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ARCTIC WOOL: PERSPECTIVES ON SUSTAINABLE CRAFT PRACTICES

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ABSTRACT

This research presents the work of two women, a crafter and a farmer, and considers connections between people working with textiles, sustainable processes, local economy, traditional knowledge, and roles within the craft sector in the Finnish Arctic and Circumpolar region. Two qualitative interviews were conducted in Finland: one with a textile-dyeing artisan using sustainable processes and another with a farmer and yarn crafter. Crafters and farmers preserve heritage skills in the textile field, valuable to the continuation of traditional knowledge. Their network has an environmental impact on the craft sector, helping to preserve endemic breeds of sheep.

Introduction

As a designer and artist-researcher in the field of craft who has been collaborating and co-designing with artists and designers for a decade, I am currently conducting arts-based action research on creative collaborations and Arctic sustainability using wool. My interest lies in the fields of craft and design, with a particular interest in tradition and innovation (Jokela et al., 2020; Jokela & Huhmarniemi, 2020), handmade design with a focus on concepts of territory (Jefferies, 2016; Kettle, 2019; Niedderer & Townsend, 2019, 2022; Townsend & Niedderer, 2021), identity, heritage, local materials (Klepp, 2022), intercultural connections (Huhmarniemi, 2021), and traditional ecological knowledge (Berkes, 1993; Kimmerer, 2002). As part of my research, I conducted open-ended interviews in Finland to collect qualitative data from a textile and dyeing artisan and from a farm owner and yarn supplier. Both the artisan and the farmer have a direct connection to the same spinning mill company.

My aim was to establish connections between people working in the field of sustainable wool crafts in the Arctic region and to consider textile crafters' contribution to the local economy, sustainability, and traditional knowledge as a first phase of the action research. Previous research related to Finnish wool, traditional weaving crafts, and sustainability has been conducted in Finland and in the Arctic (Härkönen et al., 2018; Majjala, 1988; Räisänen, 2019). The key for the future of the Arctic region's cultural sustainability is expected to lie in interculturalism (Härkönen et al., 2018), in its relation to localism as a process of transformation towards sustainability (Fletcher & Klepp, 2018, p. 135), and in the consideration of different forms of knowledge that are increasingly being sought by academics and scientists as potential sources of ideas for emerging models of ecosystem management, conservation biology, and ecological restoration (Kimmerer, 2002, p. 432). In addition, a key aspect of Indigenous knowledge—that can be considered as one form of traditional ecological knowledge—is the symbiotic relationship between people and places (Kuokkanen, 2011; Smith et al., 2022).

Historical and Indigenous-origin textiles have been used in the context of contemporary art, craft, and handmade design in Finland (Härkönen et al., 2018). According to Härkönen et al., combining handcraft tradition with contemporary art, revives, rebuilds, and reshapes the culture and traditions passed from one generation to another. However, the focus of

this research article relates to the textile craft that uses wool from endemic sheep species in connection to localism (Fletcher & Klepp, 2018) and cultural sustainability (Härkönen et al., 2018).

In this article, I analyze the two interviews with the aim of creating a narrative and presenting visual connections between the two textile crafters and their practices. Through images, I generate a perspective on the materiality and tactility of sustainable crafts in terms of colors, textures, and processes.

Arctic wool and sustainable craft practices

The journey of this article starts with a professional and established crafter in the textile field, Hannele Köngäs, owner of the studio WaveWeaversWool. I became interested in Köngäs's work after researching artisans working with sustainable processes and traditional crafts in Finland, particularly in the circumpolar Arctic area.

For artisans and designers, the ability to create their own material supplies can offer significant advantages. During the pandemic, most channels for selling craft products were on a standstill, with permanent closures of some selling points. As a result, many artisans ventured into establishing their own online shops and setting up digital selling platforms to move forward through the challenging times. During this period, I had the opportunity to explore the work of Köngäs, which led me to contact her and visit her studio in Turku, Finland. This visit allowed me to gain insights into the materials and processes she employs in the production of her woven pieces.

I was surprised to discover that the Covid-19 pandemic had had a minimal impact on her way of working. According to Köngäs, it was still easy to obtain wool supplies, as she had only used locally sourced organic wool for her work for the past 20 years—an essential feature that made her work sustainable. But, in this context, what does it mean to be sustainable? “Sustainability is met when the conditions adjust to the biophysical realities of the place” (Smith et al., 2022, p. 153) and is often primarily linked to the material resource, its form of extraction, and impacts on the land (Miller, et al. 2022).



Figure 1. Hannele Kõngas at her textile and weaving studio. Photograph: Fabiola Hernández Cervantes, 2022



Figure 2. Hannele Kõngas's dyed yarns and color samples. Photograph: Fabiola Hernández Cervantes, 2022

In addition, Kõngäs's practice features the key aspect of localism, that is being shaped by the region's natural factors (Fletcher & Klepp, 2018), as her dyeing processes and methods are also carried out locally. By collecting and growing her own plants as pigment supplies, she can color yarn all year round, even when the winter covers completely the forest with snow.

There are several connections between sustainability, the use of wool in Kõngäs's practice, and traditional crafts in Finland that I will address in this article. Craft artists often possess traditional knowledge obtained through their heritage and background, and this knowledge is passed through generations (World Intellectual Property, n.d.); in Kõngäs's case, her mother was also a weaving crafter.

According to Miller et al., (2022) "the relationship between the maker, their craft and materials, are all entwined with culture, relationship, and the passing on of these skills, knowledge, and ways" (p. 102). In some communities, knowledge is shared through a cross-cultural dialogue that allows the exchange of knowledge and techniques; very often, this knowledge is intertwined with personal family stories and anecdotes (Cervantes & Huhmarniemi, forthcoming).

While researching wool in the Arctic, I came across a farmer and yarn crafter from Tornio, in the province of Lapland. Kirsi Ylipiessa owns the farm Piessan Lammastila and a flock of about a hundred Finnish sheep —also known as 'Finnsheep'—, that are sheared two times per year.



Figure 3. Cervantes with a piece of wool from Pirtin Kehräämö in her hands. Photograph: Fabiola Hernández Cervantes, 2023

When Ylipiessa got her first flock of sheep, she started to consider sheep farming as a business. She told me how she first selected a suitable breed for wool production and, with time, studied more about wool quality and processing. Wool and yarn are important components of the farm's business, so in addition to the Finnish landrace species, she owns some Swedish Gotland sheep and mixed breeds of these two breeds. "Finnish landrace

produces soft wool and Gotlands produce luxurious sheepskin and other kinds of wool that we use in yarns to bring more durability,” she explains (K. Ylipiessa, personal communication, March 24, 2022).

As we spoke, I found out about her connection to Pirtin Kehräämö, a Finnish company of spinning mills established by the Finnish Sheep and Goat Breeders Association in Hirola, in the southeast of Finland. The mill was founded in 1948 after the Second World War and is currently Finland’s leading processor of sheep’s wool (Pirtin Kehräämö, n.d.). Currently, there aren’t many facilities where wool suppliers, crafters, and farmers can send their wool to obtain yarn, as the number of wool sorting facilities has been decreasing radically (Räisänen, 2019).

Nevertheless, according to Pirtin Kehräämö’s website, even though the number of Finnish sheep has also decreased in the last decades, their production has not been affected due to the “strengthening of consumers’ ecological values and the increased popularity and appreciation of handcrafts” (Pirtin Kehräämö, n.d.). The company uses renewable energy for heating their facilities, lighting, and wool-washing water. Their production is carbon neutral, and the company is involved in tackling climate change (Pirtin Kehräämö, n.d.).

During my communication with Kõngäs, I learned that she obtains her raw wool from the organic farm Herrakunnan Lammas and, like Ylipiessa, sends her wool to become spun yarn at Pirtin Kehräämö’s facilities. Kõngäs collects wool from the kainu-unharmas breed herself by participating in the shearing of the sheep and thus playing a key role in the process by being able to choose the sheep.

There is a clear relation between the pursuits of both practitioners. Both Ylipiessa and Kõngäs share a connection to the same spinning mill company. They both sort the wool at their own workshops and farms and send it to the spinning mills at Pirtin Kehräämö to obtain yarns. In an effort to maintain a sustainable practice, both textile practitioners engage in activities that feature key aspects of localism, characterized by small-scale activities that are shaped by the traditions and natural factors of a place (Fletcher & Klepp, 2018, p. 134). Their practices are tied to the conditions of local wool and local stakeholders who engage in related sustainable practices.



Figure 4. Kirsi Ylipiessa’s yarns. Photograph: Piessan Lammastila website, 2021



Figure 5. Raw wool from Pirtin Kehräämö. Photograph: Fabiola Hernández Cervantes, 2023

In the present context, contemporary crafters have been constantly seeking and exploring sustainable ways to develop their work. They often implement traditional techniques such as dyeing with plants and natural materials, which involves the study of endemic plants and other local elements. These contemporary explorations can help in the revitalization of techniques used in the past (Härkönen et al., 2018).

In addition, contemporary artists and designers are constantly enriching the intersection of traditional techniques with new concepts. By incorporating old techniques into new design, they are also reinforcing the identity of a place, sense of belonging, unity, and values (Miller et al., 2022), hence contributing to the sustainability of traditional practices as well. This is true in the case of Kõngäs, who crafts and designs contemporary, vibrant wool shawls, renewing traditional ecological knowledge.

Using local wool, crafters and artisans from Finland can create a wide range of wool products, such as hand-knitted garments, woven textiles, felted items, and other traditional handicrafts. In the case of Ylipiessa from Piessan Lammastila, in addition to the production of wool yarn (fig. 4), she often sells sheep skin and selected knit garment pieces at craft markets and shops. Both crafters participate actively in craft markets in Finland and abroad.

Endemic species, a possibility to tackle climate change

About 6,000 years ago, people began to breed sheep for their wool (DesMarais, n.d.). Finnsheep have been developed over the course of several centuries, and the linguistic and archaeological evidence points to them being used in Finland for over 2,000 years (Maijala, 1988). Finnish sheep breeds are an integral part of Finnish history and cultural heritage. Products made from wool are durable for years, sometimes even decades (Sthure, n.d.).

The Kainuunharmas breed belongs to the Nordic short-tailed sheep breed, a Finnish native species that is well adapted to local conditions. The color of the Kainuunharmas wool varies from white to grey and black shades, although the sheep are usually born almost black (Lammasyhdistys, n.d.). This sheep breed was saved from extinction in the 1980s through efforts to preserve it, and it is no longer endangered (Meriläinen, 2014).

Endemic species of sheep face threats such as climate change, competition from exotic species, and genetic dilution due to crossbreeding (Mathias & Mundy, 2005). Wool crafters can support conservation actions that work towards protecting these species and their habitats, such as prioritizing ethically sourced wool directly from farmers who raise and care for endemic sheep breeds. This would support local economies and encourage the continuation of farming practices that sustain these rare breeds, such as the Kainuunharmas. According to researchers, local breeds have many traits of potential value, as current projects focused on the conservation of selected local breeds are exploring market niches for their products (Mathias & Mundy, 2005).

Wool breeders in Europe have long known that climate is a major factor that influences the quality of wool. The sheep must be kept in sheds during the winter, and the weather conditions affect the wool

(Räisänen, 2019). According to Ylipiessa, “during mid-October to May, our sheep stay inside, we have a big greenhouse where they have food and good conditions to spend the wintertime” (Ylipiessa, personal communication, March 24, 2022).

According to Kögäs, who has sheared, carded, and spun the same wool for over 20 years, the quality of wool can vary from sheep to sheep; in addition, different types of wool can occur in the same sheep. The wool can also vary if the weather conditions are altered. In Kögäs’s own experience, “there have been winters where sheep grow thicker layers of wool, curlier or double-layered” (personal communication, March 3, 2022).

Climate change is likely to have implications for wool production and quality and, according to researchers in the field, “Small ruminants such as sheep are vulnerable to direct and indirect effects of climate change” (Joy et al., 2020, p. 12). In addition, researchers maintain that sheep can adapt by using diverse responses to survive, but production is often compromised (Joy et al., 2020). As the Arctic climate changes, faster than the rest of the world, the consequences of global warming in the region are already obvious and numerous: species diversity of animals and plants, the stress in animals and their natural dynamics, and impact on human health, economy, and infrastructure of the Arctic regions (Joy et al., 2020). The clichéd belief in climate science that the Arctic is warming as fast as the rest of the world is not entirely accurate; in reality, according to researchers, in the past two decades, the Arctic has warmed twice as fast as the global average (Cohen et al., 2019). Wool is



Kainuun harmas

Jola Cervant

Figure 6. A digital drawing of a Kainuunharmas sheep by Fabiola Hernández Cervantes, 2022

considered an indicator of short-term stress exposure within the sheep's living conditions (Sawyer & Narayan, 2019); consequently, Finnish sheep's wool can be an indicator of climate change, particularly when normal winter conditions in the Arctic are not met.

According to researchers, wool farming can have serious detrimental effects on the surrounding land, air, and water. Researchers maintain that livestock has significantly contributed to the increase in atmospheric greenhouse gases over the last 250 years (PETA, n.d.a; Peta, n.d.b).

Sheep can take up a lot of space, need a lot of water, and produce a lot of methane. However, wool is a renewable resource that does not release harmful microplastics into the environment (DesMarais, n.d.). In the last 20 years, global fiber production has almost doubled from 58 million tons in 2000 to 113 million tons in 2021 (Fibre2Fashion, n.d.). As opposed to this, the production of wool has declined over the past decades (IWTO, 2019).

There are many aspects to consider regarding this matter, as most of the wool used today in Finland comes from sheep living in Spain, Australia, and New Zealand, from the Merino sheep breed (DesMarais, n.d.). Merino wool's geographically long supply chain as well as the pollution it causes in the transportation process should also be taken into account when considering sustainability and environmental impact.

In addition, unethical practices—such as mulesing of sheep—continue to raise concerns due to their controversial nature, particularly in Australia, where Merino sheep are prevalent and from where 70 per cent of the world's Merino wool production comes from (Burgess, 2023). The surgical procedure performed on young lambs to prevent flystrike has drawn widespread criticism for its cruelty and impact on animal well-being. Young sheep suffer significant pain and trauma during the procedure (Sneddon & Rollin, 2010).

To promote animal welfare in the wool industry, consumers need to support ethical and sustainable farming practices. We must start to regard animals as fellow creatures on this planet as opposed to objects and consider the interconnectedness between the well-being of people and animals (Köhler-Rollefson, 2005).

At the moment, consumers are considering their clothing habits, in terms of their impact on the

environment and other social issues (Pookulangara & Shephard, 2013), which is leading to new consumption habits. A change is urgently needed in how we produce, consume, and relate to clothes and other textiles (Smith et al., 2022); therefore, designers must explore new ideas using locally available, ethical, and sustainable processes. This makes room for the revitalization of traditional crafts, which is especially relevant in the Arctic.

Revitalization of traditions through crafting has increased in the Arctic as a correspondence to global interest in materiality (Huhmarniemi & Jokela, 2020). For example, collaborative projects related to modern production, design, and heritage looking at the woollen textiles from the Nordic Viking heritage have been supported by the Icelandic Fashion Council and National Institute for Consumer Research in Norway (Klepp et al., 2022). Consequently, it is required to converge the recent craft boom to increase use of local Finnish wool, as this could help support sustainable efforts and maintain tangible heritage for the future (Räisänen, 2019).

The connection between craft, endemic species, and cultural sustainability is evident in the work of Kongäs. In addition, her commitment to sustainability and desire to protect the fragile ecosystem in which she lives, guides every step of her working process; a remarkable aspect of her work (Harris, n.d.).

Thinking about the future of more sustainable wool farming, a possibility for supporting the protection of these endemic breeds is to promote the collaboration between farmers and crafters. Establishing more partnerships could lead to a long-term breed conservation effort and, for the crafters, a steady supply of high-quality wool. This can benefit both parties in terms of sharing knowledge and participating in other activities that inspire the growth of these rare breeds.

According to a WWF report, in Finland, the wool industry places emphasis on sustainable agriculture and animal welfare. Sheep farming in Finland often follows environmentally friendly practices, with a focus on pasture-based systems and responsible animal husbandry (Nikula & Kelloniemi, 2023, p. 30).

Furthermore, methods such as natural pasture grazing of livestock have historically maintained open meadows, which are a key habitat for many different species. However, with natural-grazing on

the decline, open habitats such as meadows are disappearing (Nikula & Kelloniemi, 2023, p. 30). Further research is needed on how to develop a strategy for small-scale and collaborative-based practices that can contribute to the production of ethically sourced wool and the preservation of endemic breeds, such as the Kainuunharmas. The growing interest among consumers in supporting local, ethical, and eco-friendly products can contribute to this.

Arctic Colors, Source of Inspiration

While talking about dyeing processes with Kögäs at her studio in Turku, Finland, she described to me the wide variety of materials she uses to dye her yarns, from mordants to improve the dye's absorption into the fibers, to the natural pigments that she finds in nature. She explains to me that the colors and the sensations of all the stages of her process have a sensorial effect on her: "Dyeing, for me, means to find new colors. I like to dye wool many times and to be surprised. I get a physical reaction to beautiful colors" (Kögäs, personal communication, March 3, 2022).

Another inspiration comes from the colors she perceives while visiting her ancestor's fell, Nattastunturit, in Western Lapland, and Puljutunturi, where her family comes from. Kögäs's roots are in Lapland, in the region of the Indigenous Sámi people. Kögäs demonstrates a keen fascination for naturally derived colors; however, her main interest is focused on yarn and textile structures and the tactile qualities of wool. Engaging in weaving sessions that can extend for hours, Kögäs crafts fabrics measuring up to 30 meters in length. Kögäs then turns the long grey fabric into colorful scarves using plant-based dyeing methods.

A pivotal moment in Kögäs's textile journey occurred when she had the idea of using over-twisted yarn as a young textile student. After decades of teaching at crafts schools, she decided to focus on the idea of twill weaving with over-twisted yarn. In 2002, she obtained a grant for product development and had the chance to test wool yarns with different twists per metre. This work was made possible in collaboration with the spinning-mill company Pirtin Kehräämö, where she continues to obtain her characteristic over-twisted wool yarn. When she turned 50,

she decided, "it's now or never, I must make my dreams true" (Kögäs, personal communication, March 3, 2022).

Her craft practice is now her main occupation. She opened her weaving studio in the beginning of 2000, though she had been weaving for over three decades. She explained to me how the weaving is plain twill, but the over-twisted yarn gives the woven fabric a wavy texture, hence the name of her project is Wave Weavers Wool.

Key aspects of her practice are sustainability and eco-friendly processes. As Kögäs explained in an interview with a newspaper, in recent decades, it has become more evident that textile waste is a problem and that sustainable materials are available (Pakkarinen, 2019).

Wool, as exemplified in the work of Kögäs, encompasses a holistic sensory experience. Every piece of her woven-wool shawls colored with natural dyes offers a different sensory experience. Delving into the materiality, color sensation, and tactility, each person would interact differently with the pieces, as personal experiences, perceptions of materiality, color, and touch are subjective and influenced by personal preferences and sensitivities.

At Kögäs's studio in Turku, I got a chance to sense the texture of a few pieces. I was able to observe that the pieces easily evoke a feeling of authenticity, craftsmanship, and connection to nature. Knowing that a piece is hand-made adds an extra layer of appreciation for the craftsmanship involved (Cervantes' research diary).

In terms of tactility, the surface of her woven pieces stimulates tactile sensations. The fibers feel soft and gentle to the touch, allowing fingers to slip through effortlessly. I perceived a smooth graininess, and the texture of the waves on the weave also contribute to the piece's charm.

Wool is a full experience. Its materiality brings a sense of warmth and naturalness, thus creating a sense of coziness when you wrap them around yourself, as wool has natural insulating properties that help regulate body temperature.

The natural dyes give the woven pieces a characteristic color palette. The colors obtained from plant-based sources vary in richness, shades, and tonalities, hence creating a unique visual experience when observing them together in her studio

(Fig. 10–11). Products made by Kõngäs include natural earthy tones and vibrant shades. The plants used are usually alder buckthorn and madder for red and orange shades, indigo and woad for blue shades, logwood and cochineal for purple and pink, walnut for browns, and weld and woad for greens (Wave Weavers Wool, n.d.). However, the real beauty lies in each person’s ability to connect with the natural world through the color obtained from plants.

The idea of creating a piece that can last a lifetime is one of the core essences of Kõngäs’s work. According to Räsänen (2019), the process of sustainable design usually involves the use of local materials and has the aim of being long lasting. Furthermore, Räsänen (2019) asserts that a key aspect of slow fashion textiles is their durability and how they usually involve ethical and local production.

The use of natural dyes has been gaining relevance in the field of sustainability and craft in the past decades. According to researchers, ‘there is an escalating interest in products made with natural dyes’ (Kadolph, 2008, p. 15). In addition, there has been a sharp increase in the demand for yarns and products made from Finnish sheep breeds, such as Finnsheep and Kainuunharmas (Pirtin Kehraamo, n.d.).

Place-based collaborative craft practices in the Arctic

WaveWeaversWool is a relevant project for understanding craft in the Arctic and Circumpolar region. Aspects of Kõngäs’s way of working, such as the use of traditional processes, local materials, slow textile production, natural dyes, durability, and ethical production, make her work sustainable.

Kõngäs’s way of working features aspects related to localism, which is a concept that “prioritises communities over economic gains”, offers heterogeneous products and local stories shaped by traditions; and is “opposed to the forces of globalisation and the highly decentralised textile and clothing systems” (Klepp et al., 2022, p. 29).

In addition, the network that she has created involves farmers and wool suppliers and has a direct impact on the craft sector by helping preserve an endemic sheep breed. In recent years, similar traditional textile development projects have gathered international attention thanks to initiatives that seek to feature materials from sheep breeds that are close to extinction (Klepp et al., 2022).



Figure 7. Hannele Kõngäs’s dyed scarves, close up. Photograph: Fabiola Hernández Cervantes, 2022



Figure 8. Hannele Kõngäs’s dyeing materials at her workshop. Photograph: Fabiola Hernández Cervantes, 2022



Figure 9. Hannele Kõngäs’s dyeing materials at her workshop. Photograph: Fabiola Hernández Cervantes, 2022



Figure 10. Hannele Kõngas's dyed scarves. Photograph: Fabiola Hernández Cervantes, 2022



Figure 11. Hannele Kõngas's dyed scarves. Photograph: Fabiola Hernández Cervantes, 2022

Traditional knowledge, such as plant dyeing, weaving, and wool spinning, are part of Finnish craft heritage, and the knowledge and skills are passed through generations within families and are glued together by the power of collaboration. Traditional skills with long historical roots are a valuable form of cultural heritage (Härkönen et al., 2018). Almost all historic cultural groups have added color to textiles and other materials as part of their traditions and crafts (Kadolph, 2008).

In the example of Piessan Lammastila, in addition to the yarn production, Ylipiessa transforms her wool into intricate knit creations (fig. 12) sold in local markets where she collaborates actively —such as Pop-up Loimu— and local yarn shops —such as Sulo Yarn—. This relationship supports the community's small businesses throughout the year. One of Ylipiessa's goals is to have a small-scale farm in order to ensure the wellbeing of her sheep that graze freely on Tornio's meadows. The core essence of Ylipiessa's work is to produce fine-quality Finnsheep fleece and keep the legacy of sustainable artisanal yarn for other generations to come (Ylipiessa, personal communication, March 24, 2022).

An important aspect of these examples is the fact that craft artisans, farmers, and wool suppliers value their role in their community and the sense of how, through their work, they help preserve skills in the textile craft field by participating in it in a sustainable way.



Figure 12. Kirsi Ylipiessa's handmade knit pieces. Photograph: Kirsi Ylipiessa, 2021



Figure 13. Drawing by Cervantes (2023) related to VillaInno project. Photograph: Fabiola Hernández Cervantes, 2023

Through collaborative dynamics involving wool suppliers, crafters, and farmers and through the process of sorting the raw materials and shearing lambs, it is possible to contribute to the “intangible cultural heritage surrounding the wool and sheep breed and the tacit knowledge, passed on from generation to generation of sheep farmers” (Klepp et al., 2022, p. 17).

Collaborative and place-based practices can heal and regenerate ecosystems and communities (Burgess & White, 2019). Successful outcomes of projects involving wool development show how wool can foster the possibility for craft associations, festivals, and companies to collaborate in creating cultural and sustainable tourism-oriented events. As an example of this, Norway created the Wool Heritage Route, which had a direct impact on product development (Klepp et al., 2022).

Conclusion

Crafters like Kōngäs and Ylipiessa in Finland play a significant role in the Arctic and Circumpolar region. Their efforts not only preserve Finnish craft heritage but also contribute to the revival of endangered endemic sheep breeds, exemplifying how craft can be a powerful force in preserving traditions, fostering community engagement, and shaping a brighter future for the craft sector in the region.

Based on the encounters with two crafters, I believe that the charm of craft is present not only in the final products but also in the personal values and commitment of the crafters themselves. Each crafted piece carries stories that intertwine material connections, techniques, and traditions, weaving a rich narrative. Behind the work of crafters lies their life stories, woven into the fabric of their creations. The materials possess their own history, as they are carefully sourced, sheared, and selected by hand. A single skein of yarn holds the memories of the hands that sheared, spun, and dyed it, connecting a line of farmers and crafters to the long lineage of Finnish textile traditions. The process tells us about the crafter, but the finished pieces are a reflection of sustainability and reviving of traditions.

Wool crafts are a part of Finland’s cultural landscape. They encompass a vast field of workmanship, techniques, materials, and traditions and are a celebration of the interconnectedness of



Figure 14–15. Hannele Kōngäs at her weaving studio showing a sample of the Kainuu Harmaa raw wool. Photograph: Fabiola Hernández Cervantes, 2022

our world. Weaving is also a part of Finnish traditions. Wool crafters can contribute to the cultural expression of a place, to their community and to preserve identity, heritage, and wellbeing, this can be measured by examining the impact of their work within their community.

During this research, I emphasized the consequences and effects of climate change on wool production and sheep in the Arctic, particularly on Finnish breeds. I identified forms of traditional craft, such as plant dyeing and weaving with local wool, which can be key to a sustainable future. Finnish crafters, like Kōngäs and Ylipiessa,

expressed their respect for traditional know-how and participate in preserving traditional craft processes.

The study of Arctic wool will continue in a project titled VillaInno (Wool Innovation), at the University of Lapland between 2023–2026. A collaboration between different stakeholders, such as artists, crafters, designers, researchers, and farmers, could potentially enable interdisciplinary methods to address the current environmental challenges. One of the aims is to innovate and develop sustainable wool-based products and services. VillaInno will target small and medium-sized enterprises in Lapland involved in the craft, design, sheep farming, and tourism sectors, as well as art teachers and students, as it recognizes the potential of cooperation between agriculture, crafts, and creative industries. VillaInno aims to grow the interest in sustainable wool crafts and bring awareness to the importance of small-scale sheep grazing for biodiversity. The use of local wool will indirectly help preserve local species of sheep and cultural landscapes. Through the work of farmers, textile crafters, designers, and researchers, we will carry forward the wisdom to hopefully preserve this cultural heritage.

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