Recrafting textile futures: Transitioning toward caring and repairing as a way to design

Maione, Donna*
*Carnegie Mellon University, Pittsburgh, Pennsylvania, USA
* donna@dmaione.com

Textiles and clothing, are produced through a global supply chain that is both extractive and linear, embedded in an economic model leading to exponential growth in waste across every stage in the supply chain. Often sustainable textile solutions and innovations are coupled with economic development, making the movement from linear to circular appear as a descending spiral to waste that plunders the earth. Eco-modern solutions meant to reverse the damage caused by the mass production of clothing need a repositioning toward a longer horizon. This paper explores ways to transition toward reparative practices through craft and recrafting processes, reflection on the experience of the recrafting of existing and underutilized textiles, connecting to the long horizon to explore the potential for new design practices contributing to design for repair that may cross scales, from personal, and local consumer level to global and systemic to extend the temporal nature of textiles and clothing toward one aligned with natures cycle and to repair the wrongs of fashion past. This mixed method approach is meant to counteract the fast-paced waste stream of clothing design cycles and seeks answers to questions such as our relationship with the clothing in need of repair, our limits toward their brokenness, and how capturing reflections through autoethnographic journaling can bring about transitions through practices of care and repair needed in stopping the flow of textiles as waste feed. This work seeks ways of transitioning from broken relationships with textiles through recrafting materials combined with a reflective experiential approach to develop an intergenerational clothing design method toward a sustainable and just future.

Keywords: Design for repair; transition design; generational garments; mixed method research.
1. Introduction

For more than a century, overproduction and overconsumption of clothing have exceeded the point of sustainable resources required to sustain life on Earth (Stockholm Resilience Center, 2022). The carelessness of mass-produced apparel reverberates from the smallest persistent microfibers (Carney Almroth et al., 2018; Liu et al., 2021) to mountains of unwanted clothing traveling the globe as waste colonization (Changing Markets Foundation, 2023; Fletcher, 2018; Liboiron, 2018; The Or Foundation, 2023), outpacing the ecological cycle (Fletcher & Tham, 2004, 2019), and tipping the natural environment's scales toward an uninhabitable future (Wallace-Wells, 2019). Without a shift in our relationship with these materials, we threaten our existence as a species (IPCC, 2022).

Clothing manufacturers follow the bare minimum of maintenance and care guidelines. Few are involved in the design process for alternative care methods to extend the useful life of garments beyond care labeling for cleaning. Fashion education teaches little about Design for Repair (DfR) and the responsibility of caring for and maintaining clothing for longevity (Mead, 2015; Sekules, 2020). When garments fall apart, brands must stand behind their products by offering repair options. Product owners are left to determine how to tend to their broken garments when repair solutions are unavailable, leaving unfixable clothing discarded. Repair and mending significantly hinder clothing longevity (The MacArthur Foundation, 2017).

The move toward circular business models may inspire more clothing manufacturers to increase their responsibility for the entire lifecycle of their products, from production to disposal. The critical gap in moving toward textile circularity can be drawn from design knowledge to consumer attitudes and the design of systems to slow production and reconsumption cycles. Designers have a unique position to join with other disciplines to effect change toward a holistic point of view of clothing, toward social connections, embodying practices that bring material longevity into tangible view. To move toward these transitions, new ways of seeing are essential to redirecting the mindset and posture of the designer and the wearer of clothing.

This paper explores a mixed-method approach to clothing care and repair through my recent Ph.D. research at Carnegie Mellon University, School of Design. It investigates the approach of Transition Design (Irwin, 2015), which proposes new ways of designing for complex problems and applies the framework to craft research to shift from a material focus to a relationship focus. This goal is to identify how the tactile mending process might open space for one’s experience of caring for clothing. This research explores, through autoethnographic journaling, how a self-narrative might uncover hidden phenomena of textile mending to inform future design methods of care. Lastly, the projects set out to discover how self-reflection, while recrafting textile waste and autoethnographic writing, contributes to the mindset and posture of designers engaged in long-term transition projects to connect across scales to create a positive and equitable future.
2. Transitioning design toward care and repair

Transition Design (Irwin, 2015) proposes new ways of designing through holistic views, drawing relationships between entanglements of the built environment. Complex problems, much like textile waste, are so entwined that they need solutions that are also connected, interdisciplinary, and multi-scale. Tonkinwise (2021) suggests that the role of design has yet to make inroads into system-level design and that it needs to work intra-scale between the spaces obscured from everyday view. Much work is needed to build designers’ competencies to work intra-scale with fluidity. That is, to be able to intervene once relationships between these nested and entangled problems are seen. Using the four pillars of transition design—visions, theories of change, mindset, and posture, and new ways of designing, and using recrafting materials as a way to experience the four nodes to explore points of departure from traditional clothing design.

Vision helps bring the unseeable to others, enabling the co-creation of "ecologies of interventions" (Irwin & Kossoff, 2023) needed to dismantle the status quo (Escobar, 2018) by including past, present, and future stories in a blueprint for the future (Irwin, 2015). Visioning is essential to building a theory of change. "Cosmopolitan localism" is a theory of change and practice that promotes "inter-regional and planet-wide networking between place-based communities that share knowledge, technology, and resources" (Kossoff, 2019, p. 52). It requires interdisciplinary practice and focuses on complex, long-term projects with a socially driven mission. (Kossoff, 2019; Manzini, 2005; Manzini & M’Rithaa, 2016). It aims for eco-local, place-based economies that prioritize quality of life and needs over "want-based consumption (Curtis, 2003, p. 92). Exploring the third pillar of transition design—mindset and posture—to understand one’s position and openness toward change influenced the research projects on how self-reflection and autoethnographic writing about recrafting materials contribute to the shifts in posture of designers engaged in long-term transition projects to discover new ways of designing.

Connecting the four pillars of transition design—vision, mindset, and posture—theories of change and new ways of designing from a practice-oriented perspective make tangible through small-scale experiential projects possibilities of new methods of Designing for Repair. The projects intend to capture and apply the immaterial, felt experience of repairing and renewing textiles for future use toward designing new ways of seeing and caring for existing clothing.
3. Repair: Culture, neglect, disposability, and privilege

Repair as a way to bring clothing to new futures can improve material strength and durability; however, it may not strengthen the user’s perception of the repaired item (Chapman, 2015). Repair is also necessary for consumer attitudes, and a radical shift is needed to open new pathways of mended mindsets for consumers to view a repaired garment as more than simply an alternative to buying something new. Care for materials beyond materiality could be seen to break free from the never-ending cycle of obsolete trends, giving agency to the wear (Fletcher, 2016) and pushing up against the dominant system.

Clothing repair is not easily accessible in the current fast-paced clothing system. Consumers may not have the skill or time to repair themselves. Caring for garments through handcraft takes time and is available to those who can afford the time and resources to master their skill (Dormer, 1997). From an economic standpoint, customers may spend more to fix a garment than to replace it. Mass-produced clothing competes for business through low, unfair prices, making the cost of repair exceed the cost of replacement. Once popular at the local dry cleaner, small repair businesses compete with new garment replacements (Fletcher, 2014). Additionally, poor garment construction does not allow room for repair (Gwilt & Rissanen, 2011). Lack of skill, time, and affordable repair options lead to material neglect, ease of new clothing acquisition, and a culture of disposability with ramifications to environmental, human, and non-human health.

Privilege influences caring for or repairing clothing. In marginalized communities, repairing more expensive items is necessary or a burden, not necessarily an alternative to purchasing new ones (Mattern, 2018). Wearing visibly mended clothes as a form of rebellion against the dominant
fashion culture is only for those who mend by choice. Mending across social circles changes its meaning—mending is an act of labor, leisure, or resistance.

Repairing in a community setting improves the social fabric beyond the thing itself. Social connections deepen when people gather to stitch together (Shercliff & Twigger Holroyd, 2020). Just as individual strands weave together to create a resilient fabric, the social engagement of mending brings together the common thread (Tronto, 1998) between individuals in local place-based spaces (Odabasi et al., 2022), laying paths for emergence. As we envision the future being revitalized through care and repair, individuals may start with garment repair, building confidence and skills, and may join communities of practice to share knowledge, lend support, and spread a culture of care embedded in everyday norms.

4. Designing ways of caring
"Designing might be construed as a domain for mutually enriching articulations between the biophysical and the techno-cultural infrastructures inhabiting any and all world-making practices. In this context, the praxis of repairing and caring for the web of interdependencies, which make up life becomes a means to overcome the most destructive aspects of the technological drive to shape worlds." (Escobar, 2023, p. XII)

Care as a design focus
By acknowledging care's dynamic, ongoing nature, we can embrace a more expansive vision of care as a social practice that shapes relationships, communities, and societies. (Tronto, 1998) More than taking preventative maintenance measures to keep something in working order, we can look at repair as a critical mindset and practice to enhance not just the utility and value (Chapman & Chapman, 2022; Jackson, 2014; Mattern, 2018; The Care Collective et al., 2020) of clothing but to move into future states. Recognizing this temporal dimension of care is crucial for understanding its transformative potential and role in shaping our futures. The perspective on care in clothing design is stunted, and its expansion requires careful reflection and building new competencies and practices that support care as a design strategy for clothing longevity.

5. Studies: Sensemaking through Crafting, repairing, and journaling

Introduction
Sustainable design researchers and fashion scholars are investigating how our engagement with clothing deepens our attachment (Chapman, 2015; Fletcher, K., 2016; Twigger Holroyd, 2017; 1018) and how the vitality of home-based sewing practices may reshape the disposable nature of fashion (Twigger Holroyd, 2017). An assemblage of craft-based research projects was conducted in a home-based studio to explore Design for Repair (DfR) principles and practices for mending and recrafting textiles. The projects used items of accumulated clothing to understand the motivations and barriers to mending and recrafting to build stronger bonds, both material and immaterial, to prolong their use. The studies explore new pathways of appreciation and experiences geared toward an equitable and sustainable future.
Mixed methods
Handcrafting grounds us in the uniqueness of the place, situation, and future needs by making them tangible with our hands (Yunkaporta, 2020). To discover the importance of craft-based research, I included autoethnography, modeled after Ingold’s (2006) process of self-narration, to describe my use of skill, tools, and materials in transforming materials. Ingold references three distinct reflection points, which are the "synergy between the tool, the material, and the practitioner" as well as the "coupling of perception and action" (Ingold, 2006, p. 66). Writing helped capture these insights, which were non-verbal while in a state of flow, in the present moment of the task at hand (Gold & Ciorciari, 2020). Autoethnography uncovers personal discoveries otherwise hidden between the material layers and tacit knowledge (Adams et al., 2014).

Research questions
The research questions offer space for exploration, experimentation, and reflection to understand new ways of connecting tactile process and autoethnographic journaling to engage in the needed long-term transitional work of reparative textile futures. To understand how we might reframe our user-material relationships in the context of clothing repair and experience the limits of existing textiles and garments concerning the care for their brokenness, I show two projects that highlight key learnings toward a new vision and shifting mindset and posture. These projects reveal the impact of autoethnographic journaling regarding the relationship between caring for textiles and its influence on future behavior. These two examples are reflections of caring (about the future), visioning, reflections of the repair (about the past transcending to the future), mindset, and posture that become circular in the process.

Reflections of caring (about the future) Visioning
Project: Making future memories
The news of a new baby in my family inspired this project. Over three months, I made a baby quilt from a pre-consumer textile swatch card of men’s skirtings. In parallel to the making process, journal entries captured memories, futures of space, and material. Along the way, this project took many pauses, starts, and stops, providing ample opportunity to reflect. The objective was to make an impromptu pattern using the materials on hand. I categorize the five phases of making as sorting the material, choosing colors and a suitable weight, designing an impromptu layout by taking cues from the materials, machine stitching the topper pattern, and finishing the quilt sandwich by hand.

Remembering and journaling about the gifts I received as a new mother and “how I appreciated the handmade receiving blankets that were gifted to me twenty-five years ago for my triplets and how I still have them in my ‘time capsules’” (Maione, Journal entry), made this project promising that I may create similar sentiment for the new mother. This old tradition of handmade gifts is still valued today (Hickey, 1997). This handmade gift was received enthusiastically when the new mother realized I had made the quilt, exclaiming, “You took the time to make this for us!”
The slower pace of handwork affords time to reflect on the process of crafting. Before and after creating sessions, journaling captured the relationships between action and the perception of the methods and outcomes. Discoveries of non-verbal sentiments revealed embodied knowledge through tangible objects and exposed hidden phenomena during the making process, often taken for granted, particularly in skills that have been done for years prior.

Figure 2. Photo journal samples of the making process help to reveal five phases of making; sorting material; choosing colors and weight; taking cues from materials for layout; machine stitching the topper pattern; and finishing by hand the quilt sandwich. Source: Maione, 2023.

Analysis through memoing and coding (Appendix A) and the photo diary (Appendix B) revealed two themes around temporality: slow and swift, as it relates to the continuity of the work. In moving slowly, I uncovered some barriers, such as time constraints and the tension between thinking and doing. Space constraints also slowed my progress since my writing space was also my craft working space. It impacted the time spent on the project and the clean-up needed in a shared environment. Other constraints, on a cultural and resource level, were in deciding on a color scheme based on the availability of the shade card and the shades of pink selected for the baby girl for a cis-gendered couple. The project moved swiftly when the vision of the future blanket came into focus, moving out of the past and into making mode. There was a turning point when thoughts moved away from the past and into the future, which inspired more doing than thinking. This turning point is of most interest when action moves quickly, with an aligned goal, even if in one own mind. Reminiscent of the first node of Transition Design, vision, bringing the unseeable to view, influences forward movement. This new vision of the pattern served as
motivation to action and remain in the present. I return to this idea later as a point to consider for designing in care for textile longevity.

“In piecing together small bits of textile waste in an orderly manner toward a function and act of care for material and person, the proposed waste has become treasured.” (Maione, Journal entry)

**Reflections of repairing (about the past) Mindset and posture**

Project: Hand me down and over

A recently widowed family friend gifted a pair of pants that belonged to her husband. These pants did not fit my partner well, but as a gesture of sympathy, he accepted these white cotton spandex jeans. My partner wore these jeans, which were soon stained on the front thigh and back seat. Not wanting to throw these away out of guilt about the carelessness with which the pants soon became stained, they rested on a pile of things for reuse. While sorting fabric swatches for another project, I discovered white swatches that would cover the stains well.

These scraps sparked an idea to cover the spots on the legs. I applied patches on top of the stains in a boro and sashiko style. The nature of the patches added texture and detracted from other imperfections on the fabric. The time spent and the decision on how to stitch the garment made this garment my own. The patches hid the obligation under which these pants were received. Being given agency with a simple needle and thread transformed these pants into becoming my own. As a young child, I realized that sewing my clothing helped me avoid the hand-me-downs from my brother, giving me agency in the clothing I wore.

The politics of hand-me-downs is felt on multiple levels; here, it is on the family level. On a global scale, secondhand clothing is shipped to developing countries, regardless of their wants and needs, often referred to as "dead white men's clothes" (Besser, 2021). Container loads of secondhand cast-offs are forced on counties in the Global South and tied to foreign aid policies (Brooks, 2015). To stop this largely ignored "slow violence"(Nixon, 2011), both vision and skill are essential areas to address to develop new mindsets and postures against and with the power structures. Developing skills, in this case, may be an intervention point in shifting the power dynamics and transitioning agency for designing local solutions.
6. Generational garments and intergenerational design challenges

Combining my experience in a mass-production system that moved fast with my investigation of slow craft methods, I now turn to a deliberate act of caring for the renewal of garments that I will refer to as "second generation" clothing. Presented is speculation to shift the mindset of textile waste management toward a "repair-thinking" (Jackson, 2014) model. The vision is to order these textiles for future usage as multi-generational garments. Unwanted garments described below could be locally recrafted using regional feedstock, skillsets, and local needs.

The framework for a multi-scale system embedded between design, micro-manufacturing, and makers could strengthen a web of interdependencies within local small-scale production reminiscent of the theory of change, cosmopolitan localism.

A spectrum of generations of garments is evolving beyond secondhand to recycled garments made from multiple tiers of recalled materials, fibers, or garment components. By interacting with clothing along this spectrum, we gain a thorough understanding of past traces embedded in the fabric that inform better designs in the future. This process needs additional inputs, and each process to disassemble, reconfigure, and refurbish is less efficient than the resale of complete garments or user-mending and re-wearing.
I focus on care and how design may benefit from a mindset of care. Despite the current system's disregard for care, designers can be activists for change by conceptualizing new products using precycle methods. As one way to expand intergenerational clothing cycles, a model of hybrid material flows (Figure 4) demonstrates a hierarchy toward intergenerational garment design. In addition to saving materials from landfills, this method can provide valuable data for future precycle design strategies.

**Hybrid Material Flow through Intergenerational Garments**

![Diagram of hybrid material flow through intergenerational garments]

*Figure 4. Hybrid material flow through intergenerational garments. Source: Maione, 2023.*

The next wave of design will blur the lines between professional or educated designers and anyone who makes clothing. A shift in alternative cultures and economies around material renewal brings about the "emergence [of] a system that makes use of everything in the iterative process" (Brown, 2017, p. 14). This new way of designing involves building the culture along with the craft and framing the ontologies to improve the practice. In this way, the material and the practice keep changing as people's beliefs change. These "transitions, as systems-level change, should be approached as ontological shifts, opening up radically distinct ways of being in the world, even if not everything changes" (Tonkinwise, 2021, p. 9).

To design systems of care and repair, designers can help make things tangible through acts of care (Manzini, 2005). Designers who use their competencies to make changes against the dominant regimes must understand their position and the barriers they will face. Exploring these new practices through slow craft with deep reflection can deepen our mindset and posture and bring awareness to our being essential to a vision with a long horizon needed to build possibilities and face challenges in reparative design.
7. Findings and implications

The findings indicate that craft-based methods when accompanied by reflective journaling and images, revealed hidden and meaningful connections between the crafter, material, and activities of textile care and repair. These insights present opportunities for the future of designed experiences for caring.

Emergent categories: Motivations, barriers, activities, and temporality

Through craft-based methods, initial findings revealed hidden and significant connections between the crafter, material, and activities of textile care and repair when used in conjunction with reflective journaling and images; these insights present opportunities for the future of designed experiences for caring. Four themes emerged through the analysis of journals and process images: motivations, barriers, activities, and temporality. Table 1, shows motivations as either internal (i) or external (e). Social norms influenced external motivations and were evident in several projects pertaining to covering a hole or a stain. An obligation to conform was also discovered, as was a sense of guilt throughout the journal entries. For example, I felt obligated to take used clothing and felt shame associated with the wasteful nature of mass-produced clothing during my career, which I attribute as the primary motivation for my ongoing research. However, external motivation is sustainable only through an intrinsic drive, some of which stems from personal fulfillment and enjoyment (Gold & Ciorciari, 2020), which was present in many journal entries. Other motivations included my curiosity and interest in playing with fabrics, which brought a sense of relaxation and flow state and using them to express love to others through handmade gifts, which brought a feeling of satisfaction.

The projects that showed a high flow level included simple tasks where I was confident in my abilities. In contrast, due to space and equipment limitations, physical and perceived obstacles hindered specific projects, such as large projects and knitted fabrics. Access to studio equipment was hampered by the pandemic, diminishing confidence in producing the desired results. In addition, the lack of need for new clothing during the lockdown hindered work completion.

From a craft perspective, some activities are less observable, such as imagining moving shapes and colors together. More visible activities were touching, stretching, folding, and draping material on the body, leading to recrafting and repairing garments or textiles using seaming, knitting, patching, and embroidery. These slow processes allowed time to reflect on nonprofessionals’ challenges in clothing repair and mending.

Table 1. Clusters from journal and image analysis relating to recrafting and repair.

<table>
<thead>
<tr>
<th>Motivations (i/e)</th>
<th>Barriers</th>
<th>Doing</th>
<th>Temporality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disgust and guilt (e)</td>
<td>Time as resource constraint</td>
<td>Impromptu pattern making</td>
<td>Pace slow/fast</td>
</tr>
<tr>
<td>Thrifty</td>
<td>Space and equipment</td>
<td>Seeing voids</td>
<td>Remembering past</td>
</tr>
<tr>
<td>Concealing, maintaining (e)</td>
<td>Low need for product</td>
<td>Imagining</td>
<td>Building memories</td>
</tr>
</tbody>
</table>
Obligation to wear, guilt (e) fitting in/ belonging (i)
Lack of vision of finished product (i)
Playing, touching, folding Draping
Linear

Curious, seeking(i)
Play with materials (i)
Flow state (i)
Associated negative emotions to the material /memory (i)
Seaming
Knitting
Embroidering
Non-linear
Random

Gifting - expression of love (i)
Patching

Care of/for/about
Gifting

Source: Overview of codes clustered by category from Maione, (2023).

Designing experiences for garment longevity
The discoveries about motivations and challenges suggest developing new design roles that work with existing materials as an intergenerational design practice. To achieve this, an opening for new ways of practicing waste elimination from first-generation clothing must go beyond particular deconstruction skills. Using a model based on Ingold's (2006) meditation on the process of skill, focus on materials, tools, and techniques bringing them together with the findings on intrinsic and extrinsic motivating factors toward recrafting material. I situate the categories time, place, and situation (external) and the motivation of a psychological state of flow (intrinsic) as a developing framework for making practical material and immaterial experiences, leading to a practice of recrafted garment design for multiscalar use. The goal is to develop a model to elevate and sustain clothing care and repair through experiences beyond material and propose new competencies for designers.

A model for recrafting textiles through impactful moments of flow
Below are some scenarios that could be helpful to consider when designing recrafting experiences, leading to a more comprehensive understanding of the flow state experience by tying it to the immaterial nature of clothing repair and allowing new ideas and potential solutions to emerge when working with communities of practice. Further exploration is needed to evaluate these relationships.

Table 2. Moving through experiences through material, techniques, and tools

<table>
<thead>
<tr>
<th>Materials</th>
<th>Techniques</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material influences the experience through its perceived value in its current state and the likelihood of the intended outcome.</td>
<td>Mastery of skills induces a flow state</td>
<td>Complexity of tool use decreases the flow state if the pace does not allow for time to reflect on the past or future.</td>
</tr>
<tr>
<td>Material, time, and tools shift with craft experience, and the craft experience shifts the material.</td>
<td>Time as a resource impacts technique choices, which impacts the crafters’ experience of time.</td>
<td>Tools and materials which are aligned with place can provide a sense of grounding and belonging, for example, local and regional materials or dyes as part of repair elements.</td>
</tr>
<tr>
<td>The relationship between the material, the tools, and the techniques are the nodes relating to craft.</td>
<td>Situation affects mindset and reorients goals to the degree of perceived urgency (Kotter &amp; Weideman, 2008).</td>
<td></td>
</tr>
<tr>
<td>The intrinsic value embedded in the newly formed material is the confluence of time, place, and situation, and the degree of skill and knowledge of the tools and techniques used also plays a crucial role in shaping the experience.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The psychological state of "flow" has long been studied in the workplace to improve productivity. Productivity is not the goal, but to facilitate conditions of flow state to enhance motivation and self-efficacy, particularly as the overarching objective is long-term and requires persistence. This theoretical framework provides a starting point as a way to experiment with the impactful moments of the flow state toward increased motivation for clothing care and repair.

This research contributes to a reflective process to assist designers in learning about their position and skills, bringing to light synergies between the scale at which they want to intervene, and assessing the gaps for further learning. Journaling alone will not bring change; an analysis of journals must accompany the relationship between recrafting, thinking, and writing. For example, over three years, I saw a shift in my perspective from industrial-scale product design toward local-scale experience design building toward activism. The problem stayed the same, but my entry
point changed. This work allows one to confront the relationship between clothing and the material future through recrafting. It emphasizes the importance of developing designerly ways to increase the value and usage of clothing through experiences of maintenance and care.

Developing autoethnographic and recrafting practices to engage with Transition Design's "mindset and posture" pillar requires further engagement to evaluate its efficacy. Recrafting futures in textiles using these mixed methods offers a radical alternative to fashion design that blurs the distinctions between new, old, and intergenerational clothes via post-material spaces.

References


About the Author:

Donna Maione: is a designer, artist and educator researching new ways of designing for recrafting futures of textile waste.

Acknowledgment: This work was supported by Jonathan Chapman at Carnegie Mellon University, School of Design, who provided valuable feedback and support during the research and writing of the dissertation, on which this article is based.
Appendix A

<table>
<thead>
<tr>
<th>Quilt Journal 2021_01_Translating patterns</th>
<th>Conference Notes</th>
<th>Data analysis</th>
<th>Interpretation and analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I want to be a good quilter...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I want to make a quilt for my daughter...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I want to learn about the history of quilting...</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


## Appendix B

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>photo diary baby quilt 2</td>
<td>Image dates and comments</td>
<td>photo diary baby quilt 2</td>
<td>Image dates and comments</td>
<td></td>
</tr>
<tr>
<td>Dec 28, 2020 at 9:11 PM</td>
<td>bits of pieces considering for the entire range of colors on hand</td>
<td>Mar 16, 2021 at 7:55 PM</td>
<td>completed pattern</td>
<td></td>
</tr>
<tr>
<td>looking forward to using this machine</td>
<td>table is only surface I have clean at the moment</td>
<td>small size - accomplished</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sharing space with loads of books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/28/20, 12:56 AM</td>
<td>clearer vision into focus</td>
<td>near completion motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bits in place, secured, able to move on to next steps</td>
<td>I loved how the seams laid here; a lot of crisp and soft bend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am loving this old machine that I bought here on Pittsburgh. Nice solid sound, and secured to the table. I miss my old machine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar 13, 2021 at 9:00 PM</td>
<td>dust date approaching</td>
<td>Salvage a mistake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>motivates hand stitching speed and pattern</td>
<td>repair</td>
<td>repair as craft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stitch lines informed by scrap seam line</td>
<td>design by mistake</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>