

TESTIMONIAL DIGITAL TEXTILES: MATERIAL METAPHORS TO THINK WITH CARE ABOUT RECONCILIATION WITH FOUR MEMORY SEWING CIRCLES IN COLOMBIA

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ABSTRACT

Research on textile crafting offers an opportunity to investigate reconciliation in a context that brings together every day practice, the realities of the conflict, the possibility of healing, and the rebuilding of social fabric. In this exploratory paper we deploy a methodological design which contributes to think about reconciliation with care through the practice of textile crafting in four memory sewing circles, integrated mostly by elderly women in different Colombian municipalities. This design implies the prototyping of a set of technologies that integrate digital

components to various handcrafted textiles with the ability to digitally embody reconciliation in the selected sites, and also contribute to the interconnection between these sites. Specifically, the project is oriented towards the collaborative design of textile-digital objects, as testimonial digital textiles which allow research to be conducted in the Colombian context.

INTRODUCTION

Despite the importance of reconciliation in Colombia as a process that is actively practised by citizens in their everyday lives, most research so far has deployed an institutional, top-down approach to this process. The need for a bottom-up understanding of reconciliation in the post-peace agreement phase in the country can help establish practices of reconciliation as long-lasting and collective acts of communication, of doing and learning. This new understanding allows communities to negotiate the violent past, and situate themselves in the transitional present and hopeful futures. The goal of the

¹ The order of the authors does not reflect hierarchies between them, the paper was written collectively, having said this, the first three authors are the leaders of the design process of the digital textiles.

research which underpins this exploratory paper, is to develop a framework for reconciliation with communities that have been crafting textiles and which have been severely affected by the armed conflict. This collaborative methodology implies, among other things, the design of digital textile prototypes.

Textile crafting is deeply embedded in the life of the selected rural communities. It is an open practice, always in the making (Hallam & Ingold, 2014), and adapting to the local conditions of the communities and the materials used. Textile crafting has the unique capacity to generate, on a daily basis, new configurations between the textile materials, the bodies that come into interaction with them, and the broader environment in which they are embedded (Pérez-Bustos & Chocontá Piraquive, 2018). This means that, as a knowledge making practice, textile crafting is embedded into caring practices, situationally responding to the local contexts, and showing how armed conflict has been experienced and negotiated differently by communities that have experienced war directly.

In order to explore textile crafting within these complex conditions, the project that supports this exploratory paper employs a collaborative methodology that conceives textile crafting as a form of autonomous design (Escobar, 2016). This conception recognizes the political, creative, and epistemological dimensions of sewing, embroidery, and weaving labours as forms of care and public deliberation of the armed conflict, and as concrete local modes of reconciliation. Within this context, textile crafting is a participative design space of social action (Botero, 2013; Lindström & Ståhl, 2014) in which the involved actors imagine what is and what will come to be. Textile crafting has the power to shape social relations on the domestic and communal scale (Pérez-Bustos & Chocontá Piraquive, 2018).

Existing research on the political potential of textile crafting has drawn attention to how it is enhanced by the use of information technologies (Kimmelman & Leavitt, 2014; Pérez-Bustos, 2017). However, this possibility has not always been used within textile crafting in Colombia. Most of the sewing circles which narrate the conflict using this material language in the country are led by middle and old-aged women of rural origin and low socioeconomic strata which explains why the articulation between textile and digital craft has not occurred in these groups (Del Prete, Calleja & Gisbert Cervera, 2011).

In researching the material grammars related to reconciliation, we formed a collaborative methodological design that constructs objects that merge textile and digital components into handcrafted pieces (Pérez-Bustos, 2017). The digital component is conceived with a broad base, which implies both the representation of information and the incorporation of electronic elements (sensors, actuators, microcontrollers) into textiles. Historically, textiles and computing have been closely related (Fernaes, Jonsson

& Tholander, 2012); in fact, a textile is, in itself, a digital representation of information, in which codes are formed through threads that form the weft and are interwoven with the warp. This historical relationship, as well as the motivation to explore how textile and digital technologies can be intertwined as a way to enhance both, led us to propose living labs to experiment collectively with the communities on the creation of new material metaphors around reconciliation, which would allow the communities to speculate on what reconciliation means (to them), beyond standard state and religious discourses.

Throughout this exploratory paper we unfold two material metaphors, called ‘prototypes’, that have emerged out of two living labs with four communities that we assert are forms of doing design with care, focusing on attentive listening to what happens when communities interact with digital textiles. The first prototype was designed by searching to embody an idea of reconciliation as something that is more visible when participants of the communities are together. This led to further material explorations that sustained the emergence of a second prototype: ‘*La encomienda*²’, which was meant to think of long distance reconciliation, new senses of *collectivity* and how communities can establish a connection that can produce common reconciliation strategies that are careful of, and sensitive to, the local realities.

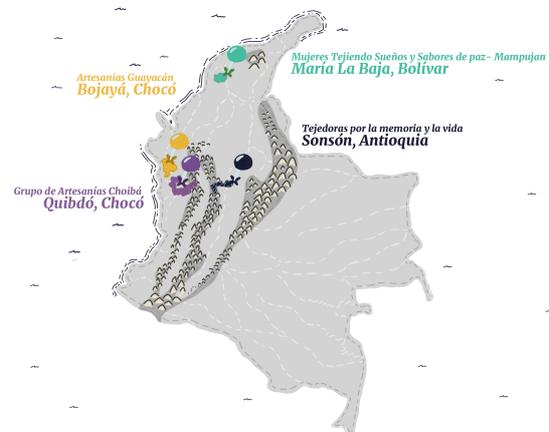


Figure 1: The four Colombian regions in which the memory sewing collectives are located.

MEETING WITH THE COMMUNITY: RECONCILIATION AS BEING TOGETHER

For the initial stage of the project we worked with four memory sewing circles located in different regions of the Colombian territory: Mujeres tejiendo sueños y sabores de paz (María La Baja, Bolívar), Artesanías Guayacán (Bojayá, Chocó), Artesanías Choibá (Quibdó,

² In the region of the Atrato river in northwestern Colombia, the word *encomienda* is used to denote a parcel sent to a loved one who is far away. An *encomienda* can carry food, money, or any other type of gift.

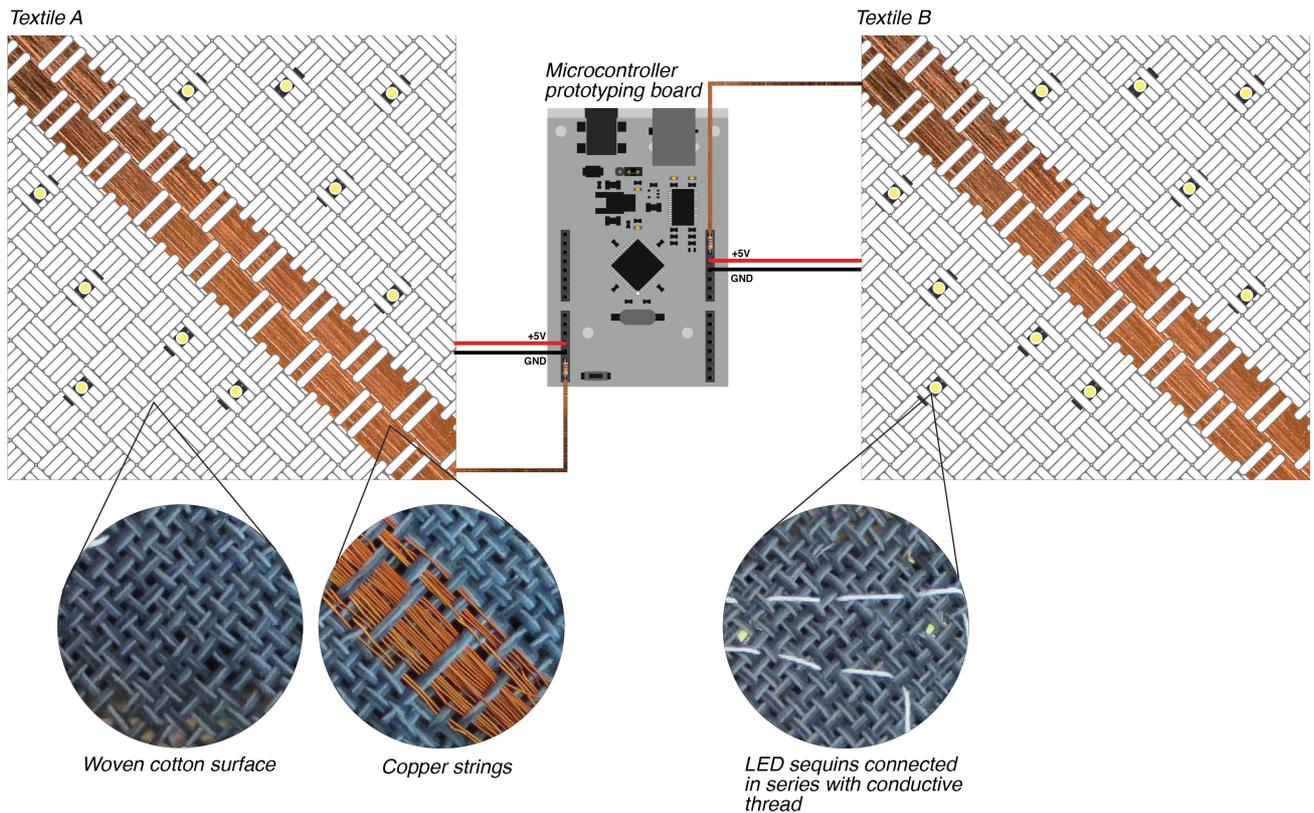


Figure 2: Digital textile prototype 1: Woven cotton surfaces with embedded copper wires and LEDs on the sides. Microcontroller prototyping board in the center.

Chocó) and Tejedoras por La Memoria de Sonsón (Sonsón, Antioquia) (Figure 1). In the first encounter (workshop 0), we presented the project and acknowledged the meanings of reconciliation present within the communities. A prototyping space, as a living lab (Lindström & Ståhl, 2014), was designed to invite all the participants—ourselves included—to participate, experiment, and reflect with a digital textile. The initial prototype reflected around the concept of *collectivity*, being employed to trigger conversations around reconciliation and serve to recognize the relationship of the communities with digital and electronic components.

Prototype 1 used conductance as a physical metaphor of collective action.³ We wanted to explore material contacts among and between people, and to investigate the ways in which a digital textile materially represents how reconciliation is a personal act that can feed collective actions (Brouneus, 2008). This digital textile (Figure 2) consisted of a surface woven with cotton threads and copper strings as the input, a series of LEDs embedded into the surface as a visual output, and a microcontroller connected to both. As more people joined the connection by holding the hand of the person that was directly in contact with the digital textile, the

³ The preliminary version of this prototype was created by Camila Padilla. We want to thank her for her support in the project, given that she did not participate in the writing of this paper, and is thus not included as an author.

capacitance increased and the LEDs lit up. One or two people alone were not enough to turn on the LEDs.

This prototype allowed us to make the lighting up of the LEDs a collective action that resulted from the metaphorical sum of the energy of the participants. This material-led reflection served as our way to bring the body into a corporal discussion regarding reconciliation. In Bojayá, electricity is supplied by petrol or kerosene power plants. Quibdó and Sonsón have electricity as a public service, so it is normal to receive electricity in urban homes. In rural areas, where most of the participants are from, there was no supply of electricity until a few years ago. Recounting their particular experiences of the prototype, the participants told us about their fear of getting electrocuted when touching electric appliances or sources.

The participants laughed when the experiment took place. Touching the prototype made them nervous but, at the same time, it made them curious (Figures 3 and 4). They encouraged each other to touch the digital textile carefully and they asked us about the components and how they worked.

The lighting up of the LEDs as the output of this digital textile prototype created the feeling that they had the electricity to power up the device. “Together we have good energy” said one of the participants from Sonsón as the LEDs turned on. Light is related to electricity and because their collective capacitance was the input to light up the textile, they assumed their body electricity



Figure 3: Prototyping in Sonsón, taking hands to light up the textile. From left to right: Blanca, Adriana, Isabel, Olga and Eliana.

was the switch: “This is pure human energy, we are just energy, we are human warmth. We proved it: we all have energy” (Participant from Bojayá, November 2018)”.

After experimenting with the digital textile, we asked the participants how they could relate this material metaphor with reconciliation and with the project. Thinking reconciliation with-through this digital textile prototype opened the discussion and brought new meanings of this institutionalized term. Their (our) bodies were part of the conversation through forms of caring touch (Puig de la Bellacasa, 2009). The idea of touching others and allowing themselves to be touched by others with care, was central to the mediation. Another meaningful observation was the need to work together, but realizing the importance of their power as individuals—“The connection between some people and between others affects it [the prototype], as in life” (Quibdó, November 2018). During the session, they constantly repeated: “we can do it together, we need each other to accomplish it”.

Regarding the project, the participants saw the digital textile as a possibility to reach others. “Electricity turns on the light (energy), and that travels far away, like this project that is going to travel far far away, farther than we can imagine. Electricity is also like a surprise when it comes and you are not expecting it, so whoever gets touched by this project is going to be surprised too” (Participant from Bojayá, November 2018).

Furthermore, the electronic components woven in this prototype were intentionally exposed to invite the communities to progressively get closer to the new elements being introduced and the possibilities they bring. Later prototypes brought additional layers that built on top of previous experiences, combining components, devices, and know-how owned by the communities with new elements and possibilities.



Figure 4: Above: Prototyping in Sonsón, Luz Dary is afraid of getting electrocuted and Lucero is laughing while waiting for her to touch the textile. Below: Prototyping in Bojayá, Isabel explains to La Negra how the textile works by showing the components.

LA ENCOMIENDA: BEING TOGETHER WHILE DISTANT

The design process of the material encounters, which include both the digital textile prototypes and the environments that mediate the experimentation with these prototypes, necessitates multiple iterations. After the fieldwork with the communities was conducted, the complete team (including anthropologists, designers, and engineers) met to reflect on what happened during the latest encounter and to discuss possibilities about the next episode. The following issues were highlighted:

- The communities we are working with are different; they live surrounded by different ecologies, they merge sewing with other corporal-artisanal practices, and they live different experiences with the armed conflict.
- However, they are also similar, they all narrate the armed conflict and ways of dealing with it, creating various symbolic products which highlight that the conflict also affects the natural wealth of their territories.

With this in mind, the second digital textile prototype was meant to allow communities to see these commonalities and differences and to use those ideas to create a new sense of *collectivity*. To accomplish this, we bring into discussion how each member of the sewing circle plays an essential role in their community, but also how the sewing circle makes part of a bigger network of textile circles in Colombia, and how they can establish a connection that can produce common reconciliation strategies that are careful of, and sensitive to, the local realities.

For this, the second material encounter was designed along the following guidelines; which were produced out of our collective discussion on the experience of the living lab created around the first prototype during fieldwork:

- The digital textile had to keep materializing the idea of *collectivity*—together we are stronger, while distant—thinking of connecting communities that are physically located in different places, and doing this with care.
- Reconciliation goes through the body and through natural territories, and those more-than-human bodies are matters of care to be considered in the design.
- Technological infrastructure in the places where the communities are located is limited, they all have GSM networks, but the internet is not always available, so design has to be mindful of existing infrastructures.
- It was important to connect communities both through digital and material messages, which included not only texts but also local objects such as seeds and threads or textile samples.

With this in mind, we created a chain of material correspondence in which women from each sewing circle could exchange material memories from their local ecologies. Once the material correspondence reached each sewing circle, a text message—Short Message Service (SMS)⁴—was delivered; both to the members of the circle opening the correspondence, and to the members of the circles where *La Encomienda* had already been, to acknowledge that the parcel had been opened.



Figure 5: The final iteration of *La Encomienda*. In the front, the textile bag has a plastic pocket that contains a microcontroller prototyping board, a cellular module, an antenna and a packet of AA batteries.

The material contents were collected inside a textile bag (Figure 5), which was equipped with a microcontroller, a cellular module, and metal snap buttons. These buttons served both to close the bag to keep the material contents safe, and to close the circuit to monitor their delivery. The telephone numbers of the women in the sewing circles—that were voluntarily given to receive updates from the project—were manually added to the broadcast list of recipients. During the second encounter with the communities (workshop 1), they were encouraged to think about how they would like to present themselves through tangible objects to the women of the other sewing circles. Then, they were invited to open *La Encomienda* to discover what gifts had been sent to them (Figure 6).

The initial approaches were timid and detached because of the visible digital components—“How are you allowed to travel with that? It looks like a bomb” (Participant from Quibdó, February 2019)—but this was quickly overcome by the excitement produced by the

⁴ SMS were chosen since this is the way in which the government communicates to victim communities and inform them about official process of reparation. This is a technology the women of the memorial sewing circles have access to and are familiar with.



Figure 6: Above: The women from the Sonsón collective preparing the gifts they put in *La Encomienda* for the other collectives. Below: Pabla in Mampuján-María la Baja, placing a couple of gifts in *La Encomienda*.

presents, and also because of the trust already built within the team. Once the bag was opened the women were distracted by the contents: reading the messages or the recipes, looking at the textile artefacts or sharing out the seeds. They were too excited to realize that they had received the text message and the team had to encourage some of them to look at their phone: ‘Hello Luz Dary! The women from the Sonsón sewing circle have just opened *La Encomienda* of the Mending The New project’. At this point, the excitement doubled. They all wanted to check if they had received the message, to verify that they were part of the wider community. The next time they received the message, they were able to remember their initial reaction and

imagine the women from the next sewing circle looking at their presents. This simple action allowed them to connect, if for a moment, across the Colombian territory with similar women with similar stories.

CONCLUSIONS

The living labs, mediated with the prototypes, were opportunities to open material discussions about daily meanings of reconciliation within the communities. The prototypes, and those who designed them, have been nurtured by the encounters with the women of the memory sewing circles. In addition, their reconfigurations have responded to dialogues between the different materialities and were fed by the know-how of the participants in the project and their local ecologies. On the one hand, the digital know-how, that was not necessarily very close to the sewing circles, was becoming progressively complex so that it remained graspable for the woman in the communities. The material metaphors intended to bring the communities closer to technologies that are usually packaged and sealed. On the other hand, the textile practices, the ways, places, and materialities in which the communities communicate, carefully define and modify the digital, creating a common language, that allows us to talk about reconciliation with care, not only with words but with local objects, emotions, and deeper world visions.

In the future, the living labs that took place in each of the sewing circles will be enriched by a series of encounters with students and experts in the fields of historical memory, textiles, and digital prototyping, both in Bogotá, and in Nottingham, UK. These encounters are aimed at exploring and thinking together the prototyping processes that were created during fieldwork so as to develop new mechanisms for continuing to explore reconciliation with the communities. All of these experiences are focused on finding ways to reconcile digital and textile technologies which connect textile circles and diverse audiences. The aim is to narrate and deal with the facts of the armed conflict by placing care on the horizon of our design practices.

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