

12 JUNE 2025 14.00 - 17.00

Panel 26. Dialoguing Species: Dialoguing Disciplines

Convenors:

Lara Giordana, Politecnico di Torino

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Keywords: ecological complexity, more-than-human collaborations, multispecies dialogues, transdisciplinary encounters

In recent years, an intense and systematic dialogue between different fields (natural and social sciences, technical, design and artistic knowledges) has emerged around environmental preservation from a more-than-human and multispecies perspective. Many collaborative projects have been carried out to address the issue of (non-harmful) coexistence among species (an example is "Dialoguing Species: Designing Common Worlds through Ethnographies – DSooE", a project in which the organizers of this panel are engaged). Indeed, the multiple eco-social crises we are facing highlight that coexistence does not concern only humans but involves all beings – both living and non-living – that are part of the biosphere's ecosystems.

Within this framework, the specific focus of this panel lies on the modes of collaboration between the various figures/disciplines involved in these projects, particularly on the frictions and opportunities that arise from encounters between different fields of expertise, perspectives, and languages. Above all, what understandings of the "good" do these various figures/disciplines bring into play, and how, and for whom, do they aim to do "good"? How do these different understandings dialogue with one another?

Furthermore, it is crucial to take into account the various social, ethical, economic, and political aspects involved in decisions about who or what should benefit from these actions. Specific power dynamics influence the prioritization of needs: for example, which species or entities are considered more vulnerable and thus in need of the intervention of a "good technoscience"?

As the general theme of the conference invites us to do, we must question our methodologies and concepts, interrogate our epistemological and ethical frameworks, and examine our practices. In this sense, what are the truly transformative potentials of these encounters between different figures/disciplines? To what extent can these projects, rather than merely establishing connections between well-defined fields, give rise to productive transdisciplinary hybridizations?

This panel aims to offer a space for reflection and discussion, and a laboratory for further investigation and exploration of these issues. We invite papers, as well as other presentation formats – such as performances, small hands-on activities/workshops, prototype testing – that engage with, reflect on, and discuss the following topics (among others):

- Interspecies co-design;
- Critical reflections on the concept of "nature conservation and restoration";
- Care for neglected more-than-human actors;
- Ethical issues regarding allochthonous/ autochthonous species;
- Dismantling modernity and returning to ecological complexity;
- Potentials and frictions in transdisciplinary encounters;
- Questions of epistemic (in)justice in environmental protection;
- Neglected indigenous and local knowledges in environmental protection;
- Power dynamics in environmental protection.



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ID 388 - Aqueous Logic: Understanding Nature Interconnectedness through Freediving.

Beatrice Maggipinto, Carnegie Mellon University; Universidade de Lisboa

Valentina Nisi, Universidade de Lisboa

Nuno Nunes, Universidade de Lisboa

Jessica Hammer, Carnegie Mellon University

Keywords: Posthuman HCI, Hydrocommons, More-than-human, Autoethnography

In recent years, scholars in Posthuman HCI and sustainable design have explored noticing as a method for shifting design research beyond anthropocentric perspectives toward more entangled ecological understandings. Through an autoethnographic freediving practice incorporating embodied underwater observations, journaling, and photography, we examine how freediving can reshape human perceptions of and connections to the ocean. We propose freediving as a method of fostering interconnectedness, where breathwork and sensory immersion enhance awareness of more-than-human interactions, ultimately informing ecological design considerations.

Freediving—the act of diving underwater on a single breath—has roots in ancient fishing practices and has recently regained popularity as a recreational sport. Research highlights its positive effects on physical and mental well-being. The practice engages the mammalian dive reflex (MDR), a set of physiological adaptations that optimise survival underwater. These include breath suspension, a slowed heart rate, and redistributed blood circulation, ensuring oxygen supply to vital organs. While essential to marine mammals such as dolphins and whales, MDR also exists in humans, particularly in children, though it diminishes with age and must be re-trained in adulthood.

This bodily adaptation challenges anthropocentric views of human-nature separation, aligning with environmental scholars such as Haraway and Tsing, who call for an Ecocene—a reorientation that acknowledges the entanglement of human and more-than-human systems. Naimanis' concept of hydrocommons further underlines water's shared role across species, raising questions about the fluid boundaries of human bodies and ecological responsibility.

Building on the notion of aqueous logic as a means of rethinking kinship and adaptability, we explore how freediving benefits not only individual well-being but also ecological awareness, connecting human and more-than-human bodies through water. Through an autoethnographic account of freediving, we demonstrate how the practice can contribute to posthuman perspectives in HCI, encouraging a decentering of anthropocentrism in design research.

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ID 400 - Needs Match Method: Dialoguing Disciplines for an interspecies design impact

Francesco Cantini, Università di Firenze

Keywords: Biodesign, Interspecies design, Urban design, Bioreceptive design, urban biodiversity

In the context of climate and ecological crises, urban environments with significant historical and artistic heritage, such as Florence, present a unique challenge: balancing the conservation of cultural heritage with the urgent need for ecological regeneration. The following research operates within this tension, proposing a multispecies design approach that fosters dialogue between disciplines to create a more inclusive, biodiverse, and resilient urban spaces.

The city is a shared environment where human and non-human actors coexist. To preserve this coexistence we need to integrate Nature-Based Solutions (NBS) with interspecies culture principles to address urban environmental challenges such as air pollution, the heat island effect, and urban biodiversity loss. By



employing a transdisciplinary methodology that merges urban design, natural science, material technologies, and environmental humanities, the following research explores novel ways of promoting multispecies cohabitation. The central question of the project concerns how different disciplines collaboratively shape urban landscapes to enhance coexistence between different species and well-being.

The "Need Match Method" proposed here, fosters an active dialogue between design, scientific and social disciplines. This five-step approach begins with defining the system boundaries (e.g., city, park, neighborhood), followed by identifying the needs of human and non-human communities through interdisciplinary collaborations. These needs are then translated into design questions that balance both ecological and cultural conservation imperatives. The final steps involve generating interspecies design responses and assessing their impact through scientific and participatory methodologies.

An example of this approach is the application of bioreceptive materials (Cruz & Beckett, 2016) integrating traditional local materials, such as Impruneta terracotta and embedding them with bioreceptive properties that can impact on urban biodiversity loss.

The method proposed here has been tested and evaluated within the NatCult interdisciplinary Summer School "Across Nature and Culture: the city of Florence as a case study for natural-cultural conservation and preservation issues" funded by the EUniWell program and in particular within the workshop/seminar "Multispecies Design in the urban context: between heritage and nature conservation". The project can count on the interdisciplinary collaboration of the two Research Units of the University of Florence: "Biodesign" and "ABC-Lab - Interdepartmental Laboratory of Aesthetics and Environmental Humanities for Biological Conservation".

The results of the application of the method were then tested through surveys submitted to the participants of the workshop belonging to the departments of natural sciences, philosophy and design. These have highlighted critical issues and opportunities of collaboration between disciplines.

This participatory model challenges traditional conservation paradigms, advocating for a shift from mere preservation to regenerative design, where cultural and natural heritage evolve symbiotically.

By engaging with questions of regenerative design, citizen science, and the ethical considerations of interspecies interventions, the research interrogates the role of technoscience in fostering multispecies urbanism. It critically examines the concept of "good" within technoscientific interventions, questioning whose needs are prioritized and how decision-making processes incorporate the voices of non-human entities.

The method proposed here wants to trigger the transformative potential of dialogue between disciplines, demonstrating how collaborative design processes can reconfigure urban environments to support both human and non-human well-being.

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ID 133 - Awkward animals and uneven solutions: insects and invasive species as alternative proteins in dog food

Carly Baker, Cardiff University

Keywords: invasive species, insects, alternative proteins, sustainability, dog food

The premium pet food industry began implementing insects and 'invasive' fish as alternative proteins into dog food in response to environmental crises and concerns for dog health. I conducted a shadow ethnography and followed these animals through the supply network to determine how human actors frame these animals to create a market niche and how this impacts multispecies relationships. Both types of nonhuman animals are marketed as nutritionally superior to other products and being 'actually' sustainable. However, the definition of sustainability changes depending on the animal and their characteristics, attracting humans with different political, economic, and ethical values. This influences the technologies adopted into the network and vice versa. The objective for insects is a sustainable supply chain in which insects are controlled in-place and 'optimized' for continuous production. Insect-based supply chains actors



are driven by technological innovation rather than need. As such, insect networks attract more finance, research, and infrastructure. The objective for fish-based products is to create an unsustainable supply chain in which 'wild' caught, out-of-place species are harvested until extinction. Actors in this network are motivated by need – to conserve ecologies and economies – rather than innovation. The inherent unsustainability of the supply network means there is less investment in infrastructure, research, and relationships. Drawing from the natural and social sciences, I demonstrate that this impacts supply network actors in uneven ways even if both networks share an objective of social and ecological wellbeing. While both animals are ultimately killed and processed into food to care for the dog, insects are being cared for through/with industrialization because of their 'low environmental impact' and fish are being cared for through killing. Still, all three categories of animals hold structural agency as the networks build around them. This raises questions on the ethics of multispecies relationships and environmental protection: Is the use of these historically neglected species as food the best way to co-exist with omnivorous dogs in the face of environmental crisis? Is one technological advancement more ethical than the other?

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ID 407 - Beyond "Participation": Local Knowledge and Scientific Research in the Northeastern Brazil

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Keywords: Anthropology of Science, Local community, Lay participation, Primatology

In various biological disciplines, particularly those related to conservation, integrating local communities into research has become an increasing concern. In a small rural area in northeastern Brazil, a group of primatologists from the University of São Paulo has been studying capuchin monkeys' tool use for the past two decades. This place, known as Boa Vista, has been inhabited by small-scale farmers and cowherds for over a hundred years, according to oral histories. With the community's authorization, the researchers built a field station in the area, and local residents began working with them—providing lodging and meals, as well as being hired as field assistants. Over time, this collaboration expanded to include photographers and filmmakers documenting the lives of these capuchin monkeys, which have been using stone tools for hundreds of years.

My research reconstructs the history of this relationship between scientists, monkeys, and the local community while also examining, from an ethnographic perspective, the knowledge of the men who work as field assistants for the primatologists. This presentation explores the controversies surrounding this history, questioning what it truly means to achieve "better participation of local communities" in a context like Boa Vista—where, from the outset, it has been the local people who make scientific research possible. As in many field-based biological sciences, field assistants spend more time in the forest than the scientists themselves, collecting data alongside the animals under study. Consequently, they develop an intimate knowledge of the monkeys—predicting their movements, recognizing their habits, and identifying them individually.

Despite their critical role, local field assistants are often acknowledged by scientists only in terms of "logistical support" or "auxiliary services," commonly described as people who "do everything." However, it is necessary to rethink what this "doing everything" truly entails, as it often falls under the vague category of mere "assistance." This presentation aims to highlight the history of scientific collaboration in Boa Vista, where negotiations between scientists and capuchin monkeys, the local community and capuchin monkeys, and scientists and the local community have been central to the production of knowledge that has gained significance in international primatology. More broadly, it challenges the idea of "improving community participation in science," given that, as the case of Boa Vista—and many others—demonstrates, local people have always been deeply involved in the research process.



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ID 442 - Transdisciplinary by nature: Galls as multispecies encounters in motion

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Luca Tonetti, Università degli Studi di Padova

Keywords: Gall Herbaria, Boundary collections, Multispecies encounters

Galls are plant excrescences that develop in association with other living organisms such as insects, mites, bacteria and fungi. These "marvelous metamorphoses" have fascinated naturalists for centuries and led to the birth of 'caecidology' at the end of the 19th century, a distinct field of research on the boundary between botany, entomology and mycology. The aim of this talk is to discuss the ongoing collaboration between different disciplines that has resulted from the study of a gall herbarium now held in the Botanical Museum of the University of Padua, Italy. This collection is currently the focus of the study interests of a research group composed by anthropologists and historians of science in relation with geneticists, curators and botanists. This herbarium represents a boundary collection in motion to understand our relations to the heritage of biodiversity: the gall is a biodeposit of scientific, social and cultural knowledge and sensibilities; as well as to understand the transdisciplinary nature of the research and conservation practices of these multispecies objects.

Drawing from research materials, including gall herbaria, literature, and archives, we explore the shift from viewing plant tissues pathologically to seeing galls as microcosms that reveal intricate ecological relationships and transformations of their inhabitants. Rather than focusing on individual organisms, we emphasize the multispecies relations and the mutual dependence of life forms. In this ecological framework, galls are not seen as harmful to plants but as opportunities to explore coexistence and symbiosis. Galls, once considered as anomalies, now represent an ordinary way of coexistence in the natural world.

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ID 683 - Multispecies, hybrid and multidisciplinary. The field of bioregenerative life support systems science at the crossroad between disciplines, technologies and ecologies

Marco Serino, Università di Napoli Federico II

Ilenia Picardi, Università di Napoli Federico II

Keywords: Outer space, bioregenerative life support systems, controlled environments, multispecies perspective, hybrid systems

The science of bioregenerative life support systems (BLSSs) is a multidisciplinary field that brings together different disciplines to study how human life can be sustained over long periods of time in environments other than Earth. BLSSs can provide humans – such as space crews on a mission to the Moon or Mars – with water, oxygen and food, recycle their waste and thus function as closed, self-sufficient systems. Including humans, plants and microorganisms, these systems are inherently multispecies, even if the interactions between the different species are largely engineered and admittedly human-centred. Therefore, BLSSs can only be designed with the joint effort of various scientific expertise and different competencies. The complexity of the task implies that different sciences cooperate in order that different species can live together and benefit from each other. In addition, hybrid systems are at issue in that the different technologies necessary to set up the controlled environments interact with the species that must be assembled in a loop consisting of different compartments where bacteria, higher plants and human crews stand in mutual physicochemical relationships. Therefore, BLSS are designed as hybrid assemblages and this hybridity calls for new ecological relationships that are essential for these systems to successfully operate. The present proposal thus aims to show how the multispecies, hybrid and multidisciplinary context of BLSSs is going to set forth new ecological perspectives thanks to the encounter between engineering,



biochemistry, biology, chemical engineering, ecology, cybernetics, physiology, medicine, and agricultural science (Skoog, 1985), along with considerations on life in space settlements from a "space and society" perspective (e.g. Verseux et al., 2024). The proposal focuses on the MELiSSA (Micro-Ecological Life Support System Alternative) project, co-funded by the European Space Agency (Lasseur et al., 2010). Inspired by terrestrial ecosystems, MELiSSA aims to produce vital resources for the crew through interspecies interactions engineered in the loop – the closure of which is one of the project's ultimate goals to support human life beyond our home planet. Drawing on concepts from STS and Social Studies of Outer Space (SSOS), the proposal aims to explore the scientific challenges and ecological and ethical implications of BLSSs, whose future will depend on the collaborative efforts of scientists and the extent to which different species can be successfully integrated in a closed system, whether on Earth or in a space settlement. Moreover, the fields of architecture and ecological design help to frame the physical infrastructure for these systems, which would turn out to be closed worlds (Kallipoliti, 2018). Recalling Bruno Latour's late reflection that we live "inside" a planet – more precisely, in its "critical zone", the study of which is itself multidisciplinary – and not "on a globe" (Aït-Touati and Latour, 2022), the proposal also wants to address the condition of a closed and controlled environment, which is assumed in the concept of BLSS, in order to cope with both environmental crises on Earth and future scenarios of life in outer space.

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ID 704 - From Data to Care: Design-Driven Infrastructures for Multispecies Heritage

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Elena Formia, Università di Bologna

Keywords: Heritage Continuum, Digital Archives, Multispecies Commons, Participatory Archiving

The Anthropocene has led to increasingly fluid boundaries between human and nonhuman actors in heritage landscapes, necessitating innovative methodologies for preserving and interacting with cultural and natural ecosystems. This article examines how data-driven design and multispecies storytelling can contribute to the development of new approaches to heritage care, enhancement, accessibility participation, and management. Building on the approaches of Transition Design (Irwin, 2015), Posthuman Design (Forlano, 2016), and Multispecies Ethnography (Kirksey & Helmreich, 2010), the study proposes an alternative model for heritage infrastructure. This model integrates co-design practices, advanced data visualization, and participatory archiving to redefine the roles of human and non-human agents in the co-creation of heritage.

The research is part of the Heritage Continuum framework (Lupo, 2023), in which digital repositories, open archives and speculative mapping mediate relationships between tangible and intangible, cultural and ecological assets. To explore how design-driven infrastructures can foster new forms of engagement, the research carried out by the CULT-UP project (funded by the European Union - NextGenerationEU through the Italian Ministry of University and Research under PNRR - Mission 4, Component 2, Investment 1.1., cod. P2022FZAEA) examines the intersection of upcycling and heritage as a means of promoting participatory and educational practices by making the language of semiotics and design interact. This perspective aligns with the need to rethink heritage as a multispecies commons (Tsing, 2015), questioning static paradigms of preservation and positioning heritage as a shared and evolving entity. Through an interdisciplinary approach, experimental workshops, and digital archiving practices, the study critically explores how responsible innovation (Formia et al., 2023) and participatory governance models (Manzini, 2018) can transform heritage into a platform for multispecies dialogue and planetary care. By interacting with heritage as a complex social-ecological system (Jakob, 2009; Kowarik & Körner, 2005), this approach moves beyond traditional anthropocentric preservation models and promotes a relational, adaptive, and co-constructed perspective. In addition, the study contributes to the discourse on postnatural studies (Institute for Postnatural Studies, 2023) by advancing the idea of hybrid archives, in which memory, data, and ecosystem



interactions converge into a new form of collective intelligence. References:

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ID 705 - Queering Urban Ecologies through Drag and Multispecies Participatory Design for Public Spaces

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Keywords: Queer, more-than-human, public spaces, coexistence, plurality

Public spaces ought to be a place for all, open to a variety of actors, activities and opportunities (Gehl, 2013; Groth & Corijn, 2005), accessible, inclusive, safe and able to accommodate the plurality of different life forms it hosts, promoting social cohesion and coexistence among human and more-than-human inhabitants.

It has been argued in philosophy, feminist and queer studies that public spaces may be produced and regulated to maintain social order (Foucault, 1977; Lefebvre, 1991; Butler, 1993; Grosz, 1994) in a not neutral way, being designed to support and facilitate traditional and binary gender roles (Kern, 2021). The perspectives of non-conforming subjectivities that diverge from the androcentric view of the "male as norm" (Kotthoff and Wodak, 1997), namely the cis-gender heterosexual able-bodied white man, are marked both as invisible and as "space invaders" (Puwar, 2004), because of their divergence from the dominant framework.

This issue is not limited to human communities. Public spaces are also constantly lived by non-human agents, whether biological or synthetic, which equally contribute to the life of public spaces. Their presence is usually tied solely to human well-being, where plants and other organisms are viewed as resources (Sandler, 2018) essential for human survival. Both queer subjectivities and non-human agents fall victim to a Cartesian dichotomy (Fry, 2020) rooted in anthropocentric and predominantly Western thinking (Coccia, 2018). In this sense, public urban spaces designed without a plural range of perspectives can fail to address the needs of both human and non-human marginalized communities.

Drawing from these premises, this paper explores how transdisciplinary dialogues between queer theory, urban ecology, and participatory design can generate frictional yet generative encounters that challenge established epistemological and ethical frameworks. The project "Regime di Periferia" (RDP) coordinated by a local group of theatre actors specialized in Drag (one of them has a background in botany), has activated in 3 urban outskirts of Milan a transdisciplinary dialogue between drag queens, researchers in Design, the Municipality, local associations and citizens, with the aim to foster plural reflections on the intersections



between queerness, ecology, and territorial

regeneration. Employing a hybrid methodology, combining site-specific drag performances, participatory co-design workshops, collaborative interspecies mapping, and laboratories about both ecological practices and queer performances in public spaces, the project questions dominant paradigms of what constitutes a "good" or "preferrable" future for urban regeneration of public spaces. By engaging citizens, the experimentation "Plural Public Space", within the project RDP, explored speculative scenarios for multispecies coexistence in three peripheries in Milan, embracing a diversity of both human and non-human perspectives to co-create and reimagine public spaces. By collectively reflecting on the individual and shared needs through co-design sessions and role-playing activities, participants ultimately designed and prototyped temporary furniture/solutions, inspiring new uses and behaviours within public spaces, embracing frictions between conflicting/contradictory perspectives, needs and desires, rather than seeking consensus. The authors argue that this transformative methodology highlights the political stakes of urban ecological futures and redefines participation as a contested yet generative space for negotiating between disciplines, species, subjectivities, and power relations.

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ID 706 - Good for the bears, good for the people. Epistemological frictions on "human dimension" within a interdisciplinary research on coexistence

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Keywords: brown bears, conservation biology epistemological frictions, human dimension

Thirty years after the reintroduction of brown bears in Trentino (northeast Italy), a significant part of the local communities perceive this initiative as threatening their safety and livelihoods. In such a context, a collaborative project between conservation biologists and anthropologists has been set up, aiming to grasp the foundational but less visible socio-cultural reasons for this perception (Martellozzo 2024). These give way to relevant epistemological and methodological frictions, at the heart of which lies the notion of "human dimension" in the human-wildlife conflicts.

For conservation experts, the human dimension is often framed as a set of measurable variables (e.g.: attitudes, risk perceptions, behaviours, personal knowledge) that can be systematically incorporated into conservation policies to reduce conflict between communities and wildlife. Within this perspective, the ethnographic work risks to be perceived (and reduced) to a data-gathering tool aimed at optimizing conservation outcomes. As such, within collaborative projects, conservation experts may initially expect anthropologists to provide "ready-made" insights while disregarding the critical dimensions of their work. Conversely, anthropologists consider the human dimension as relational and contextual stake, and ethnography as deeply intertwined with theoretical stances.

These frictions also reveal different ways of conceiving the "good" in this coexistence scenario. Conservation experts tend to prioritize biodiversity preservation, assuming that scientific expertise can objectively determine the best way of managing brown bears. Anthropologists, however, emphasize the multiplicity and the complexity of moral ecologies at play (Scaramelli 2019): depending on the point of view of local stakeholders, the "good" might coincide with the given-for-granted preservation of material and immaterial heritage, or with their collective negotiation within a more-than-human community.

Following this, our paper aims to explore the ethical, socio-cultural and epistemological conundrum and opportunities of anthropological involvement in conservation expertise, considering, in particular, the power dynamics that shape such collaborations and define objectives, research priorities and epistemic differentialities. In critically addressing the technicalization (Ferguson 1990) of the "human dimension" as a trans-disciplinary notion mobilized in "good (conservation) technoscience", the paper contributes to broader debates in environmental anthropology, critical understandings of expertise, epistemic conflicts and negotiations in wildlife management projects.



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ID 716 - Designing Bespoke Tools for Critical Design Inquiry: The Case of Sheep Biography

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Seçil Uğur Yavuz, *Libera Università di Bolzano – Freie Universität Bozen*

Keywords: Critical Design, Design Probes, Materiality, Sheep, Local Wool

Why do sheep matter when discussing wool and why and how should design take sheep into account? As planetary change accelerates in the face of multiple crises, local wool production as well as its ecologies are becoming increasingly vulnerable. The rise of synthetic fibres and the dominance of irresistibly soft merino wool, driven by global market dynamics, are putting local realities – human and nonhuman – at risk. Design, however, can serve as a catalyst for uncovering the relational aspects of our material world and rendering visible the invisible connections. Designers working with materials often overlook their relational aspects with the ecosystem they belong to, leading to a disconnection from a more holistic and systemic understanding. By considering sheep and alternative ways of knowing and making, we rethink the materiality of wool as a matter of care and wellbeing, attuned with the environment, seasons, and all the other entities they are entangled with. In our project *Feral Wool*, we challenged this perspective by focusing on the often-invisible dynamics involved in wool production, in particular the relationship between sheep and humans. By inquiring how the care for the sheep is intertwined with the wool they grow, we ask: can noticing new ways of relating in design would turn unwanted wools into precious matters? Through a bespoke tool we designed—the sheep biography probe—we invite local actors to participate in exploring how care for sheep can be traced and reimagined. The probe, designed as a paper template, collects more-than-human data that represents the profile and conditions of the sheep. It also attempts to reveal sheep's imagination by asking: What do sheep dream of? The collected data is then made visible through an infographic. By acknowledging probes as provocation for critical thoughts, the sheep biography was designed as a two-fold object, on one hand provides data for researchers to reveal invisible aspects of a material, on the other hand functions as a reflection tool for participants to look at their own practices of care and try to shift their perspective towards other beings. Moreover, the designed probes are opening questions on how relational design can be materialized in the future.

Along with the sheep biography probes, various wool samples were collected to materialize the data and highlight the intangible values of local wool, focusing on each piece's uniqueness shaped by factors beyond fiber quality. Currently, the samples are on display at an exhibition, where they come forefront with public in a meaningful way. The probe serves as a critical tool for relating to the animal, encouraging a broader, more holistic view of materiality. This, in turn, challenges the dominant narrative of unwanted and often discarded materials, opening up possibilities for alternative critical inquiries and design practices. The sheep biography exemplifies how more inclusive, relational, and bespoke design methods and probes can be imagined, and how they can form new ways of knowing, doing and materializing.

