

# MORE THAN KNOTS AND CORDS

by  
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## ABSTRACT

*More than Knots and Cords* is an exhibition supported by this thesis paper, that explores the possible friction that could generate incorporating a traditional artisanal material, which is made following ancestral production techniques and has a historical past, into an industrialized environment in a contemporary installation. This possible friction could be caused by the fact that materials and the environment where they will be installed come from different cultures and represent different spaces and times: past and present, traditional and contemporary. This could extend to even how materials are made, craft or art.

Through autoethnographic research, the materiality of Peruvian alpaca fibre and the history of ancient Peruvian textiles, this thesis explores alternative views of the past to confront the official history told from a western perspective. The distorted facts in which the official history is based create confusion in the search of an identity and a better understanding of a society. Through literature review on recent theoretical frameworks like new materialism, active matter, and systems view of life, a convergence is found with traditional views of the world like the Andean cosmovision, a confluence in the way they perceive materiality, sustainability, and ethical respect of the environment. This is seen as a convergence between old and new, traditional and contemporary.

The concept of knot is introduced, which could represent tension or conflict, pact or agreement. In the exploration described above, some knots are untied, while new knots are created in an ongoing process.

The exhibition presents the khipu, a pre-Hispanic artifact made of knots and cords, as a symbol of resistance, a metaphor for the decolonizing effort. The exhibition also includes an educational component to explain the Andean cosmovision to the broad public and to show labour during the creation process, which includes experimentation with some pre-Hispanic techniques rescued by archeologists.

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## DEDICATION

I dedicate this thesis to my dearest ones: my mother Nina and my father Eugenio, who have been a life source of inspiration to me. And to my dear husband Hector J. for being just the way he is, all love.

## PREFACE

Querida Alpaca

No sabía tu historia valiente y querida  
alpaca,  
oriunda de los Andes.  
Te conocía a través de tu fibra,  
algo en mi me decía que eres más que eso,  
y quería saber más de ti.

Aprendí que tu fibra es una fibra viva  
que me envuelve y me fascina,  
y quiero que el mundo lo sepa.  
No sabía que, desde tiempos ancestrales  
el inca le cantaba a su llama, tu hermana,  
de repente te cantaba a ti también,  
y tú le respondías.

Aprendí a través tuyo que me contaron mal  
la historia en la escuela,  
tampoco sabía lo interconectado que esta  
todo,  
humanos y no humanos, cultura y naturaleza,  
aunque me toca aprender aún más.

Ahora has emigrado también,  
has dejado tus cerros y tu ichu,  
pero seguro que te querrán porque  
eres valiente, linda y resiliente. ¡Vales un Perú!

Dear Alpaca,

I did not know your brave story my dear  
alpaca,  
native of the Andes.  
I knew you through your fiber,  
something inside me told me  
that you are more than that,  
and I wanted to know more about you.

I learned that your fiber is a living fiber  
that wraps me and fascinates me,  
and I want the world to know about it.  
I did not know that since ancient times,  
the Inca king sang to his llama, your sister,  
and he possibly sang to you too  
and you answered him.

I learned through you that I was not taught  
the actual history at school.  
I also did not know how interconnected  
everything is:  
humans and non-humans, culture and  
nature,  
although I have to learn even more.

Now, you have emigrated too,  
you have left your hills and your ichu, your  
food,  
but surely, they will love you because  
you are brave, beautiful, and resilient.  
You are worthy. Vales un Peru!

## MORE THAN KNOTS AND CORDS

## TABLE OF CONTENTS

Abstract	i
Acknowledgments	ii
Dedication	iii
Preface	iv
Table of Contents	v
Lists of Figures	vii
Introduction	1
Literature Review	5
1) Alpaca Fibre	5
1.1 Alpaca fibre – history.....	5
1.2 Theory of New Materialism.....	8
1.3 Live Fibre – Live Textile.....	10
2) Andean Textiles	12
2.1 Pre-Hispanic Textile History .....	12
2.2 Textiles as subject and object .....	16
2.3 Khipu history .....	19
2.4 Is khipu a textile? .....	23
3) Views of Life	25
3.1 The Systems View of Life and the Andean Cosmvision .....	25
3.2 The Circularity of Life .....	30
4) Artist inspired by khipu: Cecilia Vicuña .....	31
Research Creation	35
1. Autoethnography .....	35
2. Hands as tools and hand coordination .....	36
3. Textile as a Dialog .....	37
4. Circular time/circular making .....	39

5. Visiting Ontario alpaca farms .....	40
6. Communication/Sociality: Online workshops and seminars .....	41
 Creative Process .....	 44
Exhibition .....	55
Conclusions .....	57
Bibliography .....	61
Appendix A: Proposed Distribution Plan .....	67
Appendix B: <i>More than Knots and Cords</i> Exhibition .....	68
Appendix C: Videos at the <i>More than Knots and Cords</i> Exhibition .....	92



## Table of Figures

Figure 1: Feast of the Inkas, Inka sings to his red llama (Huamán Poma de Ayala, 2017, vol. III, p. 318).....	6
Figure 2: 12-year-old girl spinning (Huamán Poma de Ayala, 2017, vol. III, p. 225) .....	13
Figure 3: Andean weavers showing dyeing process .....	17
Figure 4: Khipu structure (Courtesy of Peabody Museum, Harvard University) .....	20
Figure 5: Chief accountant (Huamán Poma de Ayala, 2017, p. 360) .....	21
Figure 6: Cecilia Vicuña: Quipu Desaparecido (Disappeared Quipu) May 18 - November 25, 2018. Brooklyn Museum, photography, 2018.....	32
Figure 7: Visiting <i>Old Mill Alpaca</i> farm .....	40
Figure 8: Simple looping using a cylindric structure as a base with organic cotton.....	45
Figure 9: Simple looping with Alpaca fibre.....	45
Figure 10: Loop-and-twist.....	45
Figure 11: Cross-knit-looping.....	45
Figure 12: Interlacing alpaca fibre. Peruvian native cotton and oak branches.....	46
Figure 13: Interlacing Peruvian native cotton and oak branches .....	46
Figure 14: Knotting with Peruvian native cotton.....	46
Figure 15: Experimenting knotting with knit fibre .....	46
Figure 16: Braiding Canadian alpaca and Peruvian native cotton .....	47
Figure 17: Use of fingers in braiding process .....	47
Figure 18: Completing braiding process.....	47
Figure 19: Making khipu main cord .....	48
Figure 20: Attaching pendant cords .....	48
Figure 21: My khipu recreation.....	48
Figure 22: Combining Textile Printmaking with Ancient Textile Structure Recreations.....	49
Figure 23: Exploring Weaving .....	49
Figure 24: Knitting .....	50
Figure 25: Interlooping – Knitting Scarf .....	50
Figure 26: Exploring Different Textile Structures .....	52
Figure 27: Exploring Knots and Cords .....	52
Figure 28: <i>More than Knots and Cords</i> .....	55
Figure 29: Installation blueprint .....	66
Figure 30: <i>More than Knots and Cords</i> .....	67
Figure 31: <i>More than Knots and Cords</i> .....	68
Figure 32: <i>More than Knots and Cords</i> .....	69
Figure 33: <i>More than Knots and Cords</i> .....	70
Figure 34: <i>More than Knots and Cords</i> .....	71
Figure 35: <i>More than Knots and Cords</i> .....	72
Figure 36: <i>More than Knots and Cords</i> .....	73
Figure 37: <i>More than Knots and Cords</i> .....	74
Figure 38: <i>More than Knots and Cords</i> .....	75
Figure 39: <i>More than Knots and Cords</i> .....	76
Figure 40: <i>More than Knots and Cords</i> .....	77
Figure 41: <i>More than Knots and Cords</i> .....	78

Figure 42: <i>More than Knots and Cords</i> .....	79
Figure 43: <i>More than Knots and Cords</i> .....	80
Figure 44: <i>More than Knots and Cords</i> .....	81
Figure 45: <i>More than Knots and Cords</i> .....	82
Figure 46: <i>More than Knots and Cords</i> .....	83
Figure 47: <i>More than Knots and Cords</i> .....	84
Figure 48: <i>More than Knots and Cords</i> .....	85
Figure 49: <i>More than Knots and Cords</i> .....	86
Figure 50: <i>More than Knots and Cords</i> .....	87
Figure 51: <i>More than Knots and Cords</i> .....	88
Figure 52: <i>More than Knots and Cords</i> .....	89
Figure 53: <i>More than Knots and Cords</i> .....	90

## INTRODUCTION

I am Peruvian, but I am not coming from the Andes. I was born in Lima, the capital, the most important city in Peru. I have a mixed racial heritage that includes Spanish, Chinese and Andean. My first language is Spanish my second language is English, and I had a westernized education. That is why recreating pre-Hispanic textile structures and relearning the Peruvian history is an important part of this research.

During my life, I have been exposed to hundreds of different materials, and many of them bring memories. This is the case of alpaca material, my favourite one for creating and making textiles through crochet, knitting, and sewing alpaca fabric.

As a fashion designer, I create pieces made of Peruvian alpaca. I am aware that this fibre is five times warmer than wool, hypoallergenic, soft, lightweight, has long lasting duration, and is available in twenty-two natural colours.<sup>1</sup> Alpaca animals have Andean heritage, and the biggest world population is in Peru. There are around four million alpacas in South America and 95% of them are in Peru (Promperu, 2013).

I wonder why artists and makers have their own preferences on what medium or materials to use over hundreds of alternatives. To me the answer is not as simple as it looks like. I am intrigued and I want to know more.

I decided to investigate alpaca as a material, a traditional material in Andean communities. To understand this material, I needed to have a look at the past, when pre-Hispanic civilizations used this fibre to create high quality textiles. Alpaca and Andean textiles, which have pre-Hispanic textile roots, are part of each other; one cannot be understood without the other.

It is important for me to bring alpaca fibre to my installation because alpaca fibre and my recreation of ancient textile structures symbolize the resistance of a culture, the ancient Peruvian culture, that despite colonialism is still alive. In the same way, I want to

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<sup>1</sup> See the British Alpaca Society web site for more information: <https://bas-uk.com/alpacapedia/alpaca-fibre/>.

highlight the resilience of alpaca animals that had to change their habitat during colonial times to survive.

In our contemporary world, the economy of some communities in the south of Peru depends totally on alpaca farming. I want to find what is behind this material and what social and cultural relationships have been created in Andean communities around it.

For these reasons, a guiding question that leads this research is how I can integrate and work with alpaca, a fibre that has a history, tradition, and cultural background, into a contemporary interdisciplinary art and design installation.

My installation aims to raise awareness of alpaca material from the past to the present, bringing a traditional material to a highly industrialized environment, such as the institutional contemporary art gallery, could create tension because artisanal alpaca fibre could be seen as primitive.<sup>2</sup> In my experience as a fashion designer, when I presented to Ontario women's retail stores handmade accessories made of alpaca fibre that was spun following ancestral practices, the answer I received from buyers was that this "represents your culture" and they were not interested. As a fashion designer and as an artist, this dichotomy is not valid to me. I am conscious there are other people's perspectives, like the retail buyers, who still see a huge difference between ancestral and contemporary, and in this project and exhibition I would like to show a different perspective, I would like to show that tradition could be contemporary.

I had an insight when I found out that what I learnt at school was a very different Peruvian history, an official history told under a hegemonic perspective, and found how power groups in the Peruvian society decided what side of the history to tell. The official history has ignored local groups, who tell their history through oral local stories, dances, rituals or through Andean textile designs and structures. Relearning the past is part of

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<sup>2</sup> Generally industrialized societies diminish the value of traditional work, because under capitalism's perspective more production and lower cost means more money, and traditional ways of production generate a high cost and low volume. Blum (2021, pp. 6 to 15) explains how evolution of the fashion industry results in less appreciation for materials and focus on profits.

decolonizing my thoughts, a process that created tension between my past and present that metaphorically are represented by knots.

Theories on which my research creation is rounded up are New Materialism, the concept of Vibrant Matter, Live Fibre, Live Textile, the Systems View of Life, and Andean Cosmivision. I found very interesting commonalities between the Andean and Western ontology regarding materiality related to sustainability and ethical respect of the environment. These theoretical frameworks have helped me develop my work by providing ontological views on material, in my case alpaca fibre made with ancestral practices, that seem to converge despite coming from different spaces and times. Similarly, the Andean cosmivision, where all identities are interconnected, shows many commonalities with the Systems View of Life theories, where there is no hierarchy for ontologies.

In my research creation and exhibition, I do not want to reinforce the idea of the otherness, foreigner, the exotic one, that in some way discriminates. My intention of bringing past and present in my installation is not to create a dichotomy or polarization between them, but to bring them as a process, as development, as part of my cycle of learning and making experience during my research creation through autoethnographic research. I want to integrate traditional and contemporary, past and present through this possible tension, creating a dialog between them. In my work, I want to bridge these differences.

In my work different spaces converge, which are represented by materials from Peru and Canada. In the same way, different times converge represented by how khipu<sup>3</sup> cords were made, some using pre-Hispanic ancient textile techniques, representing my past, sharing space with more contemporary textile structures like textile printmaking, recycled material as well as crochet and needle structures, representing my present.

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<sup>3</sup> A complex pre-Hispanic information recording artifact made of cords and knots.

I want to tell my story through khipus, which is my metaphor and textile communicator in this research-creation installation. Khipu, which means knot in Quechua,<sup>4</sup> is the pre-Hispanic tactile artifact of knots and cords made of alpaca and cotton fibre to store quantitative and possibly narrative information (Urton, 2017, p.4). In my work, khipus could represent data, agreement, pact, tension, opposition; but at the same time suggests unity between past and present, ancient and contemporary, old and new technology, even connection to the cosmos.

My reflection in this paper is about my exploration of alpaca fibre through Peruvian textile techniques, such as pre-weaving and weaving techniques, as well as knitting and crocheting. By making pieces by hand, I can create a connection to sustainability and tradition in an industrialized world, and I expect to incorporate these meanings in my contemporary art installation, through the use of different media such as textiles, video, audio and mixed media.

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<sup>4</sup> Quechua was the language of the Inca's empire that is currently spoken by eight million people in the Andean region (Colombia, Ecuador, Peru, Bolivia, and Argentina) (University of Pennsylvania, 2022).

## LITERATURE REVIEW

### 1) Alpaca Fibre

#### 1.1 Alpaca fibre – history

In this section, I will present some alpaca history to understand where this material comes from, and the deep roots alpaca farming has in Andean communities.

The alpaca animal is native from the Andes. Peru accounts for 87% of the world's alpaca population (Andina, 2021).<sup>5</sup> Puno, located in the south of Peru at an altitude of 4,500 meters over sea level, is the region that has the largest population of alpaca. In this rugged geography, alpaca is the most important animal, because of the economic, social, and cultural life developed around it.

Since early times, inhabitants in the Andes wore camelid (vicuña, alpaca, llama, guanaco) fur to protect themselves from cold weather. The vicuña, one of the finest fibres in the world, was used to weave clothing for Inca kings (Flores Ochoa, p. XXIV).

According to Arnold and Yapita (2018), Andean oral stories told by members of the Qakachaka community in Bolivia mentioned a tradition of weaving and singing to Andean camelids, among them alpacas. Guaman Poma de Ayala<sup>6</sup>, a mestizo chronicler in the XVII century, mentioned in his writings that llama herders sing to llamas, even the Inka kings sing to their llama. As it can be seen in Figure 1, the 'yy' represents the sounds coming out from the Inka's and llama's mouth (Huamán Poma de Ayala, 2017). As Lopez Rivas states, cited in Arnold and Yapita (2018, p.16), this strong bond

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<sup>5</sup> In Perú, there are around 3.6 million alpacas and there are 82.5 thousand farmers involved in this activity. The Peruvian National Alpaca Day is August 1<sup>st</sup>. <https://andina.pe/agencia/noticia-dia-nacional-de-alpaca-conoce-las-variedades-y-importancia-este-camelido-peruano-808081.aspx#:~:text=1.,fibra%20de%20este%20camélido%20altoandino>

<sup>6</sup> Felipe Guaman Poma de Ayala (ca. 1536-1616), also known as Huamán Poma, was a Quechua nobleman – descendant of Inka's royalty– known for chronicling and denouncing the ill treatment of the natives of the Andes by the Spaniards after their conquest (Guamán Poma de Ayala, 2009). The bibliography has a reference for Guamán Poma (2009) and another one for Huamán Poma (2017), both referring to the same author.

between camelids and herders could demonstrate that herders depend not only economically on camelids, but also on a religious level.



Figure 1: Feast of the Inkas, Inka sings to his red llama (Huamán Poma de Ayala, 2017, vol. III, p. 318)<sup>7</sup>

Evidence indicates that Andean camelids domestication happened in the central highlands of Peru. There is no data from the Puno highlands (Flores Ochoa, 2012, p.57). It was not until the camelid domestication occurred around 6,000 B.C.E., when ancient Peruvians started using this fibre (Manrique, 2002, p. 29). Further research suggests that alpaca fibre has been used in the Peruvian coast for over three thousand years (Manrique, 2002, p. 33).

<sup>7</sup> In this Inka's Celebration, the Inka king sang to a red llama (puka llama) until the llama answered back with a hum, as described by Guamán Poma cited by Huhle (2014, p. 126). Guamán Poma, as cited by Arnold and Yapita (2018, p. 14), also mentions the lack of appreciation Spaniard conquistadores had for Andean camelids, as they called alpacas "sheep of the new world" and llamas "Andean donkeys"; wild camelids, like vicuñas and guanacos, were called "wild sheep". Spaniard administration's lack of interest for Andean camelids allowed Andean people to continue their traditions, including singing to their animals (Arnold and Yapita, 2018, p. 14).



Colonization changed the habitat of camelids. According to Burgos (2021), when Spaniard conquerors arrived in Perú in 1531, the textile production was impressive in quality and quantity, most of which was made with camelid fibre, especially alpaca. Spaniards settled down in the best cattle-raising areas of the altiplano with good pasture and climate for the newcomer cattle, mostly horses and sheep. For this reason, alpacas had to go to more remote and higher areas, above 4,000 meters, where weather is extreme and food scarce.

In the 21<sup>st</sup> century, alpaca herders and their alpacas still live in those harsh conditions. People living in these regions have inherited traditions, myths, and legends that contribute to the Andean cosmovision. They are direct representatives of the ancestral population and at the same time in economic terms the poorest people in the Peruvian society.

Herds and shepherds of South American camelids are unique in the world. They own their alpacas, which provide their only income for living. It is disappointing to see that 80% of the exported fibre is raw material, which makes this fibre a commodity without added value (Gutierrez, 2020, pp. 241, 243, 244).

There is still a lot to do to improve the quality of life of people who live exclusively from selling alpaca fibre. In the meantime, some small initiatives have started with the objective of adding value to the fibre to obtain a better income for producers. Women are spinning this fibre involving twisting variations in various textures and different thicknesses to produce alpaca yarn that are sold to hand weavers who are concerned about ecology and appreciate nature ancestral technology and quality.

The Peruvian alpaca fibre I am using in this installation comes from one of those initiatives. It is from a small association, where all members are women artisans from three different communities located in the south of Peru, in the Puno region. They transform the fiber through manual process to produce yarns of different textures using

traditional techniques based on pre-Hispanic traditions. The yarn is 100% alpaca with natural colours. This activity generates an income for women in this association.<sup>8</sup>

As a note in this research, I found during my visit in the fall 2021 to the *Forget-Me-Not Alpacas* farm located in Beaverton, Ontario, that alpaca has a great relationship with the surrounding environment, they are environment friendly animals, as mentioned by the farm owner. Their padded feet prevent pasture damage and ground erosion.

## 1.2 Theory of New Materialism

In order to understand alpaca fibre, I will use the new materialism theory to help understand this material from an ontological perspective.

To better understand this concept, I turn to Charles T. Wolfe (2017, p. 216), who defines new materialism by opposition to old materialism. Old materialism refers to material as passive and is more concerned with physical processes, having a more reductionist vision of the world as governed by mechanics and physical phenomena. According to old materialism, matter could only be characterized by basic properties like size, shape, and motion. By contrast, new materialism does not consider matter as passive, but as a complex system with a substance of its own. This is the starting point for a new materialism ontology.

In her book *Vibrant Matter*, Bennett (2010) claims that everything is alive, including inanimate entities such as stones, air, even garbage. There is a horizontal interaction between humans and things that create intertwined relationships engaged by sensitivity and sensibility. In Bennett's words, "for the vital materialist, however, the starting point of ethics is less the acceptance of the impossibility of 'reconciliation' and more the recognition of human participation in a shared, vital materiality. [...] The ethical task at hand here is to cultivate the ability to discern nonhuman vitality, to become perceptually open to it." (p.14)

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<sup>8</sup> In Peru, the *textility* is practiced mainly by women which reveal the history of these communities under a gender perspective, interesting to know more about in the future.

Bennett distances herself from the binary dichotomy of mind-body and human-nonhuman. She argues objects are not passive and stable, they are in a continuous transformation process of transformation. Humans are not the only active subject, all objects are actants, have agency and are a part of webs where humans are enmeshed. Bennett calls these webs "assemblages" (p.23). This is a new ethical perception of human in relation to their environment where humans are not at the centre anymore.

I agree with Bennett, my material alpaca fibre is not passive, I am not the only one who is making decisions on how to create my work with the materiality of alpaca. There is a relationship of interconnectivity and interdependence between my material and me. In my creation process, the agency of alpaca as material leads me to create one thing and not another. I am also aware that behind this fibre there is a larger web of connections: the women who spun the fibres, the animal who provided its hair, the alpaca herder, and the environment where alpaca has grown. It is a site of intersection of many bodies, forces and environments. As Bennett states "while the smallest or simplest body or bit may indeed express a vital impetus, conatus or clinamen, an actant never really acts alone. Its efficacy or agency always depends on the collaboration, cooperation, or interactive interference of many bodies and forces." (2010, p.20)

This interconnectivity relates also to the past. In my research, alpaca fibre represents the strength and resistance of Andean culture, a culture that survived the Spaniard conquest and is still strong; a culture that survived marginalization and discrimination. Alpaca fibre is not an unanimated object, it is alive and through its agency projects the energy that inspires Andean people to continue creating their traditional products and inspires fashion designers worldwide.

### 1.3 Live Fibre – Live Textile

Elvira Espejo –Andean artist, scholar and director of the National Ethnography and Folklore Museum in La Paz, Bolivia– and Denise Arnold –a US American anthropologist– share similar perspectives on new materialism, but Espejo speaks from a specific

Andean perspective. People in the Andes consider objects live entities, even a stone is alive because it “breathes” and generates humidity, which contributes to soil fertility, argues Espejo in an interview (Salomon, 2014).

Espejo and Arnold argue that handmade textiles in the Andes are both subject and object.<sup>9</sup> The vitality of textile comes in part from the raw material, the animal hair which comes from a live animal.

In this sense, Espejo points out that Andean people ask their animals for permission before shearing them and obtaining their hair. Later, this live hair will go through a process to become a fibre, which is softer than a fibre from a dead animal. The live alpaca material passes its essence and energy to another live entity: a textile. In this way, textile is a live object that has its own identity and interactivity with persons (Salomon, 2014).

From an Andean perspective, everything is a living entity. This is the reason Andean people respect their environment, they consider that they all share the space. They respect their animals, treat them like people and, through this reciprocity (*ayni*) ask to obtain their hair.<sup>10</sup> Alpaca herders consider alpaca animals like their own children and are able to identify each one in the herds in the same way human parents identify their children. It is interesting how lately our western society treat and love their pets, they consider them part of the family, then why is it not possible to think that alpaca herders love their animals as their own children? I have not been in an Andean alpaca farmers' community recently, but it is possible that some traditions may have changed. It will be very interesting to travel there and find out.

American scholar Tamara Bray (2009, pp. 357-366) has explored Andean materiality through archaeology (*huacas*).<sup>11</sup> She states “Ethnohistoric sources suggested that

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<sup>9</sup> See Arnold and Espejo (2013). I will discuss this topic further in section 2.2.

<sup>10</sup> *Ayni* is a Quechua word, which translated to Spanish means reciprocity (Yucra, 2016).

<sup>11</sup> “*Huaca*’ is one of the key words used in the ethnohistorical and archaeological vocabulary about the Andes today. From an uncritical reading of Garcilaso’s Royal Commentaries, this Quechua term is often considered to mean ‘sacred object or place’. By examining historical sources as well as modern linguistic information, this article

indigenous inhabitants of Andean South America saw both people and things as animated or enlivened by a common vital force (*camaquen*)". This is an interesting area I would like to explore more in the future.

An example I share here, I remember a friend of mine, who was born in a small town near Cusco, the capital of the Inca empire, and has an indigenous heritage. Despite being exposed to western culture for more than fifty years, she still keeps her Andean heritage. For example, when she built her house, she "paid tribute" to *Pachamama* (mother earth) by feeding her with *chicha* –a traditional alcoholic beverage from the Andean region– through rituals where she asked permission to build her house.

New materialism allows us to see the world in different ways and observe how people from different regions and environments see and think differently, which contributes to create a richer world. Based on that, in my view, Jane Bennett from a western perspective and Elvira Espejo from an Andean indigenous perspective, generally share a similar vision regarding materiality, which encompasses my vision of alpaca as living material. I propose that these two approaches to materiality, Bennett theoretical approach and Espejo empirical approach drawing on Andean cosmivision, form the basis of my theoretical framework.

Live alpaca fibre may not be important in consumerism, where the most valuable aspect is just aesthetics. However, as an artist and fashion designer, concerned about sustainable production, I care about both aesthetics and respect for the material I use to create.

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shows that 'huaca' (wak'a) meant 'split' and that, in the religious field, this term designated transportable stones considered as detachments or duplications of a mountain- dwelling mythical ancestor. By extension, wak'a also applied to the sanctuary that housed these stones, to the same divine ancestor and to stone amulets emanating from him. Numerous indications suggest that the cult of the huaca stones is of Inca origin." (Itier, 2021)

## 2) Andean Textiles

### 2.1 Pre-Hispanic Textile History

I do not remember when and how I learnt how to knit or do crochet. I did it since I was a little girl, which is strange because my mother and grandmother did not do that. When I was a teenager, I knitted and crocheted curtains, dresses, sweaters, etc. As a fashion designer, I knit and do crochet pieces made of alpaca. Although I always have admired the beautiful textiles from the Andes, I did not know there was a meaning, a language behind their aesthetics of colors, textures and designs. Something similar happened with alpaca fibre, I had been engaged with it, but I did not know the complex social and cultural interconnectivity behind its production. During this pandemic time, I had time to reflect on it.

As it can be seen in Guamán Poma's drawings (Figure 2), women as young as 12 years old were doing textile work, either spinning or weaving (Huamán Poma de Ayala, 2017).



Figure 2: 12-year-old girl spinning  
(Huamán Poma de Ayala, 2017, vol. III, p. 225)

It is not my intention to tell the rich and extensive pre-Hispanic textile history<sup>12</sup>. Here, I focus my discussion on textiles in relation to the material they were made of such as cotton and camelid fibre, especially alpaca. In my thesis installation I used alpaca and some cotton fibre.

The symbolism and knowledge behind pre-Hispanic textiles could explain in some way why Andean textiles are seen as live objects by Andean communities, they are their individual and collective memories. As Chilean textile artist and researcher Paulina Brugnoli states, the pre-Hispanic textile heritage can still be seen today in the native weavers of the Andes “the textile traditions of the Andes are the results of a cumulative process of several millennia” (Brugnoli et al., 2006, p. 11). This textile heritage can help me understand my engagement with alpaca fibre when I am knitting, crocheting, and wearing handmade pieces as well as why I decided to make my installation using it.

<sup>12</sup> This could be a topic to investigate in the future.

Textile started with the domestication of plants and camelids over 7,000 years ago. At the beginning, pre-Hispanic textiles were made of vegetable fibre like cotton and using pre-weaving techniques such as looping, interlinking, knotting, cordage, and braiding. During the research process, I recreated some of these techniques to understand better my fibre choices. These techniques were used mostly in the coastal regions of Peru, and did not disappear when the loom arrived,<sup>13</sup> they continued to be present in the pre-Hispanic civilizations that followed.

Camelid fibres were used mainly in the highlands, the Andes. Alpaca and vicuña fibres were used extensively, because of its high-quality hair. Pre-Hispanic textiles are admired due to their beautiful colours, designs and complex technological structures created by using very simple elements such as needles, looms, and threads. They were made to wear, to work, and especially to use in rituals for their deities and to bury their dead. It is during the Inca time (1400 – 1532 C.E.) when textiles reached their height of development. They were present in the war, in the identity process, in the economy, in the taxation and as communication system.

Textile knowledge was passed from generation to generation. In this sense, each society learnt from its predecessor building new knowledge and/or re interpreting it and building history. As Brugnoli points out "[...] textile becomes a historical text, a collective memory transmitted by learning, although it makes them recognizable as a whole, Andean textiles at the same time identifies and distinguishes each of the societies that participated in this large textile tradition" (Brugnoli et al., 2006, p.12).

Spaniard colonization did not erase all the collective memory. In small and remote villages, where Spaniard authorities could not exercise strong control on communities, local people continued producing textiles with indigenous iconography and techniques. Furthermore, Gisbert, Arze and Cajías (as cited in Gutierrez 2020, pp. 11-12) state that textiles in the Andes reflect not only the religious world but also the spatial

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<sup>13</sup> Textile development was achieved thanks to the invention of the loom, which happened between 2000 and 1800 B.C.E. (Manrique, 2002, p. 30).



and ecological environment. This migration could explain the persistence of collective memory in the Andean population in Peru (De La Fuente, 2013, p. 86).

In the same sense, the Textile Museum of Canada, states the importance of textiles as part of a collective and individual identity. "Textiles convey messages about individuals and groups of people. Images, patterns, colours, materials, and ways of making suggest belonging and kinship, social connections, and deep understanding of individuals, cultures, and subcultures. Textiles shape us as much as we shape them; they can conceal us and they can make us visible" (Textile Museum of Canada, *Identity & Society*).

I am reflecting while learning and experimenting with pre-weaving techniques which have resisted colonization and made me feel I am contributing to the continuity of these techniques, and how just only with my fingers and threads without any additional tools I can create beautiful cords, braids, or other textile structures. It also reconnects me with my cultural background – this is through and with cording and knotting.

Andean textiles have a knowledge that was long ignored. Textile art has been valued but also silenced by the mostly western hegemonic narrative on how to appreciate art. I value very much when renowned weaver Anni Albers tributed her book *On Weaving* to pre-Hispanic weavers. She wrote: "Dedicated to my great teachers, the weavers of ancient Peru" (Albers, 2017). Or when contemporary weaver Fiona Daly inspired by Peruvian Ancient weaving writes: "A history of weaving is not complete without mentioning Ancient Peru. The study of Peruvian textiles is fascinating for the modern-day weaver. Their skill in weaving is unparalleled and, over thousands of years, they have developed many techniques with amazing skill and creativity. It is no wonder that Peruvian textiles are a constant source of inspirations for weavers all over the world" (Daly, 2018, p.14).

Similar to Albers and Daly, I share my admiration for ancient Peruvian weavers and their textiles. I find fascinating the material culture of Andean textiles, their cosmovision and the language in their textiles, and how despite colonialism they are still alive. According

to Gutierrez (2020, p.11), it is possible that ancient Peruvian textiles have been merged, deteriorated, mixed, or enriched during the colony, but they are still alive.

## 2.2 Textiles as subject and object

In *El Textil Tridimensional*, Arnold and Espejo (2013) develop the concept of Andean textiles as objects and subjects in its technological, technical, and iconographic aspects, examining textiles as a subject in their condition as living entities that enter an intimate relationship with the weavers who made them. They continue their studies from the perspective of the women weavers of the Qaqachaka community,<sup>14</sup> who were very interested and involved in the research process. I consider Arnold and Espejo's textile study from the weaver's vision very interesting and necessary, because it offers a different perspective that centres on native cultural knowledge, a perspective usually ignored in the past.

The process of bringing textiles to life begins with the feeding and shearing of animals, fibre production, dyeing and the manufacturing of objects needed for weaving. It is worth noticing that the time invested until the production of fibre seems longer than the time invested in creating textiles, which I imagine it could also be a long process. This helped me understand the concept of live object and subject in textiles, because it is based on articulation of relationships among humans, animals, environment, cultural experiences, and traditions; all these going beyond the production of a textile in a loom. This process, Arnold and Espejo call the **technological** aspects of textiles (Arnold and Espejo, 2013, p. 28).

The **technical** aspect of textiles as subjects and objects refers to what weavers do with their hearts, bodies, fingers to give birth to a live object by creating different textile structures based on knowledge, practices transmitted from generation to generation.

In this process, even the weaving instruments have agency. They are not considered external accessories, they are extensions of the weavers' bodies, they transmit weavers'

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<sup>14</sup> This is the Bolivian Andean community from which Espejo comes from.

energy to live raw material: fibre. “The vitality of fabric is due, in part, to the raw material that gives rise to it, namely the animal hair, and also to the bodily bond that is established between the weavers and the piece itself that is being made with their hands, or that is ‘brought to life’” (Viana, 2015).

The **iconographic** aspect in textiles is related to representations of the environment and context where their protagonists live, such as animals, flora, tools, which become collective and individual meaning. Arnold and Espejo (2013) state that textiles are part of the weaver's body, inside textiles there is spirit and heart. Moreover, textiles are part of the weaver's lineage.

What Arnold and Espejo argue above is similar to the study Nilda Callañaupa, indigenous Quechua weaver, did in Chinchero.<sup>15</sup> A few years ago I was in Chinchero, where women did a demonstration on dyeing fibre using natural colours (Figure 3).



Figure 3: Andean weavers showing dyeing process<sup>16</sup>

<sup>15</sup> A textile Andean community in Cuzco with the intention of rescuing the significance of textiles in the community and promoting its practice.

<sup>16</sup> This photo was taken during my visit to Chincheros, a town famous for its textiles, in October 2013. These women are showing how they dye fibre with natural local materials, like pink salt of Maras, cochinitilla, or indigo.

Chincherero weavers perceive textiles, as live objects, women weavers preserved their textiles inherited from ancestors or made by a family member because they are unique and tell detail memories of their life. The weaver's sentiment of giving a textile to someone else is like giving his/her heart. This passage in her book can illustrate this feeling: "when theft occurs, the weaver cries out 'I only want you to give back my weavings'. Each textile is a unique reflecting part of the weaver's life, inspired and planned with a specific purpose" (Callañaupa, 2012, p.3).

In Peru, there were diverse pre-Hispanic cultures, each one with its own creation and iconography. While scholars and archeologists conduct research to classify them, it is possible to say their iconographies have commonalities related to their creators' own experiences that allow preserving collective memories.

To me, textiles as objects and subjects means to see the world as a whole, there is no separation between body and mind, nature and culture, subject and object. Behind textiles are live forces with interconnectivity that are in process and represent memories that are still alive.

### 2.3 Khipu history

As I mentioned earlier, khipu is my textile communicator in this research. I will present a brief introduction about what is khipu and why khipu is in my installation.

Khipu means knot in Quechua. Khipu, the artifact, is a collection of knotted cords connected to a main cord, made of alpaca and cotton fibre, which represent numeric and possible narrative information. Khipu, in its narrative form, would have been the equivalent to what writing systems were to other ancient civilizations.

In the last twenty years, the khipu system is being progressively researched by scholars (Medrano, 2021, p. 22). Researchers such as Urton (2017) and Hyland (2020) hypothesize

there were narrative forms of khipu, based on what Spaniard chroniclers mentioned,<sup>17</sup> and also on the observation of khipus with different knot patterns than numeric khipus. Narrative khipus recorded historical events, genealogy, myths, poems and even songs. For Setlak et al (2020), khipu was important to keep collective memories. She states that there were eleven different types of khipus, including historic, religious, calendars, census, storage, labour, etc. (Setlak et al, 2020, p.14).

Khipu was a portable data recording system used by Peruvian pre-Hispanic civilizations as early as 600 C.E. It was during the Incas' period, 1400 – 1532 C.E., that khipu reached its highest level of sophistication as a data recording tool very important in the administrative system of the empire (Figure 4), because they helped maintain political, economic, ideological, and military control (Setlak et al. 2020, p. 14).<sup>18</sup> According to Setlak, the stability of the Inka empire could not only depend on the military power or its capacity to expand, but also on its ability to record information and data, and its efficient and fast manner of transmitting them between the different levels of state or imperial structures. This was the function of khipus.

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<sup>17</sup> Medrano (2021, p. 50) says some Spaniard chroniclers mentioned large number of khipus being stored in libraries in coastal and Andean “libraries” (Cusco probably one of them). Medrano (2021, p. 55-56) also mentions chronicler Fray Martín de Murúa, who said khipucamayocs had a four-year training and dedicated the last two years to read laws and stories recorded in khipus. Hyland (2020) mentions Jesuit chroniclers Bernabe Cobo and Jose Acosta who stated there were different types of khipus for different subjects, from taxes to ceremonies, histories, or laws.

<sup>18</sup> It is important to note there are different variety of quipus, they differ along time (Medrano, 2021, pp. 26).

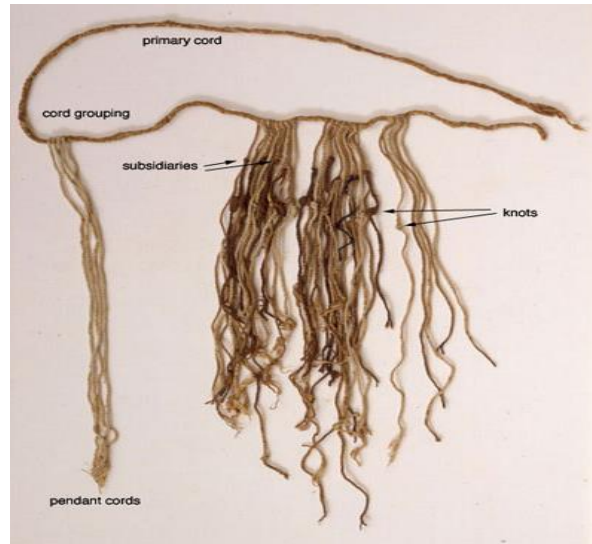


Figure 4: Khipu structure  
(Courtesy of Peabody Museum, Harvard University)

The Khipucamayoc was the khipu's keeper (Figure 5), the expert in charge of recording information. The keeper was responsible to code and decode khipus' data. Khipu looks like a form of writing without words and paper, but through knots, space between knots, cord colours, and cord torsions. It was a 3D tactile visual encoding and decoding artifact, in some way similar to a computer program.



Figure 5: Chief accountant  
(Huamán Poma de Ayala, 2017, p. 360)

According to anthropologist Gary Urton (2017), when Spaniards conquered the Inca's empire in the XVI century, they considered the Inca's civilization as barbarian and that barbarians could not have any writing system. Khipu was not considered a writing system because writing systems required an alphabet. This is what Urton calls "alphabet prejudice", by which Europeans at that time believed "[...] non-alphabetic recording was inferior to writing in alphabet script [...]" (Urton, 2017, p. 9). This could explain why colonial Spaniards did not investigate khipus and did not talk to khipucamayocs to learn more about this system.

It is possible that the extirpation of khipu, the main tool of Inka organization, by Spaniard conquerors was to impose a new organization and writing system. In the early years of the colony, khipus were forbidden and destroyed due to legal contradictions between the data stored in khipus in relation to the same data written by Spaniard in legal documents and because conquerors assumed khipus were a secret language which could promote insurrections. In the same way, between 1582 and 1583, the catholic

church through the *Tercer Concilio Limense*<sup>19</sup> ordered khipus to be burnt. Consequently, they were gradually eliminated from public use (Museo de Arte de Lima, MALI, Perú).

Nowadays, what we know about khipus and early Andean pre-Hispanic history is mainly through Spaniard chroniclers, through what Spaniard conquerors wrote. Still missing is the history of the Spanish colonization as told through pre-Hispanic sources, such as the khipus.

The study of khipus is complex and important because they are the primary source and depositary of the Incas civilization memory. Deciphering them will help to learn of colonization processes from an Andean perspective (Medrano, 2021, p.23). I share with Medrano how he metaphorically refers to khipus as “[...] survivors witness of the Spaniard conquest” (p. 36).

Although khipu scholars have managed to decipher how numbers were registered in quantitative khipu cords, they are still missing what exactly khipucamayocs registered.<sup>20</sup> In the same way, scholars still do not know how narrative information was recorded. In the meantime, scholars continue their research and expect to find the Rosetta stone of khipus to understand better this complex system. In this multi-disciplinary intent, experts have started an initiative to digitalize and collect data of khipus around the world. As Medrano states this looks promising in the intent to decipher khipus (2021, pp.103-142).

Khipus continued being used during colonial<sup>21</sup> and republican<sup>22</sup> times, but they did not have the same function. They were probably modified by the merge of cultures and

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<sup>19</sup> The Third Limense Council, held in 1582 and 1583, gradually brought down the tradition of teaching, producing, and interpreting khipus. The evangelization of Latin America was full of challenges, among them the dialogue with the pre-Hispanic cultures and the establishment of a spiritual government in vast territories. In this context, the provincial councils of Lima and Mexico made a notable effort to apply the provisions of the Council of Trent in the American territories. See: Martínez López-Cano, M. del P. (2019). *Tercer Concilio Limense (1583-1591), edición bilingüe de los decretos*. Estudios De Historia Novohispana, (61), 167–170. <https://doi.org/10.22201/iih.24486922e.2019.61.68183> .

<sup>20</sup> In 2103 and 2014, archeologist Alejandro Chu recovered 34 quipus in Inkawasi, an Inca military storage facility associated to food crops such as chili peppers, black beans, and peanuts (Urton, 2017, pp. 154 - 159).

<sup>21</sup> From 1532 to the 1820s.

<sup>22</sup> From the 1820s to early and even mid XX century.



had a utilitarian role in the new society, mostly used by the church to collect taxes in remote communities. In this sense, Medrano argues "kipus were a reflection of the political and social system from the time they were" (2021, p. 34).

Colonialism erased part of the pre-Hispanic history and culture, that is why I want to explore metaphorical representations of khipu in my installation. Khipu is my inspirational storytelling tool, khipu itself represents resistance. From a new materialism perspective, they have strong agency. From an Andean epistemological perspective, they are alive. They also represent the Andean pre-Hispanic ancestral culture, a culture that is asking to be heard and have a right for a place in history. Behind my re-interpretation of knots, there are tensions between my past and present, and at the same time agreement and reconciliation, which are important to heal. In my installation I draw in memories through textile khipus using similar materials, such as alpaca and cotton, which were used in the past. Through the knots and cords in my installation, I want to transmit care, peace, and history, and be connected to a material that brings the energy and strength of my ancestors.

#### 2.4 Is khipu a textile?

Andean culture considers textiles as live entities. Textiles are representations of beliefs, culture and materials of a specific environment, and where a weaver finds belonging. In this sense, textiles are a collective and individual memory, a visual identity language.

In the Andes, not only do textiles protect people from the weather, they also carry information of the Andean communities where they were made. Earlier, I presented textiles as the representation of a complex interactivity of social and environmental relations in a specific time and space. This information is coded not just in the iconography and colours, but in the way these are recorded in textiles.

In this sense, I argue that khipu could be considered part of the textile family, because khipu configuration could represent the identity of an ethnic group, in the same way as Andean textiles do. Lydia Fossa (2019) states that khipu could be considered part of the textile family based on style patterns. Andean textiles express significant contents

through colors, designs, and clothing, with ornaments such as colored stripes and combinations in blankets and llautos (turban). The author states that the llauto was an identity element, same as the khipu, although this is not a garment. It is made of cotton and camelid fibre that expresses meanings through its structure and combination of colors, and its arrangement in relation to the main cord. In this sense, llauto and khipu would be informative "texts" that have their own characteristics to establish their identity capacity: "Textile art style patterns belonging to a unique ethnic group expresses specific information. They may be present in khipu configurations since it is also a textile. Khipu would thus belong to the textile objects family of a given human group. Specific style khipu configuration could be considered an identity sign of a given ethnic group, which I propose in this article [...]" (Fossa, 2019).

Furthermore, khipus and Andean textiles have some distinct commonalities:

1. Both are kind of information registration systems. Arnold argues that textiles served as agricultural and pastoral tax documentation, similar to khipu's role (Arnold, 2016). While Arnold opens new avenues to study further this topic, I think there could be ways of writing outside paper and ink, the only way I have known so far.
2. Khipus and textiles in the Andes face the same materiality and their fibres are made by twisting and knotting.
3. Textiles and khipus face the same environmental situation of deterioration in relation to the fibre they are made of, alpaca and cotton.

In the Andes, textiles are an expression of each ethnic community through colours, shapes and structures of their clothing and decorations. The same principle can be applied to khipus, although khipus are not wearable like a poncho, they could be part of the textile family because they have the same materiality –alpaca and cotton– and express significance through its structures, combination of colours and carry information.

From an Andean vision, I consider khipu to belong to the textile family, this differs from anthropologist Tim Ingold's perspective. In contrast, Tim Ingold does not consider khipus a textile. He recognizes khipus are constructed on the same principles as a fabric, but khipus are not woven, therefore he does not consider khipus as textiles: "although the weaving of textiles was highly developed among the Inka, the khipu is not woven, and it is not a textile. It has no surface apart from the surfaces of the cords from which it is made" (Ingold, 2016, p. 69).

Ingold's explorations are from a western perspective of what a textile is, this is different from Andean scholars' perspectives. Unlike Ingold, I agree that it is important to not separate khipus from its textile family.

### 3) Views of Life

#### 3.1 The Systems View of Life and the Andean Cosmivision

To explore and learn about alpaca material and textiles in the Andes I need to re-learn the Peruvian history, trying to understand the knowledge and cosmivision behind Andean textiles.

It is difficult to re-build what Andean pre-Hispanic thoughts and beliefs were based on documents written from a different perspective, the western perspective. In this sense, myths and oral stories transmitted directly by pre-Hispanic Andean and Amazonian people are relevant because they are a good source to learn more about the ancient Peruvian society.

I am also conscious that myths could be a contemporary re-imagining of what has happened in the past. Besides, as Rodriguez and Garayar (2021) state: "[...] We do not have a book that covers all the Andean and Amazonian myths; on the contrary, these have come to us through different voices: indigenous, mestizo, Spaniards [...]" (p. 52).

Pre-Hispanic civilizations were diverse, this could also be reflected in their cosmovision that is deep and broad. What is known today has been through documents mainly written by Spaniard chroniclers, who had some limited access because they carried a western view.

Based on these facts, renowned Peruvian historian Maria Rostworowski and other Peruvian scholars (Hernandez et al., 2021) have analysed the Andean past from an anthropological and historiographical perspective, in a dialog with psychoanalysis to understand the past and try to avoid contamination of western views.

Through the analysis of Inka's myths that sometimes intersect with history, these scholars try to access the Andean way of thinking and its textual and contextual expressions that would allow them to reach an interpretative reading of the mythical, legendary and historical Andean discourse, which would take into account the sociocultural dimension:

“Ethnohistory and psychoanalysis could build the bridges that would allow the reconstruction of the Inka conceptions and intuit the categories by which they organized their vision of time and space and the unconscious structures and conflicts underlying the activity of the men who gestated the Inka history.” (p.XIX)

It is an interesting topic to explore. I am intrigued about how something that happened in the past is still part of my present. I see how colonization erased part of the Peruvian history and memory. From a personal perspective myths, history and legends could be my inspiration for future work.

In this context, *Dioses y Hombres de Huarochiri* (De Avila, 2019), based on the *Huarochiri Manuscript*,<sup>23</sup> is a historic document that is considered the “indigenous bible”, because

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<sup>23</sup> It was written in Quechua by Francisco de Avila, during his evangelization campaign at the beginning of the XVII century. This document compiles indigenous traditions, myths and beliefs as well as religiosity of people from the central Andes in Peru at that time, but also prior to the Inca's empire and during the Spanish colonization. Apparently, this document is not contaminated by a Spaniard view. In 1966, these stories were traduced from

through stories and myths it reveals how ancient Peruvians thought about the origin of the world, the relations between humans and the universe, the relations between humans and non-humans (animals, plants, and natural phenomena), and the relations between humans themselves. Stories in the *Huarochiri Manuscript* were told by indigenous Andeans during the XVII century.

These myths reflect a way of thinking, a world view different than the western perspective. For example, from a religious point of view, Christianity conceives a single god in contrast to the Andean world that could have thousands of *huacas*. The word *huaca* could refer –as cited in Curatola & Szemiński (2016, p. 268)– to something sacred: "[...] in particular the Inca Garcilazo de la Vega, have agreed that the Andeans must have used to indicate, generically, any entity, object or place of sacred character [...]". A *huaca* could be a stone, a tree, a lake, or a mountain to whom pre-Hispanic people worship to obtain protection. In compensation, a *huaca* could produce rain for agriculture, for example.

Similar vision on the origin of the world, but from an Amazonian indigenous perspective, is shared by Landolt (2005), who in her book *Eye That Tell* states: "For native Amazonian people, nature and society are not separate and exclusive aspects of life in this world. Human beings, along with animals, plants, natural objects and phenomena, form a single whole insofar as, according to indigenous thought, they all share a single origin and a single world [...]" (p.12).

According to Axel Nielsen, researcher at INPAL,<sup>24</sup> people from the Andes and Amazon consider nature as part of the society which is shared with humans. In the Andean cosmovision, stones, mountains, lakes are animated and can interact with people according to how people relate to them. Pre-Hispanic ancestors believe that the welfare of people depended on the respectful relation with other entities they share the world with, which include animals, lakes, mountains, and the earth (Ministerio de Cultura, Argentina, 2019).

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Quechua to Spanish. Through these stories we learn that despite the new order and regulations established by the Spaniards during the colony, ancient pre-Hispanic practices continued.

<sup>24</sup> *Instituto nacional de Antropología y Pensamiento Latinoamericano*. Part of the *Ministerio de Cultura*, Argentina.

As mentioned above, there is not a perception of separation in the Andean cosmovision, Andean people do not see division in nature, all the elements are part of a whole, in this world, reciprocity is important to maintain the balance and the cosmic order. Reciprocity understood not like an exchange but as relation of mutual help and collaboration between individuals and community. Reciprocity, or *ayni*,<sup>25</sup> in the Andes means each act or activity of a person is a consequence of the act of another person, it means individuals are always giving and receiving, it means in this world everything is interconnected.

The Andean cosmovision is integrated into nature, it is part of the earth cycles. It is linked to the times of sowing and harvesting, which has a beginning, development, and an end, to start again.

The concept of correspondence is also part of the cosmovision, there is an equivalence between the visible and invisible, between the conscious and unconscious. This could be understood in the term *pacha*. As Hernandez describes, *pacha* is time and space at the same time.

*“Pacha does not belong to things in itself, it is a form of perception of external and internal realities but at the same time the reality that sustains presences. Pacha is organized in the sense of life and death. Past tense is on the dark side of things. The worlds of the present and the past look at each other. There are two shifts, the updated shift of the present and the latent shift of the past awaiting its update. The relations between both worlds are reciprocal”.* (Hernandez et al., 2021)

The quote above reminds me of ancient practices that my family's friend still does in the Andes in Peru to pay tribute to the earth, to thank the earth for the fruits and produce they received, and to pray for the next agricultural harvest. This ritual transmits from generation to generation; they are transmitted orally as my friend told me, “earth says to us: oh!, you eat and drink very well, and what about me? I am hungry, I am thirsty”.

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<sup>25</sup> See: <http://aynibolivia.com/shop/blog/ayni-bolivia/>

During the ritual called *Pachamama* (mother earth), people make a hole in the ground and place inside different kind of crops, drinks, and coca leaves, then bury it.

There are rituals and ancestral knowledge alive in Peru, most of them in Andean communities. Andean knowledge is unknown to most people living in big cities and, because –like in my case– Peruvian history was told from a western hegemonic perspective. I found Peruvian society is disconnected, which reminds a fact that happened last year, 2021, when current Peruvian President Pedro Castillo, a peasant of indigenous descent who is also a rural elementary teacher, during his 2021 presidential campaign mentioned among one of his proposal the promotion of sustainable employment through “water harvesting”.<sup>26</sup> I remember he was target of memes in social media, newspaper headlines ridiculed him saying he does not speak the Spanish language properly. The surprise came later, to find out that the activity exists. Planting and harvesting water are ancestral millennial practices for water security.

Finally, as I mentioned earlier, in the Andean cosmovision material and non-material entities have energy, things are animated and related to the *camaquen* concept. As Martinez states “[t]he Quechua root *Cama* and its derivatives *camaquen*, *camac* and *camay*, implies different moments or situations of an Andean conception about the existence of a vital force present in the whole of nature [...]” (1988, p.61).

The *camaquen* or *camay* concept is also part of the analysis anthropologist Tamara Bray (2009) presents on her approach to the Andean personification of things (they are animated), through the theory of ‘thinking through things’ extending it to *huacas*. As she states: “[...] Within the context of an emerging paradigm in anthropology that seeks to move beyond the dualist ontology of the subject/object–mind/matter split, this article is an initial attempt to explore the various hints offered in the ethnohistoric record regarding the existence of alternatives, specifically Andean, ontologies” (2009).

In this sense, the thinking through things theory enables Bray to go beyond thinking one world (nature), many worldviews (many cultures), and a vision that recognizes the

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<sup>26</sup> See: <https://www.actualidadambiental.pe/siembra-y-cosecha-de-agua/>

possible existence of many natural worlds. This view affects her perspective as anthropologist, as she writes, "I am most interested in how the adoption of a different ontological footing might affect our interpretations of the archeological record of the late pre-Columbian Andes".

Andean cosmovision could help understand the concept of animation in alpaca fibre and textiles. As I mentioned earlier, textile is a live entity in Andean communities, which intervenes in many aspects of people's lives like dancing, dressing, carrying babies, laying out and animating people's relations.

Andean cosmovision seems to be present into everyday life on Andean communities, like for example in the community where I obtained the alpaca fibre, who cares and respects the environment to preserve the ecosystem. I share this vision.

The Andean cosmovision in some way reminds me of the System View of Life theory presented by Capra and Luigi (2014). They argue there is no hierarchy in nature, this approach of thinking considers that there is a deep connectivity network of life between living and non-living. The ecosystem is like a net where each node is equally important. They also extend this concept to the economic and political system.

### 3.2 The Circularity of Life

I am also interested in how the concept of circularity of life and the Andean cosmovision share a similar life view. Jane Cull (2013) presents the *circularity of life* concept arguing we are all interconnected in a web of life: humans, nature, and cosmos. We need to sustain this web to sustain us. Our planet is a circularly closed system, where living and non-living (rivers, air) systems have cycles. The circularity is based on the ongoing pattern and cycles of life. For example, living entities are born, live, and die; similarly non-living entities have cycle patterns: planets, weather, rivers. Cull argues, being aware of circularity is key to understand life, we cannot escape circularity.



The pre-Hispanic civilization did not have a lineal concept of time. They understood time as a constant cycle that repeats, such as the seasons, agricultural cycles, life and death. This vision is still alive in Andean communities and this concept is also present in my methodology on how to create textile structures.

#### 4) Artist inspired by khipus: Cecilia Vicuña

Many artists have been inspired by pre-Hispanic textiles, including Cecilia Vicuña, Anni Albers and Sheila Hicks, among others.

I focus on Vicuña because she has been directly inspired by khipus.<sup>27</sup> She is a Chilean poet, visual artist, and performer who has been inspired by khipus for more than fifty years. In 1970, she was in exile after the military coup against elected president Salvador Allende. Her work addresses political and social issues on climate change, deforestation, human rights, exile, and women's rights.

Vicuña's work on her exhibition *Khipu Desaparecido* (Disappeared Khipu), which was first exhibited at the Brooklyn Museum in New York (May 18<sup>th</sup> to November 25<sup>th</sup>, 2018),<sup>28</sup> explored some convergences and divergences related to my research. My intention here is to share her art creation to illustrate that I am not the only one who has been inspired by khipus.

Usually, Vicuña does collaborative work with filmmakers, musicians, composers, photographers, ethnomusicologists, anthropologists, singers, and dancers. Her installations are of large-scale and *Khipu Desaparecido* is not an exception.

Both Vicuña and I see khipu as a testimony of Andean people's resilience, people that survived the colony and have maintained their culture. In the *Khipu Desaparecido* installation, Vicuña honored the disappeared people in Latin America, who were

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<sup>27</sup> See: <http://www.ceciliavicuna.com/biography>.

<sup>28</sup> See: [https://www.brooklynmuseum.org/exhibitions/cecilia\\_vicuna](https://www.brooklynmuseum.org/exhibitions/cecilia_vicuna).

kidnapped by dictatorship regimes in South America, as well as the thousands of people who once disappeared during the Spaniard conquest and colony. Her message is very political.

Her vision in this installation was thirty bands of unspun wool hanging from a ceiling case, knotted at different heights. The wool used was coarse and was from Greece. Her poems read by her were recorded and played by speakers hidden in the installation. There were images and videos projected over the khipus. It was a multimedia work, (Figure 6).



Figure 6: Cecilia Vicuña: Quiipu Desaparecido (Disappeared Quiipu)  
May 18 - November 25, 2018. Brooklyn Museum, photography, 2018

Vicuña is a pioneer and was ahead of time among many artists who used khipus as an inspiration to reclaim a lost language of khipus due to colonization suffered by ancient people in Latin American. For her, khipu is a poem.

In my case, khipu is my metaphorical textile communicator. Similar to Vicuña's artwork, my project has a political message regarding khipu, a symbol of resistance. In my case, khipu also represents the resilience of the ancient Peruvian culture and its people's memory. In general, Vicuña and I share similar vision of khipu as a symbol of persistence, resistance to colonization. This is not strange, we both come from Latin America and share common historical roots. In my view, the use of Peruvian alpaca fibre and native cotton is an important symbol of resilience, as well as textiles inspired in

the past and present. This historical bond reinforces the connection between makers and materials.

Different from Vicuña, my guiding thread, alpaca fibre, is present in my installation in two aspects. The Andean live fibre and live textile concept has some similarities to the new materialism, active matter concept and agency. In this sense, I recognize there are some commonalities between the Andean and western concept of material. Second, the coincidence of past and present in my installation is not only through a theoretical framework. Past and present converge in my installation through displaying pre-weaving and weaving textile structures inspired in the past with more western crochet and knitting textile ones, techniques more related to my present and what I learnt since I was a child. The intention is to claim my past, but also recognize my present that has been influenced by my exposure to new spaces, cultures and ideas that I welcome.

In the *Khipu Desaparecido* installation, Vicuña's khipu cords are made with bands of spun coarse wool from Greece. She did not create textile structures. In my case, as I mentioned above, I create different textile structures. Most of the khipu cords in my installation are handmade scarves that, when the installation ends, will be recycled and will continue metaphorically being alive, keeping a connectivity and agency with whoever wears them. It means my installation will continue after the exhibition ends, and my khipu cords will continue interacting in real life.

My khipus are a personal proposal surrounded by different planes, spaces, times, where a knot means tension but also agreement, a pact between my present and my past. Materials and textiles help me convey my message of resistance and resilience, a message of decolonization communicated through the khipu, an artifact that symbolizes the survival of a culture marginalized for centuries.

## RESEARCH CREATION

My curiosity for learning more about the alpaca material, not just through history or theories, took me to experiment making different textile structures, research with my hands and research with my body. This means in my research creation process, the creation was research, and the research was also creation. While working on textile structures to create my khipu cords, I experienced the Andean cosmovision. The act of passing a thread from one finger to another, from one hand to the other, to keep interlacing and keep the balance and harmony to create textile structures, this to me means reciprocity.

I researched some ancient pre-Hispanic techniques, that were documented by archeologists and expert weavers, which were inspirations in my creation; and I used the findings of my research during my creation process.

### 1. Autoethnography

My intention was to travel to Peru to a small alpaca community in the Andes to do ethnographic research, but it was not possible due to the Covid-19 crisis. Because of this, my research on alpaca material has been done through literature readings and communication via telephone with the Peruvian community that provided the alpaca fibre. The information obtained about pre-Hispanic textiles is based on events I attended like online seminars, conferences, workshops at museums, universities and community circles by scholars, experts in Peru and Canada.

Not physically attending school these two years as a graduate student was a hurdle and a downside to create the sense of artist community with my peers, but the positive side is I have more time at home to reflect on the new findings and knowledge I was acquiring to create my installation.

Autoethnographic research –an approach to “[...] analyze personal experience in order to understand cultural experience” (Ellis et al., 2011, p. 273)– guided my search for

new information that helped me deconstruct some previous incomplete knowledge. This autoethnographic research was a hands-on reflection and practice between my material, and my past and present as a designer, artist, and scholar.

My whole research creation was autoethnographic. It was me in relation with the materiality that represents a culture, the alpaca material used in the *More than Cords and Knots* exhibition that comes from traditional Andean communities. People in these communities are direct descendants of ancient Peruvians, and I approached to pre-Hispanic and Andean culture through the material they produced. The material is part of their culture, they raised alpacas and produce alpaca fibre in a traditional way, which is an important part of their economy and social life. In the same way, khipus were also part of the pre-Hispanic textile activity.

This research is me in relation to these communities' culture through the alpaca material. With this material, I have experienced past and present through my work, with my hands and body. There was an interaction with my hands and coordination with the material that connects me to their culture. Through this material, I engaged with Andean culture, which is part of my cultural heritage, but I engaged with it from another reality, Canada.

I experienced the reciprocity and correspondence between my hands and fibre, that is related to the Andean cosmovision philosophy and practice. My thesis is the writing process of this experience that place me in connection with all that culture through the alpaca material.

## 2. Hands as tools and hand coordination

Makers always use their hands to produce work, nothing really new. During my research creation process, I found that ancient Peruvians used their fingers as tools to create pre-weaving textile structures. Fingers had the same function as knit, needles, or crochet hooks. I utilized the same technique, using every finger to create different combinations of patterns on textile braids, cords, and laces. In this process fingers, body and mind

were connected to interlace threads. I still needed to think twice before moving my middle or index finger next. I am still learning.

I do not intend replicating what ancient Peruvians did, my intention is to create a re-interpretation of Andean textiles. I want to interact with my material in different ways like just using my hands as a tool, something I did not do before. It is a different feeling and experience than when I am crocheting and knitting, techniques I am more comfortable with and skilled.

In this process, I visualize how to create cords in my installation while I imagine that with more practice my fingers could remember better when and how to move, but most important I am learning an ancient textile technique that I do not want to be forgotten.

### 3. Textile as a Dialog

*“In my case it was the threads that caught me really against my will. To work with threads seemed sissy to me. I wanted something to be conquered. But circumstances held me to threads and they won me over. I learned to listen to them and to speak their language. I learned the process of handling them.”* Anni Albers (cited in Weinstein [2017])

I enjoy working with textiles and fibres. I worked with alpaca fibre from Peru, I feel the beauty of working with this material, its softness, warmth, light weight. During the process, this fibre speaks to me and makes decisions on what final shapes and forms will have. I have a similar experience when I design pieces in my collection. I feel that the material decides and informs me what final shape it will take. This is what Donald Armstrong (2013) calls material practices where the creation process privileges materiality.<sup>29</sup>

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<sup>29</sup> “The origins and life of an aesthetic object occurs within a particular socio-historical context which is encoded in the material qualities of the object. Creative works therefore carry social and political meanings embedded in their physical feature” (Armstrong, 2013).

Besides creating textile structures with pre-Hispanic techniques, I am working on knitting and crocheting. I believe these different structures talk to each other and have a dialog with me. We learn and re learn from each other, I make them, and remake them.

In this dialog, I am including and interconnecting my pre-weaving recreation of textile techniques with printmaking of Canadian leaves on recycled textile material. I collected this material at OCAD University's textile studio and at the Textile Museum of Canada in Toronto. This recycled material represents my present, materials accessible where I live.

These different textile structures complement each other well and share the space for what I want to tell in my installation. An installation of khipus, using mainly materials such as Peruvian alpaca that has an historical past and which I embrace as a generative site of resistance, speaking to both my past and present. In my present, in Toronto, I am exposed to a broader cultural environment and have access to different materials, which I need to include as well in my installation. I include alpaca fibre from Ontario farms as well as recycled textile materials that I chose because they were appealing to me.

In this sense, my creative space and my practice goes well with Ingold's (2010) methodology of textility of making, where makers follow their material. Most of the time the materiality –texture, color, weight– of the wool yarn leads me to create/make something different from my original idea.

#### 4. Circular time/circular making

The Andean cosmovision talks about the cyclicity in life that is related to nature and time. My own experience during this research is circular, I look back to the past to learn more about my cultural history, connecting dots of new knowledge and returning with them to my present to make new connections. Turning back to the past again, but not to the same knots, and coming back to the present again and so on.

I am trying to understand my past, but I find different voices from the past tell the history differently, some with big or subtle meaning differences, that sometimes confuse me. For example, what is the correct spelling, khipu or quipu? Some historians write khipu, others quipu, similar with the word camaq or camac. The way Spaniard chroniclers at the time spelled some words did not represent sometimes the actual quechua sound.

I also found out that even Spaniard chroniclers described the same pre-Hispanic terms differently, interpreting pre-Hispanic concepts from their western Christian perspective, which resulted in altered meanings. Historians based their research on this and now they are conscious some of those documents have a western bias. To solve all the above, scholars are trying to find the equivalent of a Rosetta stone for khipus, searching for new findings in pre-Hispanic archeological remains that shed some light on the past. Another point is that there are hundreds of khipus in different museums around the world which were extracted without a proper description of the original context in which they were found. Scholars also based their research on Andean myths to understand the past, again myths are told and interpreted from different perspectives.

In addition, I experienced some confusion in trying to learn about ancient Peruvian history in my research. I found Peruvian history is in the middle of a changing process, because of new discoveries. While re-learning Peruvian history, my respect for what I have learnt in school transforms.

By making textile structures using a tube as a support while looping threads around it, I created circular structures. The repetition and coordination of my fingers with threads to repeat the same steps to create these structures is also circular.

Finally, the learning experience I had during the workshops on textile techniques I participated in was circular. We all shared knowledge, information, textile sources and learnt from each other. It is a circle of knowledge.



I did not expect the way this research developed, the circularity of learning: making, knowing, and sharing. In this learning-sharing circle although we did not meet in person, we were together and close to each other.

## 5. Visiting Ontario alpaca farms

I decided to visit alpaca farms in Ontario to know more and learn about alpaca habitat and “live” with them. I found farmers were very reserved on sharing information and bed and breakfast stays were not available due Covid-19 lockdown.

I met alpacas in real life, spend some time with them, know more about their habitat, record their humming and obtain a pure Canadian alpaca fibre for in my installation.

I visited three farms: *Forget Me Not Alpacas*, where I acquired some yarn I used in my installation; *Old Mill Alpaca* (Figure 7), where I recorded some humming and bought raw alpaca fibre I used in my installation. I also went to *SHED-Chetwyn Farms*, Alpaca Farmer & Shop Keeper, which was more a bed and breakfast and shop location. In general, I found all these alpaca farms I contacted in Ontario were small, they have around 40 - 45 alpacas in average. Animals were originally from Peru and Chile, some of them were born in Canada. Alpaca fibre in these farms is for their own consumption, they participate in craft shows and sell some fibre –in very small amounts– when public visit their farms.

I am still interested in spending time at these farms and have the experience of “living” a few days with alpacas. I also plan to visit alpaca communities in Peru.



Figure 7: Visiting *Old Mill Alpaca farm*

#### 6. Communication/Sociality: Online workshops and seminars

I attended online courses and workshops about pre-Hispanic appreciation and history as well as textile techniques. I also attended an online community beginning weaving workshop in Toronto<sup>30</sup>.

Attending two different online workshops one in Canada and another in Peru to learn how to weave contributed to my making process and creation in different ways and complemented each other as they converge in my creation.

In Toronto, I joined an art community to learn how to weave. There was a weaver instructor and participants from the GTA, most of them originally from countries with ancient history in tapestry. They, like me, did not know how to weave and, in some way, were also looking to connect to their origins. We, participants, were weaving during class in a relaxed but creative environment.

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<sup>30</sup> Workshops with Rucabado, Urrutia, Victorio, Ytusca.

The workshop in Lima, Peru was organized by the Cultural Centre of the Universidad Nacional Mayor de San Marcos, the oldest university in America, and conducted by expert weavers. Participants were expert weaving instructors and archeologists, not only from Peru but also from Mexico, Chile, and Argentina. To me, they were very generous in allowing me to share space with them knowing that I did not know how to weave. The objective was to replicate an ancient textile object: a representation of a figurine from the Chancay culture towards the 1200 C.E. Instructions and steps in the manual were very detailed on the number of wefts and warps, colours, and thickness of the thread. The figurine included to weave the face, dress, and hair.

My intention was to know more about pre-Hispanic history and textiles through weaving and be with expert weavers to share and learn ancient textile practices. I was aware I will not become an expert weaver in a few days, some of my peers had more than twenty years of experience weaving. During this workshop, while weaving the figurine's face, I made many mistakes. I did not understand the manual well, I did not have the right materials, plus I was very slow. When I completed weaving the face, I did not like it because it was different from the instructor's sample. The instructor was great, not only because of her knowledge on weaving, she was also understanding and patient in guiding me to improve my weaving. I decided to make the figurine's face again, although this time it was better, I was still not happy with the final result. But what I loved about this workshop is that all participants share the same pre-Hispanic past heritage and our love for textiles. Curiously, participants in both workshops in Toronto and Lima were women.

Following the methods I learnt in the workshops described above, I started experimenting with weaving on my own. Inspired by ancient motifs, I chose and used different colours and fibres that were more of my preference. Results were different from the referential motifs; still they are not "perfect", but they are perfect to me. The output reflected more my own style, and therefore I am pleased with the outcome.

I still remember the comments my instructor gave me when I was weaving the figurine face, like "you need to adjust the tension of this thread, spread well the wefts". I realize the method I have learnt on trying to replicate the figurine helps me on my process and

work creation. I am aware, I do not master this technique yet, there is still a long journey, but it feels it is my starting point to keep weaving. I realize, I could create weaving structures from a creative and reflexive approach to rethink my past. I plan on using these pieces in my final installation to show my journey in my creative process.

I also recognize that although I have Peruvian roots and love my culture, I have a different aesthetic approach on how to create weavings inspired by the past. Consciously and unconsciously, I am finding my path following my own intuition and flavour in my engagement with material.

## CREATIVE PROCESS

Alpaca fibre as a material has guided my overall investigation. In this journey, I have engaged with specific reading about new material theories and with hands-on practice which have helped me obtain a better understanding of my attraction to alpaca material. In this section, I present my making process through successes and failures that are part of my reflections in this paper.

Historically khipu, my metaphorical textile communicator, was made of cotton and alpaca fibre. I decided to use both these materials to create textile structures that are the khipu cords.

As I mentioned above, the alpaca fibre I used in my work comes from a women association from the Andes, in the Puno region.<sup>31</sup> In this sense, Peruvian alpaca represents my past, the country where I was born (Perú); moreover, this fibre is produced with traditional Andean practices by artisans who spin the yarn following ancestral traditions.

The Peruvian native cotton is from Lambayeque, north of Lima, and was used by ancient civilizations like the Moche culture.<sup>32</sup> As Gutierrez (2020) states: "More than five thousand years ago, various ecotypes of cotton were cultivated in all the agricultural communities of the coast, jungle, and lowland jungle of ancient Perú. Lambayecan cotton colours amazed the first Spanish chroniclers who believed that the different natural shades were dyed and put back in the bushes to dry" (p. 15). This type of cotton has natural shade colours of white, beige, camel, brown, green, red, lilac, and yellow. Twenty years ago, I saw these colours during my trips to the eastern slopes of the Andes, next to the Amazon Forest, in the meantime unfortunately some of these colors have disappeared.<sup>33</sup>

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<sup>31</sup> In my installation, I will be using natural colours such as beige, light gray, and camel.

<sup>32</sup> This cotton is not appropriate for the textile industry, because its fibre is short, coarse, and fragile, but it can be used in craft.

<sup>33</sup> In 1931, the government had campaigns to extirpate this type of cotton, because it sheltered pests that endangered commercial crops. However, inhabitants continued to cultivate and weaved clandestinely. In 1990, the government declared native cotton a cultural heritage (Gutierrez, 2020, pp. 15)

Peruvian alpaca, native cotton fibre, and organic cotton led me to explore the history behind while creating textiles structures. I also incorporated other textile elements that are accessible where I live, such as Ontario alpaca fibre and recycled textile materials.

In my installation *More than Knots and Cords*, khipus will hang from the ceiling; for this reason, khipu cords are approximately three metres long. The cords are textile structures I made recreating pre-weaving (interlacing, single looping and its variations, as well as and knotting), weaving, and interlooping (knitting and crochet) techniques (Emery, 2009, p. 30 - 42).

I am comfortable knitting and crocheting, but I did not have any knowledge about ancient textile techniques. Until now, I did not realize I do not know how to weave. Maybe I was not interested, or I was not exposed to it. I needed to learn them, and for this I registered in workshops at the Museo de Sitio Pachacamac, Peru, to learn about looping, interlacing, and knotting.<sup>34</sup> I am thankful to the Museo de Sitio Pachacamac and its facilitators for sharing their knowledge which has giving insights for this thesis.

In this sense, I use simple looping techniques with Peruvian organic cotton and a cylindric base support to create textile structures, as seen in Figure 8. This technique is still used in Peru, especially by Amazonian people, but they use plant-based fibre. My plan was to use alpaca fibre to create cords with this technique, and I have realized that this idea was not suitable. Although I like the textile structure I created, I did not like the fluff produced by friction (Figure 9). This was caused by the fact that a single long thread has to travel all the way inside a loop to create more loops. Additionally, the friction takes part of the fibre away. I started with alpaca, but I ended up using cotton.

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<sup>34</sup> See: <https://pachacamac.cultura.pe/>



Figure 8: Simple looping using a cylindrical structure as a base with organic cotton.



Figure 9: Simple looping with Alpaca fibre

I did two more variations of single loop: loop-and-twist and cross knit, which can be seen in Figure 10 and Figure 11.



Figure 10: Loop-and-twist



Figure 11: Cross-knit-looping

I interlaced alpaca, cotton, and some broken oak branches to acknowledge how ancient cultures, including pre-Hispanic Peruvian civilizations, started creating textile structures that came from the basketry practice in cotton, as can be seen in Figure 12 and Figure 13.





Figure 12: Interlacing alpaca fibre. Peruvian native cotton and oak branches



Figure 13: Interlacing Peruvian native cotton and oak branches

Creating knotting structures with native Peruvian cotton is shown on Figure 14. My intention was to create long textile structures as khipu cords. It was not easy to complete, I am not as fast as I wish to create this kind of net with knots. I also experimented with 100% reclaimed cotton knit fibre, which I filled in with recycled textile material before I started knotting. I like the result, as seen in Figure 15.



Figure 14: Knotting with Peruvian native cotton



Figure 15: Experimenting knotting with knit fibre

In the process of creation of khipu cords, I experimented with braiding. This pre-Hispanic technique makes very resistant cords that suits with the khipu concept in this research. I found out that there are different patterns in braiding. To make this tri-dimensional object, I use my fingers as tools, a hook on the wall to fix the other end. To interlace and



tight well the fibres, I create a strong cord, and I need my fingers, arms, and body movement to interact. Because this technique was new to me, I needed to pay extra attention on remembering well all the sequences my fingers have to follow for interlacing a specific pattern. This time, I blended Ontario non-spun alpaca with native Peruvian cotton fibre, representing the influence of two material cultures on me and khipu cords (Figure 16, Figure 17 and Figure 18).



Figure 16: Braiding Canadian alpaca and Peruvian native cotton



Figure 17: Use of fingers in braiding process



Figure 18: Completing braiding process

Continuing with my immersion in ancient textile techniques, I took part in free online workshops at national museums in Peru. Usually, at the beginning of each session, an archeologist delivered a historical context presentation on the theme to be developed, after that the workshop would be fully hands-on.

I realized the Museo de Arte de Lima (MALI) sessions on khipus were relevant to learn the latest research, such as the khipu digital database project (Medrano, 2021, pp. 103-142).<sup>35</sup> I complemented MALI sessions and literature review on khipus with an online workshop on making a khipu at the Museo de Sitio Arturo Jimenez Borja, Puruchuco.<sup>36</sup> It was an excellent opportunity to learn from the experts about making a khipu while

<sup>35</sup> See: <https://mali.pe/portfolio-item/khipus/#1616674849901-5e8086ce-271b>

<sup>36</sup> See: [https://museopuruchuco.negocio.site/?utm\\_source=gmb&utm\\_medium=referral](https://museopuruchuco.negocio.site/?utm_source=gmb&utm_medium=referral)

reflecting during the process. I twisted and braided my khipu cords as seen in Figure 19, Figure 20 and Figure 21. I used recycled fibre.



Figure 19: Making khipu main cord



Figure 20: Attaching pendant cords



Figure 21: My khipu recreation

As I mentioned above, in this research, my intention is to integrate Western and Andean knowledge, Canadian and Peruvian materials, to create khipu cords. I experimented with combining ancient textile structures, which were recreated with recycled fabric from the Textile Museum of Canada. I printed on the recycled fabric with Canadian leaves (Figure 22). From my research creation and design perspective, I like how materials from different spaces and cultural contexts relate and connect.



Figure 22: Combining Textile Printmaking with Ancient Textile Structure Recreations

During this research, I always thought “what I am learning about Peruvian history is different from what I learned at high school”, “why did I not learn how to weave?” and “why have I never thought about ancient textile techniques?”. I answered myself: “Hortensia, it is never late”. Here I was, in need of some guidance. I took some weaving online classes and, inspired by ancient iconography, I created a weaving piece made of native Peruvian cotton, of my own interpretation (Figure 23). I call this my learning process.



Figure 23: Exploring Weaving

Learning something new is challenging, but at the same time it generates curiosity and, in my case, engagement. This is the starting point for my learning process on weaving, I am discovering so many different forms to express myself through textiles. Peruvian ancient textiles are my inspiration, as they have been to other artists. I feel empowered learning this.

Most of the cords in my installation are handmade scarves made of alpaca. I use interlooping techniques as crochet and needle (Figure 24 and Figure 25). I learnt them since I was a child, although it could always be a complex task depending on what has to be accomplished, either complex patterns or large pieces. I created these structures because they represent in some way who I am and what I know.



Figure 24: Knitting



Figure 25: Interlooping – Knitting Scarf

Another reason to make alpaca scarves is that they can be recycled and worn and continue to be alive not just in the installation but after it ends. In a sense, for me scarves are metaphorically live entities that protect and take care of us, according to the live fibre concept by Espejo and Arnold and with the agency or vibrant matter concept from Bennett.

During the installation, a video about my creative process will play to share my learning experience in making khipu cords. It is important for me to show this process to the audience of this remarkable journey.

Finally, during my graduate program at OCAD University, I have been experimenting with sound pressure sensors and LED technology. The idea was that when somebody speaks at certain sound level, a written message made with LED lights is activated. I plan to present a similar idea in my installation, but this time instead of LED lights an audio will play. The sound pressure, of a human voice for example, is captured by an Arduino board that sends a message to a Raspberry Pi 4B device, which plays an audio –in this case alpaca humming– through a connected speaker. The threshold to activate the audio is set in code to “detect” sound at a reasonable distance and volume.

My plan is to place the Arduino board in some of the knots of my installation, so when a visitor speaks at certain voice level and distance from the knot, the alpaca humming plays. I find relevant the interactivity produced between sound pressure and the humming audio that mimics alpaca voice in my installation and when a visitor speaks close to the knot where the Arduino card is hidden, the alpaca responds to the visitor’s voice. Sometimes during my installation, I can be close to the knot and “talk” to the alpaca, so she answers with a hum, and I respond like in a conversation. It metaphorically represents the concept of live fibre, vibrant matter and that we are all interconnected. In part, sound interactivity makes alive the myth that weaver and alpaca herders, including the Inka king himself, sing to a camelid, llama as described by Guamán Poma cited by Huhle (2014, pp. 16). Why not to an alpaca?<sup>37</sup>

A personal reflection is how alpaca animals, Peruvian native cotton, khipus, and ancient textile techniques resisted colonialism. They survived, they were strong, and they are still alive. I want to preserve this history in my installation.

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<sup>37</sup> During the exhibition setup there was a problem with the audio, and I decided to take this piece out of the exhibition, because I did not have enough time to troubleshoot. I think if I were working onsite this would have never happened. In part the COVID-19 pandemic did not allow me for more onsite testing, I worked from home and when testing at home with my own speaker, it worked well; but I think something may have gone wrong when I connected the Raspberry Pi 4B to the speakers provided for the exhibition.



Figure 26 and Figure 27 are examples of some of the pieces to be presented in my installation. Those are photos at my home studio, but at the gallery they will be hanging from the ceiling. For my installation blueprint, see Appendix A.



Figure 26: Exploring Different Textile Structures



Figure 27: Exploring Knots and Cords



## EXHIBITION

*More than Knots and Cords* was an exhibition at OCAD University's Graduate Gallery, at 205 Richmond Street West, from April 26<sup>th</sup> to April 29<sup>th</sup>, 2022.

In my exhibition, I presented ten khipus, nine of them were hanging from the ceiling except one that was displayed on a wall (see Appendix B). Two videos were played on the gallery walls (see Appendix C), opposite to each other. The knots in my metaphorical khipu cords symbolized the tension and pact I have experienced doing this research creation process.

The first set of videos played in my exhibition was about my research creation process, to show the audience how my learning experience was, my making and thinking through making. My making process was an important part of my research, I spent considerable amount of time learning and relearning new textile structures, as I made and remade many of them. I found that bringing the research creation, experimentation and making process into the gallery I could share my labour and interaction with the alpaca material with visitors. The video was also important for viewers to understand better how the making process was part of my thinking to make the khipu cords exhibited at the gallery.

Inspired in the findings during my research I wrote a poem about the alpaca from the Andes. The poem was read by me in Spanish, my mother tongue, with subtitles in English. I created a video with a story line based on the poem. Most of the illustrations played in the video were drawn by me, except three illustrations by Huamán Poma de Ayala (2015). The intention of the video was to explain viewers the idea of alpaca as a live material and how this relates to the Andean cosmovision, and how interconnected we all are. Images in the video illustrate the part of the poem I was reading.

These videos addressed a narrative related to the exhibition. They are engaging and approachable, they could be understood by the broad public, including children. They are pedagogical, which made them suitable for a gallery in an educational institution.



The exhibition is a reflection of who I am, it symbolizes my background as a designer, artist and educator.



Figure 28: *More than Knots and Cords*  
Hortensia Reyes, exhibition from April 26 – April 29, 2022, OCAD U, Graduate Gallery

The documentation of my exhibition is in the Appendix B. All pictures were taken by me.

## CONCLUSIONS

In this installation, inspired by khipus, alpaca fibre and textiles from the Andes, I tried to place the fibre medium to art. Coming from a colonized society, the idea of ancestral generates conflict on how to incorporate it, since it is not part of the hegemonic narrative, especially because the Andean textile art is very important in Peru.

I am engaged with alpaca fibre because of its beauty, and I use it in my designs. Currently, alpacas live in the Andean highlands, but in pre-Hispanic times they were raised at the coast too, colonization changed their habitat. There is a strong social, economic, cultural relationship between alpaca animals, its herders and community. It seems this relationship was built in ancient times.

As I have tried to show that the knots can represent a pact or agreement, I also want to state that the knots in the installation can symbolize a tension between colonization and decolonization, my past and present, traditional and contemporary. Although during this journey I untied some knots, there are still many knots left that need to be untied.

The metaphor tool in my research creation are knots, I refer to knots as a metaphor for tension. Through working with the knots, I realized that they became my decolonization metaphor. While I was engaged in exploring the alpaca materiality and recreating ancient Peruvian textile structures, I connected to my roots in Peru from Canada. Decolonizing the knowledge which I had learnt at school has created a tension between the Western knowledge, which I thought was certain, and the revised deconstructed knowledge of Peruvian history, which I have relearnt in this research. Thus, khipus are my decolonizing metaphor that is visible on the knots in the *More than Knots and Cords* exhibition. In the same way, when I learnt about Andean cosmovision, I learnt a theory of decolonization that made me rethink the world in a holistic manner.

Another tension that knots symbolize could be bringing artisanal alpaca fibre –labeled as folkloric, raw, and non-contemporary– to a contemporary art gallery. I state that by bringing this material into a contemporary gallery do not only create tension but a pact

that can bring past and present together. From my experience working as a designer in the fashion industry, this artisanal alpaca material is placed in the category of folkloric and not trendy, but I do not agree with this view. This is the reason I have created some cords made of artisanal alpaca fibre that were presented in the *More than Knots and Cords* exhibition to generate discussion.

Knots also symbolize pact in my exhibition. When I worked with materials from different spaces, like Peru and Canada, I blended and mixed these distinct materials to create cords and knots which hold cultural meanings. My aim is to show that different times and spaces can converge through those knots, and that textile structures made with these materials can be art, craft, and design altogether. This pact symbolizes the cultures that influenced my research creation: the Canadian and Peruvian cultures. I recognize myself as the symbiosis of those.

Learning about pre-Hispanic textile techniques, khipus, and Andean cosmovision is an act of resistance not to forget, or better to rediscover my roots through thinking and making. I found that many different Andean textile techniques have been discriminated and forgotten because of colonialism. It was thanks to communities that lived far away from important cities that some techniques, memories, and traditions have survived. I want to be sure to remember them, because they are a very important part of history, of my cultural past.

It was interesting to find some commonalities between Western views, such as the Systems View of Life and Circularity theories, and the Andean perspective regarding materiality. They do not have the human at the centre and humans are not the only active matter, but all objects have agency. In the Andean cosmovision, all identities are interconnected, this vision is shared by the systems view of life theory. Moreover, the concept of animated entities in pre-Hispanic Andean cultures has opened ways to new research, like Bray's article (2009) that explores new ways of thinking regarding existence of new ontologies, based on the Andean cosmovision. I do not know if this is a new trend in research or a new way of thinking about material, but I find very interesting how the world views of some Western theoretical frameworks and the

ancient Andean cosmovision are approaching in a kind of circularity. It seems to me that the Andean cosmovision is becoming trendy and contemporary now.

Alpaca is a precious and valuable fibre that consciously I do not want to waste. This is the reason why some cords created during my research-creation are also alpaca scarves, which are perfectly wearable pieces that will continue to be live entities after the exhibition ends keeping connectivity between them and whoever wears them. Making scarf-cords appeals to my personal approach to deconstruct a line between what is art, what is design and what is craft, a dichotomy in which I do not believe. I am conscious this is a big topic that intersects many concepts, a question that does not have a single answer.

Doing my research, I hear a khipu telling me "I am alive, because my cords are made of live fibre, it is a vibrant matter fibre". As my ancestors made quipus through torsion, weaving, knotting threads to register their stories, I want to imagine that through its knots and cords my khipu is talking to me, it is bringing memories, traditions of a cultural past to my present while spreading care to others through its cords made of alpaca scarves.

As a fashion designer, I try to be responsible in fashion, in the sense of using natural materials and minimizing waste. As an artist, I want to keep having the same practice and responsibility, plus I grew up being conscious about waste, I was told not to waste. The concept of recycling material is a very important component in my work.

Another intention in this research creation is that viewers reflect on what is behind the alpaca material, so they could appreciate the intrinsic value on it, like the labour that is placed by Andean alpaca herders when raising them, as well as the manual spinning involved when producing alpaca fibre following traditional practices in its production, which are sustainable and ethical. This "invisible" value is usually ignored or diminished in consumers' societies.

Reflecting on the above, I could say artisanal alpaca fibre is a live fibre that, although produced with traditional and ancestral methods, is very contemporary and what is

made with it is contemporary as well. It is possible to integrate a traditional material in a contemporary art installation; both have shared well the space in my installation. For this reason, I would argue that tradition is contemporary. I would like to explore this concept in the future.

I consider the videos played an educational role in the exhibition. While the alpaca video addressed the Andean cosmovision and engaged viewers complementing the exhibition meaning with a holistic approach, in the other videos I shared with viewers my research creation process and experimentation. I consider the labour invested on making khipu cords was a very important part of my research and I needed to bring this to the exhibition.

There are some topics that I did not fully discuss due to the scope of this project, but I would like to explore more. I am interested in studying the connection between Ontario alpaca farmers, makers, and designers; it will be very interesting to have a circle of makers, artists, and alpaca farmers to create and promote common interests. I am also interested in further research about cosmovision, myths and legends as a source of inspiration to make art related to a new materialism perspective and new ontologies, like the Andean cosmovision described by Tamara Bray.

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# APPENDIX A: Proposed Distribution Plan

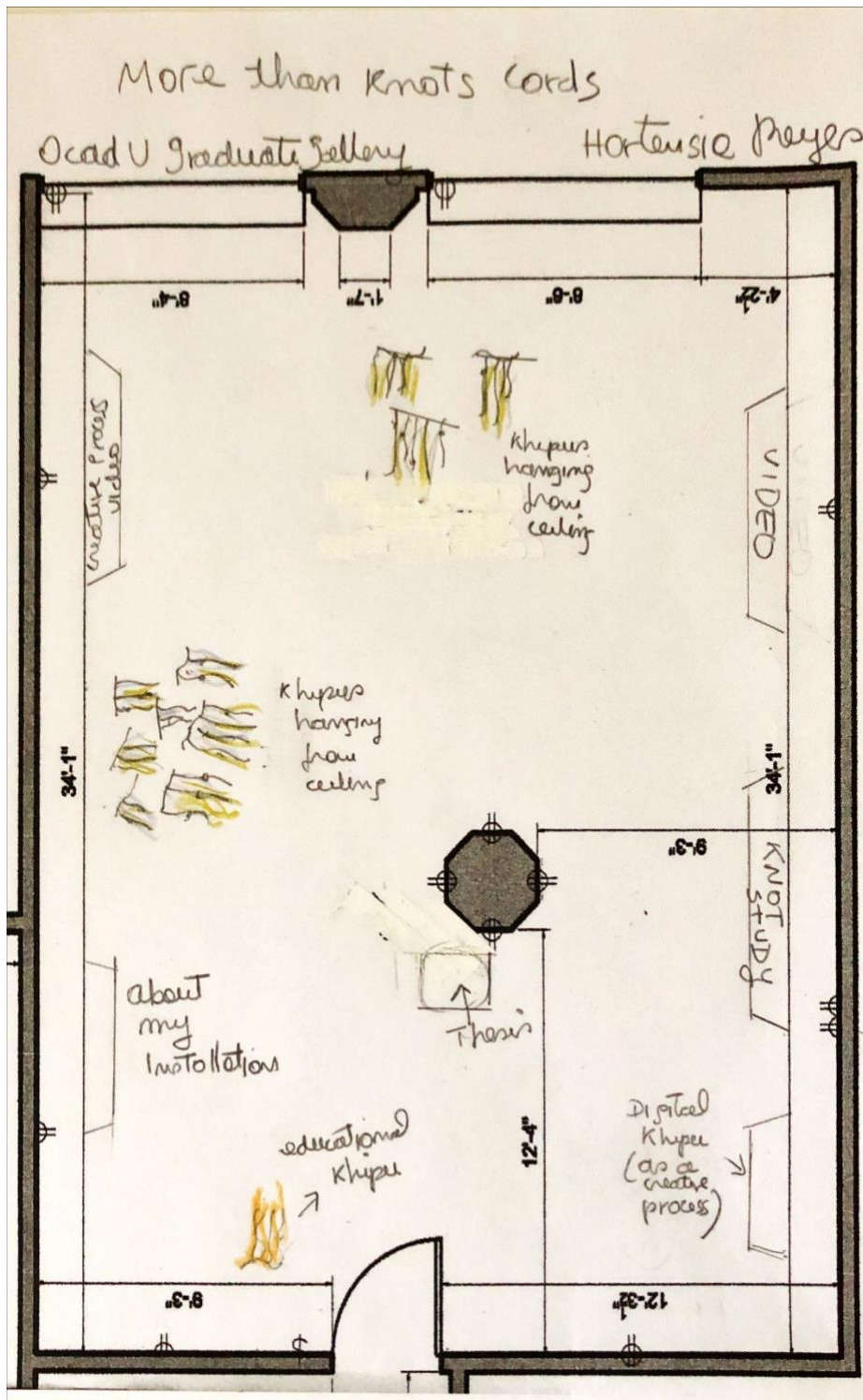


Figure 29: Installation blueprint

## APPENDIX B: More than Knots and Cords Exhibition

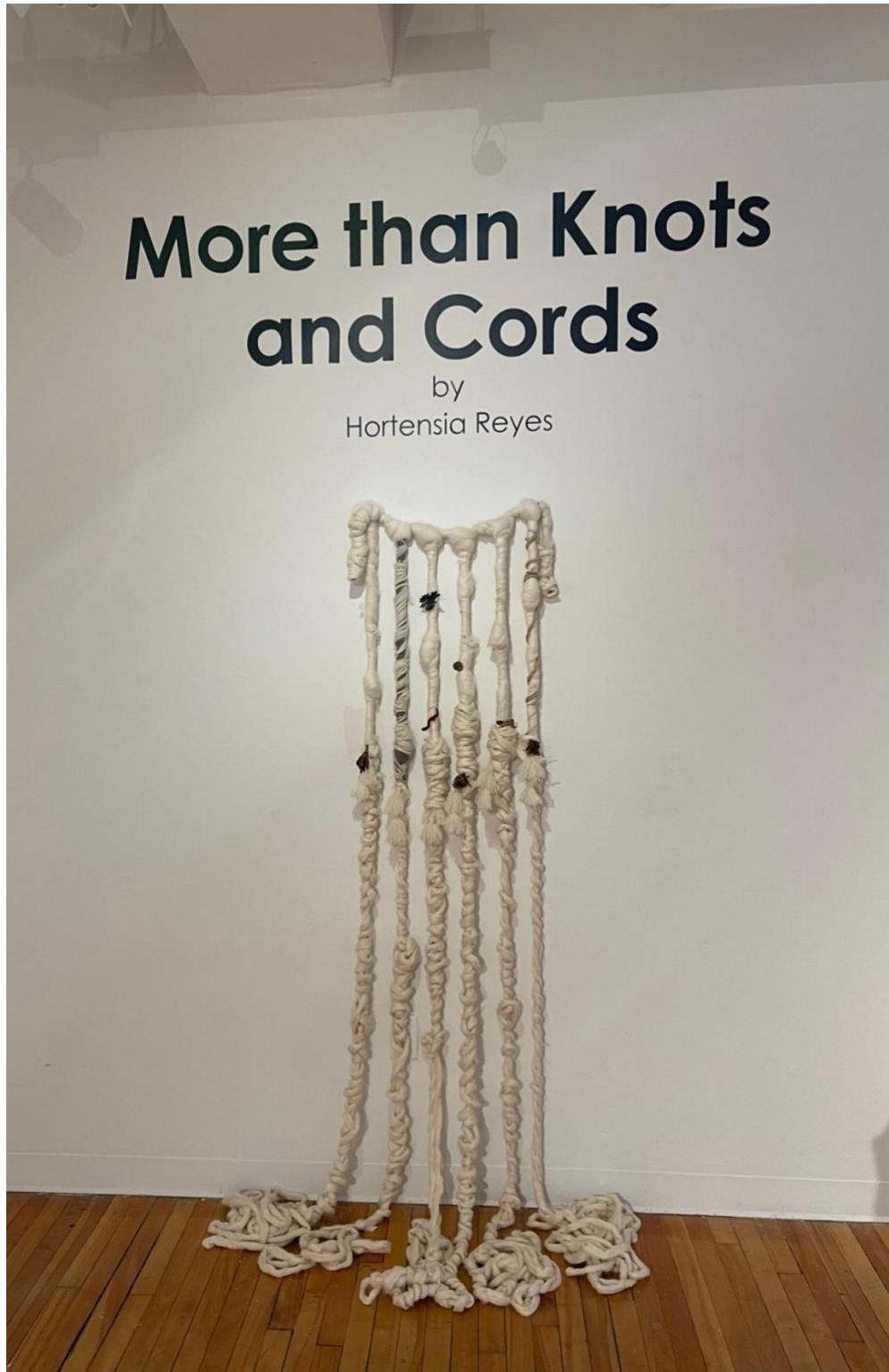


Figure 30: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton fibre, OCAD U, Graduate Gallery, 2022





Figure 31: *More than Knots and Cords*  
Hortensia Reyes, exhibition / setting up, OCAD U, Graduate Gallery, 2022



Figure 32: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton, recycled textile material, 2022



Figure 33: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton / recycled textile yarn, 2022





Figure 34: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton / recycled textile/ video projection / alpaca poem, 2022



Figure 35: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton / recycled textile/video projection/, 2022



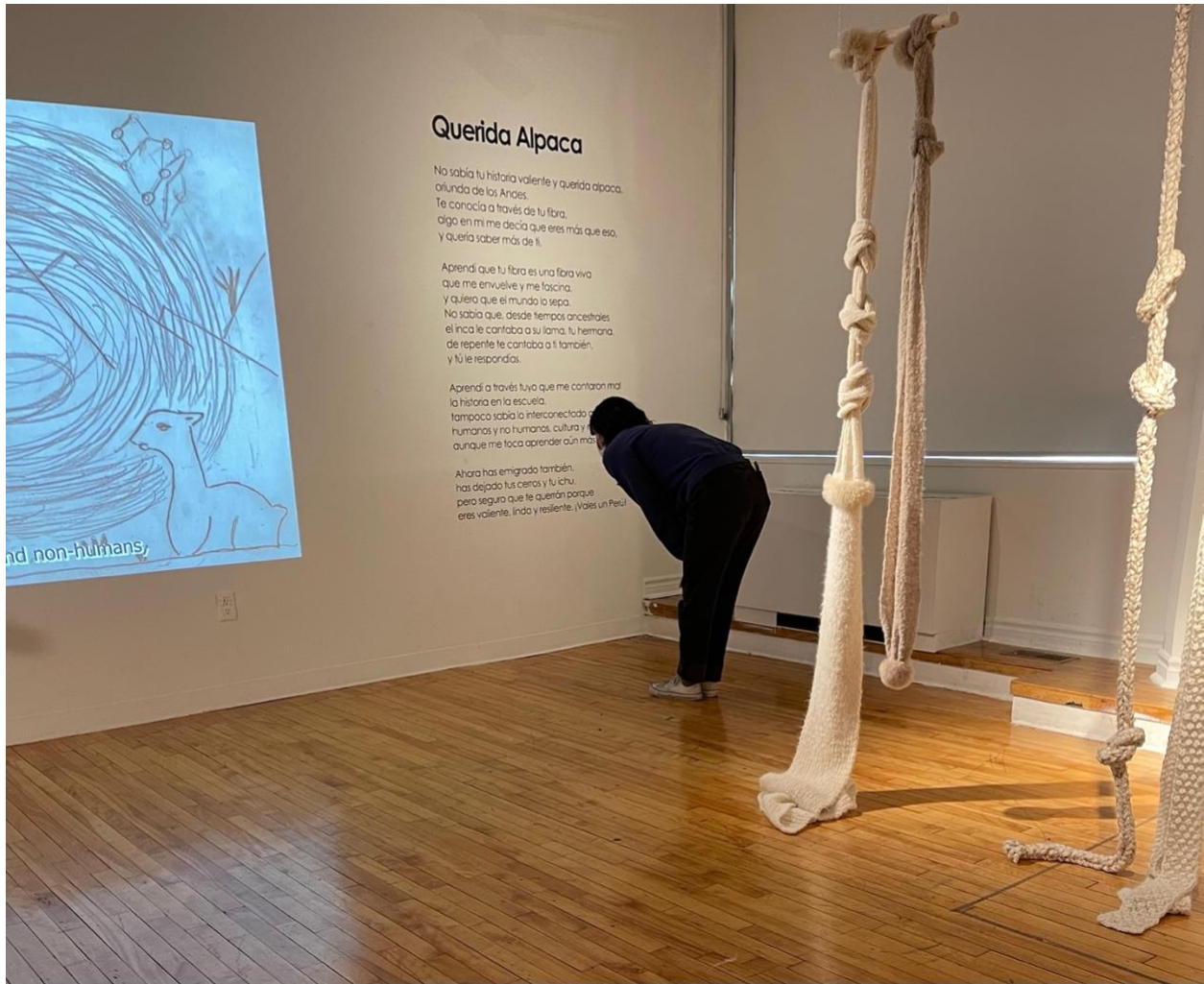


Figure 36: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton /recycled textile/video projection / 2022

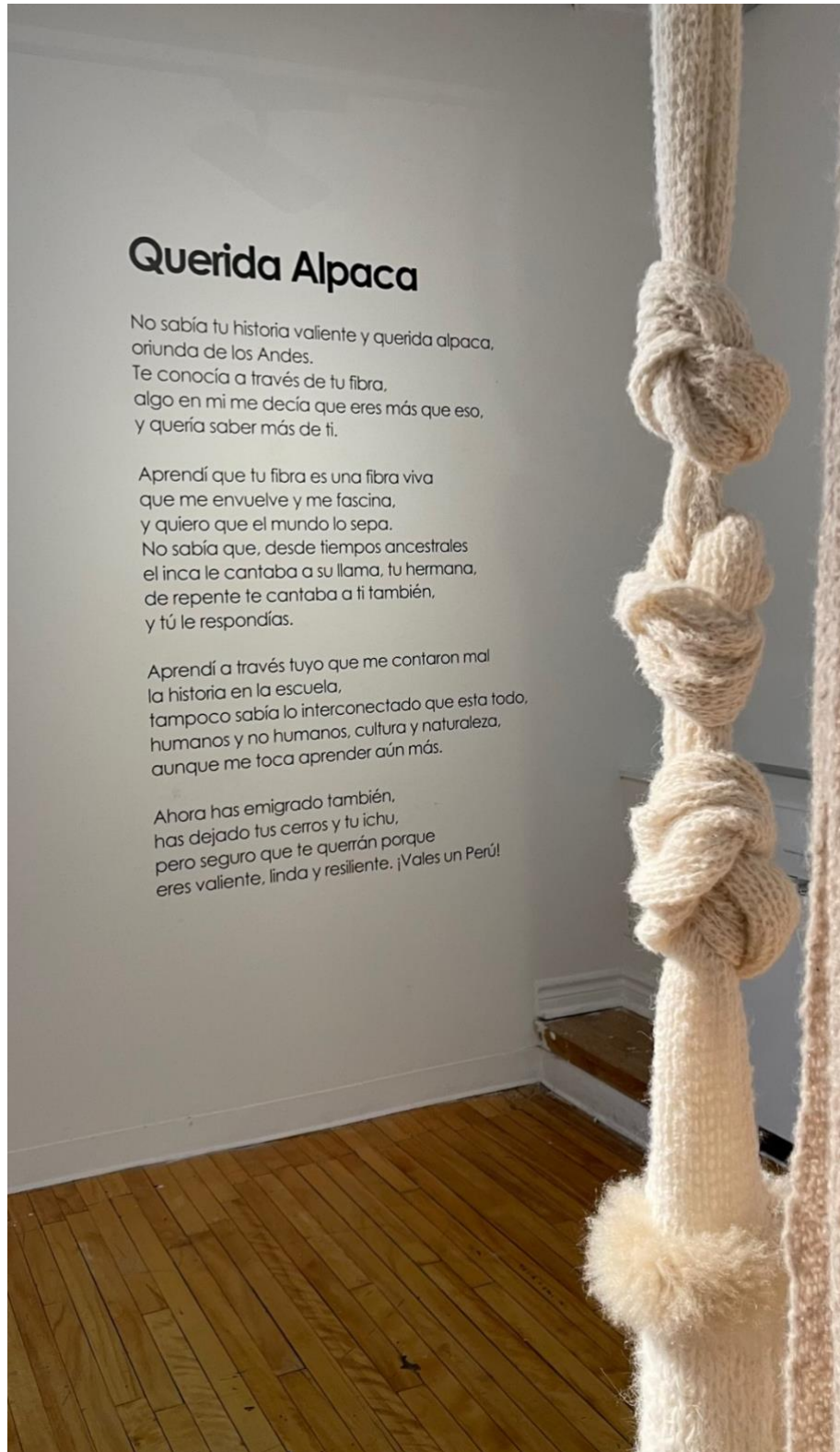


Figure 37: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton / alpaca poem, 2022





Figure 38: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton / recycled material / video projection, 2022



Figure 39: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian alpaca and cotton, 2022





Figure 40: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian cotton, Canadian alpaca fibre, 2022



Figure 41: *More than Knots and Cords*  
Hortensia Reyes, exhibition from April 26 – April 29, 2022, OCAD U, Graduate Gallery





Figure 42: *More than Knots and Cords*  
Hortensia Reyes, exhibition from April 26 – April 29, 2022, OCAD U, Graduate Gallery



Figure 43: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Canadian and Peruvian alpaca fibre/ Peruvian cotton, 2022



Figure 44: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Canadian alpaca fibre / Peruvian cotton fibre, 2022





Figure 45: *More than Knots and Cords*  
Hortensia Reyes, exhibition from April 26 – April 29, 2022, OCAD U, Graduate Gallery



Figure 46: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian cotton / recycled textile / printmaking, 2022



Figure 47: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian cotton / recycled textile / printmaking, 2022





Figure 48: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian cotton fibre / recycled fibre / printmaking, 2022



Figure 49: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Peruvian cotton / recycled textile / printmaking / broken oak sticks, 2022



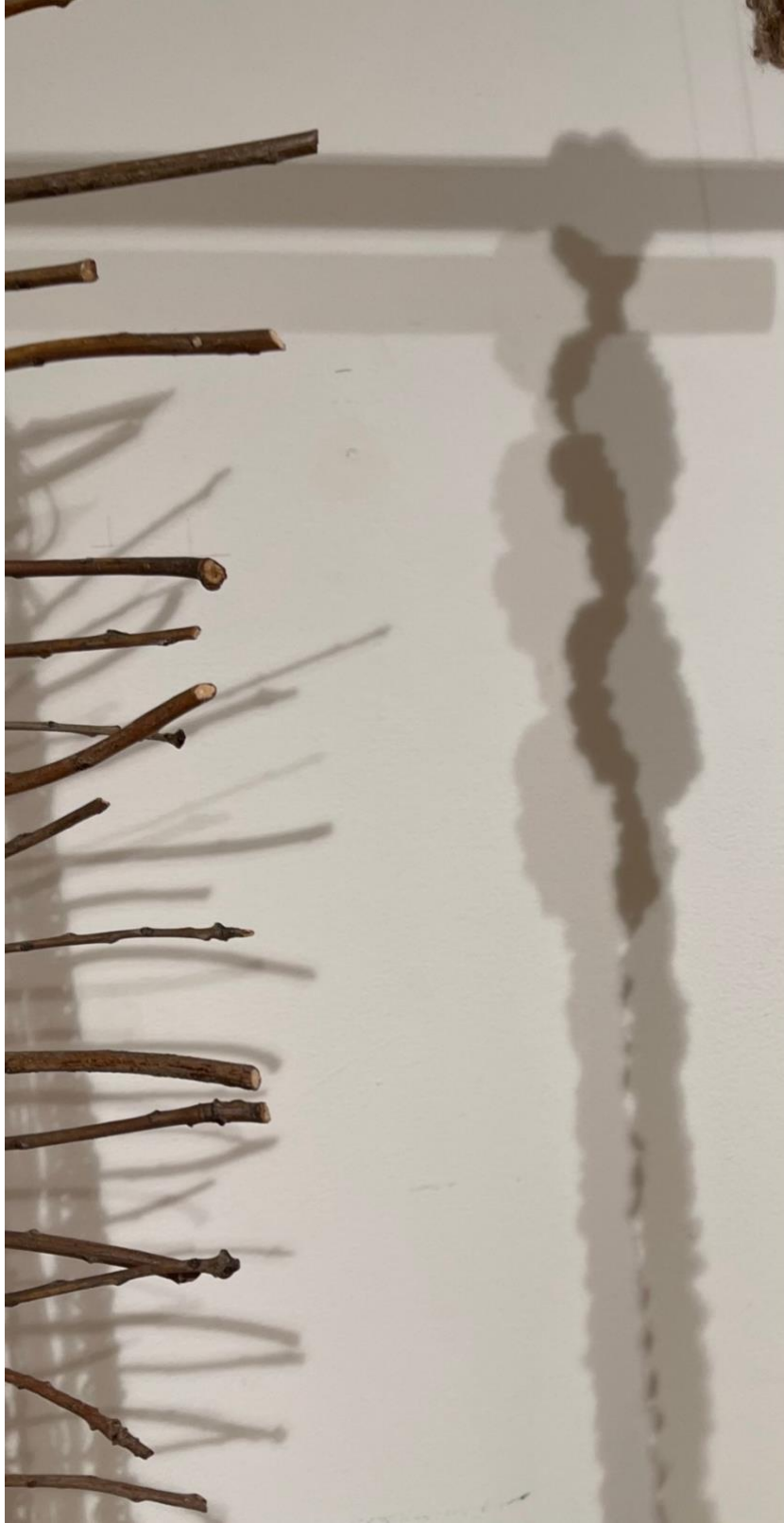


Figure 50: *More than Knots and Cords*  
Hortensia Reyes, exhibition from April 26 – April 29, 2022, OCAD U, Graduate Gallery

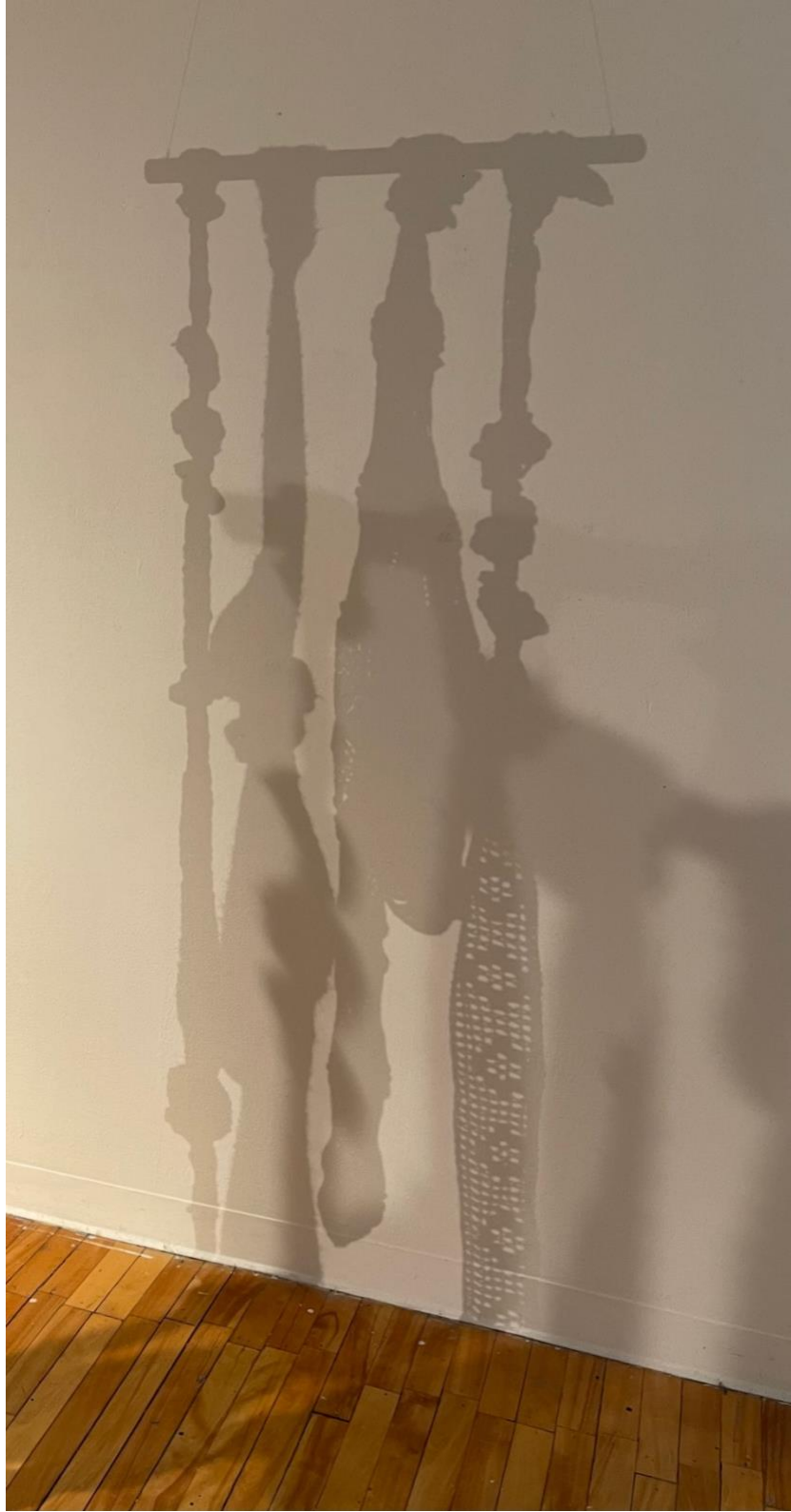


Figure 51: *More than Knots and Cords*  
Hortensia Reyes, exhibition from April 26 – April 29, 2022, OCAD U, Graduate Gallery



Figure 52: *More than Knots and Cords*  
Hortensia Reyes, exhibition / printmaking on recycled cotton fabric, 2022





Figure 53: *More than Knots and Cords*  
Hortensia Reyes, exhibition / Canadian and Peruvian alpaca fibre, 2022

## APPENDIX C: Videos at the *More than Knots and Cords* Exhibition

### ***Creative Process 1 of 2.mp4***

More than Knots and Cords Research Creation Process, part 1 of 2. April 25, 2022

### ***Creative Process 2 of 2.mp4***

More than Knots and Cords Research Creation Process, part 2 of 2. April 25, 2022

### ***Alpaca Poem.mp4***

Poem on Alpaca and Andean Cosmovision, April 25, 2022