Stranded Colorwork

Meaning-making through experimental knitting practices

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Stranded Colorwork:
Meaning-making through experimental knitting practices

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Abstract

Knitting is a common and long-established craft practice. Despite the expressive potential inherent to knitting it has been generally overlooked due to its everydayness. This is problematic because it ignores the agency and skill of its practitioners and limits its creative scope. This thesis presents knitting as a profound practice deserving of critical engagement and welcoming of creative experimentation. To facilitate this shift in perception I suggest an expanded conception of function to amend traditional understandings of knitting and take the craft forward.

The function I turn toward is of a more poetic nature: storytelling. Through representational depictions of everyday life, I explore fleeting moments between comfort and discomfort, and critically reflect on how the narrative is bolstered by the technique it is told with. In the process I focus on three elements that I determined to be central to knitting: in/visibility, tension, and repetition.

Through a theoretical review of knitting, this thesis discusses its historical position as a folk craft existing in the domestic realm. I highlight its relation to care and therapy, and how the practice provides a powerful method for introspective work through the comfort of repetition. Part of this power comes from the opportunity to confront failure at a low threshold, as people who knit know of its potential energy of undoing, the possibility of unravelling inherent to the craft. Through the concept of becoming, I consider the reconfigurability of knitting as its continuously changing position in a flux between yarn and fabric. From a poetic perspective, this thesis presents the basic looped structure as a symbol of personal history, an entangled system of individual and collective.

Following a practice-led research approach I knit stories and experiment with the stitch structure to develop a new sense of aesthetic expression in machine knitting. To do this I focus on the process of making and explore the idea of repetition. Documentation is carried out through photographs and diaries, in the form of text as well as a hand-knit scarf. The making process led up to and was contextualized by an exhibition of machine-knit artifacts.

The examinations on the project proposed the concepts of ‘knittedness’ and ‘pixelness’ as vehicles for expression. Knittedness refers to the entanglement of the work with its process, as well as a way to visualize the world around us. Pixelness describes the stitches inherent to knitting and the notion of creative problem-solving born out of this technical limitation. Through these ideas, the expressivity of knitting appears in unexpected and poignant ways.

Keywords knitting, storytelling, craft, repetition, becoming
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1. Introduction

Knitting, at its most basic, is a practice of looping one yarn repeatedly with itself to create fabric. A simple and highly approachable craft due to its accessible materials and instruction. And yet, what if it is not so simple? What happens if we start to dissect the meaning of the loops, and the hands that loop? What if we ask, what does it really mean to knit? By studying the practice and structure of knitting from a philosophical perspective, I hope to shed light on its often-overlooked power of expression. This is important because there is an unjustified perception of knitting as mindless labor, which denigrates the agency and skill of its practitioners.

The accustomed inattention to the practice is problematic in that it continues a tradition of invisible work often done by women in craft, supports a historical hierarchy of certain art forms over others, and ultimately limits its scope as a creative medium. By presenting new ways to engage with knitting my project aims to celebrate the power of craft and lessen the divide between elite and artisan.

Knitting is a sustainable and rewarding creative practice bolstered by its established relation to mental health. The repetitive process provides comfort and moments for reflection. While a largely solitary activity, it can also provide a source of community. In joining a network of makers, knitting brings people together.

This thesis approaches knitting as a craft practice as well as a “social (craft) practice” deeply entwined with culture and influenced by the people and perceptions around it (Arantes, 2020a, p. 202). Theory and practice inform each other throughout this work, and the creative production happens simultaneously with literature review and writing. I dive deep into the nature of the craft and present new theoretical connections to highlight knitting as a complex endeavor, one that crafts us as much as we craft it.

I identified three central elements of knitting: in/visibility, repetition, and tension. By focusing on these elements throughout the theoretical and creative practice I make work that is not just knit, but about knitting.
The commonplace nature of knitting, combined with the three central elements, informed the content of the creative work: telling stories of people living fleeting everyday moments. Storytelling is an important part of my artistic practice, but I am not interested in explicitly illustrating stories. Rather, presenting narrative as something to be hinted at, questioned, highly prone to subjective viewing. Whereas knitting resides in a state of becoming between yarn and fabric, ambiguous narrative occupies a similarly unstable space of subjective understanding. The concept of becoming referenced in this thesis comes from the work of philosopher Gilles Deleuze and psychoanalyst Félix Guattari (1987), who present it as a process of active influence between beings, things, systems. It is always in the midst of happening, without beginning or end.

1.1 Beginnings

I have never been a particularly enthusiastic hand knitter, before this thesis my skill level never progressed beyond purl stitch rectangles (in layman’s terms: easiest possible). But while I was studying for my bachelor’s degree in textiles at the Rhode Island School of Design I was introduced to the domestic knitting machine. This way of working immediately made more sense to me and presented infinite possibilities for experimentation.

My machine-knitting practice was stalled following the completion of my studies, when I no longer had access to a machine. It was not until two years later, in 2018, when I moved to Helsinki and bought one secondhand. However, the practice did not take off as smoothly as I had hoped. My real reconnection to the machine happened two years after that, facilitated by the exceptional circumstances of the covid-19 pandemic.

Spending so much time at home all of a sudden due to restrictions from the pandemic, I was reintroduced to my knitting machine, which had previously sat in a corner collecting dust while I was busy with schoolwork. It seemed to stare at me, waiting. Finally, I gave in. I quickly remembered how much I enjoy knitting on the machine, and my other thesis ideas evaporated. Since I have had the knitting machine there have been many techniques that I have wanted to try out. However, there has been some kind of artistic block due to the lack of clarity of the end result. I always had it in mind that I should be making functional things on the machine:
socks, sweaters, hats. But my artistic ambitions seemed to butt heads with function. So, for a time I stopped using the machine altogether. It felt impossible to divorce my expectations of what knitting is from what it could be. Function, in my mind, limited the experimental and expressive potential of the craft, and yet I did not know how to work without it. Now, by deliberately leaving it behind, I opened the door to pure creativity. This suggests a larger question: what is made possible when function is irrelevant? Or, perhaps, when the scope of function is reconsidered, and expanded. Following this notion, it was my utilitarian perspective of function that previously impeded my practice. Since knitting is generally tied to function according to its capacity to be used, in most cases, worn, it requires a whole new correspondence when user becomes observer. The criteria for function shifts from that of fit, comfort, warmth and into more abstract ideas of success.

1.2 Context

Following the reflections that emerged from working with machine knitting, I decided to construct the thesis project with studies in knitting. This thesis, then, comes from the natural confluence of two processes that I have engaged in separately for several years: fiber art and storytelling. I believe they are intrinsically tied to one another, and one objective is to clarify how.

The practical portion of this thesis is based on knitting, specifically machine knitting, and the idea that it can be used to create experimental, meaningful, artworks outside of the realm of what is generally thought of when we think of knitting. Work along these lines, as well as discussions about textile crafts in general and their utilitarian and artistic functions, have appeared in the fine art world with greater frequency in recent history, but I believe there is still much work to be done in order to take the knit craft further.

This thesis specifically focuses on the potential of knitting as a vehicle for storytelling. I highlight how this process adds expression and conceptual depth to narrative. Since knitting is a highly technical craft historically framed by function and hobby, intuitive and/or experimental engagement with the medium has been limited. I fill this gap through practice: making alternatively functional works (functions that are not utilitarian such as garments but functions that are expressive and reflective), experimenting with nontraditional techniques, and infusing knitting with storytelling, as well as through theory: studying the philosophical implications of the practice of knitting and reflecting critically on the process and the work.

Around the same time that I was reintroduced to my knitting machine, quilt maker Rosie Lee Tompkins became an overnight sensation
with a retrospective at the Berkley Art Museum and Pacific Film Archive (Figure 1). The praise of her work in publications such as the New York Times was tremendous, and deserved, yet riddled with problematic notions of the superiority of art over craft. Instead of celebrating the work as powerful in its own right, critics spurned the practice of quilt making, claiming that Tompkins’ quilts transcend craft and have ‘the power of painting’ (Smith, 2020). This veneration of painting is unsurprising considering the hierarchy of the idea in contemporary art, and the concept of transcendence comes up often in discussions of craft vs. art. In order for craft to be valued in the same way as fine art it must transcend, and not be craft anymore.

Instead of approaching the loaded discourse on art vs. craft in this thesis, I will consider a shift in functionality as the difference between artifacts. Considering the long utilitarian history of craft and how its role has changed over time through structural industrial changes, the need for a perceptual repositioning comes as no surprise. Without quite becoming art practice, craft is changing its function from the domain of necessity to manifold purposes including but not limited to self-expression, beauty, and wellbeing. I look at knitting as a traditionally functional craft practice and map what happens when storytelling becomes the primary function.
1.3 Research questions and objectives

The overarching objectives of this thesis are to study and practice knitting from a theoretical perspective, uncover its creative potential as an expressive medium, and present new ways to engage with the craft that depart from tradition.

As a practice deeply embedded in culture as well as reliant on learned technical proficiency, research is heavily influenced by and dependent on preconceived notions of knitting. To properly align the work in its context I have the following as an overarching research question:

How do social and technical aspects influence the expressivity of knitting?

To create a more focused discussion elucidated through creative practice, this work analyzes the relationship between knitting and storytelling and presents their combined power for meaning-making. By meaning-making, I refer to the process of interpretation, of making sense, of ideas, themes, realities. The application of personal experience to understand life through inward processing and outward expression. To create a nuanced visual language specific to knitting within this idea of storytelling, the project looks to repetition in action and aesthetic. In order to guide this creative exploration, I ask the following as my sub-research questions:

How can knitting techniques be utilized for storytelling?

How can the inherent repetition of knitting be explored visually?

1.4 Structure

This thesis is structured in 5 chapters. After introducing the main ideas and motives in chapter 1, in chapter 2 I will present the theory surrounding knitting as social phenomenon and craft practice. In chapter 3 the methodology employed in this thesis, practice-led research, will be expanded on in its scope and adaptation to this specific project. In chapter 4 I will outline my creative process and all the elements that participated in it. And in chapter 5 the work will be reflected on and contextualized in the field of art and design.
2. Theory

Knitting as a craft practice has been studied from various angles in fields such as anthropology, psychology, and pedagogy, often through the lens of feminist theory. Researching knitting and ethnography, Lydia Maria Arantes (2020a, p. 202) argues that knitting is not solely a craft practice subject to the flow of materials, but a “social (craft) practice,” greatly influenced by history, economy, and most of all gender.

Since the theoretical review for this thesis was wide-ranging in its scope, spanning from folklore as historical context to the reconfigurable creativity inherent to knitting, I have separated it into two sections. 2.1 A review of knitting, approaches the practice from a social and cultural perspective, focusing on the history of the craft and the relationships that its practitioners have with it. 2.2 The process of making, studies knitting from a material and making perspective, focusing on the behavior of the yarn, the technical qualities of the process, and how they suggest a poetic practice.

2.1 A review of knitting

Knitting is deeply embedded in the context of craft within culture. At a larger scale, the context is folklore, and the meandering path of craft through history. Folklore, simply put, is the stories we tell about ourselves. We, and ourselves, referring not to us as individuals but as parts of communities. And the way we tell these stories is not only verbally, but through our actions and our artifacts. There is an informality to folklore, it is not about exceptional people or events, but rather about everyone, every day. Within folklore, knitting is an example of both customary lore, our actions, and material lore, our artifacts (Wilson, 2006). In part, in this thesis, I play the role of folklorist, focusing on an overlooked aspect of culture and bringing it to the attention of the ‘elite’ (Torell & Palmskold, 2010). My role is, however, much more complex, as I will also be adding to the creation of folklore and questioning the hierarchy it resides in. The notion of the overlooked, presented by this description of a folklorist, is interesting because it suggests a level of invisibility. How can something as popular and everyday as knitting, for example, be invisible? Perhaps precisely because of its regularity. When something is seen repeatedly it becomes unseen, unremarkable, part of the backdrop of life.

The historical gendering of knitting has led to the notion of ‘women’s folklore’ which focuses on the private/domestic realm over the public (Ingram et al., 2019). Operating within the domestic realm promises comfort and community, a contextualization within the long history of mostly female makers. However, it is not without limitations.
Just as everydayness undermines the potential poignancy of knitting and precludes it from deserved attention, the confinement of the craft to the home/domestic spaces does so even more. Relief can be found in breaking these established connotations, keeping the aspects that serve the maker but doing away with those imposed by hierarchy. Psychoanalyst and art historian Roszika Parker’s liminal 1984 book ‘The Subversive Stitch’ outlines the entwined history of embroidery and femininity, leading up to the feminist reclamation of the craft in the 1970’s. Contemporary feminist art has added greatly to the catalogue of fiber art through these processes of reclamation and subversion. Knitting, however, has been somewhat slow to join.

The number of artists using knitting as their creative practice is not high. Among the small community, Lisa Anne Auerbach is one that I find inspiring as an artist myself. Her work is done primarily on a digital knitting machine. She is perhaps best known for her politically charged sweaters, but I was immediately taken by her flat pieces stretched onto canvas (Figure 2). Similar to my work, they present knitting and its capacity for mark making as a process as valid for expression as any other.

![Figure 2: ‘Summer Advice’, Lisa Anne Auerbach, 2011. Knit from wool and sewn onto stretched linen. Lisa Anne Auerbach.](image)

In this series by Auerbach the act of knitting is entangled with care and preservation. Flippant resolutions are immortalized through labor,
ascribing value to what is otherwise quickly forgotten. I am inspired by the juxtapositions inherent in the work: barbed wire and traditional knit patterning, new and old, soft and hard, care and recklessness.

The act of assigning value and laborious care to that which might otherwise be overlooked is part of a feminist politics of care. Working between feminist theory and environmental humanities, María Puig de la Bellacasa (2015) brings this politics to ecological sustainability and highlights the growing need for its ideas of maintenance and reproduction over novel production. This thesis takes inspiration from these concepts and is deeply embedded in them already by virtue of the context of fiber arts. Knitting, specifically, is in many ways already a part of the conversation on care and maintenance.

Craft in general is often lauded for its therapeutic benefits, its hands-on method of self-care. Upon researching the connection between knitting and therapy, I came across a quote from the highly influential knitting teacher and writer Elizabeth Zimmermann (1971, p. 2), “Properly practiced, knitting soothes the troubled spirit, and it doesn’t hurt the untroubled spirit either.” I was immediately struck by this inherent relation of knitting and misfortune. Before starting my research, I had only considered the positive aspects of knitting, the comfort in making and end product, the momentary respite from the world. But the realization of this connection between knitting and troubled spirits led me to ask the following questions: does looking for comfort imply discomfort elsewhere? Is there an inherent escapism in craft?

Perhaps in contrast to the notion of escapism, one reason for the value of craft in therapy is that the work compels its practitioners to dwell in their frustration (Buchczyk, 2020). Whether it be uncertainty in one’s life, from chaos or hardship, or uncertainty in the craft itself, from mistakes or learning something new, craft requires presence in confronting uncertainty. It requires deliberation. For example, dwelling on mistakes made while knitting presents meaningful moments of confrontation. First, the realization that a mistake has been made, and then the decision to continue on in spite of it or turn back and fix it. Through knitting, failure is presented as a state which can be undone. Yarn can be unraveled and still prove useful.

While the process is certainly not always full of discomfort or emotional labor, it would not be so popular if it was, craft presents a powerful and approachable tool to confront the uncomfortable. Perhaps as the practice of knitting creates opportunities to dwell in hardship, it also builds patience and understanding. Could this translate from knitter to knit? Might the stretch of a knit fabric teach us about forgiveness?
2.2 The process of making

The same technical quality that allows a knit fabric to stretch also creates a potential energy of undoing. If one segment of yarn breaks, or an active yarn slips out of its loop, the entire system is prone to collapse. Each stitch is dependent on the stitches around it. In a knit fabric, as in a drawing, each line of pencil or yarn is visible and essential to the structure (Ingold 2010). A sense of perpetual process exists in both. This incompleteness comes from the flux state, this constant wavering between body and abstraction, craft and concept. Building upon Deleuze and Guattari’s concept of becoming, anthropologist Tim Ingold (2017) posits that the cone of yarn and the fabric it creates are not two separate entities, but two stages of a process of becoming. Following this notion of material flow, the idea of matter in flux is at once natural and artificial, and the artisan follows it to create something a part of nature and artifice (Deleuze & Guattari, 1987). This poetic materialist perspective easily expands to ideas personal, and societal, in a way larger, or more abstract, than yarn and fabric. For example, here yarn becomes a poignant metaphor for the stories we tell in relation to the lives we live:

“To tell a story (...) is to relate, in narrative, the occurrences of the past, retracing a path through the world that others, recursively picking up the threads of past lives, can follow in the process of spinning out their own. But rather as in looping or knitting, the thread being spun now and the thread being picked up from the past are both of the same yarn. There is no point at which the story ends and life begins.” (Ingold, 2007, p. 90)

This relation of storytelling and living as belonging to the same process is depicted in Figure 3 as two ends of a thread, which, if pulled, becomes a knot. An entangled system of past, present, and future.

The loose knot construction resembles the basic structure of knitting (Figure 4), which also works as a symbol of personal history, the process of a life lived. It tells the story of a body following a path, and...
in following this path simultaneously becoming both body and network, a tracked history of development reliant on surroundings. When this concept of threads and stories presented by Ingold is expanded into knitting, we can also consider the implication of thread becoming fabric, and the possibility of unravelling.

This relativity combined with the flux state of becoming speaks to the simultaneous order and chaos of the lives we craft. Knitting tells this story, of sustained efforts to create, and control, with the looming threat of unraveling. And the thread reassures us that it has always been this way.

The reconfigurable creativity inherent to knitting, its capacity to be unraveled and remade, suggests a hopeful interpretation of this threat of unraveling. Unraveling does not signify an ending, but rather, a beginning. Knitting, then, does not deal in endings, but is always subjected to emerging relations with the world around it (Arantes, 2020b). A continuous becoming-knit. For the maker, this suggests a complex process of navigating the flux and joining form and matter.

In this chapter, I first discussed knitting as a cultural phenomenon entangled with history, gender, and politics of care. The therapeutic power of craft was highlighted, pointing to the suitability of introspective work through knitting. Then, with the concept of becoming, I discussed the technical structure of knitting and its inherent reconfigurability as a continuously shifting flux between yarn and fabric. In the next chapter, I will present the methodology and methods that were employed in this research.
3. Methodology and methods

In this chapter I discuss the research methods used in this thesis.

3.1 Practice-led research

This thesis uses practice-led research to get to the heart of knitting. In this methodology, the researcher is deeply entwined with their own creative practice, which becomes a source of new knowledge, focusing on practice related elements such as processes, tools, materials, and outcomes. The researcher, then, becomes the practitioner-researcher (Mäkelä, 2007). This position is one of necessary transparency, where the elusive, often-personal nature of creative practice is scrutinized and made public in the name of research (Pedgley, 2007). By focusing on their own practice, the practitioner-researcher has control over the process and can facilitate creative production that specifically investigates the research questions at hand, allowing for deeper investigation and better articulation of findings (Nimkulrat, 2009).

Reflection is central to practice-led research, used to derive knowledge from what might otherwise be overlooked in the process of making. Social scientist Donald Schön’s (1983) notions of reflection-in-action and reflection-on-action create a basis of reflective practice that facilitates knowledge accumulation. Reflection-in-action happens during practice, when the practitioner is confronted with the unexpected and must make a sudden decision. Reflection-on-action is more distanced, reflecting on the process after the fact (ibid.). This project relies heavily on these reflective practices, working with an experimental process and consistently examining its gradually shifting perceptions.

Since the research problem in this thesis came out of my perception of machine knitting from previous experience with the craft, it made sense to research my own developing practice with it. Similar to textile artist and design researcher Nithikul Nimkulrat (2009, p. 27), “this approach enables me, a textile artist conducting research, to create artworks and simultaneously observe their creation in artistic productions.” By taking a practice that was not central to my daily life prior to the thesis and then making it central, I observe not only the process of creation, but the process of immersion with the practice.

My making sessions were mostly explorative, starting with a simple idea that naturally evolved throughout the process, taking on meaning through its making. Through consistent practice and reflection I carried out many different approaches to the pieces, always trying to build on the previous work in some way. This process was documented with many tools, and in the next section I will present these tools and how they were useful.
3.1 Documentation

In order to document the research, I utilized sketching, photography, and diary writing.

Reflection in-action was a vital tool during this process. Not only does the practice of knitting create plenty of opportunities for dwelling, approaching it from an experimental angle guarantees unexpected results throughout the process.

A thesis diary was used to keep track, with daily writing and sketching. The diary existed both on paper and digitally; in a physical notebook, in the TextEdit software on my computer, and in the Notes application on my phone. The physical notebook was mainly used for sketching ideas for knit pieces and planning them, as well as noting reflections in the moment, during the process of making. The TextEdit software, the most used, was for daily reflections and free writing, both after making sessions and in the morning to plan the day’s work and consider ideas that had stewed after previous reflections. The Notes application was used for reflections made on the go, generally when I was traveling and somehow reminded of knitting in my environment. The use of multiple diaries was important to my process and enabled me to spread reflection to my everyday life and document many kinds of different reflections.

Hand knitting was also used as a form of investigative diary, following the progression of time, advancement of skill, and development of aesthetic interests. By working on a simple side project, a scarf, I created opportunities for reflecting on machine knitting and knitting in general, while simultaneously ‘taking a break’ from the work. Getting distance from the thesis while meditating on it.

The data that I collected from these documentation methods are photos, text, and sketches. These demonstrate the process of my growing understanding of knitting as a philosophically considered practice. Through reflection certain elements naturally come forward. By taking note of fleeting thoughts in a freeform diary, I attribute importance to them. Even though in the moment of writing it may seem unclear how they tie into the larger project, keeping consistent documentation provides ground for the development of hints into solid concepts.

This development is facilitated through frequent analysis of collected data. By examining especially the written texts often, the repetition of certain ideas and the dissolution of others become clear and suggest the main ideas of the work.
4. Project

In this chapter, I will begin by introducing the elements that participated in the making of this project: the machine, the material, the technique, and the concepts. I will then expand on the process of working, i.e., how all of these elements came together to make the artworks, and, finally, present the artworks themselves.

4.1 My Brother

The main creative portion of this thesis is made with a domestic knitting machine, Brother KH-836 (Figure 5). When I moved to Finland this machine was one of my first major purchases, buying it secondhand from an avid (hand) knitter who had gotten it from her husband as a birthday present. For this woman the transition from hand to machine lost too many of the enjoyable qualities of knitting for the sake of efficiency, and the machine sat in a closet for several years before I bought it.

For me, the creative opportunities provided by the machine
outweigh the enjoyability of hand knitting. I am interested in a level of experimentation with the craft, with aesthetic interests like representative imagery and patterns, that would simply be impossible to execute by hand in this time frame. Hand knitting requires more skill and time (and patience) than machine knitting. And the basic action, from the perspective of the yarn, remains much the same.

Domestic knitting machines operate between hand knitting (used by the individual artisan or hobbyist) and industrial knitting machines (used for factory-level production) and are by far the least common of the three. Domestic machine knitting is, perhaps, the neglected middle child. It is automated, in a sense, but not automatic, and it is not exactly the romantic slowness of hand craft, either. A machine that resides in a gray area between hand and machine.

Currently, domestic knitting machines are relevant in a more niche community. In the academic setting they are often simply a step in the learning process before the industrial machine, effective for simple work and sampling. At home, they are used for personal purposes and/or small-scale production. Commonly produced items like hats, socks, and scarves can be made almost entirely on the machine with minimal finalizing, while sweaters and gloves are knit in pieces and then sewn together off the machine. While noticeably faster than hand knitting, machine knitting still generally deals in hours, not minutes.

Within domestic knitting machines there is some variation that affects use. A few ways in which machines differ are whether they have one bed of needles or two (two beds makes circular knitting possible), whether or not they use punch cards (described in chapter 4.3), and whether they are digital or analog. In a digital machine the carriage still has to be manually moved across the bed every row to knit, but the computer determines what stitches are knit using a pre-made digital file.

The KH-836 used for this project is a single-bed analog machine with punch-card functionality.
4.2 Yarn

Essential to the practice of knitting is the material: yarn. Many knitters revel in fiber - saving up for skeins of the softest mohair, spending hours picking out the perfect shade of blue. I, however, find inspiration in imperfection and ‘making do’ with what is readily available. For this thesis project the materials consist of secondhand yarns from the Espoo and Helsinki Reuse Centres (Pääkaupunkiseudun Kierrätyskeskus). To be suitable for working on the knitting machine, yarn cannot be too thick, too textured, or too prone to breakage. Other than following these requirements I did not search for specific qualities, fibers, or colors. Since the works have no responsibility other than to be observed they do not need to hold up in washing machines or withstand stretching and rubbing from use. With less power in deciding colors and materials, more surprising combinations are made possible. The thrifted quality also lends poetry to the work, continuing the stories of interrupted projects. The knitting machine and hand knitting needles are also secondhand, creating a rag tag team of unlikely agents coming together to create new stories.

There is a potential energy in yarn. Secondhand yarn perhaps even more-so because it has a past that has been interrupted, a mystery. When you buy a cone of yarn at random from a thrift store it is ripe with possibility. It is not meant for anything, sure it might be better suited to some things over others, but it has not been given a purpose. Unravelling functional pieces can also be a means to source material, a poignant reallocation of function, but in this project I prefer the more direct relationship of becoming between cone and fabric. Also, the primary yarn I ended up using was one of a more utilitarian variety.

Kalalanka, literally translated from Finnish to “fish yarn,” is a basic 100% cotton yarn and the main material in my works (Figure 6). While I originally intended to explore great varieties of yarn combinations, the preference for this material appeared early on in my working process. This occurred mostly because of its availability, it can always be found in the
craft section of thrift stores, and its reliability. It never breaks. It is solid, and simple. Using a very basic material brings simplicity to work that might otherwise get more complicated than desired. The unexpected, or unrecognized until now, quality of this simple cotton yarn is that it holds and shows structure really well. It is not stretchy, and it is a bit stiff, so the knit structure can be seen clearly. Two years ago, I tried a similar technique to what I have been working on here and gave up because it lacked a clarity that I was looking for. It was almost there, but the stretchy, fluffy, wool yarn I used distorted and clouded its construction. Kalalanka is less eager to become fabric – it is intent on being yarn. This simple, matter-of-fact expressivity of the material seemed best suited for my storytelling.

4.3 Stranded colorwork

The central technique to this work is hand-manipulated fair-isle, an unconventional take on a traditional method of both hand and machine knitting. Fair-isle knitting, or stranded colorwork, known best for the characteristic patterns of the Shetland Islands, is a knitting technique where stitches are knitted alternately in different colors, with the unused colors left hanging in the back of the work (Figure 7). On the knitting machine, this process is streamlined by the use of patterned punch cards. After making the early pieces, I started reflecting on the back side of the knits as much as the front side, as I wrote in my diary:
I am struck by the description of unused yarns being ‘stranded’ across the back of the work. Of course, in reference to fibers, strand is a common term for single lengths of yarn. But in considering the other definition, like being stranded on a desert island, there is poetic value in the out of work yarns being stranded, out of sight, but necessary to the structure of the fabric. How can this poetry be utilized?

From the working diary, 4.1.2021

I decided to focus on an adjusted version of the traditional technique because it allows for larger imagery to be crafted as well as a more intuitive way of working. This technique is also an experimental one, not a common one used in knitting and thus not explicitly taught, and I wanted to take the time to develop it as a potential way of working.

Figure 8: punch cards that I made on the left, pre-made on the right.
Photo: Linnea Kilpi, 2021

A punch card is a sheet of vinyl that contains the ‘code’ of a knitting pattern (Figure 8). It is a grid, in which the spaces that are intact determine the stitches to be knit with one yarn, and the spaces that are hole-punched determine the stitches to be knit with another yarn. A punch card is 24 spaces wide and can be infinitely long, but generally needs only to be as long as one repeating segment of a pattern or motif. The width of the card corresponds to 24 stitches on the machine, and it repeats through all the needles that are ‘in work’, that is, being used to knit the fabric. A fabric that is 100 stitches wide will contain a little over 4 repeats of the design on the punch card.

This is, by all means, a highly efficient and rewarding asset of the knitting machine. With the ability to make your own punch card designs,
there is high potential for creativity. The ability to easily produce and manipulate patterns is a clear power of machine-knitting as a creative medium. There is also the possibility to create Fair-Isle motifs. That is, using a punch card but hand manipulating the needles so that only one repeating segment of 24 stitches is knit with the Fair-Isle technique, and the rest is plain knit. This technique was, in theory, exactly what I was looking for.

Despite my background in textiles and time spent working as a pattern designer, I am more interested in singular moments, perhaps containing repetition, but I am not so excited about designing patterns themselves. The problem with the motif technique, as instructed in the guidebook for my machine, was that the design could only be 24 stitches wide. 24 pixels wide, in other terms. 24 pixels is not much to work with, especially considering there can only be two colors at work at a time.

The Fair-Isle motif process, however, that of hand manipulating needles so that only certain areas are knit with the punch card, led to the development of the technique that I use in this project. Specifically, the realization that the needles can be hand manipulated to certain positions to affect certain outcomes.

The exploration started slowly. Staying small, rendering simple shapes. I quickly realized that I did not need to use a punch card at all but could follow the same technique where intact spaces correspond to the B needle position, which then knits yarn A, and hole-punched spaces

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Figure 9: the carriage determines A and B yarns. They correspond with different spaces on the punch card, which automatically positions the needles to knit certain yarns every row. Photo: Linnea Kilpi, 2021
correspond to the D needle position, which knits yarn B (Figure 10). Yarn A and yarn B are determined by which slot in the carriage they are threaded through (Figure 9). By hand manipulating the needles to certain positions with every row I could create imagery as big as I wanted, no repetition required. The only side effect of knitting large areas of one yarn is the long floats of the other yarn, generally avoided in traditional practice (Figure 11).

The maximum stitch width on my machine is 200 needles. However, going this wide is really only workable with supplemental rails on the sides of the machine, so that the carriage does not slide off when working the edges. Without supplemental rails, I settled to a comfortable maximum width of 140 stitches. 140 pixels. Still not a lot, but certainly more than 24. And the limitation turned out to be a strength, leading to more experimental solutions to create aesthetically interesting pieces, and unexpected results that seemed to lend themselves to meaning and narrative.

Figure 10: By hand manipulating the group of needles in the center to position B they knit only yarn A. The rest of the needles follow the punch card pattern, alternating between positions B and D. Photo: Linnea Kilpi, 2021

Figure 11: knitting a wide segment of one yarn (white) creates long floats of the other yarn (red) on the back. Photo: Linnea Kilpi, 2021
4.4 Stories

To create a highly focused conversation around knitting I wanted the content of the practical project to reflect the qualities of the medium. The idea of storytelling came up naturally through my own interest and speculation of a connection between the acts of knitting and storytelling. As discussed in chapter 2, telling a story is picking up yarn from other stories, it is not a separate yarn but the same one being used to knit the new story. It is the act of picking up threads from various worlds to create your own world. A reconfigurable creativity.

So that the stories represented would reflect the circumstances of their making, instead of simply being illustrations made of yarn, I considered the essence of the craft and used it to tell stories. I identified three characteristics of knitting that, to me, are central to the practice: repetition, in/visibility, and tension. Following these concepts, I was drawn to depict scenes from the everyday. To show vignettes of life open to interpretation, left ambiguous to create ample space for subjective experience. To reflect the everydayness of knitting, folklore, and what life looks like in seemingly banal moments.

The elements were brought up early on in the process, in contemplating my own perception of the basic qualities of the craft. A preliminary deconstruction. However, as the project transformed in scope and focus from the original idea, they did too. Throughout the process the central characteristics changed and developed, taking on new meanings as I dove deeper into theory and practice. Consequently, they are both framework and finding.

Repetition:

Repetition is an inherent quality of the medium of knitting. The practice is repetitive, and the result features this quality aesthetically, both in plain and patterned knitting. In ‘Difference and Repetition’ Deleuze (1968) contemplates the repetition of a decorative motif in a pattern, claiming that in the process of repeating there is an inherent instability. It is only when the process is complete, when each element of a whole has been closed off, not to repeat again, that stability is found in looking at the whole picture. This is reminiscent of the potential of knitting to create opportunities to dwell on uncertainty, and still finding comfort in this process and in its end result.

Not only does the meditative act of knitting provide these opportunities, but the entire process around the practice does as well. The
invisible work: filling in squares of graph paper, punching holes, unravelling unused knits, winding balls of yarn from cones, ironing, weaving in errant strands of yarn. All highly repetitive movements that contribute to a meaningful practice that recognizes the importance of not only the central act of knitting but the outlying processes that facilitate it.

In the early pieces I thought about moments from life where repetition was aesthetically present, looking to my own life for inspiration. Brick walls, patterned sheets, wallpaper, a new relationship, the view from my window. In studying the artifacts of daily life, repetition as aesthetic element quickly transformed into narrative element, which then circled back to the repetitive quality of the everyday.

**In/visibility:**

I stylistically differentiate ‘in/visibility’ from ‘invisibility’ to highlight the tension between two sides of the same coin.

In/visibility has to do with knitting as a cultural phenomenon. It is so common that it is unnoticed. As I discussed in Chapter 2, knitting is invisible because it is such a common practice but mainly because it is a gendered practice, historically existing in the domestic, private space. This thesis, then, works to make visible what has in the past often been invisible.

Although invisibility was part of my perception from the beginning of the process and one of the main reasons for embarking on the project, it has evolved and new perceptions emerged. For instance, with the notion that the transparency that comes with invisibility shows visibility more clearly.

According to Arantes (2020b, p. 157), “knitted surfaces are material concretisations grown out of tiny, repeated movements. They do not hide, cover up or conceal; much to the contrary: they reveal.” Thus, the knitted fabric is not a barrier that makes invisible what it interacts with, but a layer that reveals the entanglement between maker, material, and environment. The notion of revealing that comes from this transparency suggests a poignant opportunity for the combination of knitting and storytelling: the making visible of moments generally unwitnessed, of stories often untold, of people unseen.

**Tension:**

In studying knit surfaces, tension is vital to both the process of knitting as well as the aesthetic and material qualities of the outcome. The tighter a knit, the closer the individual stitches are to each other, the looser, the farther apart. In wearable knitting this means that the tighter a knit the less
visible the body behind it, the looser, the more visible. With less tension, the more openly the body behind the knit engages with its environment, and, on the other hand, there is safety and solidity in a warm, dense fabric. In the flux of becoming-knit, this transparency and lack thereof is an indication of degrees of entanglement with the world. From a perspective of becoming, the tighter a knit, the more it resembles the solidity of a fabric, the looser, the closer it is to a structured yarn.

The physical tension in practice was also reflected in the narratives in intangible ways. Interrupted moments seem to hold their breath, personal and environmental relations are frozen and emotions ambiguous. Pieces with loose floats convey a daunting chaos, or is it freedom? In pieces with two people, there is an emotional disconnect in spite of close proximity.

The use of knitting as metaphor is especially popular in speaking of people and their relations. A tight-knit or close-knit community promises support and kinship. Here, the concept of tension is at odds with the notion of strain and discomfort that the word usually suggests.

4.5 Process

Machine knitting is a process of translation, from idea to sketch to graph paper to punch card to knit. The task of bringing an abstract idea into solid form most often started with sketching. The sketches were kept simple, small line drawings meant more for inspiration than reproduction. The simplicity of the sketches was due to the limitation of the workable width of the knitting machine: 140 pixels (stitches). With this resolution the representations cannot be very aesthetically complex and any fine details might instead come from the behavior of the material. This provides a sense of discovery in the work, which is also more exciting and intuitive when not too closely planned.

Since the basic technique was predetermined, stranded colorwork, only patterns and yarns had to be chosen before knitting could begin. Punch card patterns were used both decoratively and representationally. These naturally melded together, but the distinction in practice was between choosing pre-made punch cards or designing new ones to meet a specific need in narrative. The pre-made designs have been in use for decades, and working with them connects me to a network of other machine knitters who have used those same patterns in their works, though I do not know how popular they are anymore. While I chose the designs intuitively, reflections of my thinking can be seen where the patterns take on meaning in relation to the narratives they appear in. For example, a simple wave motif as a symbol of the ups and downs of a relationship.

Deciding colors was fairly simple, given the limited options from
my secondhand yarn collection. Since the technical structure of the knit fabric is important to this project, using contrasting yarns allowed for better visibility of that structure. In some cases, test swatches were made to see what certain color combinations looked like with certain patterns, but for the most part I followed a more intuitive process. Throughout knitting, discoveries led to spontaneous decisions that altered intended outcomes. The decision of which side of the work to focus on and display, for one, often came out of seeing the development and behavior of the floats on the back of the piece.

After taking a knit off the machine, ironing it and trimming loose yarns, most of the active work is done, but not all of it. Specifically, the pieces featuring floats were really made into what they are at this stage. Not just the aesthetic quality but the narrative function was determined by the way the floats were managed after the actual knitting was done. In rearranging and cutting the long strands of yarn (and sometimes using hairspray to keep them in place) this experimental method of mark-making created another way to engage with the knitting process.

Finally, the pieces were stretched onto frames. The inherent stretch of knit fabric and its ability to be skewed allowed a final chance to affect the outcome of a piece.

4.6 Knits

The pieces are here shown with descriptions of the stories I had intended to tell and the stories I ended up telling. These reflections are my own and engaging with any artwork is a subjective experience. However, as this work deals with transparency I find it important to offer my account of the story. To be clear about my intentions, successes, and failures. The process of making is also deeply entwined with the stories that ended up being told. As a highly reflective and responsive medium, the pieces changed from beginning to end as the stories I had set out to tell became skewed by the manner they were told in.

I made 20 knit pieces in total, not including test swatches. 11 are presented here, as the truest to the goals of the thesis project and the most effective in answering the research questions. While I did not have specific criteria in mind to formulaically base the success of a piece on, I followed the research objectives and my intuition. Upon reflection, my judgment was related to at least the following questions: does the fact that it is knit impact the aesthetic experience? Does it engage meaningfully with its process? Does it tell a story? Does it expand on the work that came before it?

Works in chronological order:
In bed

Initially, with a focus on repetition, I wanted to depict a moment in life containing repeating pattern as an aesthetic element. I took inspiration from my own life, a new relationship, and sought to express the uncertainty of new beginnings. One person unsure, the other unaware. In the otherwise planned design, I looked to intuitive color use to add fluidity.

In the outcome, the patterned bed sheet, making up most of the piece, symbolizes the experience of the relationship. The pattern, a wave motif of constant ups and downs, with its seemingly random color changes, creates areas of clarity, strength, obscurity, muddiness. Despite the turbulence of the pattern and color, there is inherent comfort in the representation of the blanket, made double by its tangible softness. The emotion of the person on the left, planned to be one of trepidation, is unclear. It seems to change, from boredom, to peace, to annoyance. This ambiguity and the ignorance of the person on the right creates tension within the scene, a suggestion of the difficulty of being known despite proximity. The bold linework of the people suggests some matter-of-fact solidity, mostly hidden by the undulating blanket, the wavering of comfort and uncertainty.
Lunch (Eavesdrop)

In reflecting on the agency of yarn in machine-knitting, this piece was intended to test a multi-yarn technique where two contrasting yarns are treated as one, and the outcome depends on their seemingly arbitrary settling. The scene came from a common moment in my daily life, eating at the student cafeteria.

In the outcome, the background is somewhat chaotic, made up of shifting visibility and energy. But, from afar, akin to static. The person sits in contrast to the pattern behind them, their body remaining mostly light with some random stripes, but moving up to the head it starts to blend into the background. A sign of the outside world making its way into the inside world of the mind. In reflecting on the piece and the experience that inspired it, I wrote the following in the working diary:

“Eating alone in a public place, vaguely uncomfortable, disappearing into the conversations happening around me. Some I can understand, and I eavesdrop, some are out of reach and contribute to the restless white noise.” 12.1.2021

The table rises to meet them, and this fluidity of material activity is juxtaposed with the bold, pixel-by-pixel planned tableware. The comforting solidity of that which is right in front of you. And yet, the question mark of an empty plate.
The idea for this piece formed when thinking about the pixelated quality of knitting, its suitability for boldness and simplicity. I wanted to clearly see how the expressivity of the craft would transform basic linework.

The piece turned out unexpectedly expressive despite its simplicity, especially after further manipulating its tension through intentional stretching of the window to the frame. The graphic red lines are balanced by unintentional details - the irregular specks of red yarn on white, and the wide stripe of thinner and thus more transparent white yarn in the center. This happy accident provides a peek behind the scenes, a glimpse of the wooden frame, the long red floats. On the surface, the person in the window peaks out from their hiding place, what are they afraid of? The eyes look straight out of the piece so directly that the viewer seems implicated. The bold, strange proportions of window, door, and body, along with the irregular stripes on the wall create a child-like aesthetic that pushes a sense of irrational fear.
In response to the simplicity of the previous work, the idea for this piece was an attempt at more complex visual elements. I took inspiration from a photograph.

The process was really challenging, as with every row I had to keep track of the progression of several different elements up the work. When I finished and took it off the machine, I was disappointed, *all of that brain work for this?* I thought it had fallen completely flat. And then I noticed the way the brick curves around the person’s shoulders. Not only from a knitting standpoint is it interesting, the way the pattern warps under certain circumstances, but also in considering the narrative in the piece. To me it suggests that the person is leaning back, and the brick is accepting them, supporting them by conforming to their shape.

Also from a narrative perspective, there is some unintended notion of hiding in the piece, or unease. What is behind the brick wall?

**Untitled (Brick wall)**

Figure 16: Untitled (Brick wall). 41 x 35 cm. Photo: Linnea Kilpi, 2021
Tide

After relying heavily on the color white in the previous works, the intention for this piece was to simply try one without it. In choosing an aesthetically simple setting I was also able to play with scale.

This is another piece that was, to me, a disappointment after coming off the machine. I thought it fell flat, that compared to the other pieces this one was an illustration that happened to be knit, not a depiction conceptually reliant on and reflexive of its knittedness. Upon stretching it onto the frame, however, not only did the piece become more beholden to its knit characteristics (stretch) but it became aesthetically and narratively more interesting. What was a flat horizon became a portrayal of the gravitational pull of the moon. The visceral effect of this pull extends through the entire piece into the floating person, and lends nuance to their situation. What are they feeling? Fear, boredom, reluctance? The contrast between the seemingly passive large head and the active small waves creates a strange sense of scale and motion, further adding to the tension of a fluid moment frozen in time.

Figure 17: Tide. 41 x 43 cm. Photo: Linnea Kilpi, 2021
Suburbia

The initial idea for a knitted comic developed naturally from the storytelling function. In thinking of the reconfigurable creativity inherent to knitting, I decided to make separate panels for the comic instead of one long knit strip so that they can be separated, rearranged. The moments can go to different places and still be part of a story. A red thread connecting people, places.

With the outcome of this triptych I realized the power of floats in narrative. In the second piece, made first, the hair was an accidental discovery made while cutting the floats to get them out of the way. In the third piece, made second, I had planned to have a plain house, but when taken off the machine the floats suggested chaos and fire, and I followed their behavior.
Reflecting on the horizontal motion inherent to knitting, this piece was intended to highlight vertical elements in conversation with the horizontal. It also came from a desire to make something simple, a return to a very basic striping technique, following the more experimental trajectory that the work was beginning to take.

In the outcome, the imperfect repetition in the trees and the person creates a sense of oneness in spite of difference, and difference, in spite of oneness.

**Camouflage**

Figure 19: Camouflage. 41 x 35 cm. Photo: Linnea Kilpi, 2021
In the car

Similar to the ‘In bed’ piece, but with a more experimental approach, the initial idea for this knit came from the desire to make work about basic everyday experiences in a new relationship.

The outcome highlights the narrative power of happy accidents. Hair blowing in the breeze, and yet, rigidity in the people. There is a strange juxtaposition of the fluidity of the hair and the confrontational quality of the person it belongs to. They are waiting for something, and the trembling white yarns reveal the fear and stress of expectation. While knitting I ran out of white and had to use yarn unraveled from another piece that retained kinks from the knit structure, which led to the ripple effect. This unintentional aesthetic quality brings emotional nuance. Similarly, the wavering eyebrow of the person on the left, and their eye stitched open as if kept awake by some great effort, reveals cracks in their otherwise smooth solidity. They clutch the wheel, perhaps in hopes of control, and yet the wheel is flimsy and thin, stretched stitches making visible the wooden structure behind them. Arbitrary material choices made this piece into one of turmoil and fragility, where it might have just as well been one of stability and strength.
Emphasizing the notion of in/visibility, the idea for this piece was an experiment in transparency. In the other pieces, bodies are partially hidden by opaque structure, and I wanted one that was spatially separate but still visible behind its barrier.

This is the final piece I made during this project, and it felt obvious to stop after making it. It makes clear a project-long interest in the connectedness of knitting - the visibility of structure, especially when displaying the back of a piece. Hair blowing in the wind, to a trembling treetop. The moon, that far away spectacle, pulled into direct relationship with its minuscule peers. There is an evening of the playing field. Unlike the other pieces using floats as aesthetic elements, I did not manipulate them in this piece. No cutting or rearranging. In this regard it is perhaps the most honest, transparent piece of them all, in that it is unaltered but also in that I present the ‘back’ of the piece to the viewer, the side that I faced while making it.

The body is part of the fence, as well as behind it, within it. The floats make closed what is seen as open, the spaces between wire in a chain-link fence. They are not a representation of physical reality but of the totality of barriers. And then the one loose strand hanging down softly, almost lazily, that further removes the viewer from the person behind the fence.

In contrast to the pixelated quality of most of the pieces seen from the front, this one takes on an almost watercolor-like quality in the body of the person, an exciting discovery of the aesthetic capabilities of the knit medium.
4.7 Exhibition

The pieces were shown in an exhibition entitled ‘Stranded Colorwork’ at V1 Gallery in Väre, Otaniemietie 12, 02150 Espoo, from 16.4 - 30.4.2021 (Figure 22).

Exhibition text:

Named for the technique with which its pieces were made, this exhibition presents the power of knitting as an expressive medium. The double meaning of the word ‘stranded’ suggests the inherent poetry of knitting, the complexity of a craft often overlooked for its everydayness. Departing from tradition, this machine-knit series brings forward a new functionality to expand the creative scope of the practice: storytelling.

Three central elements of knitting were identified, in/visibility, repetition, and tension, and used to craft stories that are not just knit, but about knitting. Through depictions of everyday moments, the pieces offer accounts of living between comfort and discomfort. The stories are left simple and ambiguous, inviting the viewer to draw their own conclusions.

Exhibition reflection:

Although this thesis does not directly engage with the loaded discussion of art vs. craft, the exhibiting of works in a gallery setting does imply a level of involvement in established contemporary art practice. Upon reflection, while the sense of completion and visibility that the exhibition affords is an important stage in the project’s process, I question the suitability of the gallery environment. Specifically, the sterile, white-walled variety.
The ultra-visibility of the gallery setting seems to be at odds with the intimacy of the knit craft. Everything is figuratively and/or literally put on a pedestal and separated from the artifacts of daily life. Having worked in a home studio the work was always in conversation with other crafted objects - woolen rugs, wooden dressers. A melding of colors and materials natural to their environment. The sudden shift in ambiance to the gallery was jarring, and yet, vital for understanding my own work from a new perspective.

To tell the story of my process, the works were laid out around the room in the chronological order of their making. The straightforward, transparent layout reveals the weaving in and out of ideas, tropes that come and go. Repeated notions can be seen building into themes, into a collection. The development of the project and my skill is seen clearly, how the work becomes more experimental over time. The display also questions if there is a larger storyline that I developed in my process. How do the narratives relate to each other, do they tell one story or many?
5. Discussion and conclusion

In this chapter I present my findings along with reflections on the practice. In 5.1, I discuss the concepts of knittedness and pixelness. In 5.2, I reflect on the process as a whole and highlight the importance of the hand-knit diary. In 5.3, I outline the limitations of the thesis project and in 5.4 I suggest how they will be addressed in future studies among other potential paths. And to conclude, in 5.5, I contextualize and position the project and the thesis in the fields of art and design.

5.1 Findings revealed from documentation

Through the daily reflective writing practice, I was able to closely follow the slow development of concepts born out of the creative project. The bulk of the writing came immediately after making sessions, reflecting on the process, my feelings while knitting, difficulties, and an assessment of how the day’s piece turned out. While these feelings and assessments changed and grew throughout the project, the initial thoughts served as vital, instinctual, paths for continuation.

Examination of the texts, photos, and sketches frequently throughout the project allowed me to pinpoint interesting moments from the working process. Through both intuition and relation to the project’s theoretical basis, ideas were considered worth taking forward. I internalized the concepts that seemed to present themselves repeatedly, even if I did not know where they were leading.

At the end of each workday, hand-knitting helped to digest the day’s discoveries and facilitate reflection through the practice at its most basic.

Examining these processes proposed knittedness and pixelness as vehicles for expression, elucidated on in 5.1.1 and 5.1.2, respectively.
5.1.1 Knittedness

The intensive process of this thesis project, working independently and focusing on one technique for several months, led to the development of the concept of knittedness.

Working alone in my home studio I was enveloped in the profundity of knitting. Reading theory and writing about the craft as well as practicing daily on the machine and/or by hand created a fully immersive environment. This naturally leaked out of the studio, and I was reminded of knitting almost everywhere I went. Mostly, in movement. Sitting on the tram, for one, observing the repeated opening of the doors at every stop, picking up and dropping off. Passing through and being present for the lived moments of other people created lines, tethers, from me to them that entered through the tram doors and followed me along my way. Do we unravel the lines (lives) of others to knit our own? Poetic questions like this inevitably formed as I experienced my surroundings with my body and mind still enveloped in the process and technical structure of knitting.

I started using the term ‘knittedness’ to describe the state and quality of being knit. Often, in my reflective writing, in regard to the perceived success of a piece. If the work dealt with the central elements of knitting and was conceptually bolstered by and entangled in its process of being made, then it was successfully reflective of its knittedness. If not, it was simply an illustration that happened to be made with yarn.

In ‘Paperness’, Nithikul Nimkulrat (2009) studies the expressivity of paper yarn and its influence on artworks. Her concept of ‘materialness’ suggests the power of physical material itself to express meaning and lead the artist’s process and the audience’s understanding (p. 208). In practice following this notion, creation is reliant on material, over technique or abstract idea.

While Nimkulrat proposed her concept from a material perspective, similar thinking can be considered from a practice perspective as well. My conception of knittedness was formed in a similar manner, highlighting a central focus on a certain element (the practice of knitting) that leads the entire mode of thinking around artistic process. Then, over the process of research the idea naturally expanded outside of the realm of making. At first it was a filler word, to be used until I came up with a more succinct way to articulate myself. But it kept coming up, and building my own perception of the process. It became an expression of the complexity of the practice of knitting and a recognition of its popularity as a metaphor beyond the technical looping of yarns. Knittedness is not simply the identification of the technical qualities of a fabric, but the perception of those qualities as meaningful and wide ranging in their scope. It has to do with the understanding of their entanglement with systems of living; with the
movement of the body through life and the flux of becoming between body and life. The concept of becoming, as discussed in chapter 2.2, is central to the notion of knittedness. The active process of becoming-knit speaks to the continuous shifting of relations in the world. The give and take of matter and form.

The concept can be seen reflected in the creative project, through which the knittedness of our environment is made clear in solid form. The pieces suggest our complicity in our surroundings; the way that we shape and are shaped by what is near us. The representations of daily life create mirrors with which to locate strands of in/visibility, tension, and repetition in one’s subjective experience, and the yarn makes their connections visible.

Knittedness is invariably tied to its ‘yarnness.’ As a conception born out of making, with yarn as vital element, it is entangled in materiality. I rely on the yarn to facilitate, to manifest, the expression of techniques and ideas. However, this project would be a very different one had I relied on the material to guide the entire creative process, like Nimkulrat.

The knittedness, as it is reflected in the creative project, reinforces the strength of softness in everyday life through its representation and skews that which is hard, and solid. A patterned blanket becomes a symbol of comfort despite instability, an enveloping history of a relationship. A brick wall becomes uncharacteristically malleable, elastic in its encounter with a body perhaps in need of embrace. Knittedness warps hard edges, its elasticity suggests forgiveness, give and take. Thus, there are no perfectly straight lines in any of the pieces. Everything is pulled, one way or another, by what happens around it, and the illusion of individualistic solidity is undone. Through knittedness, we can understand that our relation to our surroundings is not only connected but made of the same matter and in a process of settling in as one body. This settling reveals the tension between different parts, how they contract and relax. The way the material settles is the way the story is told.

Stretching the machine-knit pieces into taut rectangles might take away from their knittedness, but it provides power in the ability to further influence expressivity through tension. In juxtaposing tight and loose, the strain between the hard edges of the wooden frame and the soft curves of the fabric, we can see both more clearly. In some pieces, the looseness of the knits reveals the wall and stretcher bars behind it. Had the focus of my process been storytelling alone, the visible wooden bars, frame-breaking floats and holes in the fabric might ruin the illusion, the suspension of disbelief. However, in this project I collaborate with the entire process of knitting, and the way it relates to storytelling. I engage specifically with its qualities of transparency, its clarity of process and its cultural standing. The work is not simply its representative imagery, we cannot forget that it is craft. Here, the canvas becomes the work, not the ground for the work. This
comes back to the position of flux that textile art is often seen in, between craft and art.

Returning to the shift in functionality I proposed as an updated way to differentiate methods of making, function is tied to the intent and agency of the maker. In using a traditional presentation method popular in the art of painting, the stretching of canvas onto a wooden frame, I do not make work that is painting-like, but instead expand notions of what methods can be used where. By ‘borrowing’ techniques, I highlight the similarity between art and craft processes and suggest that there is no need to remain within the bounds of one preconceived medium. An expanded creativity unmarred by barriers between methods of making, but dependent on the maker and the aspects they wish to collaborate with and emphasize in their process.

5.1.2 Pixelness

The pixel denotes a significant distinction between knitting and other creative practices, such as painting or drawing, which tend to err much farther on the side of intuition. Pixelness refers to this distinction, the necessity of order in the knitting process and its subsequent aesthetic qualities.

My process consisted of finding a balance between intuitive making and pixel planning. Each piece was somewhere in the middle, containing both intuition and differing degrees of premeditated design. With some, I worked the pieces in one fell swoop improvising from a simple sketch. With others I drafted certain aesthetic elements on graph paper before and while making. However, none of the pieces were entirely planned, with every stitch mapped out on graph paper. More often than not the pieces changed so much from start to finish that I had to continuously rework the plans at the same time as I knit.

In an interview, the artist Freddie Robins described knitting as having the ‘right balance of order and freedom’ for her as a maker (Cameron, 2018). I agree with this statement and find that it is in the
balance that creativity strives.

Working within the limitations provided by order creates opportunities to solve problems. Problem-solving, in turn, leads to creative solutions. These opportunities also allow moments of relief, like pop quizzes during making sessions. They present aesthetic challenges with workable solutions. This is an uncommon phenomenon in other creative practice that forms out of entirely subjective decisions.

There is a comforting simplicity to pixelness. If you want something to look like an eye there are only so many ways to put pixels together to suggest an eye. It makes the process mathematical, geometrical. Throughout the project I filled a notebook with pixelated eyes, faces, and patterns. Now I have an ever-growing reference book of formulas that can be applied and changed according to aesthetic need.

Despite this facet of order, the process I engaged in was still an experimental one. In the reality of the making, pixels are stitches and stitches are yarn, and the process of translation is rarely smooth or predictable. My standing as more student than master led to serendipitous discovery both through intuitive making and rigid planning.

The pixelness of knitting also implies that it can be easily dissected. Techniques can be identified, yarn behavior understood, assuming a certain level of skill and awareness. Fortunately for my experimental practice, this means that once something is done by accident it can be recreated on purpose. The process was based on discovery, reflection, and reproduction. As a rewarding creative practice, it is perhaps one of the greatest strengths of knitting, not knowing quite what it will look like when it is done and finding beautiful surprises to take forward every time.

The work became more experimental over time in part as a response to pixelness. Only after gaining enough expertise in this ordered making process was I able to begin hacking this system. The development of a focus on the back (also called wrong) side of the knits, and subsequent reliance on floats for narrative and aesthetic expression, appears as a solution to controlled form.

5.2 Reflections on the project

This project took place during the Covid-19 pandemic which forced new ways of working and living on everyone. Naturally, this impacted my thesis. While I have always been one for independent work, the sense of instability brought on by the pandemic pushed me even deeper into self-sustainability. All of the work was done in my home studio, with no reliance on other people or facilities. The only aspect that took place elsewhere was the exhibition. The virus affected not just the making process, but the theory as
well. In this strange time, I have had the chance to dwell on and experience
the repetitive quality of my life. As I have described, repetition and dwelling
are at the center of these media, and the chance for meditation is what drew
me to them in the first place.

A comfortable and efficient working schedule became clear for me
during this project. Process based work requires consistent making and
reflection. During the several months of focused creative practice, I settled
into the following routine:

Morning: writing in diary, planning/reflecting, light reading.
Afternoon: sketching and machine knitting OR prep (punch cards,
unravelling yarn, etc.) and reading. Finishing with diary writing.
Evening: hand knitting.

Even though I was technically researching all day, in the evenings
as well, it was not strenuous or taxing. Taking relaxed, contemplative
mornings and reflective evenings allowed for a slow diffusion of the day’s
labor.

Despite this unhurried approach to the project, the excitement of
exploring and discovering new techniques and the eagerness to consistently
produce novel works led to some level of urgency in the making process.
The pieces were each knit on the machine in a few hours, of intense
focus and rapid decision making. The hand-knit diary, conversely, was a
completely different temporal process. One of chipping away slowly, day by
day, over several months. Finding a balance between these two timescales
in the machine-knit work could better reflect the element of slowness that
many knitters look for in their process. The time that went into the slow,
repetitive tasks of unraveling knits, punching punch cards, and other menial
and necessary steps before getting on the machine was valuable to both the
project and my energy. Productive rest. Bringing more of this activity into
the process would be beneficial, for example through designated time to test
out experimental techniques and sample colors in preparation for creating
finished pieces.

Working with one specific material and technique for an extended
period of time built a connection between me and the practice: my practice.
Instead of having to think about how to express an idea, there is a simplicity
and depth of focus to remaining within the limits of one medium. A sort of
ownership of the craft is formed, and a feeling of being part of a community.
Before this project I was not sure about my place in the field of textiles,
I was always looking for new ways of making, ways of getting away from
the version of myself I had previously built through my work. This thesis
project gave me a newfound confidence as a maker and an understanding of
the connection of my past work and how it led me here.
5.2.1 The hand knit diary

The side project and reflection facilitator of the hand knit scarf that I worked on alongside the machine-knit work proved to be a valuable learning experience (Figure 24).

Even though my technique of machine-knitting is very hands-on, a lot of the movement and behavior of the yarn is hidden inside the carriage, which seems to magically knit stitches as it passes over the needles on the bed. Because of this separation of maker and material, this side project served as vital insight into the core of the process of knitting.

My inexperience with hand knitting allowed me to really think about what I was doing while making. Consciously recognizing the action of pushing needle through loop, the consequences of every action. It was both a learning process and a diary of that learning process. It also brought me closer to the experience of most people who knit, seeing as knitting on the machine is not nearly as popular as by hand. In the more intimate relationship between hands and yarn I was able to better understand the immersive power of that repetitive flow.

While I intended the scarf to facilitate reflection, it was not always so simple. For example, in the deliberate decision to knit after a psychologist appointment:

“I thought I might meditate on what we spoke about, but it didn’t work that way. I couldn’t keep the thoughts of our discussion at the front of my mind, and with every stitch they retreated further and further away. I couldn’t force reflection.”
From the working diary, 11.11.2021

This notion of not being able to force reflection suggests that even though knitting can be effective for such deliberation, it is more complicated than a simple decision to think about something. There is no alignment of variables that guarantees reflective action. Maybe, it has to come naturally, and can happen in unexpected ways, at unexpected times.
5.3 Limitations:

Three main limitations of this project were its scale, shape, and time that was dedicated to the project.

Scale. I stayed at a very comfortable scale, similar to traditional knit objects like sweaters, for example. Increasing scale by piecing together knit segments could have been (and will be in future practice) a fruitful technique for further experimental making. This would also show how expressiveness can work differently depending on the scale of the outcome.

Shape. Due to time and the conceptual trajectory of the work I decided to forego using one of the central techniques of knitting: shaping. In functional knitting, shaping is an advantageous distinction from other textile techniques. It allows for pieces to be formed in a way that avoids waste, compared to cutting out pieces of fabric and sewing them together. Early on in the project I had planned to use shaping but decided against it when the pieces became moments rather than representations. So, within a knit rectangle a story is depicted, containing person and setting, as opposed to creating a knit person that exists in the setting it is viewed in, for example.

Time. While coming up with ideas, sketching, picking colors, and otherwise planning the work took varying amounts of time, the actual machine knitting of each piece was started and finished in a day. Total knitting time varied from around three hours to seven hours. Compared to the hand knitting project, which took place in brief segments over several months, there is a huge difference in the temporality of these processes. Spending more time exploring machine knitting would continue impacting the expressiveness of the practice.

5.4 Future Studies

This project is the beginning of a creative practice. The valuable first steps of exploring a medium, identifying techniques and ideas that will be taken further.

The concrete next steps in this practice are tackling the previously outlined limitations of this thesis: scale, shape, and time. As mentioned, the scale could be increased, overcoming the bounds of the machine by knitting panels and piecing them together after. The rectangular border can be done away with, continuing into more organic form through shaping and reconsidered methods of presentation. And by consciously working slower, more time could allow for continued reflection and development of the work. To take the project further conceptually, the themes that are
expressed can be further defined.

Combining knitting with painting, for example, is another way to expand the practice. Painting on a knit ‘canvas’ in a way that subverts the traditional use of a canvas as empty vessel for an idea. In this case, the canvas and the painting would be reintroduced as equals, working together to create novel aesthetic expression. Painting with knit, not on.

Continuing in a three-dimensional direction could also be fruitful, using the techniques of shaping for garment-making to create more sculptural pieces.

There is of course the possibility of returning to more traditional methods and functions of knitting after this work. Unrestricted experimentation can be an invaluable asset, a kind of brainstorming before prototyping that is then simplified, made workable. Coming back to a question asked early on in this thesis, what is made possible when function is irrelevant? What happens when you go backwards, to the traditional function?

In considering the expanded functionality proposed by this thesis, there is also the question of what alternative functions could be explored other than storytelling.

5.5 Conclusion

Within the field of art and design, this thesis sheds new light on a craft that has often been taken for granted. Deconstructing the act of knitting as a creative practice creates alternative avenues to approach the medium and an opportunity to rethink its learned connotations. This is important because due to its historical gendering and restriction to the domestic realm, knitting has been limited in its scope as a creative practice and its practitioners undervalued.

The overarching research question (how do social and technical aspects influence the expressivity of knitting?) was approached by starting out with a multifaceted theoretical review of knitting. Through practice-led research the preconceived notions shifted and grew, revealing the power of knitting as an expressive medium simultaneously as it considered what it means to be knit. The central characteristics I determined, in/visibility, tension, and repetition, facilitated this reflection and led to work deeply entangled in its process. The concepts of knittedness and pixelness proposed through reflection of this process work to explore the expressive potential.

Despite its focus on creative potential and ultimate gallery exhibition, this work does not try to ‘transcend’ from craft to art, as the contemporary art world might require. It is simply about the practice of knitting, of mark-
making with yarn and its accompanying capabilities and connotations. This thesis posits that the distinction between craft and art is a tired one, and instead of remaining beholden to binary delineation it might be more accurate to think about artifacts in varying levels of functionality. In this project, the traditional function ascribed to knitting, its wearability, has been replaced with the more poetic function of telling stories.

By focusing on storytelling, this project suggests one way in which knitting can offer unexpected and poignant expressivity. With this focus, the work also speaks to the human experience and further illuminates the strength of knitting as metaphor.

With a highly experimental process, this thesis approached many different ways of making. The basic technique of stranded colorwork was explored and skewed and thoroughly reflected on in order to answer the question of how knitting techniques be utilized for storytelling. The techniques and aesthetic decisions greatly influenced the narrative. Through the use of pattern, the inherent repetition of knitting was explored visually.

This thesis opens the door for further expression through knitting, a clearly powerful process.
On the pervasive presence of knitting as metaphor:

“In the waiting room for covid testing I looked down to find a strand of dark gray-blue yarn trailing out of my shoe. The artisan’s equivalent of toilet paper stuck to a sole? The other day I wrote that I see knitting everywhere I go. I can’t always place the connection, but I see it in moments of going forwards and backwards, in the fluidity of material relations... Almost mockingly, in job advertisements. I type ‘knit’ into the search bar with a feral hope of finding the perfect job where I can play with yarn all day, I know it’s unlikely, but I get my hopes up anyway.

The listings are all IT positions with ‘close-knit’ communities.”

From the working diary, 27.1.2021
References


