than-humans, in which all of us, educators and researchers, took part. Many trees were chosen by different early childhood educators. We chose to include the story of the relationship with the lemon tree because it explicitly shows a transformation in the way the educator corresponds with the lemon tree over time. In the other story, the educator also experienced moments of delicate empiricism, and that made her discover so many resources to be in relationship with children in a more-than-human world. Together, educator and children, discover other ways of relating to the “things of the world”, and, consequently, they became closer to the trees in the courtyard, similar to the olive tree that is mentioned in that story. It is so touching to find the attention and affection and even a certain reciprocity that is subtly enunciated in this story in the corporality of the contact, when the tree returns tickles in exchange for the child’s petting.

Over the years of working together on the two projects mentioned here, we tried to acquire some of the qualities of the beings to which we related, becoming others. We sensed this ability in some instances, such as in the statement: “I felt like a stream.” Another example occurs in the story of the lemon tree; the early childhood educator wants to be sheltered by the tree, as other beings are. We imagine that her desire may be transformed towards the awareness that she is and may be a shelter for other beings.

We incorporate qualities from others when we learn from others to be others; becoming with. In the continuity of projects, we are transformed. It is remarkable how human correspondence with other beings almost always takes on a certain poetic and affective form, and this was very visible in the writings of the participants in the *Being Stream* project. They have begun to perceive a world that was not present previously in their lives, and this perception is translated into a particular form of writing that surprises the participants themselves.

The quasi-poetic mode of writing is also evident in other experiences that mobilize attention to the things of the world. An example is narrated in a text which resulted from another project we developed with a group of art students designed and carried out to promote delicate encounters with a variety of trees in the city of Évora, Portugal. Each student chose an individual tree and spent time visiting it, drawing it, photographing it and approaching it with active involvement and curiosity. In these experiences, the kinship between the students and the trees was a significant achievement, as described in this testimony from one of the art student of this project:

One day I felt the sensation of being observed, I hadn’t realized that the book was urging me to read it, to listen, and understand it. In fact, while this strange book was in my garden every day, nestled in a humble corner, I didn’t realize that its language was different from mine, that it could speak through the simple sound of the leaves turning in the breeze, that those pages were formed by the many years of the trunk, and that

the words were not to be read, but to be listened to. (Art student cited by Valente et al. 2022: 127)

Another example of how intimacies between humans and trees may be revealed in the process of writing comes from an experience led by the municipality of Melbourne in Australia, in the mapping of every tree in the city with a unique ID number. Residents were challenged to participate and report the tree's conditions, but then something extraordinary happened. Instead of identifying a tree in need of attention and emailing the council to get it done, people began sending personal messages to the trees; love letters, existential queries and sometimes bad puns.⁸ The fact that the municipality made this request was, in a way, an incentive to go and notice the world of trees. The messages sent to the trees revealed a surprising world of intimacy between humans and trees. Some of them express a subject-subject relationship, with an intended reciprocity, as is the case with this letter addressed to a nettle tree in the city:

Dear Nettle, I just moved in three months ago and I'm very glad that I can talk to you through this system. I live in the first floor and I can actually see you through my window! I'm having trouble sleeping at night because of the noise of cars and ambulances at night, hope you're not suffering that much and are able to have a good sleep. Thank you for blocking the noises from the street and wish the birds don't do harm to you. Pleasant to meet you and have a nice day! Cheers! (Citizen cited by Burin 2018)

The sender of this letter establishes a correspondence with the tree in front of their house; he/she can see the tree from their bedroom window. He/she gently recognizes the tree's presence and its role in reducing urban noise and, in return, gives the attention of care; he/she worries about the tree.

Trees and other plants provide not only shelter and food for other beings but also enjoyment and entertainment. We learn so much by paying attention to these diverse modes of connection, and we delight in them. In the quote from the art student, metaphor and imagination give us the value and intimacy she sees in the relationship between the passing air and the tree. Countless narratives tell us about these connections, some of them non-functional.⁹

Learning to become another with others, is the maximum dimension of delicate empiricism, containing participatory and transformative dimensions. This method of approaching nature is enriched by many other contemporaneous methods and ideas, particularly those of philosophers, anthropologists and biologists, among others. Learning to become another is present in the story of *Being Stream*, which is the result of continuous work over several years. This becoming another takes place in a long process of attunement, an expression highly valued by Goethe and other romantics. In this process, we become ethically responsible for the other. Donna Haraway makes the idea of responsibility clear by breaking down the word and recreating it: "response-ability" (2016). The

8 See also <<http://melbourneurbanforestvisual.com.au/#issues>, <https://www.bbc.com/news/magazine-33560182>> [accessed 15 September 2024].

9 See the story of the bee and the orchid by Myers and Hustak (2020), the story of the Arab birds by Despret (2019) and the cosmopolitan events under our feet by Tsing (2010).

ability to create responses is part of a context of kinship, love and the will to live together in a multispecies world.

Attunement requires a description of the other, sensations, the exercise of imagination, communication, time, and sharing ways of relating, knowing and reknowing. It complements many ways of knowing. Attunement goes through several stages, takes time and includes paying attention. It includes training in correspondence in order to carry out becoming with. The brief stories presented here are the beginning of the process of attunement. They represent various stages in this learning process, all of which begin and continue with go noticing! We also find the importance of attunement in Anna Tsing. In particular, when she tells about her experience with matsutake mushrooms, in which attunement is achieved when a form of love, commitment and care sets in. When she finds a matsutake mushroom and learns to smell it, it enters her life; “now we live together and live with each other in a way that didn’t exist before” (Shin and Zeiske 2021¹⁰). However, before the mushroom enters her world of life, Tsing went through the encounter with the matsutake mushroom in degraded landscapes and with different forms of knowledge and thought, where love for these beings was present. Now she shares her joy with humans, through writing; a joy of indeterminate encounters with another species, encounters that give one so much.

The stories presented here were constructed from the spoken and written contributions of the human protagonists in these projects. They were composted and composed many times under ‘this’ olive tree¹¹ that keeps intruding on us, with its shadows, its movements; diverts us but also feeds and inspires us. We exchange matter through breathing, we exchange microbes and love. Becoming with this tree is also part of these stories.

We experienced glittering moments together and learnt how to make so many glittering moments grow, even when one of the participants was a degraded stream.

Go noticing we must! Making kin we must!

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10 Part of the conversation between Sarah Shin to Anna Tsing contained in the online book *Carrier Bag Fiction*, edited by Sarah Shin and Mathias Zeiske.

11 The writing of this text, with our hands, our choices and hesitations, our dialogues and decisions, often took place next to an olive tree, “this olive tree”.

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Remembering

Flowing Narratives

Sketches from Blasted Waterscapes

Chiara Beneduce

“Insubstantial water incomplete water
smelling of ghost and death
smelling of mint and I already do not know
you
water firefly restless at my feet”.
River at Daybreak, by Andrea Zanzotto (2016:
75)

Rivers, the Bloodstreams of the Earth

There is a recurring metaphor in political, poetical and scientific works on watersheds that compares them to a living circulatory system (Schaffner et al. 2021). Feminist and environmental activist Vandana Shiva once said that “a river is the lifeblood of an ecosystem”,¹ pointing out how these earthly veins are “choked” by dams and other man-made infrastructures. Big dams, in particular, have drawn a certain attention for the major effects they have on animals, plants and communities, and, in many cases, also result in the displacement and loss of both humans and non-humans (Armiero 2013; Luby 2020).

In the context of this growing body of historical and anthropological works on hydropower plants (Elie 2013; Le Mentec 2006), micro dams and smaller infrastructures have gone relatively unnoticed in the humanities. This happened primarily because of the relatively small geopolitical relevance of these projects, which also contributed to the effectiveness of local protests and their impact. An example of this is the case of the megabasins in France that have, simultaneously, proliferated from small streams and torrents, coinciding with the implementation of ecological transition policies in Europe, which, in some cases, directly funded these kinds of green energy projects. Yet, as other scholars have pointed out (e.g. Scotti 2022), these national and international policies on

1 Quote from the 2008 documentary *Blue Gold: World Water Wars*, directed by American filmmaker Samuel Bozzo.

renewables risk fuelling extractivist practices, while ignoring and going past local decision-making processes.

During my Master's in Environmental Humanities at the Ecole des Hautes Etudes en Sciences Sociales, I conducted a two-year field research project on Italian water communities fighting against the ongoing anthropization of the small rivers and streams across their territories. As all major waterways have already been exploited for different purposes by industries, agrobusiness companies and both public and private hydropower sectors, new small-sized hydropower plants have bloomed in the past twenty years to capture the last streams free from dams, water withdrawals and artificial riverbanks. Even though ecologists have long warned us of the impact that these human activities have on waterscapes (from preventing fish migration to the erosion of the soil and the effects of hydropeaking), the construction of new infrastructures and artificial basins never stops. Ecologists have long warned us of the impact that these new power plants and water management structures have on waterscapes, meaning the complex socio and environmental co-construction of hydro-spaces that are influenced by power structures and, at the same time, open to new negotiations (Leonardelli et al. 2023). But projects such as dams and channels have also shaped our collective *memoryscape* (Butler 2008) and our imagination by imposing their impressive and brutalist presence. They have changed the landscape, moving around waterways, drying out wetlands and flooding villages (such as Curon Venosta and the old square of Pieve di Cadore). This is why petitions for the conservation of water bodies talk about a "*torrenticidio*" ("creekcide"), and activist movements, such as *Free Rivers*, provide alternative narratives to call for action. I consider these creative political and artistic acts of public participation part of what Matthew Henry calls "hydronarratives" (2022), an entanglement of past recounts and new perspectives that actively engage with the reimagination of water futures.

I argue in this text that narration plays an important role in current waterscapes, as remembering the past and, at the same time, imagining a thriving future for rivers seems increasingly difficult. I do so through the perspective of multispecies and sensory ethnography to better seize the connections between more-than-human communities and the unpredictable small streams that flow through the Italian peninsula.

In this regard, the *Camille Stories* by Haraway (2016) is a fascinating form of narration as it shows the infinite possibilities of speculative fabulation in narrating both the ruins and the possibilities of our more-than-human world. I find it interesting that the *children of compost* start restoring the earth by taking care of ecological corridors, which "is how they imagine and practice repair of ruined lands and waters and their critters, human and not" (Haraway 2016: 140). In fact, rivers are not only blasted ecological corridors, but also sites of resistance and reparation: the *Camille Stories* inspired me to see them from both perspectives, and to find hope in the concrete banks and muddy riverbeds that I visited during my field research.

I have taken long walks along rivers and streams (Tagliamento, Arzino, Isonzo, Misa and Tanagro, to name a few) during my field research with the people involved for various reasons in the defence of waterways in their local communities. I met with some of the people who participated in the process of the restoration of these ecosystems in May 2023, repairing rivers by taking down old and not operating dams. These social actors and their actions have inspired me to produce a short fictional story, *Ruins Lake*, inter-

secting anthropology and literature. Thanks to a double channel – writing and orality – I have tried to improve the idea of an “eliciting prophetic speech” as an acrobat of my time² (Benedetti 2018). I will, therefore, share just some sketches of narrations and sensory knowledge in this essay – what a town smells like in the aftermath of the flood, the unexpected multispecies encounters – that I would return as such: fragments of prophecies unheard, that as a researcher I felt a response-ability to witness (Rose and van Dooren 2017). The aim of these fragments is to open a breach in the “narrative violence” (Barca 2014) of political and media institutions that practice the active silencing of individual and collective experiences of environmental catastrophes. I, therefore, hope to contribute with this paper to a body of research that focuses on the perceptions and the embodied experiences of disasters, entrenching them in multispecies territories.

Floods in the Making

I first became interested in the political and social mechanisms behind the escalating anthropization of rivers in 2018, when the Rio Carne, a small stream in the Ligurian Alps, was threatened by the construction of a small hydropower plant. A seven-year-long process at the Public Water Court in Rome finally led the private enterprise to abandon the project, and the local collective of the village of Pigna won the case.

Following a chance meeting with some of the collective members, I suddenly discovered that it was far from being the only case. Watching the cartography of new and old projects on both national and European scales I began to feel a sort of distress: multi-colour points covered almost every one of the slim light-blue stripes representing waterways on the map.³

Italy has a long history of hydro-power infrastructures which started in the 19th century and had a boom during and after the Second World War. In more recent days, two laws had a major impact on the production of energy: the first one in 1999, known as Bersani’s Decree, set in motion the market opening and the end of the state monopoly on the energy sector. The Law 99/2009 came in second, following the European Directive 2009/28, introducing “green certificates” and funding for the implementation of the renewable energy sector.

Consequently, in 2022 there were more than 2450 new hydropower plants in the last remaining free-flowing waterways, the majority of which are the delicate Alpine streams.⁴

2 All quotations in languages other than English in the original have been translated by the author of this chapter.

3 The *Tracked Barrier Map* is still incomplete and there is a clear lack of data on the Italian peninsula, but it still shows the fragmentation of river connectivity caused by dams and weirs in Europe. It was produced by Amber citizen scientists and is available at: <<https://portal.amber.international/>> [Accessed 10 June 2024].

4 Hydropower chart from 20 April 2023, published by Terna S.p.A, the Italian transmission system operator and available at: <<https://www.terna.it/it/sistema-elettrico/dispacciamento/fonti-rinnovabili>> [Accessed 10 June 2024].

The recent floods that have followed one another in Italy are not only the symptoms of climate change – this hyperobject that seems to escape our imagination – but also the very real effects of poor management, uncontrolled concreting of waterways and swamps, and the dangerous expanding of cities inside the riverbeds.

I have attempted to follow the river flow in the Italian peninsula, starting from the northern Alpine streams in Piemonte, Veneto and Friuli Venezia Giulia, and then descending through central Italy, where, in September 2022, the Misa River flooded, in the province of Ancona (Marche). In 2014, four people had already died from a flood, and I felt the need to go there and witness the second dramatic foretold catastrophe occurring in less than ten years.

One month had already passed since the flood when I arrived in the city, yet the smell of mud mixed with the sewage blackwater continued to exude from the drain covers. Long brown lines marked the flood peaks on every wall of the historical centre, just a few metres from the Misa River. Yet, walking along the promenade, I could not see the water: two-metre high riverbanks completely hid the Misa, and were deliberately built to slow down its recurring floods.

But this effort was at odds with the fact that the riverbed is in concrete, and the estuary was narrowed down to make space for the city development, to the point of being narrower than the river itself. As a result, when there are floods, the water gains speed right where the population density increases.

A little out of the city, I took a longer walk with Luciano, a retired elementary teacher and environmental activist, in one of the worst affected areas, known as Bettolle. The landscape is flat here, and the river runs slowly. Looking at the Misa at that moment, no one could imagine its disruptive power. Not much energy can be produced in these lands, yet Luciano was telling me that the region had approved, and later abandoned, the project of a new hydropower plant in the place of an old weir on this same capricious stream. Two people died in the house just in front of the weir when the river flooded on 15 September 2023. Another controversial project, an artificial basin in the farmlands, was under construction at the time of the flood: walking in the disaster zone, Luciano mentioned the thousands of dead animals, mainly the pigs from the farms that dot the countryside. Never to be found, some of them are still decomposing under the mud.

Crayfish Encounter

Further south on the boot-shaped peninsula, in the region of Campania, I encountered for the first time the rare Italian crayfish, *Austropotamobius pallipes*, an endangered species living in quiet and clean waters. I was visiting the mystical early Christian Baptistery of San Giovanni in Fonte (5th century) that is known thanks to an annual miracle: during Easter, at night, the spring inflates itself until it fills the basin with pure water.

I had been looking to find this particular species of crayfish since the beginning of my research. Maria, the guide I was with, said she was going to show me some rare crabs, so I was really surprised to see many small crayfish lying on the wet floor of the baptistery. These very rare animals are threatened by yet another new hydroelectric power project,

this time on the Tanagro river. Activists from different regions have taken this animal as a common symbol of resistance against the extractivism of water resources.

The *Austropotamobius* are endangered by the degradation of their ecosystem, as they prefer to live in clean and calm waters. If I could not meet any before, it was because I was looking for them in northern Italy, where it is increasingly difficult to find free-running rivers that are clean and not invaded by allochthon species, such as the Louisiana crayfish. I saw many Alpine streams that still had transparent and cold water but were continuously interrupted by dams and small pipes that can take up more than 80 % of the water flow.

River connectivity is the possibility of encounter: “[...] the desire for connectivity”, writes Deborah Bird Rose, “is a statement of the ecological fact that organisms and environments permeate each other, are mutually constitutive and thus mutually necessary and sustaining” (2011: 118). When a river is free of flowing (and remembering, as Nobel Laureate in Literature Toni Morrison [1995] wrote), the water levels create safe meanders of slow and low water. Here, fish and amphibians lay their eggs, and you could find one or two crayfish hiding under some round rocks. Deer and other mammals come to drink, and during the hot summers, humans enjoy bathing in the fresh, silver waters. These places of encounter are flooded once an architectural barrier, such as a dam, is built: water stops flowing and stagnates. Migrant fish that cannot overcome the new obstacle repeatedly jump and die hitting the concrete. Many of them – some of whom are considered endangered species, such as the European bullhead, trout and pike – also die when dams are cyclically emptied for management purposes.

Another devastating effect of this infrastructure is hydropeaking, which is the discontinuous release of turbid water due to peaks of energy demand. Water may suddenly rise, endangering the sites of reproduction, while generating a flow so powerful that many animals cannot resist it. That is why swimming in mountain rivers has become more dangerous than it was ever before and is, in many cases, prohibited by law. Lucia, one of the activists I met during my research fieldwork in Veneto, talks about an annual grief that she feels cyclically every year when she witnesses this massive non-human death. She, similar to many other residents, fights for a more democratic decision process, where the local people who dwell in these waterscapes are the ones that have a say concerning those ‘green’ projects. To do so, Lucia travelled a lot to strengthen the ties with other territories, participating on a local level as well as in the European network of events and meetings. Andrea Muehlebach, a researcher of the cultures of waters, notes in her book *A Vital Frontier* that stories which seek to capture the complexity of these collectives must, in fact, “circulate as much as the members of these movements” (2023: xi), to put their own fight at the centre of a broader political agenda of river politics.

Remembering, Imaging, Flowing

Talking about the craft of writing and writer’s imagination and attentive memory, Toni Morrison compares this capacity with the ability of a river to remember and follow its course, saying that “all water has a perfect memory, and wants to go back to where it was” (1995: 99). Writers are like that: remembering where we were, what valley we ran through,

what the banks were like, the light that was there and the route back to our original place. It is an emotional memory – what the nerves and the skin remember as well as how it appeared. And a rush of imagination is our “flooding”. Waters remember: that is why, now more than ever before, it is necessary to talk about what marine geographers Phil Steinberg and Kimberly Peters call “wet ontologies” (2015) and to reflect about how we can live in the waterscapes of the Anthropocene.

When it comes to river management, memory of past waterscapes and images of river futures are always part of the discussion. In writing *Ruins Lake*, a short fictional story on the future of dammed rivers, I was particularly inspired by Ursula Le Guin's *The Carrier Bag Theory of Fiction* as a breakthrough in her understanding of evolutionary theory (1989). When Le Guin writes the mesmerizing list “a leaf a gourd a shell a net a bag a sling a sack a bottle a pot a box a container. A holder. A recipient”, as an environmental anthropologist studying the anthropization of Italian rivers, my thought went to yet another kind of recipient: the river dam. Set in an undefined future, this writing experiment gave me the possibility to play with “hydronarratives” (Henry 2022), water stories that can shape an ecological and political change. At the centre of my story was the possibility to restore rivers by taking down dams, a possibility that already exists in some countries and is openly invoked by activists, artists and riparian communities all over the world. In the words of human ecology researcher Andreas Malm, “blowing up” (2021) these infrastructures is an ecological action itself.

People like Luciano try to imagine a future in which the river vegetation is respected as an important part of the riverine ecosystem. After each flood, excavators are once again the protagonists of what is called the ‘cleaning’ of the riverbed itself, as trees, roots and algae are considered dangerous in case of overflows. That is why many activists are now reappropriating the local practices of care that had been lost in between a few generations, after the economic boom of the 1970s. Caring for a river means deciding exactly which tree needs to be cut down, and which is strong enough to resist the next flood, and stories of past floods were rooted in the local knowledge that was once transmitted through oral histories and collective memories. Filippo, a river activist from Piemonte, told me his personal flood memory:

In 1958, I had not yet been born, but in Val Bognanco, the torrent Bagna, a tributary of the Toce, filled the bed from one side to the other, then began to flood the houses. My mother, born in Paris to an anti-fascist family, told me about a night in which she participated in a procession, with the Capuchin monks, in which they blessed the water and the day after, the river was all calm. It rained cats and dogs, umbrellas were useless. Lost men trust the divine. They seek protection, like a sick man who confides in the saints. I remember this scene because the monks lived near us, and I always imagined them walking with the umbrella to pray on the banks of the river.⁵

What I find particularly interesting in his recount of the 1958 flood, that was transmitted to him by his mother as a piece of local memory, is that he admits adding fictional um-

5 Extract from an interview with Filippo P. in the small village of Beura Cardezza, in the region of Piemonte, Italy, on 15 May 2023.

brellas to the monks praying. It is a good example of how stories are transformed through sharing, and how imagination also plays a role in the intergenerational transmission of catastrophic events. Lucia also shared with me the memory of one particular flood that touched her region, Veneto:

During the flood of '66 I was here, I remember, it was the 4th of November. It was the same flood that hit Florence. Here, it was a disaster, it completely changed the appearance of the valleys. I was small, in 1966 I was only eight years old. It was November, it had rained a lot, and it carried everything with it, the village, and the bridge that was made out of cork. Where there is now the market gardener of fruit and vegetables, there was a wooden bridge. I do not think it caused any deaths, but it changed everything.⁶

The use of commemorative plaques accompanying these intimate and oral stories used to be a physical sign of the collective effort to build a local historical counter-memory. However, nowadays, after each new flood, the first reaction is the complete erasure of these same marks. It starts with the obsession of cleaning each trace of mud, debris and every object that has come into contact with the sludgy water. This practice stirs up the fear of waterways, and leaves behind a strong feeling of loss, as was the case for Francesca, a woman living alone in her mother's house near the Misa River. The municipality of Senigallia paid for the waste disposal only if everything was thrown away in the first week following the floods. Francesca's first floor was where she stored all her belongings, and it was completely flooded: everything had to be thrown out, including shoes, summer dresses, family photo albums, a carnival mask bought in Venice and so much more. She, similar to many others, did not have time to try to save and clean up each object carefully, and one month after the disaster she could not hold back her tears.

The material loss and alteration of her home following the disaster could be defined with Glenn Albrecht's neologism *solastalgia* (2019), the feeling of psychological distress provoked by an environmental disaster in which one feels estranged and homesick while still being in one's own home – a home that is forever transformed by the effects of climate change and anthropization.

Unleashed Water in the Anthropocene

This paper brings together different sketches and interviews collected during my research fieldwork along the Italian peninsula: in doing so, I wanted to paint a picture of waterscapes, their human and non-human inhabitants, their sense of grief and urgency, but also their actions and hopes. I gathered hydronarratives of trouble and recovery, and even material objects that shape space and memory from which new hybrid narratives originate. Starting from these ethnographic sketches, I wanted to briefly introduce the ecological, historical and political issues I encountered along the way, and that were

6 Extract from an interview with Lucia R. in Forno di Zoldo, in the region of Veneto, Italy, on 20 May 2023.

constantly brought up in conversation with the people living in these waterscapes. I particularly insisted on local memories of past disasters as a starting point to reimagine river futures, their restoration and the parallel dismantling of anthropogenic infrastructures. If free-flowing is an act of remembering, I suggest that we let our memories also flow with the currents, and let them mix with our fantasies of what our waterscapes could look like. Coming back to our opening metaphor of watersheds as a living circulatory system, the tactical anthropomorphization of the earth could be our way out of human narcissism, as Bennett suggests (2010: ivi, xvi). Storying rivers as the veins of the earth – or forests as its lungs – participates in a transformative action that reconfigures watersheds under a political perspective of resistance against the devastating consequences of extractivism and climate change.

Finally, I would like to conclude this paper by doing a small act of remembering: in the final stages of writing this text, three young people died during a flooding that hit one of the rivers I visited during my field research, the Natisone in Friuli Venezia Giulia. Trying to resist the power of the water, they hugged each other. Here are their names: Patrizia Cormos, Bianca Doros and Cristian Casian Molnar.

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Green Powerhouses in Road Construction

An Ethnodrama

Christine Neubert

Characters on stage:

staff of the urban district (two people)

the head of the construction company

the construction supervisors (two people)

the builder

the arborists (two people)

the researcher (me)

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Hidden Actors (exposition and rising action)

*Scenography:*¹ *It is December, but the planned end of the construction project was last October. Today is the final inspection by staff of the urban district. The walkabout has just started. A group of up to ten people, including the construction company, the construction supervision, the builder as well as the district staff, move slowly and carefully along the renovated road in order to “take over” the construction site and “return” it to the city. Suddenly, the walking stops. One of the two representatives of the urban district pushes a small spot in the newly paved floor, filled with special gravel, free of leaves, and hits the stone edge with a shoe. It is a stumbling edge.*

A member of the urban district: “Couldn’t they have put a six-stone in here? Couldn’t there have been another stone in there?”

A construction supervisor (explaining): “We didn’t work with six-stones at all, but with seven-stones. Moreover, it was due to the roots.”

The head of the construction company (performing explanation): “The reason for the tripping edge is the unforeseeable extent of (big gesture with arms directed to the ground) thick tree roots and their location. This was *not* how it was expected according to the plan.

1 “Scenography refers to the total visual and aural conception for theatrical productions and includes the constituent elements of scenery, set and hand properties, costumes, makeup, lighting, sound, and technology” (Saldaña 2003: 231).

That is why we had to rethink and adjust the pavement because we dug up, looked in and worked with what was there.”

The Sticking Point (rising action)

Scenography, throwback, in the middle of construction work: The construction supervisor's phone rings. It is the arborist who has “taken care” of the trees in the street for the duration of the construction work. When the construction supervisor finished talking to the arborist on the phone, they say: The construction supervisor (half-seriously): “We’re good for a tree.”

Everyone looks at each other (uncertainly).

When walking along the street of the construction site, the researcher, as usual, feels open to be affected by the field. Suddenly, they stop at a street corner at a large construction pit. They notice the insanely large number of roots exposed here. It is a wide and long bundle of medium and finer roots that catch their eye first. By looking deeper into the dug hole, even stronger roots stand out from the tree slice over into the pavement. The tree's strong roots are pushing through the curbs of the enclosed tree slice. They seem to emerge squeezed through a narrow spot between two curbs, only to spread out again into the barren soil beneath the car park, pavement and road drain. Near the drain, the roots appear very wide and crowded. The arborist and construction workers are standing in the construction pit talking within the thick bundle of roots.

The arborist (convinced, pointing to the spot of thick roots near the drain): “That’s the sticking point! The only way to continue building here is with a non-professional solution.”

The researcher (addressing the audience): “What could that mean? Not too many years ago, when the regulations of Hamburg Building Code (§14) were not yet realized on-site, street trees became regularly witnesses of a lot of non-professional solutions. Just as an urban district considers beautiful trees as green capital, trees are still in danger during construction sites. Roots can be injured through carelessness by heavy machines or just a pickaxe, or even intentionally, in order to be able to build more effectively without the tree afterwards. That is why trees are still treated somehow as a currency, their value is still negotiable in some places. Even if it has been in a joking way, such as ‘We are good for a tree’. – So, what does it mean?”

The Bathtub (climax)

Scenography: Still in the construction pit, another arborist from the tree care department approaches the scenery.

The second arborist (greeting): “What’s the situation here?”

Then both arborists turn their bodies towards the tree and take a step towards its roots.

A construction supervisor joins the researcher and the two arborists in the construction pit. Since there is still time until the assembly starts, the researcher asks the supervisor about roots that are clearly sticking out on the ground in another pit. We are heading to the root, standing in front of it. The researcher: “It looks like you can’t pave with the root like that, or that something has to be done beforehand, right?”

The construction supervisor (pointing to the stones under the sand of another ruin in the private area): “That’s the crap of building half on private land when renovating public space. (pointing to the exposed roots in the gravel, guessing): The root had pressed itself along the wall and had, therefore, come up because it probably had no other place to go. Now, the arborist will have to decide whether the roots could be cut back or if they could be pushed down a bit.”

The researcher (quietly): “And what if neither is possible ...?”

Back at the construction site with the large bundle of roots.

The two arborists (concluding): “We don’t see any *problem* there for now. If you lower it a bit, push the roots down a bit, then it would work. (To the researcher) Is that why you’re here today?”

The researcher: “No, not specifically, but I read about ‘the problem’ in the report of the last construction meeting.”

Until then, the two tree care workers loosen the soil with a digging fork to prepare the underground for the suction excavator – a vacuum cleaner for trees that sucks in the old soil to refill the tree’s slice with new substrate. After a few minutes, seeing that there are no more large roots hidden under the soil, the arborist jumps to the researcher briefly.

The arborist: “Fortunately [...] *this problem* is almost out of the world. But you see [...] the general problem is: The tree has so little space; it’s like people who would have to live with their belongings in the bathtub.”

The researcher (thoughtfully, to the audience): “Living in a bathtub [...] unimaginable for human beings. The ruby tree stands in its tree slice, it has the wooden slats around the trunk. This wooden chain is supposed to prevent the tree trunk from getting scratches. But obviously, that is not the biggest issue. Although it might feel good that some air is finally getting to the finest roots and capillaries, the open construction field is also getting to the tree and its root system: no soil, no wetness for a few days. Only some sheets of white or grey fleece will protect from dryness. Maybe, things turn out well for the tree and the workers fill in new substrate and will also remove the garbage bags, the old wheels and stones leaning against the lower trunk. This city tree seems to be tired of putting up with everyone else’s trash. Let them leave it in people’s apartments and in their houses, gardens and yards! In their bathtubs, no matter how huge these are.”

(Fig. 1:) *The bathub. Photograph by the author.*



Pressure Pads (falling action)

Scenography: The researcher is waiting at the construction pit for the consultation assembly. One of the arborist still brushes the soil aside from the roots with his bare hands. He grabs the roots and bends them around to see how flexible they are. Then (to the audience) he shows the tree's pressure pads that roots form to relieve punctual pressure. They seem to be wide and strong. One can clearly see the imprint of the cobblestones that had previously been laid on top of the roots.

The arborist (explaining): "It is their adapting daily activity for receiving nutrients under the pressure of the street. They form pressure pads. That is an intelligent strategy of the trees to open up bases of life, like providing with nutrients securing space – in the soil that offers hardly any opportunity."

Now, more and more people, decision-makers, arrive and gather around the construction pit. People from the construction supervision, the builder, the construction company and the tree care staff. In total, about ten people standing at the tree. They are looking for a solution for the disabled parking space planned here, discussing, exchanging arguments. The named problem is the "sticking point", the spot at the road drain where the roots are strong and can be pushed down only minimally.

After a while, without much comment, construction workers start measuring the height and depth with a yardstick and water level. The measurements seem quick and swift, skilful hand movements to determine the path of the paving. Shortly afterwards, they hammer iron rods into the ground to mark the dimensions; thin green ropes are stretched across the construction field.

Paved Unpaved (epilogue)

Scenography, back in December: The final inspection group is moving slowly but steadily. The unpaved areas in the new pavement are piling up. The paving stones are seven centimetres thick and they simply cannot be laid over the root. The construction workers had to leave the space open.

A few weeks later, again in the street. The unpaved areas are now asphalted, not hot but cold. There are imprints of leaves on the new filled in asphalt, they look like framed artefacts within the sidewalk. Beautiful, somehow.

(Fig. 2:) A leaf in the pavement. Photograph by the author.



The Trees' Various Activity on the Street

My ethnographic research on construction sites (Neubert 2023) takes me to different places of construction with the aim of uncovering their everyday procedures. Therefore, my studied 'field' is temporally and spatially framed by the activities on-site. By using the ethnodrama, I focus on tree's activity. One can observe how trees primarily place themselves in a powerful position in the context of roadworks through the activities of their roots. This spatial reorganization, restructuring and negotiation of everyday spaces, which are activated and made visible by construction sites, are of concern for studying the trees' everyday life in construction sites.

The agency of trees in the construction site is manifested in their roots. This also means their past root activity is (made) relevant in the current situation of the construction site. In this sense, the construction site as work on communal, built infrastructure entails exposing this usually invisible, purposeful activity of non-human beings. Yet, the experience among construction workers is that this uncovering of the ground and the insights into below-ground habitats could principally change *everything*. Significant root positions can lead to a considerable disruption of the construction work, causing a delay or even preventing the planned construction work completely.

Using an ethnomethodological approach (Garfinkel 1967), I assume that the installation and operation of construction sites in streets allow one to see what is being worked on here besides the stated aim of the construction project, such as renovating a road and pavement or laying cables, and who or what else is involved. From this point of view, the reason and demand for the construction project are a means to an end to research the everyday life of construction sites and their green powerhouses. The effectiveness and activity of trees in the context of urban space especially need to be empirically analysed in more depth. It is not the symbolic or literary treatment of plants as the "green lungs of the earth" (Stobbe 2019) or the request to empathize with their sensitivity or thinking (Kohn 2023). Instead, in an ethnomethodological approach, observable activity is assumed to be meaningful procedures or *doings* also of non-human living beings (Ernwein 2021; Latour 2007). I conceptualize trees' root activity within construction sites as their directed (co-)work on a building site.

The Case of the Construction Site

Trees' activity within construction sites provides something that can be reconstructed as an orientation or relevance of this action in theoretical terms, especially in the field of the sociology of knowledge. In the terminology of a so-called geo-sociological perspective,² the idea is common that plants' "typical strong rootedness in the earth" and their "site-boundness" express "an orientation towards the local" (Schroer 2022: 164, author's translation), and this can be traced by following the activity of their roots. Today, flora and

2 The sociologist Markus Schroer has been spreading the historic and systematic analysis of sociology widely as a subject of human and non-human living on earth under the title "Geosozilogie. Die Erde als Raum des Lebens" (2022).

plant orientation seem more connectable to us than ever before. A shared cross-species relevance of existing and a right to space seems to have emerged under the pressure of climate change and the need for adaptation strategies and alternative forms of living, most of all in cities and metropolises. This – the goal of securing (places of one's own) existence – makes it possible to seriously pursue entanglements and connections between human and non-human living beings on a larger scale. Therefore, Markus Schroer considers the following rethinking of plants as possible: from “the stable devaluation [...] as the embodiment of a life condemned to immobility [...] to the model for the ideal of a settled life [...] that does not swarm out, plough through and occupy other spaces, but remains in place” (2022: 165). Following on from the given necessity of overcoming a habitualized modern lifestyle, discursive connections can be drawn here regarding the limitations of our own mobility and the return to local and regional values. It can be observed that plant practices and their spaces hidden in the soil are now being examined more closely. How movement, for example, takes place despite being fundamentally tied to a specific location is being investigated in ever greater detail (e.g. Gesing 2019). The question arises, what *other* or *new* quality of mobility is involved by this plant's practice? Therefore, from a multispecies perspective, the case of the construction site can provide insights in two respects: firstly, the entangled geographic practices of human and non-human actors becoming visible in their socio-material dimension, and, secondly, the effectiveness of plants' spatial practices as oriented activities below ground.

Ethnodrama as a Multispecies Ethnography Method

In order to emphasize the overall common relevance of securing existence in times of crisis, I chose ethnodrama as a method of representation in the context of multispecies ethnography. Following Laura A. Ogden and colleagues, I understand “multispecies ethnography [as, CN] a project that seeks to understand the world as materially real, partially knowable, multicultural and multinatured, magical, and emergent through the contingent relations of multiple beings and entities” (2013: 6). The ethnographic research style is now additionally challenged by the need for an extraordinary degree of reflexivity about one's own ‘human’ positioning within the multispecies network of relationships, especially regarding data production and analysis.

Basically, ethnographic research provides suitable circumstances for fulfilling this request. The research style of discovery is particularly prominent: Ethnographers want to take in everything they encounter, “draw it through [their, CN] own senses” (Gehlen 1983: 12), experience it first-hand and try to understand what is actually going on here. On the one hand, it is one of the more complex qualitative methods for generating insights into ‘foreign’ lifeworlds, on the other hand, it is precisely for this reason that it is able to engage with and adapt to the circumstances of the field, for example, by adjusting the pace, focus and sensory apparatus. In this way, it becomes more possible than with other approaches to follow multispecies encounters that are not loud or superficial for humans in everyday life. A number of tools, such as the “soft” concept of method in relation to the “hard” concept of empiricism (Amann and Hirschauer 1997: 9) or the research attitude of curiosity in “artificial blindness” (Bude and Dellwing 2015: 13) as well as in “ar-

tificial distance" (Amann and Hirschauer 1997: 12) to supposedly familiar processes, set the basis for a potentially heightened sensitivity towards non-human living beings. Nevertheless, a central question remains: How are these other things and species included in the ethnographic data production? How can they be described and how does this process of description situate both the researcher and the living beings researched?

The social anthropologists Eben Kirksey and Stefan Helmreich state in the *Journal of Cultural Anthropology*: "A new genre of writing and mode of research has arrived on the anthropological stage: multispecies ethnography" (2010: 545). In their article, they are inspired by the multispecies thinker Eduardo Kohn, who recognizes that it is not just a matter of representing more complex multispecies-human structures linguistically or understanding them: animals, plants, microbes with human categories, of measuring and comparing them linguistically against human categories, so to speak. Instead, he demands, it must be a matter of having "to force us to radically rethink these categories of our analysis" (Kohn in Kirksey and Helmreich 2010: 563). This can mean establishing new categories, as has been attempted mostly on the subject of empirical studies: Donna Haraway, for example, with the companion metaphor (2003) or Agustín Fuentes with that of the niche (Kirksey and Helmreich 2010: 563–564). In addition to such conceptually heuristic new metaphors, that are useful to demonstrate the kinship of low-threshold, basic forms of interaction and activity (Hirschauer 2016), again, the fundamental question arises as to how far language can be used to integrate other species more adequately into the description of the social world. A new genre of writing, as postulated by Kirksey and Helmreich (2010), strives to question ethnographic description itself or, at least, explore its forms and possibilities beyond scientific conventions. This exploration is offered when using ethnodrama.

But, after all, what is an ethnodrama? In preparation for the performance of an ethnotheatre, the ethnodrama is dedicated to be

the written script which consists of 'dramatised, significant selections of narrative collected through interviews, participant observation, field notes, journal entries, and/or print and media artifacts such as diaries, television broadcasts, newspaper articles, and court proceedings'. (Saldaña in Hare 2008)

The important contrasts with the ethnographic protocol lie in three words of the definition: "dramatised" and "meaningful excerpts" from narratives. In comparison to the interpretative and systemized evaluation of field notes, ethnodrama focuses on the additional representational exaggeration of individual positions, actors and practices. It is, more or less, an artistic adaptation of ethnographic data with the aim of presenting it both more entertainingly and convincingly. There are some practical tips in the literature "on how to condense dialogue from transcribed narrative texts and illustrations of how theatre art and dramatic techniques can infuse a performed text with energy, vigor, and the immediacy of the here-and-now" (Hare 2008). According to Saldaña, creative work on ethnographic data begins where it is condensed, exaggerated and combined in order to create a scenic presentation for a broad audience. In doing so, as you can see above, researchers enter new fields of presenting what they have done in data production. But, and this is also true, when editing the storyline by cutting together central parts of the

observation protocols, I basically felt resistance for a moment. What am I doing here? For me, the practice of writing a good story seemed to be comparable to the (scientifically doubtful) approach of quoting repeatedly only the obvious, empirical examples and, thus, over-stylizing them. After a while, I got used to it and felt more comfortable in this kind of new attitude in relating from the field. Finally, I honestly followed the premise that Saldaña reveals from several years of practical experience with ethnotheatre: “An ethnodrama is the data corpus – with all the boring parts taken out” (2003: 221).

In the context of multispecies ethnography, ethnodrama and ethnotheatre are, thus, inherently new ways of staging natural-cultural “contact zones” (Haraway 2008: 4). As performances on stage, their special value can lie precisely in the vividness of cross-species encounters that are often communicated between the lines. Although ethnodrama needs a linguistic script, its effect basically unfolds in the non-linguistic performance and realization of the script in ethnotheatre. Nevertheless, it must be emphasized that writing a storyline and developing the corresponding characters for the performance and so on is a highly cultural competence that uses language as a central tool. By definition, non-human entities are engaged as actors, they do not set themselves in a scene, as seems to be the case when observing on-site through the lens of ethnomethodology. Regarding the goal of multispecies ethnography, it is necessary to reflect on how such a passivation of non-human actors relates to the claim to *narrate* their role in a social world more adequately. This still remains a field for further exploration. Perhaps, the primary concern of ethnodrama and ethnotheatre is rather beyond a non-human adequate description, and lies in staging non-human actors, giving them the literal stage.

Reflecting Ethnodrama “Green Powerhouses in Road Construction”

The question of whose story is being told in this ethnodrama can surely be answered in different ways. My impression is that the practice of the construction site is on stage generally, and, in this scene, the plants are staged as actors within construction site practice. As you can recognize by these words, for an ethnographer, ethnodrama gives one the opportunity to distance oneself. The data in the format of an ethnodrama is now more like an independent artistic artefact and provides an opportunity to reflect on the social roles in terms of characters and the positioning of human and non-human actors on a construction site. There is, for example, the tripping hazard in the new pavement, which refers to problems in the construction pits. From the point of view of the builders, these problems are obstacles to the routinized progress of construction; from the point of view of the arborists, problems can only ever be solved with the tree, never over its top or crown. For the ethnographer, the problem mentioned in the construction meeting protocol is an opportunity to explore the construction site in a condensed and specific way: as multispecies work on the negotiation of spaces of supply and infrastructure security. From a multispecies research perspective, it is apparent that the relevance of securing existence overlaps here: Strategic activities underground to secure support or relieve pressure are discussed with equally strategic and spatially effective approaches

for building, for example, to be able to build safely and have pavements without tripping hazards later on. The measurements and drawings of the builders seem to already include the interpreted solutions of the tree.

Compared to the ethnographic protocol, writing an ethnodrama requires the willingness to leave gaps. There is no scope in drama for the researcher claiming to have nearly the same knowledge as the field and revealing this (as it is the case in ethnomethodology). After all, doing ethnodrama is not about the researcher or the research practice as such. It is about the story. The information, for example, that the stumbling hazards in the epilogue were not filled with hot but with cold asphalt must, therefore, remain uncommented on for the moment. It is not important for understanding the point the director of the story will make. The scenography is acted, not narrated. And in this case, the researcher becomes the tree's spokesperson. The person who brings it on stage. The researcher also gives it space to unfold by empathizing with plant spaces: The metaphor of the bathtub becomes an adequate description of everyday spaces at urban roadworks, not only for non-human actors but also for human ones.

Positioning Multispecies through Timing

I consider the construction site as an urban practice where customary procedures of negotiation are central and can be seen as an often implicit arrangement of everyday practices that unfold spatially. By focusing on plants and trees while doing this, the pitfalls of different temporalities and, therefore, powerful positions of these everyday care practices of trees and humans in the field of construction sites are emphasized.

The structure of the drama follows the internal logic of the construction site as a place of construction. How can the construction site deal with problems that arise and are caused by non-human entities? How can they be overcome? In the course of tackling the problem, however, the impression that human problems are connected to those of other, non-human actors (and that these then, again, result from previous human practices, such as urban densification) becomes increasingly evident. The metaphor of the bathtub serves to connect human experience with observable root activities and, thus, builds a bridge between human and non-human systems of relevance. Securing existence under today's global and social conditions also means not just living in a bathtub in the long term. A look at the tree's problem-solving strategies is followed by the recognition and attribution of its space-consuming practices. This can be seen, for example, in the fact that areas of the new pavement are explicitly not paved with stones if it was not possible to push back roots that are important for the tree's supply. Seen like this, both the trees and the construction site have a mutually disruptive effect: Construction work can cause changes and mean 'danger' for the trees' safety as well as the trees possibly having an impact on construction measures.

However, the ethnodrama also shows that green centres of power at construction sites are strongly restricted. The asymmetrical relationship between human and non-human actors is particularly evident in the temporal perspective. While at the time of the disruption of the construction process by roots, the attribution of its supply and safety practices has a relatively high priority, this seems to take a very low priority during the fi-

nal acceptance by the district office with which the ethnodrama starts. By contrast, pavement safety is now prioritized from a human perspective. What is not narrated here are the developments on-site between the finalization of the pavement and the eventual inspection. During these weeks, rain has washed out the spots filled with gravel, and street cleaning, with its machines and leaf blowers, has also contributed to this. This is also part of the construction site's *contact zone* in which the participants are positioned accordingly.

Finally, the ethnodrama highlights the fact that the material effectiveness and power of non-human and human actors always emerge from a complex set of relationships and need to be correspondingly explained. No matter how symmetrical the initial conditions of actors may be in social theory, the concrete activity and interaction on-site is not; it always produces reciprocal positioning that equates to asymmetrical conditions in interactional relationships (Haraway 2008; Tsing 2015). The ethnodrama is able to demonstrate this process of positioning and agency of street trees in the course of construction sites. It also illustrates and underlines the idea that the shared environment of tree and human is not a co-environment but a shared basis of existence, framed in the everyday doing and needing the same soil while practicing urban everyday life.

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The Multispecies Paradigm in Traditional (Gaelic) Folklore

Mairéad Nic Craith

Elif Shafak (2022) tells the story of two young lovers in a divided postcolonial 1974 Cyprus in her masterful novel, *The Island of the Missing Trees*. One is Christian and Greek and the other is Turkish and Muslim. What is remarkable about Shafak's novel is the role played by a fig tree that grows in the middle of a cafe. The tree is the third character and plays a central role in the narrative. As well as witnessing the huge range of emotions involved in a forbidden human love story, the tree narrates the story from the perspective of other animals, plants and insects. Early in the novel, the tree laments the lack of interest from humans in other-than-human species. After observing them for a long time, the tree arrives at the conclusion that humans "do not really want to know about plants" (ibid.: 44). They do not wish to know whether plants are capable of kinship and emotions: "They find it easier, I guess, to assume that trees having no brain in the conventional sense, can only experience the most rudimentary experience" (ibid.). The rest of the novel is a powerful exploration of love and fear from the perspective of different species.

This contribution focuses on the multispecies relationships that are evident in traditional Gaelic folk narratives. It explores the extent to which such folk-tales engage with an other-than-human world and examines the role of multispecies temporalities in these narratives. Drawing on the Celtic ontological concept of *Dúchas* (heritage) and examples of folklore from the Gaelic culture, my key argument is that traditional folk narratives can teach us lessons about interactions between humans and other species. The paper investigates the extent to which folk narratives preserve memories of historical ecologies and asks whether these can be revived, re-envisioned or repurposed to develop new possibilities for cohabitation in the multispecies world. My focus on Gaelic folk-tales derives from the fact that I grew up in Ireland and now live in Scotland – but I recognize that many of the points I make concerning Gaelic folk narratives also apply to other Indigenous cosmologies.

Patchy Anthropocene

Humans have increasingly distanced themselves from other species in recent centuries, but this has not always been the case. The Anthropocene is the term commonly used to profile the contemporary hierarchical relationship that humans have with the rest of the species on the planet. There are power implications inherent in the concept which imply that mankind is the single most influential species and has effectively influenced and tamed nature to such an extent that humans have fundamentally altered biological systems. The human impact on nature has not been a positive phenomenon. It has led to climate change, the nuclear bomb and the rise of toxic activity on earth. As humans destroy the planet, they are increasingly alienated from their environment.

This hierarchical paradigm is powerfully captured by Irish eco-philosopher John Moriarty in a story from his childhood (2011). He describes one Christmas eve living on a rural farm in the west of Ireland. The excitement was palpable. The candles were lit, the cake was ready and Santa was on the way with a game of snakes and ladders:

There was no denying it, it was wonderful, and in a glow of fellow feeling with all our animals I went out and crossed the yard to the cowstall. Pushing open the door, I looked in and at first I just couldn't believe what I was seeing, no candles lighting in the windows, no holly, no crib, no expectation of kings or of angels, no sense of miracles. What I saw was what I would see on any other night, eleven shorthorn cows, some of them standing, some of them lying down, some of them eating hay, and some of them chewing the cud, and two of them turning to look at me. Devastated, I had to admit it was an ordinary night in the stall. Coming back across the yard I looked at the fowl house and the piggery and the darkness, and the silence that had settled on them couldn't say it more clearly. Christmas didn't happen in the outhouses. Christmas didn't happen to the animals. The animals were left out. And since the animals were left out, so, inside me somewhere, was I. In our house everything turned out as we expected it would [...] but I couldn't forget the dark stall. (ibid.: 6)

This personal narrative clearly reflects the hierarchical relations implicit in the Anthropocene model. But the Anthropocene concept is increasingly regarded as contentious and has been modified by social anthropologist Anna Tsing and others to counteract its implied homogeneity and even-ness across the earth. As an alternative, they propose the term “patchy Anthropocene” to profile “the uneven conditions of more-than-human livability in landscapes increasingly dominated by industrial forms” (Tsing et al. 2019). Locating this concept firmly within the field of anthropology, they suggest “that by broadening our notions of social relations into more-than-human space and time, anthropology may recapture what it does best: attending to specificity without being parochial” (ibid.). They refer to these patches or sites as “beings in landscapes”, which take account of the diversity of multispecies in local places. The patchy Anthropocene does not imagine a homogeneous human race nor an evenness of consequences from developments such as the industrial revolution or the Capitalocene. Instead, it is an intersectional, anthropological approach that topples the primacy given to human behaviour in the Anthropocene paradigm.

Considering the way in which non-human animals have been treated within the field of human geography, geographer Chris Philo suggests that any inclusion of non-human creatures within the discipline has been conditioned by what he terms a “human chauvinism” (1995). This implies that animals are either ignored or considered in the context of their relationship with humans. Philo notes that the trend has considered “animals as marginal ‘thing-like’ beings devoid of inner lives, apprehensions, or sensibilities, with little attempt being made to probe the often take-for-granted assumptions underlying the different uses to which human communities have put animals in different times and places” (ibid.). Instead, Philo proposes an alternative paradigm which places animals in complex and nuanced relationships with humans.

Tsing et al. (2019) argue that the great acceleration of climate change is best countered through engagement with many small-scale and local rhythms. Their focus on the local patch is not confined to humans. Instead, they give voice to the “subaltern” – that is, all the creatures that are considered subordinate to humans in the Anthropocene contest. It includes animals as well as plants and insects who coexist alongside humans in particular places. Tsing et al. regard the Anthropocene as “a wake-up call urging us to reinvent observational, analytical attention to intertwined human-and-nonhuman histories” (ibid.). They advocate a form of landscape literacy that engages with humans as well as non-humans in local places. Clifford Geertz’s webs of significance have been extended to include hitherto marginalized or suppressed voices (1973: 5).

Folklore and Local Patches (Places)

It is their engagement with local places that makes folk narratives such a rich resource when dealing with the patchy Anthropocene. Kent Ryden noted the significance of folklore for the expression of a sense of place three decades ago (1993). While humans use maps to organize places geographically, maps do not express the wealth of human experiences in particular places. Maps are flat two-dimensional documents – consisting of lines drawn and redrawn on paper. They locate places but do not capture a sense of place. In the words of Shafak: “A map is a two-dimensional representation with arbitrary symbols and incised lines that decide who is to be our enemy and who is to be our friend, who deserves our love and who deserves our hatred and who, with sheer indifference” (2022: 1).

Ryden coined the term “invisible landscape” (1993) to capture the meaning that humans attach to places. Drawing on the folklore he had gathered in Northern Idaho, he explored the dialectic between particular places and the representation of those places in folklore. A sense of place emerges from a fusion of time, memory and experience, and that sense is expressed in traditional narratives or lore. In common with patchy anthropology, folk narratives emerge from specific (often small) places. Bateson argues that folk narrative “tends to be grounded in the hyperlocal, embodying intergenerational notions of place and community” (2021). Christopher Tilley suggests that narratives (along with movements and paths) help develop a distinctive sense of place (1994: 34).

The Gaelic tradition is replete with place lore which captures the spirit of particular ‘patches’. The importance of the local in the Gaelic tradition is best captured with refer-

ence to the concept of *Dinnshenchus* (place-lore) which references legends and incidents and/or attachments to particular places. Seán Ó Tuama says of the Gaelic narrative tradition that: “Down to our own day each field, hill and hillock was named with affection [...]. There is a sense in which place finally becomes co-extensive in the mind, not only with personal and ancestral memories, but with the whole living community culture” (1985: 23). Human and non-human narratives are linked with distinctive places and their geological activity woven together over several centuries. Moreover, traditional folklore has embraced the non-human or more-than-human world in those places.

Patricia Monaghan attributes the significance of particular places in Irish folklore to the earth-centred (Pagan and Celtic) spirituality that prevailed in Ireland before the domination of Roman Catholicism (2010). Specific locations possessed “a particular power that is creative and regenerative” (ibid.). Moreover, “the shape of the earth’s surface creates innumerable nooks and crannies, each having a different quality about them and thus defining itself as a place having its own particular power” (ibid.). An energy or power emanated from different places throughout the Irish countryside and the human-place relationship was very significant.

Ullrich Kockel (2014) emphasizes in his work on human ecology that place is not where a relationship happens. Place is an intrinsic part of any relationship. Place matters and “not just as the construct it invariably also is, but as ontological datum” (ibid.). Moreover, it is ultimately ‘place’ that brings us together and enables relationships – and the activities they engender – to ‘take place’. “If we are at all, then there is a place at, in, from and towards which we thus are” (ibid.). This relational perspective puts place at the heart of our relations with others. Place is not a “third space” in Homi Bhabha’s (1994) sense. It is itself part of the relationship. “Place” is always an integral part of our various relationships.

The Old-Irish tale of the *Táin Bó Cualigne* (The Cattle Raid of Cooley) is a strong example of the specificity of place in Gaelic folklore. The Cattle Raid of Cooley from the Irish Ulster Cycle of Tales concerns a dispute between Queen Maeve and her husband King Ailill in the West of Ireland. When comparing their wealth, neither could outdo the other with one exception. Ailill had a great white bull for which Maeve had no equal. Having taking counsel, Maeve discovered a brown bull of equal strength in Cooley and requested the loan of it for a year. When ultimately refused the loan of the animal, the queen despatched her fighting men to raid the bull. Ultimately, Maeve’s men brought the brown bull back to the Western region of Connaught.

Before long, the two bulls were engaged in battle. What follows in the narrative is a very detailed account of various bull organs falling onto the landscape. One of the more interesting aspects of the tale is how the landscape is changed as a result of the bull fight over a long trail. What is even more remarkable is that the journey of the bulls has been made without human intervention. The landscape has been named because of an interaction between two bulls and the site is altered from a place with no history and no cultural significance to one that is replete with meaning (Toner 2019).

An emphasis on a local place can sometimes spark a negative reaction. It can be seen as parochial or inward-looking. At worst, it can be misinterpreted as a form of populism, nationalism or xenophobia – but in the words of Mairi McFadyen: “Advocating for local culture is not about reifying places and forms of non-capitalism as untouched or outside

of history as part of some sort of romantic hankering for paradise lost, it is to stand up against the destructive and homogenising forces of capitalist modernity” (2019). This is in the spirit of Scottish ecologist Patrick Geddes, who advised people to “think global and act local” (MacDonald 2020).

An emphasis on local place is very much in keeping with the Gaelic concept of *dúchas* (loosely translated as heritage from below), which implies a strong relationship with the land. This contrasts with another Gaelic word *Oidhreacht* (loosely translated as heritage from above), which implies a relationship with place that is directed by the government or state. Speaking from a Scottish-Gaelic context, Alan Riach suggests that “*Dùthchas* is the word that describes understanding of land, people and culture” (2022). In the words of James Oliver it is an “ontological dynamic of embodied experience and terms and emplacement [...], and complex entanglement [...] with relationships of belonging and dwelling, heritage and inheritance, a human ecology with ‘place’” (2021).

The Multispecies Paradigm

Irish folk narratives offer several different models of species living together in particular places. Firstly, I would like to draw on the story of the renowned warrior, Fionn Mac Cumhail. As a young boy, Fionn was mentored by a wise poet named Finnegas, who lived on the banks of the river Boyne. Finnegas was renowned for his deep knowledge of nature – animals, forests, rivers, the wind and the rain. As recompense for this teaching, Fionn collected firewood and cooked. Fishing was the only task that was forbidden to Fionn.

It had been foretold by the Druids that on rare occasions a salmon of knowledge would be found at Connla’s well. The well was surrounded by nine hazelnut trees which contained immense wisdom. Once the nuts fell into the water, the salmon would feed on them and be imbued with all the knowledge of the world. At that point, a red spot would appear on the flesh of the salmon. Finnegas spent many years trying to catch this salmon and was overwhelmed with joy when, one day, he caught a salmon with a red spot on its belly. Immediately, he asked Fionn to gather firewood and cook it. He warned him not to taste it but did not explain the reason for this. It has been foretold that whoever ate the first bite of the fish would gain the knowledge of the salmon.

While he was cooking the fish, Fionn burned his thumb, and instinctively put it in his mouth. This immediately imbued him with the knowledge of the salmon. When the poet returned, he saw the wisdom in the young boy’s eyes. Despite his disappointment, he suggested that Fionn finish eating the fish and advised him that whenever he put his thumb in his mouth, the knowledge of the world would be revealed to him. (As an aside, it is interesting that the ancient storytellers did not need to wait for the discovery of Omega 3 before they knew that oily fish was good for the brain!)

The different species in this folk narrative worked together like a chain of connectivity. Nine hazelnut trees grew over the well. The nuts on the trees contained wisdom. As the nuts fell into the water, they were eaten by the salmon, who then swam downstream. The human who ate the salmon was endowed with gifts of wisdom, inspiration and knowledge. When humans died, they decomposed into the land and it was from the land that the trees grew. What is even more interesting about this narrative is that the gift

of knowledge was not limited to humans. Meg Bateman notes that the intuition gained by Fionn Mac Cumhail when sucking his thumb was not that of an individual but a universal intuition “sought by poets composing in the dark, [it] is the knowledge drawn up through wells, roots, and rivers of the mystery of regeneration. This is an understanding that life is wholly dependent on the earth” (2009).

A later episode in the Fionn Mac Cumhail narrative reveals a second model of co-existence, which is shapeshifting between human and animal. When the legendary warrior, Fionn Mac Cumhail, grew up, he loved to hunt at Slievenamon in Co. Tipperary. It was while hunting there that he met his wife, Sadhbh. She had been turned into a deer by a druid whom she had refused to marry. Although she had the figure of a deer, Fionn’s hounds recognized her as human. Fionn brought her home. She was transformed back into a woman the moment she set foot on Fionn’s land, as this was the one place she could regain her true form. Sadhbh was soon pregnant. When Fionn was away defending his country, the druid returned and, seething with envy, he turned Sadhbh back into a deer, whereupon she vanished. Fionn spent a lot of time searching for her, but to no avail.

Years later when out with his hounds, Fionn found a fawn in the forest. He recognized the animal as his own son with Sadhbh. Once he brought him home, the fawn turned into a boy whom Fionn named Oisín (meaning little deer). Oisín would later become one of the greatest of the Fianna. Bateman summarizes the movement between the species as follows: “The hero, Fionn, originally a god, changes shape as a dog, deer or man; his nephews are dogs, one of his wives is a deer and his son, Oisean, is part-deer” (ibid.). The relationship between Gods, humans and animals was blurred in many traditional Gaelic folk narratives. Humans could change, for example, into werewolves, hares or insects. Shape-shifting occurred frequently and shape-shifters passed through a range of animal forms, insects, birds and mammals. It seems that knowledge of and identification with the different species was regarded as an advantage for those who experienced it and consolidated relationships between the different species.

The relationship between humans and other species was also celebrated in poetry as well as narrative. There is a very famous poem in medieval Irish literature called *Pangur Bán*. This poem was penned in the 9th century at or near Reichenau Abbey in Germany. It was written by an Irish monk about his cat, Pangur Bán. The poem describes not only the harmonious existence between monk and cat but also their parallel activities. The relationship between human and animal is equal. The poet compares the cat’s happy hunting with his own scholarly pursuits. While the cat hunts for mice, the monk pursues an ancient manuscript for meaning.

Seamus Heaney (2006), the Irish Nobel Laureate, translated this poem into English. Heaney’s translation captures the equal relationship between monk and cat:

Pangur Bán and I at work,
Adepts, equals, cat and clerk:
His whole instinct is to hunt,
Mine to free the meaning pent.

The human and animal are engaged in parallel pursuits. Once he observes the mouse, the cat pounces on it. In the same way, the monk pounces on lines once he understands their meaning. During their shared pursuit, the monk gazes piercingly at the text, while the cat keeps his eye fixed on the wall. When the cat springs on the mouse, it exults in the kill. The monk is equally ecstatic when he captures a hidden meaning. Each of the two creatures is focused on their pursuit and there is no rivalry between them. They are kindred spirits. In the words of Heaney:

Day and night, soft purr, soft pad,
Pangur Bán has learned his trade.
Day and night, my own hard work
Solves the cruxes, makes a mark. (ibid.)

Matching behaviour between humans and animals is also evident in traditional Irish-Gaelic proverbs. Many Irish traditional sayings imply parallels between the natural environment and humans. In the following proverb, for example, there is a warning to beware the silent human:

Is iad na muca ciúine a itheann an mine.
[‘tis the silent pigs that eat the meal.]

Sometimes human actions are compared to animal ones. One might say of humans, that they are:

Ag ithe’s ag gearán ar nós cearc goir.
[Eating and complaining like a hatching hen.]

A human who is too eager is compared to a horse:

Ní deacair capall umhal a sporadh.
[The willing horse doesn’t need much spurring.]

A well-known proverb implies that humans can act like insects:

Aithníonn ciaróg ciaróg eile.
[One beetle recognizes another.]

Plants also feature, as in the following example which compares young children with saplings:

Is minic a thánag an tsal nar mheas gurb í d’fheacadh.
[The sapling expected to wither often makes good.]

Michael Newton calls this process human-nature mirroring (2019). He refers to parallels perceived between humans and trees in the Gaelic world. The anatomy of the tree was seen as comparable to the human body and the same Scottish Gaelic terms are used for

the human body and trees alike. People are often described with tree metaphors. Exemplarily, the phrase: “It was in the timber” is used to describe something hereditary. The importance of rearing a child well is captured in the phrase: “bend the sapling and the tree won’t defy you”. An aggressive person is compared with the antagonistic ash: “The way of the wild ash befell him”. These examples demonstrate agency on behalf of not just humans but also nature. The parallels are not simply a projection of human personality traits onto the natural world but go in both directions.

An Ecological Reading

These four models serve to illustrate that the pre-Christian Gaelic mindset encoded a particular way of thinking about humans and nature which was multispecies rather than anthropocentric. Humans were not separated from other species in the traditional Gaelic world. There was an ecological balance between all entities. A key feature of the *dúchas* concept is interconnectedness. Paul Meighan explains that “the importance of this concept of the connectedness and inter-relationships between land, people and culture, held in the word ‘*Dúthchas*’, cannot be overestimated” (2022). It captures the way that land, people and community, past and present, are interlinked – connections which are maintained by practices, language and other means.

Deborah Bird Rose (2011) uses the concept of kinship with similar intent. This concept, she says, “situates us here on Earth, and asserts that we are not alone in time or place: we are at home where our kind of life (Earth life) came into being, and we are members of entangled generations of Earth life, generations that succeed each other in time and place” (ibid.: 50). Humans are only one species that live in kinship with others. This multispecies kinship is the glue that binds nature together. We are dependent on, vulnerable to and responsible for one another (van Doreen and Chrulow 2022). Keith Basso points to a similar cosmology among Native Americans when he notes that “dwelling is said to consist in the multiple ‘lived relationships’ that people maintain with places” (1996: 54).

Patricia Monaghan (2010) compares the spiritual (rather than religious) dimension in the Gaelic worldview to that of Indigenous peoples. She claims that “the traditional Irish worldview derives, as does the Native American, from a vision of nature as immeasurably holy, understood through story and ritual in specific rather than generic places” (ibid.). Similar to *dúchas* and kinship, this is a holistic perspective. It is an understanding of nature that contrasts sharply with the science. It believes that the earth is alive and concurs with the Gaia hypothesis advocated by Lovelock and Margulis in the 1970s (Lovelock 1972; Lovelock and Margulis 1974). The Gaia hypothesis (named after the Greek Earth goddess) suggests that all living organisms on earth interact with each other to create a synergetic and self-regulating system. The earth is continually in a process of becoming.

My reflections on the multispecies nature of Irish folklore draw on the Irish philosopher Richard Kearney’s concept of “diacritical hermeneutics” (2011). He understands hermeneutics as the art of deciphering multiple meanings. This relates, in its most basic sense, to the human capacity to have ‘two thinks at a time’, as James Joyce said (1939). More precisely, it refers to the practice of discerning indirect or tacit allusive meanings,

of discerning another sense beyond or beneath the obvious. Monaghan argues that “many Irish folk tales encode environmental understanding necessary for survival in subsistence economies and, in some cases, for survival of the planet as well” (2010).

It is a form of knowledge that has emerged from local engagement with particular places. It is local rather than universal. The American Indian’s focus on the local is described by Peter Nabokov in the following terms: “over there something wondrous or unexplainable or terrifying happened; right there some spark was struck between the everyday and the extraordinary, creating a memory so bright that some still go there to pay respects or conduct rituals or contact the spirits” (2006: 3). This form of knowledge is very often disregarded as unscientific since it is imbued with cultural values.

Critics might argue that this kind of ecological reading is a form of anachronism, i.e. that it is simply a projection of our own, modern knowledge and anxieties about climate change back in time and that we are attributing environmental anxieties to humans in the past. But as Hennig and his colleagues propose “it is certainly reasonable to assume that also premodern societies experienced environmental and climatic changes, even though these were of a different quality than the massive transformations on a global scale occurring today” (2013: 26). Arguments against this kind of ecological reading of folk narratives imply that any and every story has a fixed and limited meaning. This denies the role of the reader to interpret the story from their own perspective. Given the current climate crisis, it is surely legitimate to read “contemporary ecological issues *into* the medieval past so that we can read *out of* medieval texts ideas that inform our responses to the world that we live in now” (Abram 2019: 38), and these are not just any stories, but narratives that have emerged from our local places, from our *dúchas*.

Silver Branch Perception

Drawing on our traditional folk-tales, I believe we should adopt an approach that Scottish activists McFadyen and Sandilands call “cultural darning and mending” (2021). They describe this as a “playful approach to cultural activism” or a future-orientated creative ethnology that engages with our folk narratives, our placelore and traditional local knowledge. In linking to the past, we ‘re-member’ (McIntosh 1998) a *dúchas*-grounded relationship with the land – and raise consciousness about what was lost during the process of anglicization and colonization in Ireland (Nic Craith 1993). Part of this “cultural darning and mending” involves revisiting our traditional folk narratives and reading them ecologically. It could encompass activities such as revised folk narratives for adults or children, mapping activities or collage.

Our reclamation of traditional folk narratives could potentially bring about a renewed and fresh perspective on the environment, what John Moriarty calls a “silver branch perception” (2005). The concept of “silver branch perception” is drawn from Irish mythology and refers to a medieval Irish tale called *Imram Bhrain* (The Voyage of Bran) which is narrated in the 12th century *Lebor na hUidre* (Meyer 1895). In this folk narrative, King Bran mac Feabhail got up in the middle of a great feast and walked into the forest. Normally fearless in battle, the king found himself strangely unsettled and began to hear music from a silver branch, but nobody was playing. The music was coming from the

Otherworld. As he listened to the music, the King's perspective changed and previous victories in battle suddenly seemed insignificant. The King then returned to the feast and saw a woman from the Otherworld who invited him to come to her land.

The following morning, Bran and his army set sail for the Otherworld. After three days and nights, the sea transformed into a land filled with flowers. There they encountered Manannán Mac Lir, the God of the Sea who was singing with joy. Manannán bestowed the gift of a silver branch with golden apples on Bran and all were bewitched. When the singing ended, Manannán disappeared and the beautiful land was transformed back into water. Once again, the sea was dull and grey and smelled bitter. Bran and his army returned home. Bran came to realize that the Otherworld he had been invited to was simply another perspective on his own world. The experience gave Bran a heightened perception of the world in all its forms.

Alastair McIntosh (1998) suggests that this silver branch (bough) perception is the branch of apple blossom given by fairies to enable humans to pass into musical and poetic realms. The imagery is not confined to Celtic folk narrative. A similar feature occurs in the *Aeneid* during Aeneas's quest to find a golden bough to gain access to the Underworld. When Aeneas begins his descent into the Underworld, the golden bough is shown to Charon who then allows the visitors to enter the boat and cross the Stygian river.

While the narratives differ in detail, the key feature remains the same. Silver or Golden branch perception enables a wider perspective on relationality within the universe. It is not bound by logic but open to different insights beyond the rational. It engages the senses as well as the mind. Silver branch perception represents a transition. It involves a heightened awareness of the oneness or holistic nature of the world. It "is a shift towards an acknowledgement of a reverence in being, to the wonder inherent in the living world" (Ward 2022). As a consequence of this change in perception, "what once appeared ordinary becomes extraordinary" (ibid.). Moriarty described this enhanced perception as "*mirabili*" (2007: 114). This is a way of knowing the world that acknowledges the strangeness of reality but does not attempt to explain or master it. It involves a novel way of looking at the earth, and a new, non-hierarchical relationship between humans and other species.

Claireach Filleadh describes silver branch perception as "a way of seeing the entire Ecology of the world, natural and spiritual" (2013). It requires breaking the habit of separating the human from the animal, the societal from the personal and the spiritual from the mundane. Silver branch perception is a journey that allows us to see all of nature as sacred and everywhere as "a place of spiritual practice" (ibid.). Moriarty describes "silver branch perception" in his *Invoking Ireland* as a gift that the Irish lost as they tried to dominate nature (2005: 150). "Brutally, as though it didn't exist, we felled forests, we killed and slaughtered calves, we set fire to whole mountainsides of heather and furze" (ibid.), but it is perhaps a skill that could be reclaimed if we were to revisit our traditional folklore with ecological eyes.

Folklore and Ecological Diversity

Although the concept of “silver branch perception” is not explicit in a recent report from NatureScot (Maclean 2021), the latter draws on Gaelic folklore to make the case for a revised perception of the environment and its many species. Examining Gaelic placenames in the landscape, folklore, stories, poems and songs, the author, Roddy Maclean finds a wealth of evidence about the ways in which the natural world was appreciated by traditional Gaels. They valued clean air, fertile soils and timber as well as recreational and spiritual benefits. The report identifies hundreds of references to ecosystem services such as food, timber, medicine, fuel and fibre (ibid.).

Pointing to medieval narratives of the Fianna, the author notes the significance of red deer as well as highland cattle to the way of life of the Highland people (ibid.: 16). He profiles the strong tradition of stories of seals and the seal women who visited the shores. McLean proposes that stories like these indicate the “strong connection between humans and the wild through transmogrification” but also a “barrier between the human world and the wild, which can only be crossed by certain people at certain times, and sometimes in just the one direction” (ibid.: 44).

While the relationship between humans and animals was very significant in these medieval Gaelic tales, it also extended to plants. In many tales from the Fianna, the excellent health of the women was attributed to the “boiled tops of hazel” they ate from the treetops. The same food was shared with sheep and goats (ibid.: 56). The oak tree was used to make weapons and yew or ash were planted in woods with the intent of making bows (ibid.: 57). McLean profiles the knowledge that traditional Gaels had regarding the medicinal uses of plants and animals. Such knowledge “can inform the argument about protection of habitat, where the existence of a greater species diversity can be argued from a cultural, as well as natural, perspective” (ibid.: 43).

What is interesting from a folk narrative perspective is the extent to which the report drew on traditional lore to suggest policy changes. The author particularly argued that Gaelic lore could bring a Highland/Gaelic perspective to conversations about nature in Scotland. It could bridge the gap between Gaels and non-Gaelic speakers and bring a traditional perspective to the contentious rewilding debate in Scotland, which has largely been dominated by an Anglocentric worldview. One of the report’s recommendations was to establish a project to research “some of the iconic places in Gaelic literature” and analyse them “for their botanical and zoological diversity and environmental health in the current era, in the light of the descriptions made of them by Gaels in the past” (ibid.: 76).

Conclusion

Initiatives such as these offer hope in a time of climate crisis. The sense of despair about the future of the planet implied in the Anthropocene concept is decades old. In 1972, folk collector Alan Lomax wrote that “a grey-out is in progress which, if it continues unchecked, will fill our human skies with smog of the phony and cut the families of men off from a vision of their own cultural constellations” (1977/1980). Lomax was referencing

the process of globalization which was flattening out local cultural perspectives in favour of “mass-produced and cheapened cultures everywhere” (ibid.). Consequently, humans lose ways of living on and with the planet that will deprive future generations of the possibility of life itself. It was to counter this disillusionment that Anna Tsing and others designed the concept of the ‘Patchy Anthropocene’ (2019). Instead of dealing with helplessness on a global scale, activities could zone in on specific places with an attitude of optimism and ambition.

Although catastrophic in consequences, the current anthropogenic concept can be infused with a sense of hope. As the writer, historian and activist Rebecca Solnit has said: “We cannot afford to be climate doomers” (2023). Drawing on the experiences of Indigenous peoples who have previously faced deforestation and annihilation, one can imagine local solutions which are permeated with a radical courage that is “directed towards a future goodness that transcends the current ability to understand what it is” (Lear 2008: 103). This solution will not be achieved by a single mode of knowing favoured by Western imperialists. Instead, it will involve different modes of knowledge. Although alternative ontologies, such as *dúchas*, have been diluted/flattened by the colonial project, these Indigenous modes of knowledge are crucial if we are to invest localities with relevant thinking. Sophie Strand says: “A myth is a patch of soil where we can plant the best practices of a community: how to relate to each other and to our shared ecosystem” (n.d.). Let us revisit our traditional folk narratives to build a better future.

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Representations of Nature in the South Indian Oral Narrative of Maṇṭeśvāmi

Towards a Holistic Worldview and the Conceptualization of “Ecosocial Ideals”

Pauline Schuster-Löhlau

Introduction: “Ecosocial Ideals,” a Need for “Dalit Ecologies” and Viraśaiva Worldview

In the light of the disastrous effects of climate change, pollution and environmental damage, which appear to disproportionately affect the most vulnerable and disadvantaged strata of the Indian population (Dalits and Adivasis),¹ there is a pressing need for what David Barnhill (2010) calls “ecosocial ideals”. According to him, these ideals “concern speculations about positive alternatives to our contemporary problems, turning our attention to behaviours, values, ideologies, cultures and social structures that might constitute a wiser and healthier relationship with the earth and each other” (ibid.: 282, cited in Rangarajan 2014: 528). In this paper, we look at the principles that guide the interaction of Maṇṭeśvāmi’s followers with and attitude towards nature as instances of such “ecosocial ideals”. These appear to be inextricably linked with the religious and ethical ideals of Viraśaiva belief. Viraśaiva philosophy, for example, generally advertises a harmonious relationship between humans and all living beings, informed by respect for the divine creation and the knowledge that mankind depends on it to survive.

The idea of social and ecological harmony, together with “well-formulated dharmic [ethico-religious] injunctions for environmental protection” is already found in the ancient Indian concept of the “earth family (vasudhaiva kutumbakam)” that includes “all living beings in the universe as members” and in the Sanskrit *Arthaśāstras* (ca. 300 BCE), textbooks on economic, political and social strategies to obtain and ensure prosperity

1 Dalit (from Sanskrit *dalita* “broken”, “crushed”) refers to a member of the lowest castes in traditional Indian society, some of which were regarded as “untouchable” castes due to their members’ occupation being viewed by the higher castes as (ritually) polluting. While the term Dalit is self-chosen, the official term is “Scheduled Caste”. Similarly, tribal groups often call themselves Adivasis, or “earliest inhabitants”, while administrative institutions categorize them as “Scheduled Tribes”.

(ibid.: 528–529). Other classical texts, such as the pan-Indian epics *Mahābhārata* and *Rāmāyaṇa*, address the relationship between mankind, creation and the divine and “offer rich insights into the ethnoecology of the terrestrial ecosystems of India” (ibid.: 529) as well.² Oral literary and performative traditions also give us an idea of how this relationship can be conceptualized, namely, by emphasizing “the human-nature continuum”, as reflected, for example, in the “creation myths and the way of life of tribal cultures” (Saraswati 1995: 4, cited in Rangarajan 2014: 520).³ In this paper, the concept of the human-nature continuum is elucidated based on the analysis of selected text passages from the Maṇṭeśvāmi oral narrative, which reflect the world-view and way of life of the deity’s devotees, who belong to the lower and ex-untouchable castes of the southern part of the Indian state of Karnataka.

However, in view of the production and publication of ecocritical research and literature in India, oral and folk literary traditions or, more generally, literary works by marginalized groups seem to have been largely overlooked (or ignored) by both Indian scholars and scholars from abroad. Indulata Prasad gives the example of Dalits, whose “knowledge has been omitted from the ecological canon” (2022: 99). She further points out that the reason for this omission is founded in the Indian caste system, which “shapes and mediates access to nature, knowledge of the environment, and environmental activism” (ibid: 100). Prasad, thus, calls for a caste-sensitive framework called “Dalit ecologies”, which needs to include detailed studies and analyses of Dalit oral and literary traditions (ibid). Recently, though, scholars have finally taken up studying and “rereading such traditions to theorize Dalit relations with their environments, recognize them as key stakeholders in the environmental discourse, and address their ecological precarity” (ibid.).

Although the oral-performative tradition associated with the Vīraśaiva Saint Maṇṭeśvāmi is maintained by singers who belong to the wider Dalit community, the focus of this paper is not on the issues of caste in relation to environmental discourses and activism. Instead, it offers a glimpse into an alternative perspective of the relationship between man and nature, namely, one that overcomes the dichotomy between man/culture and nature, or subject and object, characteristic of the Western philosophical tradition. The Maṇṭeśvāmi tradition’s ecocentric philosophy, as reflected in the narrative, is shaped by the devotees’ intimate relationship with nature, as well as by the ethical and philosophical principles inherent in Vīraśaivism. This approach is inspired by the idea of ecocriticism being

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- 2 Early Tamil literature (300 BCE–200 CE), called *sangam* literature, should be mentioned here as well. The poems pertaining to this classical South Indian genre can be divided into two categories, *akam* (“inner”) and *puram* (“outer”). While *akam* poetry deals with “the inner world” of the people, with feelings and emotions, *puram* poetry addresses matters of the public domain, such as heroic deeds and battles. These two subgenres, in turn, can be divided into seven subcategories, called *tinai*, which are based on the landscape in which the poetry is set. Thus, Nirmal Selvamony comments that Tamil *sangam* poetry reflects a culture “deeply rooted in the soil” and “where place is the first principle of literary presentation” (2008: 153, cited in Rangarajan 2014: 529–530).
 - 3 Baidyanath Saraswati further explains that “[t]he oral traditions of hunter-gatherers, fishers, farmers, and the pastoral transhuman envisage the seamless view of man and nature as an inseparable whole” (1995: 4, referenced in Rangarajan 2014: 520).

a methodology that re-examines the history of ideologically, aesthetically, and ethically motivated conceptualisations of nature, of the function of its constructions and metaphorisations in literary and other cultural practices, and of the potential effects these discursive, imaginative constructions have on our bodies as well as our natural and cultural environments. (Gersdorf and Mayer 2006: 10).

The focus in this paper is on the Maṇṭeśvāmi narrative tradition, thus, it is primarily concerned with the representations of nature within and through oral literary tradition. Therefore, my analysis is based on two Maṇṭeśvāmi texts: the Maṇṭeśvāmi epic as sung by Inkal Mahadevayya, edited by H. C. Bōraliṅgayya (1997) and a multiple narrator text edited by Ambāliḱe Hiriyaṇṇa (2014).⁴ While the first text is mostly only available in the Kannaḍa language, except for a few passages of different episodes published by C. N. Ramachandran (2007) and G. N. Devy (2012), the second text has been translated into English in its entirety (Hirianna and Bhat 2014). In particular, two passages from the texts: the *Creation Myth* and the *Kalinga Cave Episode*, are taken up for a detailed study, discussing the following questions: How is the creation of the universe and the relational web between man, nature and the divine or spiritual conceptualized in the narrative? Why do certain animal species get singled out in the creation process and why do they play such a significant role in the episode set in the Kalinga Cave? Or, more generally, in which ways and to which purpose is nature imagery used in the Maṇṭeśvāmi oral epic? What kind of stylistic devices and aesthetical means are employed? Does the text invite the reader (or, rather, the audience) to put the ethical ideas and morals it addresses into practice, particularly where the interaction of humans and nature is concerned?

In order to understand the character and uniqueness of the Maṇṭeśvāmi oral-performative tradition better, here is some information on its socio-cultural and religious background. The tradition is native to the remote, hilly, forest-covered southern part of Karnataka, traditionally inhabited by hunter-gatherer and shepherd communities, as well as by communities practicing (shifting) cultivation. It has evolved around the worship of the young Vīraśaiva Saint Maṇṭeśvāmi,⁵ who presumably lived at the close of the 15th century, yet, he and his teachings are very popular up to this day. Vīraśaivas are especially fervent devotees of Śiva, who is one of the highest gods of the Hindu pantheon. Vīraśaivism is a reform movement, which is said to have been founded by Basava in the 12th century. In essence, Basava promoted a just and egalitarian society as well as harmony on earth through the Vīraśaiva doctrine. Maṇṭeśvāmi lived around three hundred years later than Basava and is regarded as a reviver of Basava's ideals of early Vīraśaivism. Even more, he harshly criticized that Vīraśaiva morals had been corrupted and contemporary society had adopted the hierarchical structures it had once rejected so rigorously. He is believed to have been low-born himself, thus, it is no surprise that he spread his

4 Both texts have been collected as part of an attempt to preserve the oral tradition before it might become extinct. As a result, several renditions of the Maṇṭeśvāmi epic by different performers (individual singers and groups of singers) have been documented on audio- and/or videotape, a few of which have been put into writing and published.

5 *Maṇṭe* means "small mountain" or "hillock" in Kannaḍa, the official language of Karnataka state. The word *svāmi*, in turn, is an honorific term of address, denoting respect towards the addressed, often a religious leader.

teachings primarily among groups that have been marginalized both socially and spatially, such as Dalits and Adivasis. Maṇṭeśvāmi's teachings are based on Vīraśaiva doctrine, but have been adapted to the lifestyle of his followers, characterized, among others, by manual work, community spirit, meat-eating and vestiges of animism. In other words, he has established his own branch, or sect, within Vīraśaivism.

Maṇṭeśvāmi's birth, his wanderings, struggles and miraculous deeds, as well as his retreat from the world are told in an oral epic named after him. An important role in maintaining this narrative tradition is played by the Nīlagāras, professional singers initiated into the oral-performative worship tradition associated with Maṇṭeśvāmi. They sing the Maṇṭeśvāmi epic as part of night-time rituals, temple festivals, life-cycle ceremonies and on their alms walks.⁶ However, the Nīlagāra tradition has been disappearing in recent decades as it is no longer a means of winning a livelihood for the singers: Their art and devotion is less and less appreciated by the devotees of Maṇṭeśvāmi, whose understanding of this aspect of the worship tradition seems to have diminished. With the decline of this particular oral-performative tradition, which also functions as a cultural memory, the Nīlagāras' knowledge of the local flora and fauna and their world-view represented in and through the Maṇṭeśvāmi epic is being lost as well. It is at this world-view and its underlying Vīraśaiva cosmology that we take a closer look in the following analysis of the creation myth.

The Creation Myth: A Representation of Vīraśaiva Cosmology

According to the genesis portion of the Maṇṭeśvāmi epic as sung by Inkal Mahadevayya, in the beginning, there is only light. This "supreme light" (*parañjyōti*) is then equated with Maṇṭeśvāmi. Thus, in the opening canto, and throughout the entire narrative, the motif of light is used repetitively. Maṇṭeśvāmi, for instance, is referred to as "the supreme light", the "light of the Netherworld" and "light of the world" in the first chapter. Maṇṭeśvāmi, in turn, is identified as the creator of the universe. He makes both an earth and a sky: the earth, with plants and trees, will be the world of his (human) children and the sky will be the world of gods (Ramachandran 2007: 48–52). Next, Maṇṭeśvāmi brings into being several deities, both male and female, whom he also calls his children (*ibid.*: 53, 59, 61, 63, 71–74). Among them is a daughter, Vidiyamma, who acts as a female creator: She makes "all kinds of animals" and, subsequently, creates hundreds of female and male "dolls" (*ibid.*: 75). The use of the word "doll" suggests that human beings possess only limited agency, as they are controlled by and dependent on the divine will. Nevertheless, they are an important part of the divine creation, but so are trees and plants, for example, on which humans depend for food, as stated by Maṇṭeśvāmi: "Let the plants and trees [...], born on this earth, let them provide food for the children I have begotten" (*ibid.*: 51). This description of the creation process correlates with the assumption that in prophetic monotheism, in our example, Śaivism, animals are usually created for the benefit and

6 Groups of Nīlagāras walk from house to house on designated days of the week, singing selected episodes from the epic of Maṇṭeśvāmi, begging for alms, which they usually receive in the form of natural produce. In return, they offer the blessing of Maṇṭeśvāmi.

continuity of human beings (Chapple 2018). Nonetheless, “[t]here is a recognition in Hinduism that nonhuman forms of life also are expressions of divinity and that in the hierarchy of beings there are animals not only below us but also above us, on earth and in divine worlds” (Jacobsen 2018b). Some animals, for example, are worshipped in India both as a live animal and in iconographic form. One of these animals is the snake (*nāga*), and more specifically, the cobra, which occupies a significant place in Indian mythology, folklore and religious practices, but also in the realm of divine beings:

Snakes are particularly worshipped by women who desire children since snakes are connected to fertility. Since *nāgas* are associated with anthills and trees, these places also become centers for snake worship. Snakes are worshipped for their power and protection, for fertility and healing of disease, but snakes have a dual nature. They are benevolent and when treated properly protect the family and give fertility. But if not propitiated properly, they become dangerous. (ibid.)

It is the snake’s association with anthills and trees, and implicitly with meditation and ascetic practices, as well as its dual nature that is of interest to us later, in the context of the analysis of the Kalinga Cave Episode. As per the narrative, Vidiyamma continues to create “hundreds of scorpions” and “hundreds of snakes”, as well as “ants and chameleons, insects and worms” (Ramachandran 2007: 75). It is noteworthy that these specific animals are singled out in the creation process. The animals just mentioned are rather ambivalent beings, as they are usually associated with danger, demise and death, but also with fertility (especially the snake).

While the ambiguous nature of the snake has just been discussed, I would also like to draw attention to the fact that snakes, scorpions, ants, chameleons, insects and worms are associated with the notion of liminality. These wild creatures are not only found in what we could call liminal spaces, such as forest borders (neither village nor forest and jungle), caves (simultaneously on the ground level and beneath the surface, offering protection but also leading into the unknown) and dying matter (neither dead, nor fully alive). But, more importantly, all of them undergo a kind of metamorphosis at some point of their lives: they transition from one state of being to another, a stage marked by liminality and ambiguity. Snakes and scorpions, for example, shed their skin, insects pupate and re-emerge in another form and chameleons are able to change their colour according to their surroundings. Analogous to an animal undergoing a metamorphosis, in Viraśaivism, the devotees, especially the spiritual leaders (*svāmis*), go through different stages on their spiritual journey to become a liberated soul, passing through phases of liminality as well. We will discuss the issue of liminality and ritual transformation in detail once we turn to the study of the Kalinga Cave Episode below.

Coming back to the question of the relationship between man and creation, Maṇṭeśvāmi claims that “among all creatures, the noblest of all is man; the highest on earth [...] is this creature called Man” (ibid.: 80). Although human beings are presented as superior to most other beings, they are, nevertheless, merely one entity among many within the relational web of creation. Humans, for instance, depend on various elements of the environment (e.g. clean air, potable water, arable land and woods) for survival. So, ideally, they should protect nature and its resources. It is their moral duty

as well as a sign of respect and devotion not to damage divine creation. This practice of non-injury or non-violence towards all living beings, be they humans, plants or animals, in Indian religions, such as Hinduism, Buddhism and Jainism, is known as *ahimsā*.⁷ The ethical principle of *ahimsā* and the concept of rebirth in Indian religions, which includes the belief that humans have been animals in past lives, have shaped the relationship between humankind and nature to the effect that many orthodox Hindus, Buddhists and Jains are vegetarians and practice *ahimsā* as best as they can in daily life, or, at least, adopt an attitude of empathy towards all living beings (Chapple 2018). There is a scene in the Maṇṭeśvāmi epic that illustrates this ethical concept of *ahimsā* particularly well: the saint and his disciples are on a walk and realize that the cloth bags they carry around with them to collect alms, called *śivakante*, have become dirty and need to be cleaned. Maṇṭeśvāmi advises the washerman:

The living beings like lice or their eggs should not lose their lives in the process. [...] The *Śivakante* is not to be dipped in water, not to be thrashed on stone, not to be boiled in steam. Not a single living being that might be sheltered in it should be hurt in the process of cleaning it. (Hirianna and Bhat 2014: 102)

Although this incident is a test for the washerman and clearly possesses a ritual dimension, it reminds the audience of the Maṇṭeśvāmi epic's oral performance that every life is precious, that each and every living being has its place and purpose within the framework of divine creation and should not be harmed, either on purpose or due to carelessness. Thus, the Maṇṭeśvāmi narrative illustrates the ideal of a harmonious coexistence with all the creatures on earth. This trope is carried forth in the Kalinga Cave Episode.

The Kalinga Cave Episode: Illustrating a Viraśaiva's Spiritual Journey

In the Kalinga Cave Episode, the plot shifts its focus – as suggested by the title – to a remote and eerie cave far away from all civilization. Maṇṭeśvāmi decides to teach the community of smiths, who have accepted neither his authority nor his teachings, a lesson: he abducts the seven-year-old son of an arrogant and wealthy ironsmith and imprisons him in a dark cave, together with various dangerous animals. The young boy called Kempācāri

7 The word *ahimsā* derives from the Sanskrit root *hims* “to injure”, “to harm”, “to kill” or “to destroy”, in combination with the negative particle “a”, together meaning “noninjury” (Jacobsen 2018a). It appears that the doctrine of *ahimsā* emerged in the first millennium BCE as a reaction to and “critique of the vedic animal sacrifice (yajña)”, thus, originally being “a criticism not of war but of violence against animals” (Jacobsen 2018a). For this reason, *ahimsā* is often associated, or even equated, with vegetarianism. However, Anna Scarabel (2020) opines in her study of the *Anuśāsanaparvan* of the *Mahābhārata* that, in terms of diet, the principle of *ahimsā* does not apply to different social groups in the same way: those following the spiritual path to liberation (e.g. ascetics) should observe a strictly vegetarian diet, while those leading an active life (e.g. warriors) could also eat meat. Maṇṭeśvāmis’ low-caste and very active followers also eat meat, as it is more easily accessible, affordable and nourishing than plant-based foods. In this paper, then, the term *ahimsā* is used in the sense of non-violent practices in general and an attitude of empathy towards all living beings.

or Kempaṇṇa is held in there for twelve years and finally re-emerges as an enlightened man, as Siddappāji, who later becomes Maṇṭēsvāmi's successor. In the beginning, however, Maṇṭēsvāmi is not sure whether the tender boy will survive, as the following citation shows:

The Light of the World, Light of the Heavens,
 Light of the Depths,
 Elder of the Earth
 Looks at Kalinga Cave.
 Can't figure out if son Kempanna's inside;
 Doesn't know if he is dead.
 Left the child captive to snakes, captive to scorpions,
 Left him to be tormented by killer scorpions.
 Can't find him; what use calling out to a dead son? (Devy 2012: 65)

Indeed, the inhospitable cave reminds us of a grave or netherworld where unfathomable creatures dwell. Among these creatures, scorpions and cobras, or *nāgas*, feature most prominently. Cobras are connected to water in Indian mythology and common belief, be it in the form of rain, a lake, a river – or “the dark, creative, cosmic waters of the underworld” (Jacobsen 2018b). The cobra is a poisonous snake, therefore, it also “represents danger and power over life and death” (ibid.). The other animals mentioned in the quotation can also bring death. Even if they did not attack and kill the young man, the knowledge and anticipation that they could is a form of torture in itself. Altogether, the atmosphere created in this passage by using the image of a dark and dangerous cave, stands in marked contrast to the image of the divine light, symbolizing creativity, hope and true knowledge, evoked in the creation myth.

Kempācāri, who has grown up sheltered until the day of his violent kidnapping, is probably confronted with his own mortality for the first time and – understandably – does not know how to cope with it. He lies there, in the cave, lamenting:

I toss to the left –
 the cobra torments me.
 I turn to the right –
 the python torments me.
 God! I lie in the middle –
 the killer scorpion torments me.
 Can't bear this captivity. (Devy 2012: 65)

As illustrated by this quotation, the helpless, possibly even immobilized, Kempācāri cannot escape his captivity and the danger to which he is exposed. There is literally no place to which he can turn for safety, which makes him doubt his own survival. Finally, he seems to realize that he is at Maṇṭēsvāmi's mercy and that his only hope is to put his faith in Maṇṭēsvāmi. He, thus, pleads to the saint to end his torture, but the ordeal seems to go on endlessly, with the passing of time being creatively depicted with the help of nature imagery:

On his temples
 Grow *matti* trees.⁸
 On the little one's forehead, son,
 Grow *bhasumanga* trees.
 In his two eyes
 Wasps breed.
 In his nose
 Grow *muguthas* trees.
 In his mouth, O God!
 Grows an anthill.
 On his shoulders
 Grow *buruga* trees.
 On his back
 Grow *bilpatre* trees.⁹
 Under his arms
 Bees build hives.
 Huge bees, child;
 Little bees.
 Inside his heart's nest
 Cobras make children.
 In his navel, child,
 A pipal tree¹⁰ is born.
 In his palms
 Grow *angalinga* trees.
 On his feet
 Grow *padarakshi* trees. (ibid.: 66–67)

Apart from marking the passage of time, the imagery suggests that Kempācāri has surrendered to his fate, as he remains in a meditative state, letting nature slowly take over. The image of nature taking over Kempācāri's body, using it as a shelter and a sort of breeding ground for some species, thus, integrating it in the natural processes of growth and abundance, indicates that the young man has been claimed by nature. In this context, the pipal tree growing from his navel is an especially powerful image: Just as a foetus in the womb is connected to its mother by the umbilical cord, Kempācāri seems to be connected to nature (or "mother Earth" to stay in the metaphor) through the pipal tree, which is considered sacred by Hindus and is, thus, part of different worship traditions.¹¹

The image of Kempaṇṇa slowly becoming one with nature, having lost himself in it, vividly represents the essence of the philosophical system of *advaita*, and more specifically of *śaktiviśiṣṭādvaita* in the context of Vīraśaivism: the term denotes "a scheme of

8 Bot. *terminalia elliptica*.

9 Bot. *aegle marmelos*.

10 Bot. *ficus religiosa*.

11 I am grateful to Saigeetha Hegde for sharing her thoughts on this imagery. Furthermore, the pipal tree is associated with meditation and asceticism, as holy men (*sadhus*) tend to meditate beneath this particular tree. This observation complies with the fact that Śiva is often depicted as an omniscient yogi who leads an ascetic lifestyle on the sacred Mount Kailash and the Maṇṭeśvāmi tradition is essentially a Śaiva tradition with aspects of asceticism.

ultimate nondualism but with differentiation in the realm of active phenomena, or ‘energy qualified monism’ (Michael 2018). While followers of other forms of Śiva worship believe that the world is merely an illusion (*māyā*), Vīraśaivas “insist that the energized world (*śakti*) of manifest forms and names is real but only insofar as it is rooted in the nature of Śiva” (ibid.). In other words, the world of nature, and every single being in it, is real and ultimately one with Śiva, as it is “the real energy of Śiva,” according to Michael (ibid.). The belief of everything there is ultimately being the energy of Śiva fits well with the ethical concept of non-violence or *ahiṃsā*: by practicing *ahiṃsā*, Vīraśaivas demonstrate that they recognize the divine energy, God Śiva, in every living being.

It is the goal of every “true” follower of Vīraśaivism to eventually achieve “a state of ‘oneness’ (*aikya*)” with Śiva by transcending distinction and identifying with him (ibid.). The importance of the spiritual journey of an individual soul is expressed in the *ṣaṭsthala* scheme, which traces the six (*ṣaṭ*) stages or steps (*sthala*) on the way to spiritual attainment. This “most important philosophical scheme” of the Vīraśaiva movement “is firmly based in the practical realm of devotion and spiritual development” (ibid.). And, indeed, it is a spiritual development and profound transformation that Kempācāri undergoes in Kalinga cave.

In the course of time, Kempācāri completely relinquishes his former identity, focusing all thought on Maṇṭeśvāmi, as becomes apparent by his inner monologue:

Don't know when the master's feet
Will appear, Kempanna thinks.
Hugging the python, he prays;
'I have no one but you.'
Forgets his mother,
Forgets his father.
Forgets his brothers.
My darling
Forgets his hut,
Cowshed, sheep,
Bullocks, buffaloes;
Renounces the twelve-lakh [1,200,000] fortune
That awaits him in his house.
Ayya, Elder of the Earth [Maṇṭeśvāmi],
You are my only hope, says he. (Devy 2012: 68)

In captivity, Kempācāri has learned to cope with the agony and the possibility of a premature death. He has totally accepted whatever his fate may be, which is spectacularly captured in the metaphor of “hugging the python”. In contrast to the poisonous cobra that has been repetitively mentioned previously, the python is a constrictor and the image of the young man hugging the python might mirror such a snake strangling its prey, suggesting that Kempaṇṇa is able to control his fears, emotions and desires. He has learned to overcome them by meditating on and putting his faith in Maṇṭeśvāmi. Like a snake shedding its skin, Kempācāri has also left his old self behind and undergone a sort of metamorphosis. Interestingly, in Indian folklore, a snake leaving behind its skin symbolizes “longevity or immortality, and it is a simile of mokṣa (liberation) and of the way one

who is liberated leaves evil behind” (Vogel 1926, cited in Jacobsen 2018b). Indeed, Kampachari has severed all his material and emotional bonds with the physical world beyond the cave and all his worldly desires seem to have dissolved. He has learned to completely relinquish his ego through suffering and meditation. Even more, he seems to have found liberation by becoming a fervent devotee of Maṇṭeśvāmi (i.e. Śiva) and experiencing oneness with him.

The transformation or spiritual journey Kempācāri has undergone is completed with him being “reborn” as Siddappāji, as the following words by Maṇṭeśvāmi show:

May the name your parents gave you
Cease in that dungeon this moment.
May the name of Kempachari
Perish this very day. [...]
Siddappaji, Siddappaji,
Get up and come, says he. (Devy 2012: 74)

By giving up his old name and identity, Kempācāri has symbolically died in the cave and been reborn as a new and reformed man, as implied by his new name, Siddappāji.¹² Even more, his new name points to Kempācāri having completed his spiritual development and, in the last and sixth stage of the *ṣaṣṭhala* scheme, attained oneness with Śiva, as the Sanskrit word *siddhi* signifies “perfection”, “completion” or “complete attainment”. The development the young man is going through is marked by a long period of liminality, of him being in a state of “in-betweenness”. His story might remind us of an animal undergoing a metamorphosis or a person undergoing a time of transition in their life.

The different stages of an individual’s transformative period in their social life have been described by Arnold van Gennep (1960) in his famous theory of the rites of passage. According to this theory, there are three stages: separation, liminality and incorporation, each of which is associated with special acts and places. It is the second or liminal stage, that is of interest to us in the context of the Kalinga Cave Episode. In this phase,

individuals or groups transition from one established category or status in society to another by separating from their previous social identity, experiencing the liminal period when they were neither the identity that they formerly held nor the new identity that they will transition to, and then incorporating or aggregating into their new identity as they re-enter society. (Banfield 2022: 611)

12 Kempācāri’s captivity and transformation “is a variation of the very old myth of Valmiki, the first Sanskrit poet who wrote Ramayana”, according to C. N. Ramachandran (2004). He writes: “It is said that Valmiki was initially a hunter, who, after being advised by divine sages, meditated for long in the name of Rama. He was so preoccupied in his meditation that an anthill grew around him; and after 12 years he came out of the anthill as a sage-poet” (ibid.). The name Valmiki goes back to the Sanskrit word *valmika* “anthill”. Maṇṭeśvāmi and Siddappāji are both believed to be incarnations of Śiva by their followers and it is said that they also manifest themselves in anthills from time to time, demanding to be worshipped by the people.

Or, in other words, individuals who find themselves in this particular stage in a rite of passage “are neither what they used to be nor are they what they will”, but, simultaneously, they are both of these things and neither of those things, as well as a “blending of those two things into a third (as in a hybrid)” (ibid.: 611, 613). Liminal experiences and statuses are, thus, often associated with notions of transition, in-betweenness, indeterminacy and ambiguity.

Applying van Gennep’s three-fold theory to the text, Kempācāri’s abduction relates to the first stage, separation, the leaving behind of his familiar surroundings and social context. The creatures witnessing – or perhaps even assisting – his transformation from an ordinary human being to an enlightened man and later a spiritual leader himself, are all animal species which could be described as liminal beings (as discussed above). Their undergoing a metamorphosis at some point in their life might be read as an analogy to Kempācāri undergoing such a transformation as well, spending the liminal stage of his personal rite of passage in the Kalinga cave. In the cave, he is no longer Kempācāri, the son of a wealthy ironsmith, but, at the same time, he is not yet Siddappāji, an enlightened, “a great soul”. However, once he realizes that the purpose of his existence lies in the devotion and service to Maṇṭeśvāmi, he is freed from his prison and initiated into the fold of the Viraśaiva sect founded by Maṇṭeśvāmi, thus, integrating his new identity and re-entering society or, in this particular case, an ascetic order. He eventually becomes the saint’s successor and is remembered and worshipped by thousands of devotees during an annual festival held in his honour in the village of Chikkalluru up to this day.

Conclusion: Śaktiviśiṣṭādvaita Philosophy as a Model for Overcoming the “Otherness” of Nature and an Inspiration for Ecosocial Ideals

As we have seen, nature imagery is used in the Maṇṭeśvāmi epic to create certain moods and ambiances and evoke specific emotions. Moreover, it is used to represent Viraśaiva cosmology as well as the complex ethical and philosophical principles pertaining to Viraśaivism’s belief and value system. Regarding the use of nature metaphors, consider, for example, the use of light imagery throughout the oral narrative: in the creation myth, Maṇṭeśvāmi is established as the all-powerful creator and, in turn, equated with light, which is the origin and basis of all other creations. Time and again, he is referred to as “the supreme light”. In the Kalinga Cave Episode, however, the mood shifts from one of light, creativity and prosperity to one of fear and terror by evoking images of a dark and grave-like cave inhabited by potentially deadly animals. The dramatic effect is even enhanced by taking over the perspectives of Maṇṭeśvāmi and Kempācāri, which is marked by a change from third- to first-person narration. Once Kempācāri has completed his transformation, he removes the boulder blocking the cave’s entrance with the help of the superhuman powers he has gained during his captivity and light streams in, reflecting his journey from the darkness of ignorance to the light of true knowledge.

Regarding the cosmology represented in and through the Maṇṭeśvāmi oral epic, we have learned that it is hierarchical: man is depicted as the noblest creature of all, with animals and plants having been created for his benefit. Yet, at the same time, he is de-

pendent on nature and divine grace for his well-being and survival. From a holistic – and idealistic – point of view, then, it would be in humanity's own interest to protect nature in order to guarantee its continuity. In addition, some animals, such as the cobra, are worshipped as deities and, thus, stand above human beings in the cosmic hierarchy. More importantly, we have discussed the concept and practice of *ahimsā*, or non-violence, towards all beings in various Indian religious traditions and how this principle might be realized in everyday practices. The practice of *ahimsā* can be regarded as an “ecosocial ideal”, as it calls for empathy towards all living beings and, ideally, their protection or non-injury, acknowledging their capacity for suffering.

Furthermore, using the example of specific animal species that have been singled out in the creation process according to the narrative, the concept of liminality, as one of the stages in van Gennep's theory of the rites of passage, has been discussed in detail. More importantly, the process of Kempācāri becoming a *siddha* in the Kalinga cave by giving up his human self and desires, as well as his former faith, is captured strikingly in the image of becoming one with nature. It is also a metaphor for Kempācāri becoming one with Śiva, thus, reaching the sixth and last stage in Vīraśaivism's philosophical scheme of *śaktiviśiṣṭādvaita*, the six stages of becoming a liberated soul, the goal of every “true” Vīraśaiva. According to *śaktiviśiṣṭādvaita* philosophy, the world of nature is “the real energy of Śiva”. Therefore, the protection of nature constitutes an act of devotion and, vice versa, the exploitation and destruction of nature is an offence and an obstruction on the path to liberation. Another significant aspect in this context is the abandonment of one's ego, pride and greed. On the one hand, this could alleviate one's anthropocentric perspective in favour of a more ecocentric view, in which nature embodies the divine. On the other hand, this could lead to adopting a simpler, less consumerist, lifestyle, thereby reducing one's ecological footprint. From the Vīraśaiva point of view, then, the economical use of resources and the protection of nature are an “ecosocial” and religious ideal. This view also fits well with the rather ecocentric lifestyle of the social groups that worship Maṇṭeśvāmi, such as tribals, shepherds and agricultural labourers, who possess an intimate knowledge of the local flora and fauna and the intricate relational web between human beings and nature.

Moreover, these groups perceive of this relationship as a continuum rather than a dichotomy. Thus, in contrast to the Western philosophical tradition, nature is not seen as the “other” of man, and there does not seem to be a need to either reconcile or delineate the two. Thomas Claviez, for example, acknowledges that other (earlier or contemporary) cultures are “informed by a mythical, or mythopoetic, world-view, [and] rather emphasize aspects that connect humans and non-humans in a holistic, if hierarchized, cosmology” (2006: 437). He argues that it might be exactly such “a pre- or non-scientific perspective on the relation between man and nature” (ibid.) that could provide “the moral-philosophical framework” on which the ethical demand for the preservation of nature can be based (ibid.: 435). It is exactly such a holistic and – from the perspective of Western scholarship – alternative, world-view that the cosmology and *śaktiviśiṣṭādvaita* philosophy represented in the Maṇṭeśvāmi narrative tradition provides. Furthermore, the tradition may inspire a more environmentally friendly lifestyle, based on principles such as *ahimsā*, which could be interpreted in terms of an “ecosocial ideal”. The Nīlāgāras ensure that the democratic and ethical principles underlying the worship tradition of Maṇṭeśvāmi

are actually practiced and that everybody, regardless of caste, class, religion or gender, can learn about (and act upon) the religious and (eco)social ideals of Vīraśaivism.

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Speculating

From Ancestrality to Possible Futures

A Journey of Multispecies Politics

*Fernanda Haskel*¹

Dear Reader, Here Is a Warning: Get Ready!

Prepare to break perceptual cocoons which treat nature utilitarianly.² This will foster a new type of sensitivity to transform the natureculture relationship dichotomy. This text is an experiment in anticipatory narratives and speculative fabulation (Haraway 2016), blurring the boundaries between humans and non-humans. It occurred in 3989, after the end of our times – with the effects marked by the loss of hope and biodiversity, civilizational crisis and climate emergency. This text is part of a doctoral thesis on the regenerative process in the encounter between city and forest, specifically the Atlantic Forest of Southern Brazil – guided by the life of plants and indigenous ancestral wisdom, which helps sustain the planet's forests. The intention is to raise affective politics through the multispecies alliance, providing visibility and activating the collective imagination to other ways of existing and relating, such as cooperation with plant sociability, to build other worlds and possible futures.

And Deep Down, What Is There?

In fact, countless meetings have happened after the first climate agreements in the 20th century. Now, everyone is exhausted. Only a few attend the current Assemblage. Few believe that anything is worthwhile in these meetings, especially after the last tree has been cut – even with all the environmental laws and international agreements on global goals!

1 This chapter is part of a PhD research project in community psychosociology and social ecology at the Federal University of Rio de Janeiro (UFRJ), supported by a scholarship from the Improvement of Higher Education Foundation (CAPES) in Brazil. No crossing is done alone; few are done in encouraging company. Thank you, Laura Dolan, for your tireless support that never abandoned the boat, regardless of the storm. I will always remember it.

2 Emerson Elias Merhy, the adviser of my PhD project, said this during a collective orientation in 2024.

It is a time of loss and hopelessness. Everyone remembers the first world conference about the environment as a major issue in 1972: the United Nations Conference on the Human Environment in Stockholm (UN 1972). We have not forgotten the Paris Agreement when the global goal was to hold the global average temperature well below 2 °C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels (UN 2015). However, these words were devoid of value, discredited and wasted. Men were forgetful then and failed to recognize the power of words as actions that create the world (Kopenawa and Albert 2013).

It is the year 3983. The Assemblage, also known as the Cyclical Assemblage of Mutant Multispecies, has convened on the Transatlantic Bridge. The bridge is crafted from solar threads and salt pieces. The Atlantic Ocean, which has always been a nexus for diverse species' encounters, holds ruin and abandonment in its depths. The oceans have drowned much of the land, continents have succumbed to submersion, and once towering mountain peaks are now scattered islands resting at sea level. As scientists had repeatedly warned in the past, Earth's temperature has unsurprisingly soared by over 7 °C (IPCC 2023a, 2023b). It is uninhabitable for non-hybridized species, known as a place ravaged by humans who continually ignored Indigenous peoples who had known what was to come. As *The Falling Sky: The Words of a Yanomami Shaman* had warned us, the sky fell as soon as the last tree was cut down (Kopenawa and Albert 2013).

However, glimmers of life shine through on this diseased planet. Plants eat abandoned structures. Human remnants – metamorphosed with aquatic life, birds, and flora – made existence possible by recalling witchcraft and *Reclaiming Animism* (Stengers 2007) to create clusters of humans with mutations. Women engaged in daily witchcraft have established profound connections and reciprocal relationships with plants, evolving the ability to form spaces to manifest life (Federici 2003; Stengers 2007; Sztutman 2018). We have cultivated conditions of living by existing in otherness experiences. Activating imagination, transcending linguistic boundaries and improving sensitive perception have become prerequisites for composing possible worlds (Deleuze and Guattari 2013; Krenak 2020a). We operate the *Cosmopolitical Proposition* – a way of practicing politics incorporating multiple perspectives (Stengers 2007). All existences have political agency, and everyone participates in multispecies politics. We convene periodically in Cyclical Multispecies Assemblage to discuss the precariousness of living conditions on Earth.

The attendees of the Assemblage are intrigued, despite the historical indifference and neglect we have faced. Word of a talking notebook spreads rapidly, sparking curiosity. *A talking notebook? How could this be?* Odnanref – a woman-whale-bromeliad – found it during a routine dive into the ruins of the world's depths, where she discovered the rainbow-hued and translucent bag that held it. Intrigued by what she had found, Odnanref swam speedily southward to the Atlantic Ocean towards a place known as Brazil – a historically rich land teeming with diverse life forms and biomes (unfortunately, Brazil succumbed to death due to global policies in ancient times, and this resulted in the devastation of forested areas. The suffering of that time is tattooed on her own mixed-species body).

As soon as Odnanref emerged from the water after her discovery, she arrived on a small island where she was enthusiastically welcomed by Plant – her sister, guide-researcher (Seixas et al. 2019), and companion species (Haraway 2003, 2008, 2010, 2016). Panting, she was excited to show her what she had found, a relic documenting multi-

species political actions in 2023. As they admired the rainbow-hued bag, she recalled their first encounters. Since the start of the hybridization process, *The Life of Plants* (Coccia 2019) has been the essence of Odnanref's existence and the focus of her investigations. So, when Plant chose to be part of her – to graft into her original human-woman body as part of their hybridization process – they made an unconditional commitment: sharing everything they found with each other. Plant and Odnanref opened the little bag with the notebook together as a non-negotiable best friend and research partner. To their surprise, something happened: they discovered unprecedentedly that the little notebook was a talker!

They realized the notebook contains notes, drafts of the first Multispecies Conference held in 2023: *Narrating the Multispecies World*, a precursor to the Multispecies Cyclic Assemblage the future would bring (Würzburg University 2023). The notebook pages narrate community participation in urban planning and the governance of protected areas once covered by the now-extinct Atlantic Forest. The multispecies politics action took place in an archipelago known for its magic – both because of the beautiful landscapes and the witches who used to live there. The notebook also holds letters of multispecies politics and unfolds a narrative of exercising citizenship alongside *forestizenship*, the citizenship of forest people (Krenak 2022, 2024).

The notebook also has traces of a story of a woman with a plant, deeply connected to the beings responsible for the magic of the archipelago that was sold ages ago. Odnanref realized that the little notebook was a portal, revealing the encounter between humans and non-humans already working together in the political arena in a cosmopolitical dance across time. I will come back to this woman, known as Lis, later. The little notebook's scribbles bring forth multiple languages in drawings and writings. Touching it, Odnanref immediately became aware that its messages were sufficient to invite it to join us at the Multispecies Cyclic Assemblage.

Multispecies Cyclic Assemblage: Art as Political Imagination

Today, Odnanref feels confident, having dedicated considerable time to readying herself for the Assemblage. She knew it would test her limits and abilities to navigate the radical differences and encounter her ancestral past. The Assemblage's host is typically chosen through a raffle, and the name is drawn. This year, 3983, it was hers: Odnanref. She tells us more about herself: She is a mixture of a woman, a whale and a bromeliad, a plant from the extinct Atlantic Forest. A warm sensation enveloped her when she was called upon, radiating from her throat and commanding her entire mixed-being. It had awakened her deepest fear: public exposure. Simultaneously, as a researcher on aquatic times and life conditions, she recognizes this experience as an opportunity deeply connected to these themes. After all, she routinely dives into the ocean on expeditions to investigate times when humans could live as a specific species. She maintains a collection of Multispecies Assemblage Diaries and Drifting Letters that she has found in the depths of the worlds. Being a moderator of the Multispecies Cyclic Assemblage allows us to experiment with multilingual dialogues and compose another compass: the encounter of times.

Now, the Multispecies Cyclical Assemblage starts, featuring the talking notebook from deep down in the world and herself. Polyphonic drums set the stage as it opens its first page. An ancient drawing of a multispecies assemblage is exhibited.

(Figure 1:) *Polyphonic assembly: multispecies landscape. Painting by the author.*



Aroeira, a special *art-intelligence*, exudes a nostalgic fresh wood scent, and her role is translating the little notebook to the guests. Aroeira was once a doctor and nurse healer, residing in the forest with profound roots and dedicated to the care of women. In a rare metamorphosis (Coccia 2021), she transformed into a tree intertwined with jellyfish and butterflies, supported by artificial intelligence. Due to her heightened sensitivity, artistic talents and healing capabilities, Aroeira has become a translator of worlds and times. Recognizing her unique abilities, she is the guest of honour participating in the Multispecies Assemblage. Her challenge is to express the secrets concealed within the little notebook, offering landscape perspectives from 2023 and translating them for the assemblage in the year 3983.

Recognizing the translation's inaccuracy, precarious like the world (Tsing 2015), Aroeira delves deeply into the drawing shown by the little notebook and cites the multifaceted relations between humans and non-humans. The drawing brings messages from whales, oceans and plants during an era when humans considered themselves separate and superior to nature. It is not easy to describe the meeting between humans and non-humans when the latter were treated as objects and not as producers of life conditions. Aroeira attempts to describe it with a piano and flute melody. In other words, it is translated as follows: It was a spring afternoon in the southern hemisphere with a full moon rising from the ocean. The sky had twilight tones: pink, blue, and purple – whales passed by Matadeiro beach in southern Brazil, where the magic was auctioned. “Matadeiro” means “slaughterhouse”. It was where the whales were killed in the 16th,

17th and 18th centuries. Plants attentively presented the whale arrivals and departures through the times. Bromeliads bloomed from the top of the trees, between the cracks of the stones, and lived with bamboo and snake plants – Saint George's Sword. With Aroeira's help, the atmosphere at the Multispecies Assemblage becomes alive with the sounds of whales, the ocean waves and the rustling of the plants depicted in the drawing. The sudden emergence of these non-human voices surprises everyone, for in 2023, it was rare for non-humans to take centre stage in political meetings. The shock reverberates throughout the gathering as attendees realize that the whales, ocean and plants are the protagonists of their narratives and integral to the collective story of existence: "Can I show landscape as the protagonist of an adventure in which humans are only one kind of participant?" (Tsing 2015: 155).

Providing the context of these ancient times, Aroeira probes the roots of the natureculture dichotomy. As she accesses her memories, she feels the reverberations of the past, witnessing one specific way to live, which allows the violent colonization of the Americas and the enslavement of Africa by Europe – a brutal annihilation of countless diverse ways of life. She shows us a way of life that treats nature as a resource, the times before the sky fell when the patriarchal society perpetuated colonialism and fed capitalism. It was a time when the white men – from "commodity people", whom everything they touch becomes a product, as the Yanomami Shaman teaches us – violently exercised their supposed superiority in intellectual, economic, political and social relationships. Exploring, oppressing and exterminating Indigenous people, black people, women and non-human entities, such as plants, rivers and oceans, was deemed beneficial to their economy during that era, even producing massive inequality and ecological crisis. This way of life, though once accepted, is now inconceivable and beyond the bounds of possibility for those who still exist. We need cooperation, especially with plants and Indigenous people, to sustain life conditions for everyone, except for creatures such as Malvaro Developon Specularex, an experienced and well-known scientist who is vengeful and resentful.

Despite having once advocated for environmental causes, he blames the remaining hybridized humans (especially those made with female) for the deteriorating conditions of life on Earth. His persuasive power, and deep and strong voice intimidates people and leads them to obey his commands. He is one of the few who seeks to accumulate resources to create living conditions solely for his benefit. Malvaro retains traces of individualism and selfishness, which should have been extinguished long ago. His hybridization occurred in an unauthorized and dangerous manner, resulting in an appearance where the beings that merged with his body cannot be identified. Therefore, he is predominantly composed of artificial intelligence, governed by strict and uncompromising rules. Using this feature, Malvaro seeks to manipulate and control where witchcraft is practiced, charging taxes for his power and wealth.

Malvaro devises destructive policies, contributing to the demise of diverse magic words that could restart ecosystems. Creating narratives is a potent method for reforesting our collective imagination (Krenak 2024) and developing theories for life – our collective response-ability (Haraway 2016). We enhance our coexistence ability by embracing *The Carrier Bag Theory of Fiction* (Le Guin 1986). We tell stories that are not epic tales of triumph where someone wins but, instead, forgotten and dismissed ones that

no one has told before, such as collecting seeds and focusing on gathering rather than hunting and conquering (ibid.). We know the importance of plurality, community and collective efforts in storytelling to survive. We have also shared an ethical understanding of prioritizing women's stories, which were undervalued in favour of patriarchal, heroic exploits in ancient times. Malvoro's disdain and disregard for the interconnectedness of all beings and his ruthless exploitation of the common environment make him a feared adversary in our efforts to carry bags with stories of multispecies worlds. The resonance of ancient irresponsibility and his interference evoke a collective sense of physical and emotional sickness.

Amid these sensations exploring the encounter of times, a ritornello bell plays for our attention. Everyone is still. The notebook invites us to play with the collective imagination. For a moment, it seemed strange because it had been a long time since we played. The embarrassment lasts until the notebook starts a joyful dance, and everyone laughs aloud. In the midst of the joy, Malvoro, a know-it-all in a permanently bad mood, complains and disrupts the joyous laughter and dancing.

However, the notebook resists and triggers our imagination in a playful tone. It poses a question: *If you could be any other being in nature, which would you choose?* The query unravels our memories, and we are affectively connected to 2023. The realization strikes us, and we are transported into a fold outside of time, offering a chance to alter the past radically. An atemporal encounter across existential territories allows for co-creating alternative futures by speculative fabulation (Haraway 2016). Despite our free imagination, we stay with the trouble without succumbing to extermination or forgetfulness, recognizing our responsibility for life and death (Davies and Loftus 2010; Haraway 2008, 2016). Focused on the notebook's invitations, we start to perceive that we are dreaming of building a world where many worlds fit (Baschet 2021; Morel 2023). The narrative merges with the living territories of the past presences, and a collective dream ignites.

Decolonizing Collective Imagination about Possible Futures

Imagine if you could be any other being, which would you choose? The question beckons from the little notebook, urging participants to attune to otherness rather than merely empathize. The exercise challenges human-centric living. It awakens our response-ability towards other-than-humans (Haraway 2016) and recognizes beings with far longer histories and experiences on Earth.

Before we start to imagine, Malvoro interrupts, defending his radical ideology that prioritizes technological dominance over collective creativity. He does not believe in the possibility of a *Sensible Life* (Coccia 2016) or a collective imagination. He postulates the return of human-centric interests. Viewing the multispecies ecosystem solely as a resource to be exploited, he advocates for manipulating multispecies without female parts, evolving specialized men's prosperity. He wants to take resources to improve artificial intelligence, which he considers more accurate than art-intelligence. Dreaming is a superstition for him, and awareness of other possibilities in life is a waste of time.

Realizing that the Assemblage is activating the collective imagination, Malvoro becomes very restless. We ask the notebook a question, and suddenly, he starts screaming:

"You should stop believing in the nonsense of imagination. Sensitivity is bullshit! Rationality comes from the practice of reason with metrics that only artificial intelligence can achieve, not the affections." His favourite game is to paralyze our vocal cords. He thinks it is funny when we try to speak, but the voice does not come out. However, it is agonizing and forces an unbearable lump into her throat. Everyone's discomfort is visible. Malvoro's control is embarrassing as he continues: "Once and for all, you should keep in mind that drawing is not a way of cognition, and imagination does not equate to knowledge." In an orderly tone, he adds: "We must maintain the reason and distinguish between rationality and emotion, establishing quantifiable goals with precision, traceability and scientific justification."

Then, he laughs sarcastically, wipes out the records of the past five Multispecies Assemblages, and dismisses all that had been collectively built. Enraged by the little notebook, he punctures the colourful bag that houses it and shatters our oldest, most cherished ceramic vase for carrying our revolutionary collective stories. He callously burns two of her notebooks. Everyone is plagued with heavy hearts and hopelessness. She is filled with profound sadness and anger. He proclaims: "I am the right mixed-being to guide you." Odnanref's instinct is to run away, screaming and crying. The lump in her throat grows. Malvoro's abuse of power and authority hurts her profoundly. The only thing she can do is breathe and hope that this moment will soon pass.

Suddenly, as if from the mists of a forest, Aroeira generously disperses a fresh morning breeze reminiscent of the scent of the sea at sunrise. As everyone calms down, we realize it is a momentary pause to regenerate our vocal cords. This interruption discourages Malvoro from continuing, and Aroeira provides the opportunity to recall our collective understanding throughout time: "Not even the cleverest person in this place is more clever than the collective cleverly emerging from our interaction." Dissolving the lump in her throat and relieving the voices silenced by Malvoro, Aroeira continues, nullifying any possibility of an individual leadership as a hero or saviour: "Each of us can guide ourselves, creating the common and the shared conditions of life for all of us." Aroeira holds on to the space of stillness and enables us to imagine freely in alignment with the invitation from the little notebook written in 2023.

With our voices restored, Odnanref seizes the moment to respond to Malvoro, reminding him that rationality has evolved significantly. The notion, epitomized by "I think, therefore I am" (Descartes [1650] 1986), puts thinking before existence, regarding the value of thoughts as a condition of existence. This way of thinking builds knowledge but overlooks alternative modes of rationality beyond the human experience. Examples include the lives and sociabilities of entities such as plants, which do not rely on human-like rationality to thrive. There are other rationalities and ways to build the world and gain knowledge of it. Now, delving into our hybridization scriptures imprinted on our skin, we consider an alternative path through thought. Affection, neglected in the construction of research methods in old modern science, is, in fact, also a form of thought and a means of knowledge production (Deleuze 1988; Spinoza 1677). Affection is a potency that can either enhance our will to live and power to act or diminish them, depending on the conditions of encounters (Deleuze 1988; Spinoza 1677). Encounters with Malvoro consistently diminish our potential for vitality. Fortunately, we are lucky

to have Aroeira among us, who is able to offer some devices that amplify our capacity to act and create.

Returning to the invitation from the little notebook, Odnanref starts to imagine. If she could be another being, who would she be? She would be a whale, she thought to herself. They play together and take care of each other, living in cooperation. They are deeply aware of the ocean's delicate balance. She pondered on the question curiously as many of the beings around her reflected on the same inquiry.

While lost in her mind, wondering who she would be, some of the little notebook's pages intone the voice of a woman named Lis, who, from the past, was answering the same question for the Narrating the Multispecies World Conference (Würzburg University 2023), wrote the little notebook. The notebook shows us that Lis references the old cities and arguments about human civilization against the Multispecies Landscape (Tsing 2014, 2015). Odnanref is choked up listening to the resonance between the composition of their answers through the times. Moreover, there is an encounter of times, between Lis – a woman of a specific species from 2023 and herself, Odnanref – a woman-whale-bromeliad from 3983.

Through the notebook, Lis tells us that if she could be any other being in nature, she would be a plant because they have ancient knowledge of the planet and know how to evoke the forest. They are profoundly cooperative. Together, they co-create life conditions for many beings and help each other to support the ecosystem's specific composition. Lis concludes: Such a way of life is difficult for some humans, who are deeply entrenched in societal structures rooted in colonialism and violence, to understand because it relies on colonial and violent systems driven by oppressive values. The world is Berlin, New York and São Paulo for humans. Instead of evoking the forest, we kill it and build cities. For the plants *The Word for the World is Forest* (Le Guin 1972).

Becoming-with Plants: A Process of Enchantment with Multispecies

In the notebook, Lis wrote and illustrated stories of an archipelago in southern Brazil, intimately recounting her bond with the plants during a time of deep concern over the exploitation of the Atlantic Forest. Within the pages of the little notebook, she vividly describes a beautiful place blanketed by this biome that was once one of the world's largest biodiverse reserves. Tragically, by her time in 2010, 92 % of this biome had been ravaged by deforestation and urban expansion. Lis's hometown faced the ongoing threat of massive urban expansion, leading to the gradual disappearance of the magic of the Island where she was born. While the cities grew, the forest died.

However, her city had a fantastic coast where marine life still prospered. She explains that, in the past, humans killed whales there, but "perhaps the whales have forgiven us because they still come back every spring to nurse their babies". She continues: "When the whales arrive, my heart fills with joy. I fall in love with them each time I see them." As Lis recounts her experiences, Odnanref feels a profound connection in her hybridized skin – plant-whale-woman – that becomes translucent and shiny, resonating deeply with Lis's words.

The question of “What being could I be?” initially dawned on Lis as an epiphany during a stroll through the forest. It arrived like a whisper in the wind, a gentle breeze that broke the silence and conveyed a message from the trees. It invited her to find her place among them, to belong there. She had been consumed by worries about urbanization and the loss of creatures in her city, finding solace in walks through her favourite place.

Once, she was walking amidst the trees, sunlight filtering through the canopy, enveloped in the damp soil, crisp air and the invigorating scent of foliage. A fresh smell of greenery surrounded her, and the symphony of birdsong provided a full talk-talk as a soundtrack to her thoughts. At first, there was a distinct separation between the trees and herself. Then, seemingly out of nowhere, something extraordinary happened. The trees receded into the background, and a network emerged, intertwining from the ground, rocks and branches, blurring the edges between them (Haraway 2008). In a moment of revelation, Lis was entwined with a tangle of plants, a seamless part of the forest. That is when the separation disappeared. In a moment, she was connected to them, part of them, one with them – the sensation of belonging washed over her.

To Lis’s astonishment, she encountered a remarkable plant that she had not noticed before, known as the Bromeliad. The Bromeliad was enchanting, and Lis could not believe what she was seeing. The Bromeliad’s presence felt magical, and Lis sensed the plant had a message to impart. Eager to learn from this enchanting plant, she had an epiphany: What if we recognize non-humans’ existence and allow their knowledge to teach us how to live together? This realization inspired her to dive deeper into the plant world, studying the intricacies of *The Life of Plants* (Coccia 2019).

Lis recognizes an incomparable connection with the Bromeliad and is guided by her to examine many questions concerning coexistence with other-than-humans, including the works of Donna Haraway. On the back of one of Lis’s drawing pages, Donna Haraway’s ideas are etched, emphasizing the importance of the kind of relationship that we cultivate with other-than-humans in a process of “becoming-with” (Haraway 2008, 2016). She delves into the unruly edges (Tsing 2012) of the boundaries between nature and culture and asks: Who do we invite, and who do we overlook when we meet the other in ethical encounters?

Aroeira – the jellyfish-woman-butterfly mixed being, the art-intelligence translator of times and worlds, brings the lights and shadows of that Sunday morning when the Bromeliad encountered Lis walking along the Atlantic Forest.

Who Does the Bromeliad Think She Is?

Everyone at the Multispecies Assemblage wants to know more about the Bromeliad from the extinct biome, so Aroeira asks the little notebook to tell us who does Bromeliad think she is?³ The little notebook reveals a drawing of the Bromeliad from that day of the encounter with Lis in 2023.

3 Inspired by Deleuze and Guattari (2013: 39-74) asking *Who Does the Earth Think It Is* and *If the Earth had politics, what would it be?*

(Figure 2:) *Messages from the Atlantic Forest Bromeliad. Painting by the author.*



The Bromeliad introduces herself to the Multispecies Assemblage, presented by a poem studded on the branches where she rests her roots. The group of researchers in *Therolinguistics* – a new and revolutionary area of science specialized in wild literature (Despret 2022; Le Guin 1974) – quickly tried to understand the message of the Bromeliad. They translate:

We do not need to be fragile to be a flower.

*I am the Bromeliad, a witness to time,
Through the ages, my wisdom chimes.
Embracing the tropical water, I thrive,
A testament to life's will to survive.*

*In the heart of the forest, I unfold,
A plant, ancient and bold.
My body dances as colours ignite,
A multiple symphony of green hues, plural and bright.*

The team continues investigating why the Bromeliad left the poem on the tree trunk. They find some marks in that drawing: “With my roots, I leave messages. Making a hole in the blocked walls and crossing edges are my skills. For eons, I rest in the structures of abandonment. I have cultivated within the core of my being a shelter for many creatures.” We are stunned by the message, deciphering its meaning as it continues: “I cultivate a sustainable ecosystem teeming with biodiverse life generation. Different beings cohabit in my womb and are nestled in the centre of my being. My body is their home. As if creating a mini planet, some species only exist within the water tank that I can reserve.”

In the following pages of the little notebook, Lis describes the Bromeliad and her aesthetics:

The Bromeliad is a colourful queer crown, blooming without shame, giving all her brilliance to the forest. Her glorious flowers take a long time to bloom, but when they do, they come without shame in stunning colours: bright red, hot pink and sunny yellow. She looks like a brave hero with a circular composition made up of sharp leaves. Instead of using them to command or fight, her leaves form a cup whose power lies in sharing water and nutrients and cultivating space to allow life to prosper. It is a bag that carries the stories of many. Her water and colourful flowers even attract frogs, bees and hummingbirds. She creates life-giving relationships. That is why one of her specialties is the aggregation of biodiversity. She is a very experienced being that invites life to flourish in unexpected places. Her response-ability (Haraway 2016) creates habitability for other creatures, sheltering biodiversity in her own body living otherness in the depths of her skin. She knows how to defend herself and take care of others.

Lis's story with Bromelia moves us all at the Multispecies Cyclic Assemblage significantly. As we know, the Bromeliad is a survivor, one of a few species that has survived climate mutation and overcame the sixth mass extinction as a specific species. Their existence holds much of the planet's hope. With a life experience of 64 million years on Earth, she can spawn forests even in inhospitable living conditions. Her roots are deep and, even broken, grow in rock cracks. She can live in difficult places, such as sandy and dry soils. She holds onto life firmly.

In 2023, Lis believed that communicating with plants was impossible, and the Bromeliad showed her otherwise. As she notes in the little notebook:

Non-human beings tell stories to us, even without verbal language. They express themselves through their presence. The Bromeliad reveals there are other ways to live in society. Sociabilities more-than-humans can teach us how to live on Earth. The flowers' philosophy, for example, can be an inspiration for our civilizational crisis.

The encounter with the Bromeliad transformed Lis's mind and behaviour and, as she writes, she shifted her point of view:

By existing, Bromeliad explains to me how to be courageous enough to stand up to those who separate us and to act instead of being complacent. Since I met her, I have never been the same. The Bromeliad became my friend, sister, partner and advisor. We are moving on together, shaping public policies in my city. We are building a collective story alongside her, a plant, the Bromeliad as a citizen in a Multispecies Politics.

If the Bromeliad had a politics, what would it be? I think to myself while Lis starts to express herself through the little notebook from the depths of the worlds.

Ancestral Future: Dreaming Is a Political Action

I, Lis, have a message for the people of a future Multispecies Cyclic Assemblage. It is information for those who imagine collectively, live in otherness and reclaim witchcraft. The notice is this: Indigenous wisdom recognizes that memories can be alive without

words through our experience. *They cannot burn our memories and the contra-colonization stories that all beings have lived across the eras* (Bispo dos Santos 2023). Since the encounter with the Bromeliad, I have been learning with Indigenous people how to live with socialities of other-than-humans – citizenship-with-forestizenship (Krenak 2020a, 2020b, 2022, 2023, 2024).

Seeking an explanation, I confessed to Ailton Krenak about the encounter with the bromeliad, and he told me that there are plants that adopt us. “Maybe the Bromeliad has adopted you”, Krenak said. For Brazilian indigenous communities, plants are wise teachers and sage healers, sharing wild knowledge of how to thrive. In fact, they consider all non-humans as people. The Krenak people, for example, treat the Doce River as an ancient grandfather known as Watu. In addition, Guarani people weave *affective alliances* and engage in *creative dialogues* with non-human beings, learning from and living with them (Krenak 2020a; Takuá 2019).

Cristine Takuá (2019) invites us to cultivate spaces for nurturing creative dialogues with the forest and its inhabitants because they embody ancestral wisdom. Plants and animals possess profound knowledge of how to thrive on our planet, having survived across time (ibid.). Despite that, a colossal mistake of modernity is the extermination of the knowledge held by the forests and the beings that inhabit them, including the plants (ibid.). Indigenous people do not see ‘nature’ as ‘outside’ or separate from themselves. The word ‘nature’ does not even exist for Guarani people, so the boundaries of nature and culture do not make sense; all is nature, and everyone makes culture. The separation is a lie that justifies domination over non-humans. Seeing nature as a resource is an illness for the Indigenous people (ibid.).

Ailton Krenak explains that our separation from nature has caused a disconnection from life. We are now plummeting into a void. In his words, we are falling into an abyss – a result of the separation between the civilized and the savage, who are susceptible to being exploited and annihilated to the detriment of economic wealth. For Cristine Takuá (ibid.), modern life takes our time hostage, kidnaps our imagination, cuts our sensibility into slices and mutilates our capacity to notice and learn from and with non-humans. We are living in a time that wants to consume nature and, with the same eagerness, wants to consume our subjectivities. Even our imagination has been colonized. Indigenous people emphasize the urgency of decolonizing collective imagination and reimagining possible futures (Krenak 2020a, 2020b, 2022, 2023, 2024).

Indigenous people have faced extermination for 1,500 years of the European invasion. When asked how Indigenous people have been dealing with the end of the world, Krenak (2020a) tells us that they are keeping their stories alive. Enriching subjectivity to resist the homogenization of thinking is the strategy of Indigenous peoples to resist modern and capitalist capture. For him, suspending the sky means expanding the horizon of imagination and creativity with songs, dance, poetry and stories. He tells us that the magical experience of suspending the sky is common to many traditions of people originally from Brazil: “We resist by expanding subjectivity, not accepting the idea that we are all the same. There are still 250 ethnicities that want to be different from each other in Brazil, who speak more than 150 languages and dialects” (ibid. 2020b: 59). Therefore, he calls us to live our subjectivities with the freedom we can invent.

Since nature is being robbed in an indefensible way, let's not put our subjectivity on the market; let's enrich our subjectivity with different visions and poetics of existence [...] sharing space, being together, does not mean that we are equal. Still, we can unite through difference. (ibid. 2022)

Living in a civilizational crisis, Krenak (2024) offers a clue: *the future is ancestral*. Considering it, the plants, with their millions of years of wisdom, surpass human understanding about how to live on the planet. We must listen to Indigenous people before it is too late. They offer us technologies to transform our relationship with nature, which can help us sustain *the falling sky*.

For the Yanomami people residing in the Amazon rainforest, the “white men” – known as merchandise-people – were bewitched by capitalism because they transform everything they touch into a commodity, including the forest and beings who are living there (Kopenawa and Albert 2013). We must break free from the spell of capitalism that has colonized even our imagination. To do that, Krenak (2020b) invites us to co-create colourful parachutes to fly over the abyss we have caused by regarding the Earth, a living entity, as a useful resource to unsustainable capitalism. The parachutes are woven with threads of dreams and are colourful because they radically encompass the diversity and inclusion of humans and non-humans. However, the white men sleep a lot but dream only of themselves, while the Yanomami's dream is always the dream of others (Kopenawa and Albert 2013; Limulja 2022). The collective dreams allow us to decolonize our imagination and reinvent futures. We have remembered to dream inclusively and have common dreams and visions of the future together. Dreaming is a political action. Paulo Freire says that the collective dreams are possible dreams that can co-create unprecedented viable:

Dreaming is imagining horizons of possibilities; dreaming collectively is taking on the struggle for the construction of conditions of possibility [...] The act of dreaming collectively [...] carries within it an important (trans)formative potential [...] by the viable unprecedented, since the impossible becomes transitory to the extent that we collectively assume the authorship of possible dreams. (2001: 30)

Enchantment opens the doors of our dreams, sparks joy and frees our imagination. Without domination, it allows our collective creativity to emerge as an ally for creating narratives and multispecies alliances. To enter the portal of enchantment, we have to awaken our sensitivities and take back space-time to have creative dialogues with nonhumans.

Against Ailton Krenak warning us that *Tomorrow Is Not for Sale* (2020b), we are selling the magic of the archipelago where I, a woman enchanted by the Bromeliad, was born for real estate speculation. Living the paradoxes between development and conservation, Atlantic Forest is asking for help, in a red risk alert. Despite covering only 1.4 % of the planet, it is one of the hotspots containing 60 % of terrestrial species diversity. Even so, Krenak (2020a) has given us *Ideas to Postpone the End of the World*, summoning us to decolonize our collective imagination, break free of the capitalist spell and reimagine others' possi-

ble futures. Enchantment, dreams and collective stories can transform our relationship with nature and help us face the civilizational crisis together.

So, what if we follow the clues of enchantment and dreaming? What do bromeliads dream of? I have dreamed of plants bodied by bromeliads. Have they dreamed of me? On one of these nights, before going to sleep, worried about urban expansion and the magic sale of my hometown, I asked for advice to help sustain the sky up, and I dreamed of Davi Kopenawa. He blew his breath out of the forest. *It was a gift: a whisper from the wind* that caressed my skin and said: “Be an instrument of plants. Make yourself the voice of flowers.”

So, as Lis in 2023, I look to you and all future Assemblages. Please remember: The future is ancestral (Krenak 2024). The whale is the ancestral mayor of our community in the future and the Bromeliad would become an advisor to her. The Bromeliad finds receptive humans willing to act with the flora, fauna and oceans. Her phenomenal capacity to aggregate, adapt and be resilient is shaping an open and alive multispecies school in the forest nearby. From the Atlantic Forest, living in the burred edges of the world, at the encounter between city and forest, and dwelling in the remnants of magic, I invite you to embark with the bromeliad on a journey of enchantment and multispecies politics. I urge you to dream of another possible future by asking, “If you were any other being in nature, what would your dreams be? What would we need to break the spell and flourish together? What futures would we reimagine?”

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Playing the Plant, and Other Stories

Embodied Mimesis as Material-discursive Narration

Siobhan Leddy

Since the theme of this volume is narration, I will begin with a particularly powerful instance: that of the individualized, atomized and neatly-bounded human subject. Although this rather anthropocentric story is not the only narrative of what it is to be human – humanity, after all, is a diverse affair – it is, nonetheless, an extremely pervasive one, and its dominance forms a central problematic in the feminist posthumanities (Åsberg and Braidotti 2018; Braidotti 2013). Taking a cue from such posthumanist scholarship, this chapter aims to trouble this dominant narrative of the human subject as not simply discursive – that is to say, as free-floating representation – but as *material-discursive*, performative, embodied and profoundly sensuous. However, there are some important caveats: This narrative of the human subject does not directly correspond to the *Homo sapien*, although it often coincides. Nor is it a universal genre; it neither applies to all humans at all times, nor does it ever saturate a person's being entirely. Rather, this narrative is a normative and performative ideal, specific to a particular anthropocentric and post-Enlightenment liberal imaginary. How, then, do material-discursive counter-narratives of the human proliferate? What tactics in material-discursive re-narrativizing are available to us?

Acknowledging, with Karen Barad, that words have often been “granted too much power” in how we understand the world and ourselves (2007: 132), and the sensuousness of matter granted too little, might we consider a far broader interpretation of narrative? Narrative, at least in any common-sense designation, tends to be understood as being composed of language: words are the stuff of stories. However, thinking with Vicki Kirby (2011), it becomes possible to consider narrative in far broader terms. Taking seriously Derrida's claim that there is “no outside of text” (ibid.: 73), Kirby makes a radical material-discursive intervention: How might we understand this expansive text beyond the human? Such an approach cannot be limited to discourse on human terms; it must, therefore, also include other kinds of creative and aesthetic expression. Indeed, Kirby proposes “[t]here is a serious suggestion that ‘life itself’ is creative encryption” (ibid.: 73). Offering examples, such as genetic encryption, or translations within the immune system, she asks whether we might understand *all* of life's creative, material and sensuous

enactments as a kind of text, where “[n]ature reads, writes, effectively articulates itself” (ibid.: 84). This makes it somewhat difficult to separate representational systems, such as languages, images or models, from that which they profess to represent. Barad, similarly, describes how discourse and matter are consubstantial in their performativity, an entangled inseparability, they describe, as I do, as material-discursive (2007: 132–185). They refuse the representationalism that posits language as merely symbolic of a separated material or natural reality, instead describing language and matter as inextricable forces of worlding: in their mutual entanglement, they enact the world. Building on these ideas, we can begin to take a broader approach to narrative that allows us to consider shifts in sensation, feeling and affect as narratively productive; in this dynamic narrative unfolding, “matter makes itself felt” (ibid. 2003: 810). Not only does this offer “a contestation of the excessive power granted to language to determine what is real” (ibid. 2007: 133), it also enables us to consider narration beyond the logocentrism of the literate or verbalizing human, into more-than-human and more-than-discursive domains.

Thinking of narration as material-discursive also permits the following questions: What if the Cartesian partitions that often cleave humans apart from non-humans and environments, culture away from nature, mind from body, self from world are narrated not only through language, but also through sensation and affect? How is human exceptionalism tacitly narrated through and with the body? Shifting away from the logocentrism that burdens discussions of narrative and loosening our “exaggerated faith in the power of language” (ibid.: 133), we might also acknowledge how embodied and sensuous narratives shape the world and our collective knowledge about it. Conceptualizing narrative beyond solely discourse (as language on conventional human terms) means we can engage sensation and affect as narratively meaningful. This, then, raises a counter question: How might sensuous or aesthetic tactics *re-narrate* human subject-bodies in ways exceeding anthropocentrism, exceptionalism and neatly bounded atomization? Considering narration in expansive and material-discursive ways suggests that artistic and aesthetic practices can be considered as narratological, as they proliferate sensuous and tacit counter-narratives with and through the body. If meaning and matter cannot be definitively separated, as Kirby and Barad seem to suggest, activities that enact new configurations of sensation can also perform material changes to that subject-body, palpating the plasticity of the world.

That such material-discursive re-narration is possible at all is because – as Judith Butler tells us – despite its apparent stability, the human subject is a performative and incomplete process rather than any kind of stable or static being (2002 [1990], 1993). It is the overall tendency for subject-bodies to iterate and reiterate in non-normative or deviant ways, as unruly narratives and embodiments slip through the cracks. While performativity is not a conscious process that can be controlled or manipulated as such, the sheer plasticity and contingency of being, nonetheless, makes for ripe ground for experimentation.¹ The task at hand, then, is finding activities, sensations and material-dis-

1 Without conflating performance with performativity, we might still suggest that the sensational enactments that embodied mimesis can generate are materially-discursively meaningful, and, as such, able to intervene in the performativity of normative narrative. See, for instance, Butler 1993, 2002 [1990].

cursive re-narrativizations of the human subject that far exceed its anthropocentric and individualizing boundaries, instead, finding “the point of fusion between the self and his/her habitat, the cosmos as a whole” (Braidotti 2006: 154). There are ethical stakes to such an endeavour. If the human subject – materially – discursively narrativized as individual, discrete and separated from non-human/natures – can only engage with the world from a perceived remove, and as exceptional, we face an ethical imperative to seek out material-discursive counter-narratives of inseparable worldliness. We must seek out an ethical orientation *into* and *of* the world and refuse to retreat into the interiority of the self, as one learns to narrativize one’s own inseparability from environments, habitats, species, ecosystems and climates. While turning the human subject inside-out, so to speak, we might begin to challenge human exceptionalism and the material-discursive narrative of separation that often leads to apathy or so-called ‘doomerism’. Seeking out re-narrativizations of the human subject, therefore, is a project quite unlike liberal notions of personal self-improvement. It is, rather, to take responsibility for one’s own role in forging a more-than-human planetary politics.

Embodied Mimesis

I propose embodied mimesis as a material-discursive narrative strategy, able to unfurl more-than-human narratives with and through the body. But what do I mean by this, exactly? Embodied mimesis, as I describe it, is a creative practice of embodied role-play, in which one imaginatively mimics and assimilates to the movements, gestures and sensational capacities of non-humans. This should not be understood as simply a kind of copying, or a symbolic gesture representing an ontologically separated real. Mimesis as *material-discursive narration* avoids falling into what Barad describes as representation-ism, in which an image, model or likeness can only *stand in for* material reality, rather than perform as *part of* the real itself (2007: 46). Less a mediation, representation or copy, embodied mimesis is better understood as materially-discursively performative, profoundly intervening in the unfolding of the world. Enacted through and with embodied matter, it is a material-discursive narration belonging, as Michael Taussig puts it, “as much to body as to mind” (1993: 46). Taussig describes the mimetic faculty as a kind of yielding-knowing, in which one actively yields to one’s other; in this way, the mimetic faculty is quite different to forms of meaning-making enacted through, for instance, the aggressive domination of nature or others (ibid.: 46). As an active yielding to that which is not-me, embodied mimesis can, therefore, be understood as enacting narratives, meanings and matterings that are cooperative and sympoetic, rather than representationally domineering or grounded in mastery.

Embodied mimesis activates the imaginative capacities of the body by opening up ordinarily illegible or ‘impossible’ sensations. Doing so not only produces new meanings and narratives (my body can do X; I feel Y) but, furthermore, also rearticulates normative narratives we hold about our subject-body interiority, the exteriority of the other and the givenness of the boundary between them. This is because it enacts, through yielding, a process of becoming ‘more like’ that which is usually excluded into the realm of the absolute ‘not me’ (as the remainder of this chapter will show, this might entail mimeti-

cally yielding to non-human life, such as an animal or a plant). That is not to say one can 'be', morphologically, identical to a bird or a tree as such. Embodied mimesis is not an endeavour to perfectly and fully inhabit the form or being of another entity; bodies, after all, are always and already unstable doings, rather than ontologically stable beings. Rather, embodied mimesis allows us to experiment with our performative and material-discursive narratives, re-narrating our subject-bodies as we soften our boundaries and yield towards that which is not-me. Embodied mimesis is not necessarily the experience of *being* the other, but a sensuous 'telling' of subject-body contingency and plasticity. As those performative boundaries that divide self from other, human from non-human or environment, become less determinate, the normative human subject – in other words, that which is held in place through anthropocentric boundaries and material-discursive narratives – also begins to come undone.

Becoming Sensor

Anthropologist Natasha Myers has been collaborating since 2016 with dancer and filmmaker Ayelen Liberona, as well as numerous urban Indigenous community members in and around Toronto, on *Becoming Sensor* (2017). This is a long-term artistic research project engaging with the plant life of High Park in Toronto, and the project concurrently advocates for Indigenous land management practices. *Becoming Sensor* generally aims to "do ecology otherwise" (ibid.: 78) and among numerous interventions, which include work with sound, image, 'kinesthetic attunement' and 'synesthetic installation', the project has also incorporated role-play exercises to be carried out in the park. These exercises are what Myers describes as "hypnagogic inductions, or guided visualisations, that can dilate our morphological imaginaries, altering our sense of our bodily contours, and what we can see, feel, and know" (2020a).

One such exercise, which Myers calls *A Kriya for Cultivating Your Inner Plant*, asks participants to imagine sensing as though they were a plant, engaging in embodied mimesis of plant sensoria. "Draw your awareness back up your stem and into your leaves," participants are directed; "You no longer have eyes, a nose, ears, a tongue, or nerves, but that doesn't mean you can't see, smell, hear, speak, taste or feel. Can you feel the play of light and shadow across your leaves?" (2014). It also directs participants to "[e]xperiment with light at dawn and dusk. Can you feel the energetic shift when the far-red light of the rising and setting sun clues your body in to the Earth's rotational rhythms?" (ibid.).

Myers explains this performance or 'kriya' (a term borrowed from yoga, meaning action or effort) as an exercise for overcoming the inherited notion that plants are humans' most radical other, and, therefore, bounded away from humans in ways that are entirely absolute, exterior and irredeemable. As she puts it,

[Plants] don't look like us, like animals do, and so there's this sense that they're this ultimate other to the human. But when we [...] really attend to their practices, we can actually begin to recognize almost the animal-like qualities that are part of plants and the plant like qualities that are part of humans. And so I spent some time developing

meditations that allow us to expand our sensorium [...] to expand our understanding of what the limitations of the human sensorium are. (Myers 2020b)

In these mimetic experiments for playing the plant, Myers encourages participants to harness the imagining body to generate non-normative sensational meanings and narratives. These sensational meanings disrupt what Myers calls the “conventional ecological sensorium” (2017: 78), which situates plants as radical others. This sensorium – which we might describe as the normative limitations, permissions and thresholds of the sensible – is aligned to a settler colonialism that renders more-than-human sentience as improbable and illegible; plants are deemed insensate and in their imagined inertia (yet another anthropocentric boundary, in which humans are imagined as superlatively sensitive), are reduced to extractable resources. Conversely, the (ordinarily foreclosed) sensations that embodied mimesis opens up can help us to tell “new stories about lands and bodies” (ibid.). These “new stories” are not exclusively formed through language, but through sensations that deviate from normative anthropocentric narratives, exceeding the performative limitations and permissions that foreclose other ways of human-ing. Within the temporal flow of normative human-subject narratives, playing the plant offers an interruption and counter-narrative. In feeling oneself more like a plant, we can begin to reconfigure the boundary of human exceptionalism that holds the fortress of the human subject apart from plant life.

Training Transhumanism

Training Transhumanism (I Want to be a Cephalopod) is a creative mimetic project developed by artist Miriam Simun aimed at aligning the human sensing body more closely with that of a cephalopod. Simun describes the project as fundamentally transhuman, but this is quite different to the transhumanism favoured by the denizens of Silicon Valley, who crave immortal human subjecthood through technological augmentation. Simun calls instead for a different kind of transhumanism: one of radical openness, relationality, sensory expansion and contingency. Simun looks to the cephalopod as “an evolutionary role model” (2019a), learning from and attempting to mimic its unique sensory abilities not only to open up sensational experiences ordinarily by anthropocentric body-narratives, but, significantly, to also contribute to a transhumanist project to transform the human subject-body.

Echoing Michael Taussig’s description of mimicry as “an ineffable plasticity in the face of the world’s forms and forms of life” (1993: 34), Simun’s approach to mimicry similarly emerges from her understanding of the body’s material plasticity and capacity for transformation, which has itself been influenced by her training in free-diving. Through the latter, the body’s capacity for breath can be radically transformed, with some divers able to hold their breath underwater for extraordinary periods of time. This is possible because, as Simun’s own diving instructor told her while holding the artist’s head underwater, “your urge to breathe is a lie” (Arts at MIT 2020). All one need to do is change the narrative of one’s body (I must draw a new breath every few seconds) and the material processes of the body are, thus, transformed.

Cephalopods – Simun’s model species – engage with their environments in extremely sensitive and adaptive ways. Each tentacle contains a complex and dispersed sensory system, with which cephalopods attune to their environment, sensing the presence of physical objects or chemical information so that they can respond and adapt appropriately (Mather and Kuba 2013). Their cognition – dispersed throughout their entire bodies – is largely sensuous, since much of their central nervous system is dedicated to perception and responding to sensations (Zullo and Hochner 2011: 26–29). When they sense changes in their surroundings, they mimetically adapt in form and colour, becoming more like what they are sensing with their soft, shapeshifting bodies and the chromatophores under the surface of the skin. They even mimic other organisms’ movement patterns. It is this sensory intuition and responsiveness, so Simun believes, that has led to their astonishing resilience (some of the earth’s oldest species are cephalopods). Their whole bodies are fully and reciprocally attuned to what surrounds them, what they are part of, and they exist in a state of ongoing sense-based communication. Simun, then, not only aims to mimic the aesthetic sensitivity of a cephalopod, but also its incredible capacity for mimesis.

We are asked to engage with the softer “squishy” parts of our bodies, the parts between the bones, in a performative guided audio workshop that forms part of the project, titled *Transhumanist Cephalopod Evolution* (Simun 2021). A soft voice guides us in this endeavour. We are asked to no longer organize ourselves around our skeletal rigidity but our invertebrate parts. The voice instructs us slowly: “pour your entire body into your tongue [...] find every wave, manner, direction, speed in which you can use your tongue”. How might the body follow the tongue if it were to lead the way?

Another aspect of the training pertains to breath. Since cephalopods expel air quickly from their bodies to propel themselves through the water, we are similarly asked to experiment with our breathing, testing and changing its velocity and rhythm. We slowly inhale large volumes of air deep into the lungs before quickly expelling it, as though we were using its force to push ourselves through water. This process can make one feel a little light-headed, and the voice warns us against losing consciousness: “we don’t want this”.

After these preliminary exercises, we are asked to move along the ground and around space, guided by our breath and vocal expulsions. We are requested to trace our fingertips and limbs around the floor, along the walls and over objects in the room. We are next called on to take a “molluscium position”, the mollusc being our last shared ancestor with the cephalopod, a starting point from which we might reconfigure our bodies. Imagine we have no head, the voice directs us; instead, try to “see” through your skin. Let gravity take over, we are told, let it flow and flop your flesh around, allow it to direct your attention without once engaging the muscles.

Simun has designed three main training areas for developing a becoming-cephalopod sensibility. The first asks us to “see” with our skin, much like an octopus might, practised through activities such as the mollusc-like gravity movements described above. The second is a call to shapeshift, not only sense or perceive but, crucially, also respond and adapt to one’s sensational environment. The third training area aims to develop a distributed intelligence, akin to that of a cephalopod, whose cognition is not a process contained within any kind of ‘brain’ or ‘mind’ but dispersed throughout its entire body. In-

deed, it is precisely this full-body cognition that makes any kind of Cartesian mind-body split impossible: body is very much mind, and vice-versa.

This distributed body-mind also makes it impossible to conceptualize the cephalopod as though it were a singular embodied subject (as in a subject-body as narrativized in humanist terms). Since there is no central control region, different tentacles can even have different personalities. At times they might even work against one another. This means that, on the one hand, an octopus might be described as a single organism with nine brains, or, on the other hand, as nine different organisms cohered together. Such distributed mind-embodiment, simultaneously singular and plural, has major implications for any boundary that might ordinarily be drawn between self and other, or even interior and exterior. Philosopher of science Peter Godfrey-Smith notes that “uncontrolled movements by an object around you are usually a sign that it is not part of you [...]. If you were an octopus, these distinctions would be blurred” (2017: 56). It is precisely this indiscernibility between the me and the not-me, between internal self and external world, that Simun's transhumanist training project aims to encourage. Through practice and cultivation, Simun seems to suggest the narrative that separates self and other, insides and outsides, mind and body, can be re-narrativized as somewhat less clear-cut.

We see this distributed embodied cognition practised in *Your Urge to Breathe is a Lie* (Simun 2019b), a 25-minute film resulting from a collaboration between Simun, choreographer Luciana Achugar and synchronized swim choreographer Paola Tirados. The film follows a group of humans as they undergo Simun's transhumanist cephalopod training. We see limbs trace each other's outlines, in pairs and groups. Two tongues flip and roll as they face one another, the soft fleshy parts taking the lead. Bodies undulate and flop around the space limply, before coming together to move both independently and together, as part of a shared, yet distributed, body-intelligence. A leg's movement will take on the rhythms of another. In this fluid motion, whatever a body senses, it becomes more like, in a dynamic process of embodied mimicry. While mimicry might mean chromatic changes in cephalopods, for the humans in Simun's film, this manifests as legs first feeling out for one another, then calibrating their movements in synchrony, as they respond to one another with all the soft openness of the brain-body. Forms shift and move, together-apart, both many and one.

(Fig. 1:) Video still from Miriam Simun, *Your Urge to Breathe is a Lie* (2019b), 25'00".



(Fig. 2:) Video still from Miriam Simun, *Your Urge to Breathe is a Lie* (2019b), 25'00".



Mimetic Magic

Embodied mimesis offers a sensuous approach for re-narrating the human subject-body in two ways. Firstly, it proliferates non-normative and less anthropocentric experiences of sensation with and through the body by asking a simple ‘what if’ question: what if we could learn to sense more like a plant, for instance, or a cephalopod? The new kinds of sensuous experiences that such questions open up deviate from normative narratives of the human subject-body and its sensorium, and, therefore, already pose a challenge to the narrative that posits the human subject-body’s sensory capacities as given. Secondly, the mimetic body, as it becomes more like that which is not-me, also challenges the fixity of the normative boundary that holds self apart from other, interior from exterior, even

human from non-human. Much as an octopus' body occupies a less clear distinction between the me and the not-me in its distributed body-mind, a becoming-mimetic body is similarly relatively indeterminate. Mimicry is a particularly challenging method for producing meaning and knowledge, as Michael Taussig notes, since it blurs the distinction between percept and perceiver. "Is it conceivable that a person could break boundaries like this", he asks, "slipping into Otherness, trying it on for size?" (1993: 33). Both Simun and Myers seem to suggest so.

Simun's cephalopod mimicry resonates with an earlier philosophical text: Roger Caillois' writing on morphological mimicry in insect species (1984 [1934]). Observing the incredible mimetic capacities of some insects (which, for instance, might closely resemble leaves or twigs), Caillois proposes that mimicry functions as a kind of natural "magic", operating according to the magical principle that "things that have once been in contact remain united" and that "like produces like" (ibid.: 25). Under such magical mimetic conditions, body and environment begin to blur, as the boundaries of the self are materially-discursively re-narrated (my phrasing) into something highly porous. Mimicry, for Caillois, is an act of "depersonalisation by assimilation to space", whereby the distinction between oneself and one's surroundings is diminished (ibid.: 30).

Yet, significantly, mimetic transformations are rarely absolute. Embodied mimesis is desiring, processual and relational, and embodied mimetic practices, such as Simun's, do not obliterate difference altogether, so that body and other, or body and environment, become an entirely undifferentiated unity (after all, *Training Transhumanism's* subtitle is "I want to become a cephalopod", not "I am a cephalopod"). There is no total collapse between exterior and interior, or self and other, even while there is a high degree of indeterminacy. We might even consider embodied mimesis as enabling difference and sameness to co-exist simultaneously, rather than as a binary opposition. In this tension between difference and sameness, we can begin to narrate our subject-bodies otherwise, playing with bodily indeterminacy to challenge numerous other binary categories too: me/not-me, inside/outside, mind/body, discourse/matter, human/non-human. Each of these binaries, under becoming-mimetic conditions, is revealed as a highly unstable material-discursive narrative, and, thus, "always open to contestation" (Barad 2003: 824). In this way, we can begin to challenge the anthropocentric subject-body's exceptionalism, individualism and boundedness, sensuously re-narrating human bodies in more-than-human ways.

Caillois' essay, written in 1934, remains caught up in the narrative of human exceptionalism. He describes mimetic processes in humans as solely manifesting in the psyche, or imagination, in ways contrasting with the transformations to body or morphology in insects or, indeed, other non-human species. However, Simun's mimetic training is built on the principle that the body is no less susceptible to mimetic transformation. She does not separate the imaginative dynamism of the mind from the plasticity and malleability of the imaginative body: Her approach to mimesis is a material-discursive one. This is not to say that the human body will, with sufficient practice, mimetically morph into a leaf-form the way an insect might. It is only to say that there is no essential difference between embodied mimesis in humans and non-humans – and certainly not one predicated on a mind/body duality. Embodied mimesis, in a generalized and more-than-

human sense, not simply an anthropocentric one, can re-narrate both meaning and matter at once, to varying intensities, in humans and non-humans alike.

Conclusion

We find in embodied mimesis a material-discursive tactic for (re-)narrating the human subject-body. As a body thick with desire, not held aloof from the world but sensuously yielding towards and with it, we can narrativize ourselves beyond anthropocentrism, individualism and exceptionalism, refusing the limited narratives we have inherited. Embodied mimesis is, to revise Taussig's expression, a yielding-narrating that tells of indeterminacy between self and other, interior and exterior. Environments or non-human species are neither radically exterior nor absolutely other, but both 'me' and 'not-me' at once. What a radical narration of being this could be.

However, it would be reckless to assume that embodied mimesis is entirely unambivalent in its potential. Heeding Judith Butler's words of caution regarding drag (itself a kind of embodied mimesis), while mimesis might "question the legitimacy of the command" (1993: 122) that polices subject formations or bodily boundaries, we must also remain aware of the ways in which those same norms may be inadvertently reproduced through mimicry. As Butler warns, "there is no necessary relation between drag and subversion" (ibid.: 125), and its existence may more ambivalently reflect our own implication in identity systems. Similarly, it is not impossible that more-than-human mimetic practices may inadvertently uphold the very boundary between human/non-human or self/other that they purport to oppose. Furthermore, might trying to 'sense like' a cephalopod (or indeed any other non-human entity) simply be another act of appropriation that reinforces human exceptionalism? As Alison Sperling asks, why do we even *need* to imagine an octopus in order to escape the limits of our own human-ness (2023)? If we are to engage with and develop embodied mimesis further as a method for materially-discursively narrating the more-than-human, these questions certainly raise ethical concerns worth interrogating in greater depth.

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Sand-writings of Woodiana Mussels

Report for the Therolinguistics Association

Andrea Palašti and Sanja Anđelković

Before we begin our paper, we are going to take you through a walking exercise. Please take a pen and draw a line illustrating how you feel today. It can be of any shape and length.

Mussels also leave lines when moving along the riverbed. They move by inserting their foot into the sand or gravel, pulling themselves forward, inching their way along the bottom. So let us try and walk the line you draw as a mussel! Sit down on the ground, with one foot upfront, hands behind back, and start inching your way into the shape of your drawing.

Did you finish the line? Now stay on the ground without moving.

Mussels also rest sometimes, they burrow down deeply into the sediment to avoid being washed out during floods, stay warmer in winter, escape predators and, most importantly, avoid the contamination of the water. As you continue to read these pages, you will understand that learning to walk like a mussel can be a fundamental asset in our uncertain futures.

Yet, please be informed that the present contribution does not seek the rigour of science, but the lyrical essence of an artistic research paper. The roles played by the mussel visitors¹ and *woodiana* within these pages are entirely fictional and the report presented has no factual basis. This is an artistic endeavour, informed by the

1 We adopt the concept of “visitors” as articulated by Donna Haraway, who, traces this concept from Hannah Arendt’s method of thinking “with an enlarged mentality” (Arendt 1982: 43, cited in Haraway 2015: 5) in order to describe the practice of Vinciane Despret and encourage others to “go visiting” (Haraway 2015: 5). Visiting is a “Curious practice” (ibid.). It cultivates enthusiasm and the ability to find everything interesting, in order “to retune one’s ability to sense and respond” (ibid.). Therefore, it is of utmost importance to train our body, “mind and imagination to go visiting, to venture off the beaten path to meet unexpected, non-natal kin, and to strike up conversations, to pose and respond to interesting questions, to propose together something unanticipated [...]” (ibid.: 8).

art project *woodiana.today*, an experimental forecast service developed to save the Danube's future through speculative fabulation.

Esteemed President and Members of the *Therolinguistics Association*!²

We feel deeply honoured to share our discoveries with the *Therolinguistics Association*, a community of scholars and explorers who have devoted their lives to the meticulous examination of non-human forms of languages. Encouraged by the report of G. D'Axbay and T. R. Bardol on the writings of the decapitated ant worker, and D. Petri's sea-writings of penguins (Le Guin 1988),³ we aspire in our findings to make a meaningful contribution to the advancement of therolinguistic research. We also understand that the art and science of therolinguistics is still incomplete and that our notion concerning animal language is dependent on our human interpretation. As the President of the *Therolinguistics Association* has already stated, no matter how fragmentary our knowledge is today, it is of utmost importance to engage therolinguistic acts in order to understand and respect each other tomorrow (ibid.).

Drawing upon insights from prior scholars, it is evident that every animal writes. These writings, or languages, encompass diverse forms, many of which human senses are still incapable of comprehending. They write to communicate with each other, and to us. Some dolphins, for example, toss and turn, fall loudly, but always rise. These "*tūpoupou*"⁴ can be noisy, making the "ocean [...] a drum" (Gumbs 2020: 15), as this climate makes them glum. Māori meteorologists have observed them for centuries, seeking guidance on the weather that has yet to come. This is where our trans-species communion could start: tuning into different shapes by observing silently their "urgent instruction" (ibid.). As the weather is changing, so are we.

Therefore, translating these languages is our urgency! But in order to read them, different kinds of rules than those from human sciences have to be applied. Rules that are not fixed but in constant flux. Rules that ask us humans to constantly reinvent different modes of attention: to be tossed and turned. Even play by the rules that are not set by humans only. The ethical obligation of the therolinguists is, thus, to think beyond the "authority of science" (Despret 2004: 84), to cultivate "a virtue of politeness"⁵ (ibid. 2005: 360)

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- 2 The *Therolinguistics Association* is a fictional discipline invented by Ursula Le Guin in 1974 in her short story "'The Author of the Acacia Seeds' and Other Extracts from the *Journal of the Association of Therolinguistics*" (1988).
 - 3 In her short article entitled *Ms. Found in an Ant Hill*, Le Guin guides us through a report made by G. D'Axbay and T. R. Bardol, a pair of literary scholars, who undertook a close reading and interpretation of a found text "written in touch-gland exudation on degerminated acacia seeds" by an ant worker (1988: 167).
 - 4 Gumbs writes in her book entitled *Undrowned* about dolphins found only on the shores of Aotearoa, which Māori meteorologists call *tūpoupou* (2020).
 - 5 Vinciane Despret is committed to a particular epistemological position which she calls "the virtue of politeness" (2005: 360). Donna Haraway offers a useful explanation on how Despret cultivates it: "Despret's sort of politeness does the energetic work of holding open the possibility that surprises are in store, that something interesting is about to happen, but only if one cultivates the virtue

and to practise relatedness that comes with leaning on our intuition and imagination. Because it is only through magic, art and poetry that we can truly talk about therolin-guistics.

Supported by all the wonderful colleagues from the *Association*, we are prepared to contribute additional details to the exploration of animal writings.

So Let Us Speak (about) *Mussels*!

The writer Sylvia Plath speaks *mussels*.⁶ However, she is not the only one who thought they knew *mussels*. Since ancient times, there have been poets trying to read mussels afoot. Although there is no written evidence, due to the unlikely event of the burning of books in 213 BCE, there was an ancient Chinese fable known as *The Weeping of Mussels* (Chinese: pinyin: *Yībèi de kūqì*).⁷ The only remaining fragment, the prologue, which is still orally passed on through generations in the Water Town of *Longjin Brook* (龙进溪) in Yichang Sanxia, is preserved in the memory of a local Tujia fisherman.⁸ Our mussel visitor, S. Angyal⁹ had the honour of documenting it for the first time:

When spit catches onto someone's face, it becomes redundant. Depending on the closeness and the type, it sometimes latches on. There are not many attempts made for this to work. With the right type and proximity, the spit that latches on distributes a great number of descendants, microscopic in size.

They live on its face, unknowingly. As it swims, they grow. When do they separate – it is up to them. The fish have borne the burden of conception and become unwilling accomplices. With those spit-like residues, they turn into shapes. Shapes that show up, in another place, far, far away. Displaced.

Once they become independent, they shoot out a leg. There is no longer any need for the fish anymore. They become their legs – a muscular organ, pink and frail. Ready to sense.

Humans call them mussels.

of letting those one visits intra-actively shape what occurs. They are not who/what we expected to visit, and we are not who/what were anticipated either. [...] With good questions, even or especially mistakes and misunderstandings can become interesting. This is not so much a question of manners but of epistemology and ontology, and of method alert to off-the-beaten-path practices." (2015: 6)

6 Sylvia Plath explores nature and our relationship with it in her poem *Mussel Hunter at Rock Harbor* by delving into the world of the mussels and crabs that inhabit the Massachusetts seashore (1958: 22).

7 This fable is entirely fabricated but draws its inspiration from the lamentations found in Chinese *Marriage Crying Songs* (哭嫁歌 *kū jià gē*). In the culture of the Tujia ethnic minority, the *Marriage Crying Songs* can be sung by the bride to express her sorrow for her destiny, the profound love for her family and the challenges of the feudalistic marriage customs she endures. When two girls sing together, it is referred to as "sister crying". The bride initiates the crying and singing, with the other girl joining in to provide comfort (Qian An 2022).

8 The setting is based on a real place.

9 S. Angyal (Eng. Angel) is a pseudonym for the co-author of this paper, Sanja Anđelković.

Mussels come to life in the most intriguing way. But, despite their form, purpose and function existing well beyond our comprehension, there is something of kin in our utterly contrasting shapes. When they grow up, mussels breathe water that we let go. Of course, “we are all bodies of water” (Neimanis 2012: 85), and are connected to and flowing into each other’s body. Taking into account Charles Darwin’s “pleasant genealogy” (1860) that our ancestor was “an animal which breathed water” (ibid.),¹⁰ makes this correspondence with the body of mussels even more pleasurable. Water, thus, becomes the medium of our correspondence on the border of natureculture: we drink, digest, excrete; they pump, filter, expel, then we drink it again. Could this be a form of symbiogenesis, becoming by living together (Margulis 2010)? Indeed, water repeats its presence, but these flows not only transit across our bodies in space but also across different times:

Water not only flows between, and connects bodies; it also facilitates new kinds of bodies. And in this engendering of new watery bodies, water becomes the difference. In other words, instead of simply ‘flowing’, water suggests a more complex logic of interpermeation, gestationality, and differentiation. (Neimanis 2017: 95)

This complex relationship of water, humans and mussels is cleverly applied in water treatment plants across Europe where mussels control our drinking water by the usage of the biological early warning systems (BEWS) (Bae and Park 2014).¹¹ In addition to the traditional chemical and physical methods, the BEWS are real-time surveillance systems of drinking water that uses the body of mussels, specifically, the behaviour of their valve gaping, to inform tap water quality. Valve gaping is a natural response in mussels; when they detect a foreign substance, they may close the valves to reduce exposure. In the water treatment plants, these supersensitive mussels are attached to a high frequency non-invasive valvometer which monitors their shell movements in response to toxicants in the water. Consequently, when the mussels detect contamination in the city’s water supply, they close up, effectively shutting off the water supply for the entire city (Ferreira-Rodríguez et al. 2023). This mussel-powered system, which protects public health, perfectly demonstrates “how humans create problems for the world and then use living organisms to protect themselves [...] from themselves”¹² (Pelka 2019).

Humans and mussels truly share a way of being together. They influence each other in a most latent way,¹³ creating a sort of water-communality or, more precisely, “embod-

10 Charles Darwin wrote a letter to Charles Lyell on 10 January 1860, in which he expressed: “Our ancestor was an animal which breathed water, had a swim bladder, a great swimming tail, an imperfect skull, and undoubtedly was a hermaphrodite! Here is a pleasant genealogy for mankind” (Darwin 1860).

11 Valve gaping behaviour is monitored in over 50 drinking water treatment plants across Poland, including the Dębica Water Treatment Plant in Poznań (Warta River) and Gruba Kaśka in Warsaw (Vistula River). Germany employs the Dreissena-Monitor at water control stations along the Rhine, Elbe, Danube and various tributaries (Borchering 2006; Scott 2022).

12 Julia Pelka, a film director, tells the story of the Gruba Kaśka (Eng. Fat Kathy), a clam-based water monitoring system in Warsaw, in a documentary titled *Fat Kathy*, first screened in 2019.

13 Neimanis (2017: 95–97) outlines three aspects of watery embodiment: (i) water as a facilitating and gestational force; (ii) water as a means of differentiation and the actualization of diversity; and (iii) water as simultaneously interconnecting and interpermeating. This “aqueous logic”, encom-

ied hydrocommons” (Neimanis 2017: 95). Mussels breathe us, but we breathe them too. And as the water loops around through our bodies, we digest other bodies too, forming “sympoietic arrangements” (Haraway 2016: 58).

Sympoiesis is a simple word; it means ‘making-with.’ Nothing makes itself; nothing is really autopoietic or self-organizing. [...] Sympoiesis is a word proper to complex, dynamic, responsive, situated, historical systems. It is a word for worlding-with, in company. Sympoiesis enfolds autopoiesis and generatively unfurls and extends it. (ibid.)

It is this very operation and sympoiesis that encouraged us to engage in lyrical research, and inspired us to make suggestions on the linguistics of mussels and their possible meanings.

The Chinese *Swan Mussel*

Our paper centres on swan mussels, belonging to the species *Sinanodonta woodiana*, initially described by Isaac Lea in 1834. They first arrived in Philadelphia around 1829, in a box sent as a gift to Lea from William Wightman Wood, from Canton (now Guangzhou), China.¹⁴ They arrived in Europe more than 130 years later, but this time alive and on a fish.

Sinanodonta woodiana travelled from the Yangtze River as Glochidia on Asian silver carp (*Hypophthalmichthys molitrix*), which humans transported to the Danube river and its tributaries in 1963, with the aim of fighting the effects of eutrophication (Paunović et al. 2006). They were microscopic parasitic larvae, deck passengers clinging with their hooks to the gills of the host fish. After feeding off the body mucus of the host fish, they dropped off within a few weeks and went on to develop into adult mussels on the bottom of the Danube. In this paper, the abbreviated nomenclature *woodiana* will be employed as a concise reference to the species.

As a mussel, *woodiana* are filter feeders. They clean the Danube by reducing algae, particles and toxic materials from the river just by the way they eat their food. They are able to strain the tiny food particles from the Danube with the cilia in their gills, move them down to their mouth where they eat, and eventually digest them. The clean water is then pushed out through the excurrent syphon. However, unlike other Danubian mussels (e.g. *Unio pictorum*, *Unio tumidus*), which are rather sensitive to toxic materials with often fatal consequences, *woodiana* are resilient to a wide range of environmental conditions (Kolarević et al. 2015). They have the capacity to digest hazardous substances without trouble and recover from these encounters rather quickly with their great adaptability to

passing, within and between, suggests Neimanis, is a dynamic force of becoming. The assertion is that water, as an interconnecting force, provides insights into a broader ontological understanding. Water, driven by its inherent tendency to repeat, primarily serves as a facilitator and gestator, continually giving rise to diverse manifestations and new knowledge.

14 Lea initially described the taxon as *Symphynota woodiana* in an article presented before the American Philosophical Society. However, the name was revised to the now accepted *Sinanodonta woodiana* (Lea 1834: 42–43).

man-made environments. Due to this resilience, *woodiana* are not suitable for BEWS and the real-time analysis of drinking water, as it showed almost complete absence of alarm responses in testing (Giari et al. 2017). However, the toxic materials persisting in their feet serve as crucial indicators in laboratory analyses aimed at detecting hazardous substances, such as dioxins and heavy metals, including phosphates, zinc, copper or nickel, in the Danube. Additionally, their significance extends to the examination of microplastics (Paunović et al. 2006). But when they die in the Danube, the large and long-term persistence of their empty shell can be particularly important as a habitat-modifying effect, attracting a diverse macroinvertebrate community, such as amphipods, caddis larvae, isopods and gastropods (Bódis et al. 2014).

Woodiana demonstrate a notable expertise in us humans and other critters. *Woodiana*, for example, from early on, were surveying humanity's impact on the Danube and its mussel community, which were significantly disappearing even before they were introduced to the new environment. The Danubian mussels were losing their populations because of pollution from agriculture, habitat loss due to hydropower plants, water abstraction, and overfishing for the production of mother-of-pearl buttons.

But despite all of these extraordinary features of *woodiana*, their most important peculiarity is their act of sensing the future by leaving some dazzling temporal movement patterns in the river bed. With a distinct sense for the slightest changes in the Danubian ecosystems, they move slowly through the shallow waters, leaving traces in the sand looking like secret symbols. They change across space and time, revealing often ambiguous glimpses of the Danube's future. To the best of our knowledge, until now, no study has examined the horizontal and vertical movements of *woodiana* in the Danube River. Thanks to our scholars and therolinguists – our mussel visitors who interpret their language with precision and translate it into text – we can now understand mussels.

The Practice of Reading Mussels

The purpose of our study was to engage in research on the language of mussels and the possibility of thinking with them. It can be seen as a scientific and artistic inquiry into how we could classify the traces/lines left by their movement as stories of our peculiar relationship.

It has been already proven that unionid mussels move depending on environmental factors, such as the temperature, length of a day, rising water, reproductive period, flow and food conditions in rivers. The movement behaviour can also help them escape predators and contaminations of the water. In addition, they burrow as a form of protection from predators or toxic water (Amyot and Downing 1997; Schwalb and Pusch 2007). Mussels do a specialized stepping pattern, called Weierstrassian Lévy walks, in order to move (Reynolds 2014). This Lévy-like walk¹⁵ is a “byproduct of crawling” (ibid. 2021) in which they alternate small steps with large leaps that they make randomly and in almost every

15 Research on Lévy walk can be consulted at Reynolds 2018.

direction.¹⁶ When they are not moving and remain at a maximum open position for an extended time, it usually indicates the death of the mussel (Giari et al. 2017). Therefore, understanding how mussels move and behave across space and time can be a fundamental question in the study of the Danube's ecology.

But *woodiana* move differently! *Woodiana* are messengers between worlds and times. They are not moving just for themselves but to inscribe and warn us of what lies ahead. This phenomenon was first brought to our attention by D'Pop,¹⁷ a long-time mussel visitor from Sremski Karlovci. D'Pop studied the movement patterns of *woodiana* to predict the weather to protect his vineyard. He believed that these patterns could forecast not only earlier frosts, severe ongoing droughts or rainy springs, which cause mildew and floods, but also more extreme events, such as supercells, powerful earthquakes or even futile military endeavours. Although his interpretations were supported by natural consequences, the mussel readings echoed the methods of plastromancy¹⁸ and the *ngam dù* spider divination.¹⁹ However, unlike the fortune-telling methods of seeking guidance for individual decision-making, *woodiana* are thought to be writing for our collective, human and other-than-human sympoetic futures.

Every organism responds to other living and non-living beings through emotions, sensory perceptions and lines of movement (Ingold 2022: 6), thus, mussels and humans also engage in an ongoing interplay, responding to each-other's *lines* (lives!).²⁰ So, to understand the lines of the mussels, we do not need to possess the skills of an oracle or a scientist, but of an *imaginista*!

While imagining, we see, sense, think and “correspond” (ibid.: 8) with our world.²¹ It is a form of sense-making that goes beyond mere observation and classification. Imagina-

16 Assisted by scientific consultation and review by Dr. Maja Raković and Dr. Stoimir Kolarević, IBISS, University of Belgrade, we recorded the movement of *Sinanodonta woodiana* in an improvised laboratory setting (Center for the Promotion of Science Belgrade and *woodiana.today* 2021). For other Lévy-like walk documentation, see van den Berg et al. 2011.

17 D'Pop (Eng. Priest) is a pseudonym for Daniel Popovic, who first proposed to us the concept of examining the shapes and lines mussels leave by moving in the sand and speculate about their possible meanings.

18 Plastromancy, also known as the turtle-shell oracle, is probably the earliest documented method of fortune-telling. In this practice, the diviner would subject a portion of a turtle shell to heat (sometimes using a hot poker) and interpret the patterns of cracks that formed. These cracks were occasionally annotated with inscriptions, representing some of the oldest Chinese writings that have been unearthed (Keightley 1985).

19 Artist Tomas Saraceno collaborates with spiders through arachnomancy readings. The public is encouraged to develop new skills of observation through the Arachnomancy App and receive their own spider/web oracle reading (Saraceno 2023a). Furthermore, the public can consult the spider and spider diviners of Somié, Cameroon, through the web portal *Nggamdu.org* (ibid. 2021). Saraceno also published a book of proverbs and exercise in collective memory encouraging some to look into spiders in order to predict the weather. The book titled *Spiders in Motion, Rainy Commotion* is an invitation not to change the climate per se, but rather to change our habits (ibid. 2023b).

20 Tim Ingold describes life as “lived along lines and that as they go along together these lines – rather like melodies in musical counterpoint – continually differentiate themselves from within the texture of their polyphony” (2022: 6).

21 We understand imagination as corresponding with the real, described by Tim Ingold in his *Imagining for Real: Essays on Creation, Attention and Correspondence* (2022; 6, 66–80, 127).

tion enabled us to empathize and adopt a way of engaging with *woodiana* that is more open-ended, deeply perceptive and sustainable than that which sciences and modern technology alone can offer. We slowed down and made time to practise horizontality, time to attune our eyes to the murky Danube and breathe beneath the water. And we learned to read again. This practice then created a condition in which we were able to experiment “in contact with the real”²² (Deleuze and Guattari 2004: 13, as cited in Ingold 2022: 8). Because, to be sensitive to the lines we wish to read, beside imagination and time, we also need to intervene in the real.

We imagined in contact with the past (history) and with the sciences (biology). We interpreted the lines informed by anthropogenic activities by mirroring past events, for example, wars, industrial accidents or environmental degradation caused by river engineering. We also considered the physico-chemical and biological parameters of the surface water sourced from the TransNational Monitoring Network (TNMN).²³ We made provisional predictions of future concentrations of surface water pollutants using the ARIMA model forecasting algorithm and data from the TNMN archive (covering the monitoring period between 2001 and 2018).²⁴ These tentative forecasts were then combined with our knowledge of past events, which helped us to correspond to the movement behaviour of *woodiana*. However, in contrast to exact science and contemporary principles of forecasts, we did not aim for clear and precise predictions but rather to inspire us to imagine how other ways of knowing are possible, and what multiple futures could look like. Hopefully, it is this model of connecting the nonverbal knowledge of *woodiana* with human experiences that could help us to create a more liveable future and teach us how to cohabit more responsibly with each other.

In order to pursue this matter, open-air visiting spots were set up along the Serbian section of the Danube: river km 1433 – 1075. The visiting of the mussels was continuously conducted and documented from 15 March 2021 to 15 March 2023. The survey was carried out by free-floating tracking and with an underwater mussel viewer. From the statistical side, the average rate of daily horizontal movement was 0.8 cm, which means 5.6 cm/wk and 173.6 cm/month. When burrowed, the mussels were sometimes found by ‘raconing’, a tactile searching technique, others were already tagged by a transponder or a fly-fishing line attached to their shells – a technique which helped us to measure the depth of their eventual burrowing. These procedures did not harm the mussels and were conducted with utmost care to ensure their well-being.

They were more often moving towards the shore than away from it, probably influenced by rising water levels, as man-made global warming causes heavier rains and frequent floods. *Woodiana*, for example, during May 2021, were moving onshore, interrupt-

22 For practical ways of imagining for real, Ingold draws on the ideas of Deleuze and Guattari, explaining that “[...] imagination that does not oppose but reaches into, and joins with, the real. This joining is what I mean by correspondence” (Ingold 2022: 6).

23 The TNMN is an important tool under the Danube River Protection Convention. It was formally launched by the International Commission for the Protection of the Danube River in 1996 to observe and analyse the water quality and pollution levels in the major rivers of the Danube River Basin. The findings can be accessed at the Danube River Basin Water Quality Database on the website: <<https://wq-db.icpdr.org/>> [Accessed 1 July 2024].

24 For the TNMN Yearbooks, see TNMN 2001–2018.

ing their path by burrowing and emerging again. But it is not only *woodiana* that were dislodged in the river. Unexploded landmines left from the Yugoslav wars also started emerging downstream, as a result of flood disasters.²⁵ In October 2021, a path with three curls was discovered, an activity within *woodiana* that reveals high energy levels – but not of the mussels. They sensed future hydrological alterations, suggesting altered water flow, possibly due to the increased water usage for cooling the new data centre facilities along the Danube.²⁶ During February 2022, the direction of *woodiana* was frequently doubling back and creating spastic lines in the riverbed. This behaviour coincided with the emission of sonar pulses by Russian military vessels in the Black Sea, which later led to the deaths of numerous harbour porpoises.²⁷ In April 2022, they were motionless and burrowed in the sediment to depths as much as 20 cm almost entirely for the whole month, when surprisingly, for the last few days they made the longest distance in our study, a total of 3.6 km in three days. The forecasted water quality data for the next month showed the presence of notable quantities of mercury and dioxins. Our mussel visitors interpreted this as a *progenitorial trauma response* of the devastation caused by NATO bombing at the petrochemical plant and oil refinery which took place in April 1999 in Pančevo.²⁸ In June 2022, the concentration of wastewater discharge in the river spiked dramatically.²⁹ It also restricted our visit. During this period, *woodiana* was spiralling erratically, creating twisted lines in the riverbed.

These examples are just a few of the ways we have been thinking with *woodiana*, exploring our attempts to translate *mussels* into text. Based on our two-year mussel visit, our team proposed a provisional manual of their patterns. However, this manual does not describe the internal state of *woodiana* but rather its environment, similar to how we might interpret a *river's gesture* to understand its motion and events.

Horizontal movement:

Straight line: stability or stagnation, lack of change, a false sense of security

Curved line: emotionality or unpredictable conditions; the journey ahead may be treacherous

-
- 25 For the geologically-driven migration of explosive remnants of Yugoslav wars, see Baselt et al. 2023.
 - 26 Google is opening a new data centre location in Kronstorf, Austria, on the river Enns – a tributary of the Danube – making it an optimal location for water utilization and hydroelectric power generation (Google Cloud 2022). But the significant water consumption of data centres raises concerns about the sustainability and resource depletion in an increasingly water-scarce world (Sattiraju 2020).
 - 27 *Woodiana* in the Danube can sense disturbances from afar, such as underwater explosions and powerful sonar used in the Black Sea. Santora writes about the environmental catastrophe that the war caused for marine wildlife in an article in *The New York Times* (2023).
 - 28 NATO's bombing of Serbia led to significant environmental concerns, including the potential contamination of the Danube River with toxic chemicals from oil refineries and petrochemical plants in Pančevo and Novi Sad (Hedges 1999).
 - 29 Andreas Fath swam through ten countries as part of the Clean Danube project, to raise the awareness of pollution in the Danube River, but refused to swim the 15 km stretch of water through Belgrade (Fath 2022; N1 Belgrade 2022).

1 curl: large and sudden changes, transformation or transition

2 curls: disturbances or conflicts, scandal with another critter, interrupted path

3 and more curls: high energy level, emergency, fire

Bouncy and scalloped line: instability, whirlpool, or turbulence, trouble from strangers

Circle: beginning or ending cycles, phases, entangled in the consequences of one's actions

Spiral: murkiness, poisoning and other unlucky events

Motionless: parched, death, secrets may come to haunt us

Vertical movement:

Buried in the sand up to 10 cm: undertow, obscured depths

Buried in the sand 11 cm and more: darkened waters, or hard freeze

In our study of the movements, daily patterns were traced with the help of a planning frame and an underwater drawing slate.³⁰ These daily drawings were later synthesized into a monthly diagram. We focused specifically on the mussels' monthly movement patterns, resulting in a new narrative unfolding each month throughout the course of the visit. Today, 24 simultaneous futures emerge in our readings – a series of lyrical narratives known as *forewarning cards*. The translation of these messages are ambiguous, cryptic and incomplete, and are only here as an instrument of reflection, a speculation between indefinite possibilities of meanings. They are influenced and shaped by the knowledge and experiences of the therolinguists regarding their own fears, struggles or confidence. But they unveil the intricacies of extraction, extinction, overconsumption, pollution and wars in their meaning – all interconnected challenges impacting our shared existence. In this paper, we feature 12 such futures unfolding across 12 timespans. When they will occur is unknown to us. Perhaps they already have.

30 To explore the equipment needed for an underwater visit, connect with 3H Consulting at: <<https://www.3hconsulting.com/techniques/TechEquipment.html#DrawingSlate>> [Accessed 1 July 2024].

Sand-writings and Other Weeping Notes³¹

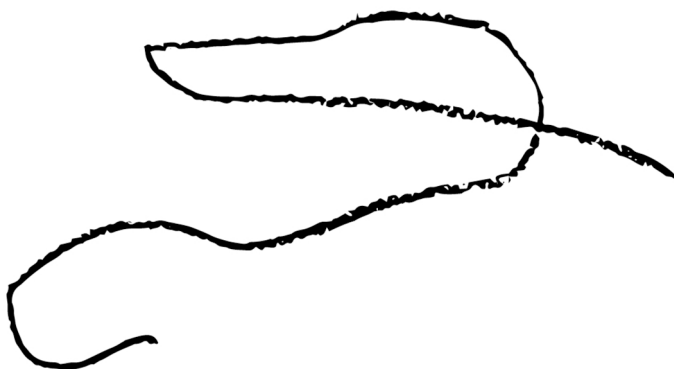


As they hold their breath, something loud brings them death. Unable to hear what is near, they swim dazed, as others they stay unfazed. Click, click, click, they try to establish a connection quick. No one can hear them flick, as it all happens in a blitz.

These foreign objects have to change their matter to be able to hear better.

Boom, boom, boom, stop the action soon!

Note: A spastic line brings together actions that are non-viable in their nature. Dolphins “click” as they hear our bombshell is near. It echoes within their shell as well.



When it trots, it looks like a dog. Once being caught for pleasure, it started declining in measure. From the estuary to the fish tank, its paddling crank. You have one more chance to free the dogfish from the tank!

31 All drawings are created by the authors.

Note: A diagonal curly path depicts what we might see as a fish, but its movements create another relish. Its being has been put at risk. What can we do to reinstate this fish anew?



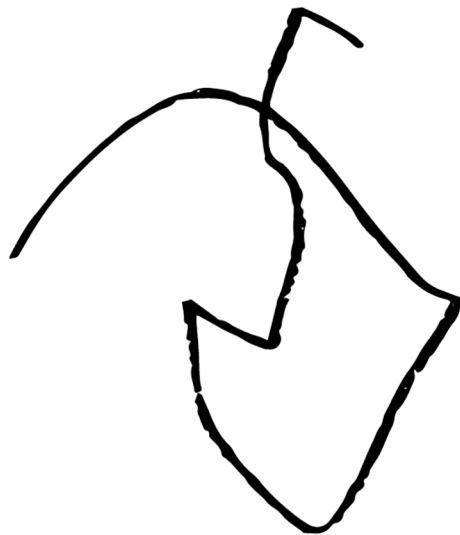
Where the Danube rests still is where the blockage is near. The Iron Gate shows the stats: "You shall not pass!" It is not only the popular cultures crass. The We Pass stays in the past and there are sturgeons left trapped. Would you advocate for the walls to collapse?

Note: The horizontal placement of the path questions the ways in which humans place barriers. Whoever has the right of passage has two straight legs.



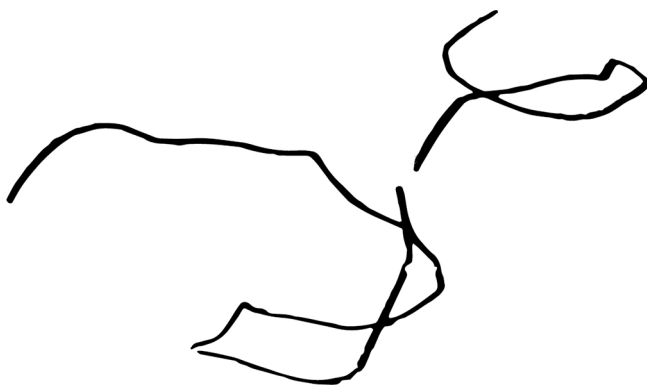
If you want to walk, you have to hop. Otherwise, you might stop on a war prop. Be careful of the land that lies ahead, it has secrets left unsaid. And so it goes, a land full of mine crops, shifted by nature into your course. So better watch out for the remorseless flood, as landmines play in the moving mud!

Note: Slight corrosion in the path position makes the marks juxtaposition. This message comes with a warning from the past. What humans have left in the 1990s' bloodshed, comes to hunt their future thread.



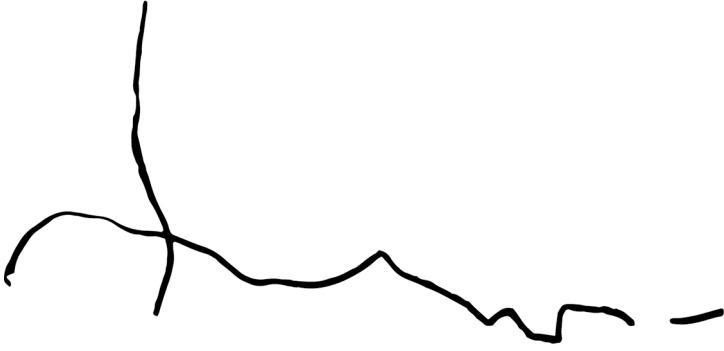
An underwater coal mine makes the ecosystem frail. Ghostly shadows, aquatic kin, bear witness to the lignite sin. In their silent gaze, the ecosystem's plea, as the coalfield claims the stream. A warning they bring, a dire request, to preserve the Danube, its waters blessed.

Note: Dark circle raises questions about riverbed exploitation. It changes the topography, and within, its inhabitants.



There is an event, trying to save one's own head from the fear of the regime's gear. A group of people swim across the cold gate. Across the river, a new life begins to deliver.

Note: It is the first time since 1977 that these circles are in the loop again. There is a need for deep transformation and people are forced to flee with water.



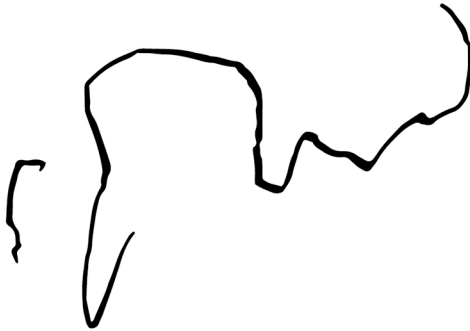
You think it's a wonder, as you smack its legs with hedonic hunger. Its scientific name '*Pelophylax kl. esculentus*' points to a delectable treat, if one can identify it. Sharp your ears to hear its growling call: "re-re-re-re-re" to catch the prey. But be aware! Everyone who wants to have this little snack should know that its legs are dismembered while still alive and left to beg. Would you plead to change the prologue for the edible frog?

Note: Bouncing lines bring troubles from a stranger. But besides all the damages humans are capable of inducing, the *Pelophylax kl. esculentus*'s faith is commemorated with the saddest song of the wailing frog of a different descent: "Ooh. . . ooh . . . ooh . . . ooh . . ." sings the fire-bellied toad. The sound floods all over the wetland.



If you strike, *Bombina bombina* puts out its spike. It is not what you think, it is not sharp and clink. Orange, bright, yellow, and light, is a fiery reflex you shouldn't ignite. Once it scares you, it tears your eyes. So you better leave this toad in the sludge!

Note: A path is interrupted, and *Bombina bombina* may be extinct on the other side. When threatened, it scares with the 'unken reflex'.



With all the new scorching heat, there are no more secrets left to keep. You can find a cowards fleet, just below your swimming feet. After so many years following their last battle, they lie still underneath the gravel. Be careful how you stroke, there is a rumour that their hull carries heavy smoke.

Note: A scalloped trail retraces armours along its path. Deep down there are fleets of ships left intact. As the tides suck in, there is a real danger of the still existing ill.



Among the all-seeing eyes of this planet, there are artificial ones that are like gadgets. They trick the river into digital leaks and disrupt its flow by using its generous growth.

Untethered by traditional roots, the vigorous coontail floats free almightily. Its flowers appear inconspicuous, but it might also grow too densely. The virtue of its trick is to be thick. Do not stay under its brick! You better learn from its ethics: swiftly adapt and do not attach!

Note: A quirky, curled line with a single loop establishes the uncanny nature of the coontail and its adaptive mechanisms. When there is too much of it, it can be, for others, a suffocating neighbour.

Live, Think and Die with Mussels

Let us take you on a little detour. Dolphins are known to communicate and co-ordinate their fishing actions with fishermen at Praia da Tesoura in Laguna, Brazil. As dolphins ingeniously realized where the fishermen cast their nets, they began herding fish towards that place. This strategy causes fish to break into formation, making it easier for the dolphins to catch them. They even signalled the fishermen regarding the approaching direction, unintentionally training them in this cooperative strategy (Cantor et al. 2023). This *thinking with* helps both of them catch more fish, but only if they are sensitive, actively listening and paying attention to one another.

What is at its core here is a question about collaboration; how can we think together and work together for a better catch? But what if there is no catch involved? What if the catch is our shared existence? Humans have certainly been engaged in mutual evolution with other species throughout history. They have never been isolated or abstracted from their ecological and relational correspondence with others. But thinking and doing with *woodiana* is far more difficult than with dolphins. And it is not because they are one foot short. Instead, we are short in understanding the advantage of attuning to *woodiana* paths. The understanding of the Danube with *woodiana* is, of course, shaped by their unique sensory perceptions, biological characteristics and evolutionary history, which offers a perspective that is fundamentally different from our own. Nevertheless, it is informed by our coexistence. What we let go, they catch. And eventually, we catch it back.

But there is another catch in this story: we both do great harm in this world.

Being shipped from long distances between continents, without being migratory species themselves, these mussels were soon declared as one of the most invasive aquatic macroinvertebrates found in the river Danube. As a species with exquisite survival skills, *woodiana* can cause harm to other species, posing a potential threat to biodiversity. They are considered generalists because they are in direct competition with other Danubian mussel species, excessively exploiting fish as their hosts (Paunović et al. 2006). As a result of this, *woodiana* are often represented, both by the popular media and within academic discourse, as an invasive species dominating over the native species (Benko-Kiss 1995; Douda et al. 2012; Paunović et al. 2006; Popa et al. 2007). *Woodiana* are certainly faster to reproduce, bigger in size and more resilient than the other mussel species. But, perhaps, this is what it takes for life in the Danube, which is rapidly changing by anthropogenic ecological degradation, to continue.

Animals (and plants) that have been labelled invasive species are the bad guys, evil villains, invaders, killers, pests, aliens or monsters for the wildlife conservation world (Elton 1958; Strayer and Waldman 2013; Subramaniam 2001). We are urged not to perceive these creatures as an essential part of the natural ecosystem, but as invaders, who even require military strategies and lethal measures to be dealt with:

[...] I have described some of the successful invaders establishing themselves in a new land or sea, as a war correspondent might write a series of dispatches recounting the quiet infiltration of commando forces, the surprise attacks, the successive waves [...] of attack and counter-attack (sic!) and the eventual expansion and occupation of territory. (Elton 1958)

The language used in discussions about invasive species tends to create bias in people being against the animals, fostering a perception that the killing of these creatures is not only morally justifiable but also deemed necessary. However, such claims are highly controversial (Inglis 2020). Certain members of the academic community have endeavoured to advocate for invasive species asserting that “the vast majority do no harm at all or are positively useful” (Thompson 2014: 6), or suggesting that these species are here to stay instead of the endangered or extinct ones, that they might even represent our best hope for replenishing wildlife populations in the Anthropocene (Pearce 2015). On the other hand, we must also acknowledge that, in terms of the Earth’s history, humans are “The Most Invasive Species of All” (Marean 2015).

So, how do we change the invasive species and non-native narrative around *woodiana*? How can we change our viewpoint to envision a potentially positive future where we acknowledge the value of *woodiana*? How can we comprehend the interactions between the *Danubian* species and us humans, especially in the face of swift environmental changes? Well, perhaps by training our minds to “go visiting” (Haraway 2015: 11).

Through our visits and *speculative fabulation*,³² we have engaged with pressing questions that the Danube compelled us to explore, telling stories about alternative futures with the aim of changing those troublesome in the present. Perhaps not the *world* per se but, at least, to start changing our manners, what we read and how we speak. We are trapped in languages entirely created by humans, and our planet is desperately in need of unheard *voices* and unknown *lines* (lives!). However, to hear them, we have to be brave enough to ask them the right questions: so, *What Would Woodiana Say If We Asked the Right Questions?*³³ (Despret 2016)

In our intricate nature and continuous existence, both *woodiana* and we humans are simultaneously inflicting significant damage and supporting entire ecosystems: “The devil is truly in the details of response-able nature-cultures inhabited by accountable companion species. They – we – are here to live and die with, not just think and write with” (Haraway 2016: 125).

32 Haraway describes speculative fabulation as a “mode of attention, a theory of history, and a practice of worlding” (2016: 230).

33 The original title of the book by Vinciane Despret is *What Would Animals Say If We Asked the Right Questions?* (2016).

But, until we die, we must sow worlds. As our esteemed President of the *Therolinguistics Association* once noted, narrating these stories allows us to embody the concept of *Staying With the Trouble* (Haraway: 2016) And after ants, penguins, dolphins and mussels, there are others to be heard:

And with them, or after them, may there not come that even bolder adventurer – the first geolinguist, who, ignoring the delicate, transient lyrics of the lichen, will read beneath it the still less communicative, still more passive, wholly atemporal, cold, volcanic, poetry of the rocks; each one a word spoken, how long ago, by the earth itself, in the immense solitude, the immenser community, of space. (Le Guin 1988: 175)

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Acknowledgments

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Concluding

Tracing, Expressing, and Asserting Multivocality in the Multispecies World

Concluding Remarks

Regina F. Bendix

T. H. White chronicles the upbringing of mythical young king Arthur (2012 [1958]) in *The Sword in the Stone*, the first book of his *The Once and Future King*. Arthur's teacher, the wizard Merlyn, knows the boy's destiny and seeks to prepare him for it. White, an agnostic, was himself a naturalist and, as one reviewer wrote: "Notably free from fearing God, he was basically afraid of the human race" (Townsend 1977: IX). Drawing on Sir Thomas Malory's translation of the medieval French *Le Morte d'Arthur*, White develops a world in this first book, where species, at times, seem intermeshed. White's magician Merlyn appears to blend in and cohabit with animals, and while he hears and has them speak, White would seem to be an anthropomorphist in the service of bringing his 20th-century naturalist's knowledge to entertain while communicating the habits and social organization of different species. To prepare Arthur to grow into a wise leader, Merlyn transforms him, in turn, into a fish, a hawk, an ant, an owl, a goose and all manner of animals. Here is young Arthur, transformed into a goose, sensing and participating in the departure for migration:

[He] began to feel an uneasiness in himself. The dim squadrons about him, setting out minute by minute, infected him with a tendency. He became restless to embrace their example, but he was shy. Perhaps their family groups, he thought, would resent his intrusion. Yet he wanted not to be lonely. He wanted to join in, and to enjoy the exercise of morning flight, which was so evidently a pleasure. They had a comradeship, free discipline and *joie the vivre*.

When the goose next to the boy spread her wings and leaped, he did so automatically. Some eight of those nearby had been jerking their bills, which he had imitated as if the act were catching, and now, with these same eight, he found himself on pinion in the horizontal air. The moment he had left earth, the wind had vanished. Its restlessness and brutality had dropped away as if cut off by a knife. He was in it, and at peace. (White 2012: 183)

As much as Arthur's experiences of animal bodies, sensation and agency are anthropomorphized in this novel, and as much as they serve to teach him to become a wise ruler over difference, they show a deep awareness of other-than-human lives on the planet.¹

There is also a longing to share in other species' ways of moving, dwelling and living, encountered in the shape-shifting motifs found in oral traditions around the globe. In this volume, Mairéad Nic Craith touches on such transformations as gleaned from Irish narrative tradition. Candace Slater studied the stories of freshwater dolphin transformations into human form in the Amazon region (1994). Kitsune, the woman turned fox, figures in Japanese legends (Iwasaka and Toelken 1994). Swedish legendry knows of forest spirits, half woman half tree or transforming from one into the other, where a present-day reading might focus more on such spirits' protection of forests from men than, as older interpretations emphasized, on their seduction of men.² Other tales and legends in vernacular tradition feature the knowledge of understanding animal languages, a gift that those who have it all too easily squander. The animals overheard have a greater knowledge of events to come than the humans who understand them (Johns 2016). Rivka Galchen writes: "Animals have prominent speaking roles in many of our oldest stories. Eve has a memorable conversation with a snake. In Norse mythology, two ravens, Huginn and Muninn, serve as spies to the god Odin, whispering to him the news of the world" (2024). Animals know of hidden treasures or impending calamities, and one could surmise in such stories a latent (or taken-for-granted?) human awareness of the assemblages of perception and knowledge in the multispecies web. The 21st-century scholars, scientists and artists contributing to this volume express this knowledge overtly: they use words such as connectedness, kinship, relationship, relationality, webbing and so forth to affirm and build on the situated as well as overarching evidence of multispecies interwovenness, interdependence, care and responsibility. Much as White engages serious concerns in crafting an example of what is termed the fantasy genre today, some authors in this collection, such as Siobhan Leddy, advocate and practice what Donna Haraway termed "speculative fabulation" (2013), or develop their own variant of a fiction genre, such as Fernanda Haskell's anticipatory narrative.

Working from traditional narratives and reconsidering them under the auspices of a multispecies perspective, as do Nic Craith and Pauline Schuster-Löhlau in this collection, is a powerful means of narrating a multispecies cosmos. There is rich folkloristic research that documents and examines vernacular narrative in emic and etic terms, and offers new readings of how seemingly barren texts³ allow insights into efforts to link to,

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- 1 T. H. White's *The Book of Merlyn*, intended as the concluding volume of *The Once and Future King*, was published after his death (1977). He engages here still deeper into animal worlds, with Merlyn once more sending an aged and dispirited king Arthur off to learn from animals, hoping that the broken king might regain the strength to lead the world into peace. The text was written during WWII, and White has animals hold court over warring humans.
 - 2 They can be found under "Spirits of the Forest" in Bengt af Klintberg's survey (2010). A Nordic comparative survey of these figures, without attention to a multispecies perspective, is offered by Kuusela (2020). More on human-plant shape-shifting and vegetal narrating is introduced by Middelhoff and Peselmann (2023).
 - 3 A young audience member voiced in the question and answer session after Nic Craith's splendid keynote in Würzburg how she now finally understood why she had found printed collections of

mirror and mimic the more-than-human world.⁴ Yet, it took a long time for scholarly work with indigenous and vernacular narrative to expand from collection efforts and etic attention to narrative categories (Ben-Amos 1969; Jolles 1930) to recognize the interwoven sensibility toward self, place and other encoded in traditional or indigenous narration (Kockel 2014). An early example is Keith Basso's *Wisdom Sits in Places* (1996); a very recent one goes further, paying attention to the embodied, even material experience of both narrating and listening (Kotašková 2024). Listening, seeing and sensing all require attunement if humans are to perceive other-than-human communication. Furthermore, decentring humankind is in order to acknowledge that our species is not necessarily the addressee of such potential multispecies storying. Humbleness is perhaps the essential quality necessary for our species to attempt to narrate the multispecies world.

The bold tasks set by the conference "Narrating the Multispecies World in Times of Crisis", gathered here on the two-dimensional printed page, are as manifold as the challenges of what its instigator, Michaela Fenske, in her introduction emplaces in the growing scholarship on the polycrisis. A wild and productive interdisciplinary assembly of participants took up the call to narrate in ways that felt, at times, even beyond three-dimensional. Research and imagination exploded further than the parameters imagined by a more classic, discipline-based concept of narrative, encouraging one to go beyond what has been assumed to be an exclusively human skill, as reflected in the term *homo narrans* (Fisher 1984; Ranke 1967). To assess what possibilities were charted by the conference and the selection of papers that found their way into print here, I will, firstly, probe what might be understood to constitute narration and story when working from a multispecies perspective. Secondly, I will address the forms and media chosen through which narrative, broadly understood, is put forth in the contributions assembled here. Behind both perspectives is a goal probably embraced by everyone involved in *Narrating the Multispecies World*: communication and, with it, narration, broadly conceived, are more-than-human facilities. But it is up to humans to use their particular narrative skills to compel members of their often so deaf and blind species to listen to what the multispecies world is capable of narrating.

Communication and (Shared) Sociality as a Foundation of Narration

Humans have gone to great lengths in asserting their superiority over all living things – as Nic Craith noted in invoking the habitual, yet mistaken hierarchies of human views of the environment. In the dominant religions of the Western world, myths as the master narratives of religions characterize humans as the pinnacle of creation, endowed with

tales and legends boring – reduced to context-free texts, as was the custom of folklore collecting deep into the 20th century. Nic Craith's contribution was an eye-opener for many of those present.

4 The major reference work on folk narrative, the *Encyklopädie des Märchens* (Ranke et al. 1977–2015) encompasses all genres of folk narrative; it offers many articles on animal protagonists of stories, but few on plants; it was conceptualized before the human-animal and the multispecies studies turn within folkloristic and anthropological disciplines.

the power to name and dominate over all else. Western science since the Enlightenment, taking for granted such mythic claims, set out to 'discover' and name, observe, dissect and categorize all plant and animal species, habitats and environments, using the very capacities that were seen to constitute 'human superiority', namely, a large brain relative to body size, and language, in all its communicative forms, particularly writing, which enables reflection as well as plotting and planning futures. The plotting and planning has, perhaps, been to the detriment of the planet, and communication and, with it, language, as we have come to realize through studies ranging across many different species, is not humans' gift alone.

Naturalist Lyanda Haupt's monograph surrounding *Mozart's Starling* (2017) also offers a chapter summarizing scientific efforts to claim aspects of language as uniquely human, citing, for instance, Hauser, Chomsky and Fitch's efforts (2002) to establish "recursiveness" as a uniquely human capacity. As recently as 2016, Robert Berwick, together with Noam Chomsky, asserted that in evolutionary terms, it can only be us humans who command language. Haupt's own experiences with raising and caring for a starling she named Carmen led to an opposing view, which she had seen confirmed already in Darwin's work: "Darwin wrote in *The Descent of Man* 'The sounds uttered by birds offer in several aspects the nearest analogy to language.' That was in 1871" (Haupt 2017: 168). She goes on to cite Erich Jarvis, a neuroscientist, who mapped the genome of forty-eight different species of birds. He found fifty overlapping genes in humans and birds that correlate with vocal learning. "In birds that were more adept at learning new songs, these genes were more often expressed" (ibid.). In bridging between scientific work and personal experience, Haupt permits herself some astonishment that it took until 2012 for an international consortium of prominent scientists to sign "a document called 'The Cambridge Declaration on Consciousness,' in which they proclaimed that animals from birds to mammals to octopuses, possess consciousness similar to humans" (ibid.: 170). While perhaps leading to higher ethical standards of treating animals, she states:

I cannot help but think that as an academic declaration, it comes a bit late. [...]. Do most of us really need a scientific document to inform us that the animals we live with are conscious beings? I believe that the human sense of connection with the more-than-human world is innate and joyous. It is our truest way of being, of dwelling, of relating. It is not new; it is very old. (Ibid.)

While a humanistically inclined naturalist, such as Haupt, has no difficulty combining her science foundation with an experience-based understanding of, in this case, Carmen's relational behaviours, acknowledging bird song as sentient communication is still considered less scientific in the world of some ornithological research. Yet, in Wikipedia, the most widely used popular reference source, ornithologists speak of bird vocalizations rather than bird song and emphasize such vocalizations' function for mate attraction and territorial defence, as bird song recedes once mating and child-rearing are over.⁵ The word song, we are told, is used because those vocalizations sound like (human) music to

5 "Bird vocalization" <https://en.wikipedia.org/wiki/Bird_vocalization> [Accessed 30 July 2023].

human ears, and many scientists do not wish to presume that birds enjoy aesthetic pleasures such as singing. Considered a form of anthropomorphism, different vocabulary is, thus, chosen, and the potential of affective involvement on the part of the researcher is avoided.⁶ When searching for ‘whale song’ – which has long been marketed as music and incorporated into human compositions – Wikipedia also redirects to “whale vocalization”. Here, at least, we find sentences such as “male humpback whales have been described as ‘inveterate composers’”.⁷

Fearing anthropomorphic propensities, natural scientists may also be less inclined to use vocabulary that is derived from language and reflection to discuss support mechanisms among networks of plant and tree roots. However, Stephanie Pappas (2016) summarizes that scientific debates regarding supportive webs among trees in forests, and the propensity to acknowledge chemical and electric interaction as forms of communication has certainly increased and perhaps also indicates a rise of other than Cartesian stances in science (e.g., Jørgensen Hansen 2024). However, it is the interdisciplinary attention, such as Sarah Abbott’s work bridging ethnography and science (2021), that is more daring in carrying arguments of sentience and, with it, communicative endeavours among trees into the public realm. And it is literary work, such as Richard Powers widely read novel *Overstory* (2018), that builds on a susceptibility or conviction among readers in favour of arboreal and arboreal-human communication. In doing so, Powers becomes an actor in the growing number of narrators of the multispecies world, much like Haupt, who lobbies not only for Mozart’s awareness of the starling’s musicality and intelligence, but also the communicative talents of her Carmen (Haupt 2017: 93).

Even with the scientific hesitation to consider communicative and relational possibilities for fear of projecting human characteristics and predilections onto non-human species, we witness a great deal of evidence of non-human communication that asserts sociality. From sociality grows habitus – clearly also not a human prerogative, and possibly a source of memory. Over the course of my lifetime, despite all scientific scaffolding to categorize non-human communication at best as functional for a given species, we have been inching closer to acknowledging communicative skill and agency going beyond stilling hunger, insuring procreation and warning of danger among numerous species. Media report no longer just on smart dolphins but also on smart ravens or, adding emotion, seemingly irritated orcas.⁸

There is, certainly, communication in the form of learned and crafted vocalization in traditionalized animal-human pairings. Think of pastoralism and Sami joiking (Jones-Bamman 1993), the primary or head tone soundings among the Tuva (Levin 2011) as well as herders in parts of Mongolia, alpine yodelling (Schwietert 2007) or “singing the cows

6 Galchen reports, however, that at Tokyo University, for example, there has been an animal linguistics laboratory since 2023, drawing different conclusions than the animal-language deniers.

7 “Whale vocalization” <https://en.wikipedia.org/wiki/Whale_vocalization> [Accessed 30 July 2023].

8 There were press reports on orcas disturbing sailboats on the Iberian coast in the spring and summer of 2023; a more systematic site has archived such orca-human encounters since 2020: “recorded interactions” <<https://www.orcaiberica.org/en/copia-de-interacciones-registrada>> [Accessed 13 September 2024].

home” in Sweden (Brorson 1985). All of these are elaborations of the vocalizations employed in wordless, guttural but melodic ways to call in domesticated animals for milking or guide them in other ways. Vocalization is also not the only non-linguistic communication in which humans engage: research on hunting points to other sensory relational dimensions that have been ethnographically documented (Willerslev 2007⁹), similar to those in horse breeding and riding (Eckardt 2023). Human-companion animal research presented at the conference on which this volume is based was full of multisensory communication that respondents did not know how to put into words.¹⁰ As differently as such human-animal relationships may be motivated, once they are felt to be social relationships, actors within them can no longer be indifferent to them (Keane 2024: 81).

A focus on sound opens up further perspectives. Philosopher of science Vinciane Despret employs the concept of “cosmophonic stories” (2022: 31) in her rethinking of birds, territoriality and multispecies relations. Her concept resonates for me with ethnomusicologist Steven Feld’s more than forty-year-old work with the Kaluli of New Guinea (1982). In that thickly forested terrain, sound takes on a role outpacing vision. The Kaluli shape their cosmology, ritual and aesthetic expression deeply through their connection with birds, bird song and plant life, integrating themselves on an even plane with the species among whom they live. If we, thus, step away from what *humans* consider language and with it narration, and consider the sensorium, and the sophistication required to use and habitually rely on its communicative role within and between bodies or entities, intelligence turns into something far broader, encompassing the realm of tacit, experiential knowledge. It is not an accident that it has taken a long time to seriously address how we acquire tacit knowledge, such as Michael Polanyi (1966) has theorized it (Bendix 2023). Where body, senses and mind accumulate experience and turn it into internalized skill without necessarily verbalizing it, the comparability of species in learning and acquiring competence can be grasped and the potential for (shared?) understanding of what mastering life entails may open up further, experience by experience. To grasp a multispecies world – instead of a world of many species as perceived by humans – invites, urges and requires attention paid to all sources of communicative skill and knowledge. The non-cerebral is at the forefront, undermining classic nature-culture divides and other kinds of binaries. Embodied learning and communicating undoes categories and acknowledges the individuality of humans and non-humans alike. In their work with grey parrots, Ute Hörner and Vanessa Wijngaarden in this volume build on sensory knowledge as it grows to a communicative interspecies and dyadic history. Ally Bisshop’s work is particularly in tune with the thinking outlined here, regarding her grasping spiders’ vibrational command as communication. What she terms “sensory smudging between hearing and tactility” is an opening towards linking the sensory with the cognitive in untried ways. Smudging would appear to be a suitably imprecise term and method to find perspectives into multispecies worlds.

9 See also the special issue on senses I edited for *Ethnofoor* 2005, 18(1) < <https://www.jstor.org/stable/i25758079> > [Accessed 28 October 2024].

10 Sarah Mönkeberg, Kerstin Jürgens and Markus Kurth reported on a microsociological research project about human-companion animal relations (2024).

To return to the core narrative of old world mythology: Sampling the fruit of the tree of cerebral knowledge was what caused mankind to be kicked out of Eden. Paradise in that story meant to live within rather than outside of the multispecies world. From that perspective, the myth of the fall thematizes the ill use of humanity's cerebral capacity for human supremacy, with its domineering and exploiting stance towards the planet as a whole. Paradise cannot be restored. But once there is the recognition that communication is a facility shared within and across species, once one arrives at accepting narration to be possible, recognizable or, perhaps best, desirable for the sake of rebuilding, at least in patches, a multispecies world, one can turn towards what such narration may look like.

Voice, Form, Medium: How to Narrate the Multispecies World

Sandra Eckardt, when drawing the story of the orphaned chick Daisy in the opening contribution in this volume, employs the eloquence of shape and colour in narrating a little bird's survival in human care. The form and medium chosen, with voice sketched in uneven letters and words in a manner suggesting more-than-human penmanship, all suggest an approximation of witnessing and telling in colour and shape that which might contain Daisy's way of perceiving and emoting. While the book form ultimately enforces working with printed and grammatically correct human language, the presence of art in the contributions bespeaks its centrality as an avenue through which a potentially participatory or collaborative multispecies world can be grasped and narrated.

The visual as a medium is used to offer presence and outline characteristics to communicate differential (co-)existence figures in a number of contributions. Photographer Ren Hang's work is explored by Ahmet Emin Bülbül, who interprets the artist's skill in decentring the human in multispecies portraiture. Hang's compositions aim for a more-than-human sociality, on the one hand, using light and positioning to allow for the non-human entity's qualities to emerge in a dominant rather than background manner. On the other hand, Hang produces liquid depictions of shared space, with non-human and human moving within water or breathing the same air. On the metalevel, classic theorizing of photography is augmented and shifts with the influx of multispecies theorists, such as Eben Kirksey or Anna Tsing.¹¹ André Krebber and Zhongaho Chen trace the ways in which landscape in its textured constitution found ways to narrate itself through painting, from the brush strokes of a 17th-century Chinese painter all the way to present-day ways of allowing canvas to absorb plant agency before being further worked on.

Andrea Palašti engaged participants in actual movement during the conference on which this volume builds, intended to experience mimetically and three-dimensionally how another species may inhabit space. In the contribution written jointly with Sanja

11 Kirksey most recently coedited with Sophie Chao and Karin Bolender a work that, much as the authors gathered here, combines scholarship with creative work (Chao, Bolender and Kirksey 2022). Anna Tsing, next to her much cited work on the Matsutake mushroom's entanglements (2015), continues to build the gargantuan *feral atlas*, a work that like no other documents and demonstrates the ongoing human impact on multispecies co-existence (Tsing et al. 2021).

Anđelković, it is the lines that mussels draw in movement that are taken as sandy writing, communicating existence, movement and the passage of time. Palzang's use of film documentation distributed over digital social media, reported here by Sira Liang, is almost in an opposite, disembodied direction, yet, clearly effective in its efforts to recover Tibetan grasslands. Digital narrating and witnessing about traditional herders' ways counter ineffective, destructive policy and wins adherents. Martin Abbott, Amy Cheatele and Lissette Lorenz's turn to zine-making and gardening as activities co-constituting one another, for which they coin the term *anthropo-botano-genesis*, is visual and graspable, in a crafty-earthly way.

Multispecies advocacy encourages and warrants this kind of creativity. Yet, the poly-crisis we find ourselves in has its origins in our species, and it is, first and foremost, humans who need to hear narratives about and for the multispecies world. Whether it is short stories penned by students (Ilhéu and Valente); personal narratives on roots, houseplants and migration (Alkan); a creative format, such as an ethnodrama, to stage the presence of a tree and its roots in a scene peopled with architects and labourers (Neubert); finding engaging ways to narrate the endangered entanglement of monarch butterflies and milkweed (Tabak); differentiating between the slow collaboration of traditional fruit breeders and apple trees and fast track genetic modifiers (Peselmann); or gathering water's destruction in language, where humans have excessively hemmed in its course (Beneduce): each of these approaches succeeds in drawing attention to a particular angle on the multispecies web and the actors within it, from the everyday to the scientific, the metaphoric to the concrete.

Conclusion

Narrative is a meaning-making practice as well as an opportunity to encourage taking action, or, indeed, to desist from acting. Times of crises require, more than anything, the spreading of insight and assembling of courage to productively and collectively engage in tackling such crises – for we cannot afford to be planet doomers (Solnit and Lutunatabua 2023). One big challenge lies in the dynamic nature of knowledge: both research-based and experiential, knowledge often changes so fast that narrations limp behind or cannot keep up. The COVID-19 pandemic can serve as a case in point with the build-up of knowledge, policy decisions and conspiratorial rumours leading to conflicting stories. Climate change and its effects are so rapid that the same may happen with environmental and conservation stories – both of which require potent narratives to find supporters in the broader public. And, as narrative scholars know, just as every proverb generally finds an opposing companion proverb, so stories pleading for multispecies awareness and practice are confronted by other, rhetorically powerful stories that endorse political values pressing for continued land exploitation, denying the human role in bringing about the melting of glaciers, and endorsing a story of continued economic progress.

Michaela Fenske, in her introduction, endorses Donna Haraway's "staying with the trouble" (2017), that is, taking on the responsibility of retelling familiar or crafting new narratives that recover or build afresh the direly needed multispecies awareness, and, in the process, kindling courage and contributing to repair and rebuilding. Such narratives

will set aside human-made divides between the useful and useless species, respect the differential needs for space and shoulder the responsibility for undoing at least some of the havoc our species has wreaked over thousands of years in securing dwelling and nourishment, first and foremost, for our own species.

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Appendix

About the Contributors

Martin Abbott

I am an environmental humanist and hold a PhD in science and technology studies from Cornell University. My research explores the relational dynamics between social, environmental, and technoscientific forces that shape contemporary life, particularly from the vantage point of urban futures characterized by uncertainty and inequity. Growing up on the unceded territory of the Biripi people in Cedar Party, Australia, I developed a deep commitment to fostering a just world where all forms of life can thrive equitably.

Hilal Alkan

I am a senior researcher at the Leibniz Zentrum Moderner Orient in Berlin, working at the intersection of migration and multispecies studies from an anthropological perspective. What captivates me most in my multispecies research is observing and drawing the plants given to me by my research participants. I find it astonishing that non-humans are so persistently overlooked in mainstream social scientific analysis, and I aspire to see the day when this changes.

Sanja Anđelković

I am developing a PhD thesis at the University of Applied Arts Vienna in Austria about reconstructing dominant cultural narratives in Orthodox chants through the lens of multispecies thinking. I aim to understand the ancestral voices of the Earth by exploring how our vocal muscles mimic and learn from the voices of cicadas. With these insights, I seek to develop and expand new ways of composing and performing liturgical music that shift the dominant human-centred narrative toward a broader, more inclusive sonic expression, one that embraces other-than-human knowledge and voices.

Regina F. Bendix

I teach Cultural Anthropology/European Ethnology at Göttingen University. My work has focused on the political and economic dimensions of cultural practices and the history of scholarship surrounding them. My approachment to multispecies studies began with

a conference themed around dwelling; the present volume is a welcome start to further engagement.

Chiara Beneduce

I worked on the anthropization of Alpine rivers and streams in the Italian peninsula as a Master's student in environmental humanities at the École des hautes études en sciences sociales in Paris. I am particularly passionate about the entanglements between literature and anthropology that emerge from multispecies studies, and sometimes write short stories inspired by my own fieldwork. I strive to practice committed research that engages directly with social, political and environmental justice.

Ally Bisshop

I am a creative researcher and lecturer in interdisciplinary arts-sciences at Griffith Film School in Meanjin (Brisbane), on the lands of the Jagera and Turrbal people. My research engages with the queer complexity and expressivity of more-than-human lives, using art-science 'fictioning' practices to explore speculative pathways for multispecies flourishing that challenge visions of the world grounded in anthropocentric fatalism. This work is informed by my ongoing collaboration with Tomás Saraceno's *Arachnophilia*, which invents new paradigms for multispecies relations through intimate engagement with spider-webs.

Ahmet Emin Bülbül

With a background in audio-visual studies, I currently work as a lecturer in the Department of New Media and Communication at Istanbul Nişantaşı University. One of my most significant achievements in the field of multispecies studies has been establishing a deep connection with more-than-human beings in my neighbourhood, particularly plants, cats and dogs. I am eager to contribute to the existing literature by foregrounding a multispecies aesthetics in which more-than-humans manifest themselves, perform and create unexpected, refreshing and anti-hierarchical experiences of coexistence.

Pearl-Sue Carper

I am a researcher at the Department of European Ethnology/Cultural Analysis at the University of Würzburg. One of my most interesting works in the field of multispecies studies so far has been exploring the power of rats in urban spaces. I am currently working on my dissertation project, which deals with the significance of rose hips and the possibilities the fruit enables. My aim is to contribute to a better understanding of how the world is shaped with and by other-than-human beings.

Amy Cheatle

I am a PhD candidate in science and technology studies at Cornell University located in Ithaca, NY, the ancestral and contemporary lands of the Cayuga Nation. I explore the complicated, exciting and dangerous introduction of computation into existing forms of craft, and how long-standing forms of doing, knowing and making evolve or erode as a consequence. I am also an urban gardener who nurtures and is nurtured by medicinal

and other plant communities that grow in and around my home. This project is rooted in growing these plant relations.

Zhonghao Chen

My practice combines visual art, creative technology and environmental activism. I have focused on the Tai Lake area in Jiangsu, China, over the past five years to create imagery and facilitation that raise sustainability awareness. My work in multispecies studies includes two key projects. The first, influenced by my experience in the New Zealand food industry, explores otherness and aims to reduce animal cruelty through multispecies engagement. This led me to explore the concept of milieu and non-animal entities, inspiring my current project in China.

Sandra Eckardt

I am working as a visual anthropologist at the Department of European Ethnology/Cultural Analysis at the University of Würzburg and in different projects and regions of Germany. I have always loved to be outside and observe how other-than-humans live and grow. Their beauty attracts me and by observing them, even with a camera or pen, I understand them a little better and get closer to them. I am driven by the desire to communicate what connects us beyond their surface and make others curious about them.

Michaela Fenske

I have the pleasure of chairing the Department of European Ethnology/Cultural Analysis at the University of Würzburg in Southern Germany. My most captivating work in the field of multispecies studies lies in tending my garden together with other-than-humans. My passion is to contribute to cultivating a world where humans are irresistibly drawn to respect and savour the deep, sensual connections with the more-than-human world around them.

Fernanda Haskel

I am an artist-researcher, a PhD student in the psychosociology of communities and social ecology at the Federal University of Rio de Janeiro. I investigate the regeneration of natureculture relations, focusing on care production and affective politics at the intersection of forest and city. I have collaborated with popular and community movements on urban planning policies, nature protection and rights in southern Brazil. I am passionate about plant life and have cultivated a close relationship with the Atlantic Forest Bromeliad, which guides my research and teaches about other-than-human ways of world-making and living on Earth.

Ute Hörner

My teaching area at the Academy of Media Art Cologne is multispecies storytelling. In this field of studies, we explore the question of how we can tell stories in a way that no longer places humans at the centre, but rather focuses on other-than-humans as individuals with their own desires, interests and rights. The most challenging but also joy-bringing collaboration in my artistic life is the work I do together with my parrot com-

panions. As the interspecies collective CMUK, we question one of the last largely unchallenged features of anthropological difference: the exclusively human ability to create art.

Maria Ilhéu

I am an associate professor and researcher at the University of Évora, Portugal. My work is at the cutting-edge, where ecology meets and mingles with multiple disciplines, including the arts. It delves into the fascinating relationship between the human and more-than-human realms, exploring the potential for immersive experiences to deepen our understanding of this relationship. I have had the pleasure of collaborating with Mariana Valente on numerous projects exploring the “delicate empiricism” concept of Goethe. Through this collaboration, we have developed a research and educational approach that fosters a “response-ability” towards the multispecies world.

André Krebber

Non-human animals have accompanied me for most of my academic career as a cultural historian and theorist, most recently as a guest professor at the University of Kassel in Germany. A standout project has been OktoLab – a series of collaborative events and exhibitions that celebrate the otherness of octopuses, which led to my inquiry with Zhonghao in the present book. I believe strongly that the aesthetic sensitivities of animals, both human and non-human, provide a key to addressing our socioecological challenges – by way of opening up an understanding of how animals are subjects of their own lives and histories

Siobhan Leddy

I am a researcher, writer and artist based between Berlin, Germany, and the forests of rural Dalarna, Sweden. I am drawn to aesthetic or sensuous processes for creating meaning, such as art, sound, song and food. These methods help me to understand my embodied and embedded responsibilities in more-than-human worlds in different ways.

Siran Liang

I am a PhD candidate at the interdisciplinary research training group ‘Geo-ecosystems in Transition on the Tibetan Plateau’ at the Technische Universität Braunschweig, Germany. I learnt how to milk yaks during my fieldwork with Tibetan yak herders. I hope people who grow up in cities like me are able to see the lives behind the plastic packed meat and milk; actually, not just the meat and milk, but everything in the supermarket.

Lisette Lorenz (ki, kin)

Hailing from the transdisciplinary field of art-science for ecosocial justice, I work in the community to end speciesism. I specialize in the plant medicines of my ancestors, which span the indigenous Americas and the African diaspora. My research focuses on environmental health and wellness in and beyond the crises of the Anthropocene, and my work can be found at lisettelorenz.com.

Christine Neubert

I have the opportunity as a sociologist and postdoc at the Department of Social Economics, University of Hamburg, to pursue my deep interest in the everyday life and practices of humans and more-than-humans. I am fascinated in my research project on construction sites by the self-evidence with which flora and fauna present themselves as co-creators. I hope to contribute to a deeper understanding of the interdependencies between human and non-human spatial practice and strengthen the willingness to learn from each other in dealing with climatic and social challenges.

Mairéad Nic Craith

I am Professor of Public Folklore at the University of the Highlands and Islands in Scotland. My department is the interdisciplinary Institute for Northern Studies. An Irish migrant living in Scotland, I am currently engaged in a critical analysis of traditional Celtic folklore in order to examine everyday interactions between humans and non-humans in pre-colonial Ireland. I am interested in indigenous ancestral stories and poems, and how these can be re-envisioned and re-purposed to develop new possibilities for cohabitation in the multi-species world. My blog on this research theme can be viewed at <https://bellacaledonia.org.uk/2023/08/23/gaelic-folklore-for-a-multi-species-future/>.

Andrea Palašti

As an 'artisteacher' at the Academy of Arts in Novi Sad, Serbia, I experiment with performative research practices centred around the Danube River. We explore the effects of climate breakdown and biodiversity loss through a series of physical exercises, for example, practicing how to flood, to crack as glaciers, to swim like the endangered *Hundfisch* (*Umbra pygmaea*, Eastern mudminnow) and walk like the thick shelled river mussel (*Unio crassus*). This approach not only enhances our relational and empathic abilities but hopefully also highlights the importance of training our bodies through a multiplicity of other-than-human bodies.

Arnika Peselmann

I have been working as a research associate in the Department of European Ethnology/Cultural Analysis at the University of Würzburg 2022–2024, conducting a DFG research project on human-plant relationships in commercial fruit growing in northern Germany. This gave me the opportunity to accompany people and apple trees for quite some time and catch a glimpse of the subtle way in which apple plants communicate within their multispecies entanglements. I hope that my fascination with vegetal life transpires through my work and raises respect and admiration for our plant companions.

Pauline Schuster-Löhlau

I am an Indologist at the University of Würzburg in Southern Germany researching oral texts and performative traditions of marginalized and tribal groups in India. I am fascinated by their 'alternative' ways of thinking about the relations between humans and the myriad forms of other-than-humans, including the divine. It is my hope that, through my work, I can inspire a wider audience to re-evaluate their perspective on this relation-

ship and adopt a more respectful, compassionate and inclusive attitude towards the non-human world.

Eline Tabak

I am an environmental humanities scholar with a background in comparative literature. My career has taken me from the Netherlands to England, Germany and Finland. In my academic work, I create space for stories of small life, from unloved insects to forgotten seeds, on the edge of extinction; I hope to cultivate renewed interest in often overlooked species and become part of a convivial more-than-human society.

Mariana Valente

I am a science educator and researcher at the Institute of Contemporary History, University of Évora/IN2PAST — Associate Laboratory for Research and Innovation in Heritage, Arts, Sustainability and Territory. Many years ago, I came across Marcel Proust's narrative on "the blooming apple trees" and it has been a point of no return in my future life. That was a significant moment of natureculture which is still present in the experiences and narratives that I put forward with other-than-humans going through and living on my farm. I met Maria Ilhéu, an ecologist, and together, we have paid attention to many species, making kin with them, and searching for narratives connecting them. We go on working with teachers, educators and students, researching within the framework of the *Outgoing project: children, nature and culture in relationship*.

Vanessa Wijngaarden

I am a research professor in social anthropology at the University of Liège, and a senior research associate at the University of Johannesburg. I am leading a special journal issue on intuitive interspecies communication, and a multispecies ERC consolidator project working together with expert animal communicators and Indigenous groups on four continents. My passion is to rethink the social sciences through the development of dialogic multispecies methods, a conceptual and theoretical process fuelled by the exchanges between a plurality of human and non-human voices and knowledge.