

Recipe Booklet

EMBROIDERED PROTECTIONS

Collaboratively crafted digitally augmented interactive sister quilts to explore notions of women's safety



A quilting recipe for cross-cultural digitally augmented craft practices

This project aims to raise awareness of the links between women's safety and textiles, and to build solidarity among women who may have experienced un-safety. It is about togetherness that worked across cultures, borders, organisations, and craft practices.

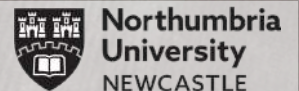
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INTRODUCTION

Opening notes

In this booklet, we present a ‘recipe’ of how we approached our project, and one we hope will be useful for others wanting to work on similar co-creative, cross-cultural quilts. We hope that others will learn from our work, and make adjustments to their own projects based on this learning. We are calling this a ‘recipe’ rather than a set of ‘instructions’, because we recognize that each project is unique – and that each context provides unique ingredients. We hope that other researchers, designers, practitioners, crafters, or artists can adapt our recipe, make substitutions to our ingredients, or spice it up with alternative digitization or collaboration strategies! Following the list of ingredients at the start of the booklet, we outline how we utilised them to create our project together.

both countries to create sister quilts, which are artefacts and physical manifestations of our shared (un)learning, understanding, and hopes for the future.

The sister quilts are connected not only metaphorically through the collaboration, but also through their digital augmentation. Using Turkish symbols, we cross-stitched Augmented Reality markers, which are embedded into our sister quilts. These markers are the same for both quilts. When scanning these markers with a smartphone, additional information about our project and quilts appears on the screen – photos of our process, a photo-representation of the other quilt, a report produced by the Turkish team based on a workshop with the local city council to address topics of safety in Istanbul’s neighbourhoods, as well as our recipe and exhibition booklets.

“The sister quilts are connected not only metaphorically through the collaboration, but also through their digital augmentation.”

The aim of this project was to collaboratively craft digitally augmented interactive sister quilts to explore notions of ‘women’s safety’. This collaboration was intended to be digitally mediated, but also related to in-person collaborations in the UK and in Turkey, as well as metaphoric collaboration between the people working across the two countries.

With this project, we hope to raise awareness of the links between women’s safety and textiles, and to build solidarity among women who may have experienced un-safety; ensuring trans-inclusivity across our work. Together, we worked across cultures, borders, organisations, and craft practices – building cross-cultural collaborations. We participated in training from local craftspeople in the UK and in Turkey, followed by digitally-mediated participatory crafting workshops in

Throughout its history, Istanbul has been a physical and metaphoric bridge between East and West; a melting pot of religions, cultures, and craft practices. With this project, we respect this rich cultural heritage while looking towards the potential of novel hybrid crafts for the future; using digitally mediated and augmented practices. The project broadens participant’s horizons, encouraging them to think beyond their own practices and borders, and beyond western ideas of women’s safety and traditional forms of craft. We hope that others will use the recipe we outline in this booklet to either create their own collaborative projects, or to create additional sister quilts, expanding the sisterhood we created in our project between Istanbul and Newcastle to other cultures, countries, or regions.

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CROSS-CULTURAL
COLLABORATION

The first ingredient for a successful collaborative project that is digitally mediated, is to develop strategies for cross-cultural collaboration. There are lots of elements to consider for doing this, and we expand only on some of these below. Prior to the practical steps we outline below, it is integral that the research team see the expertise in all collaborators – regardless of organisational and hierarchical standing. It is integral that there is a base understanding of the different work environments and national contexts in which collaborators live and sit, and that a shared values-system is established prior to the start of a project. Below, we outline only some of the pragmatic steps that can be taken once these more values-based aspects of the collaboration are established. Below, we write about the development of: (1) shared digital infrastructures; (2) the importance of ‘sisterhood’; (3) the importance of academic designers becoming students with and through projects like ours; and (4) language and translation of words and phrases that are used in projects.

Shared digital infrastructures

Creating a shared digital infrastructure is integral to fostering successful collaboration. This infrastructure must include platforms that are accessible and useful for all collaborators. Internet accessibility, usability, and institutional

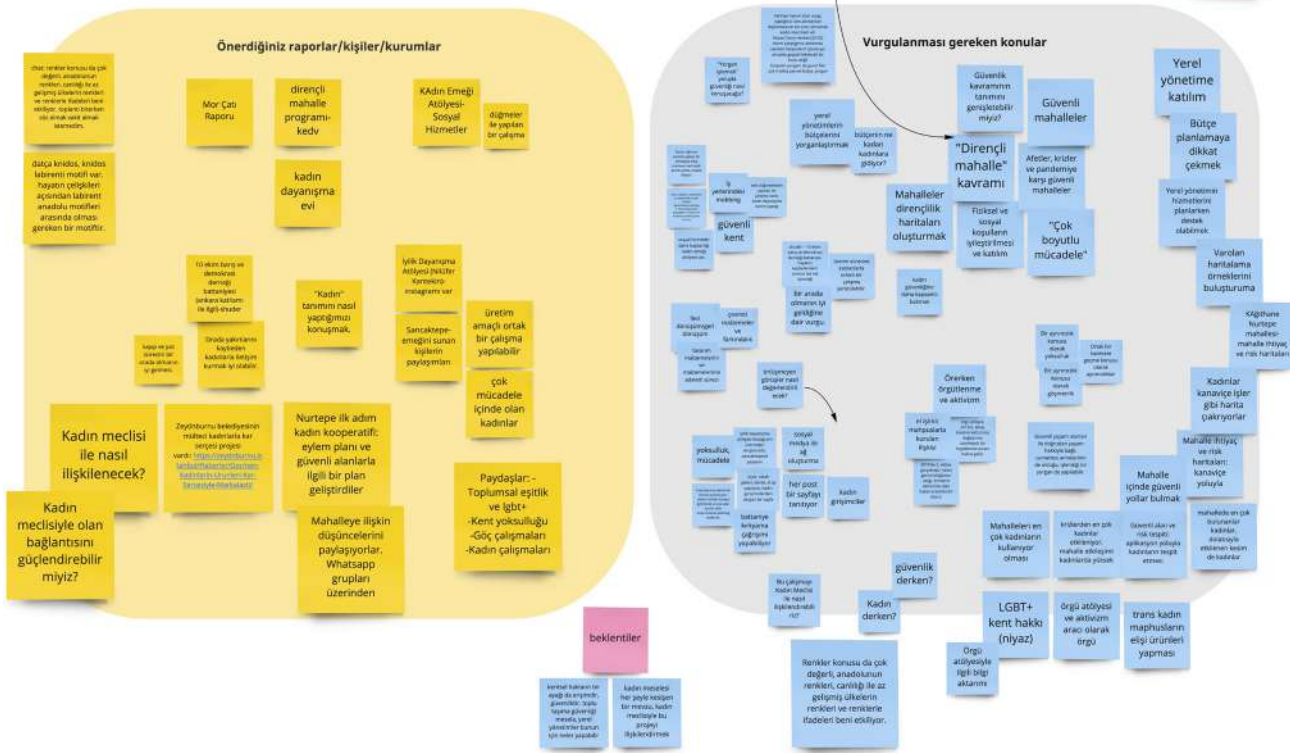
Image: Shared Miro board



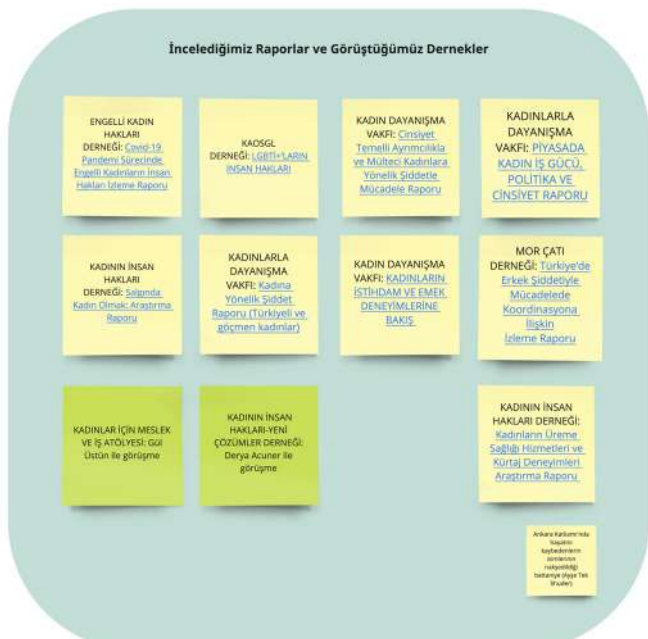
privacy concerns should be taken into account here for both synchronous and asynchronous collaboration. In our project, we used MS Teams channels for meetings and impromptu conversation, as well as e-mail, instant messaging apps like whatsapp and slack, a shared online whiteboard, shared documents where we communicated asynchronously (and sometimes synchronously) through comments and suggested changes, and social media. This might seem like an incredibly long list of platforms, which is the result of allowing our communication patterns to develop organically – to give space for the platform that made the most sense for the interaction that was needed.

We created a shared online board on the day we started the project. Both co-leaders first introduced their inspiration for the project, to which other project members added as time went on. As the project progressed, the online board turned into a diary for the project, capturing the developing inspirations internally to the team as well as externally with participants. Partners added pictures from ongoing work, transcripts and records of different meetings were added, as were works-in-progress for our own quilting patterns, thinking, and writing.

Further, the use of the shared online whiteboard



Images: NGO meeting outcomes from Turkey. The growing whiteboard with NGOs, links to existing reports, initial themes, and in depth comments on how to merge themes.



The importance of sisterhood

In our project, we worked on two connected but unique quilts, which we are calling 'sister quilts'. In the process of developing the pattern, we had many conversations about how 'similar' they should be - and even whether we should attempt to create 'twin' quilts. Looking at the differences (and similarities) of experience in Turkey and the UK, we decided to value our understanding of violence against women and gender based violence as a global problem - one that is connected to all of us. But also that while there were great similarities in these two countries, that situations were different enough to warrant different interpretations, motifs, patterns. We wanted to illustrate the connection, similarity, and individuality of experience through our unique but connected pieces. We see our work as an homage to the global sisterhood that is needed to combat violence and increase safety - one that is connected in a variety of physical, emotional, material, and metaphoric ways. But also one that acknowledges and combats global inequities, one that acknowledges, embraces, and celebrates cultural differences.

inspired the team in Turkey to use the same type of board for collecting and sharing materials with NGO collaborators. This allowed an equitable participation of many groups, where they had a chance to see the decision making process in the preparation meeting to the event of 'Gender and Security Perception in Istanbul' which the team organised later on.

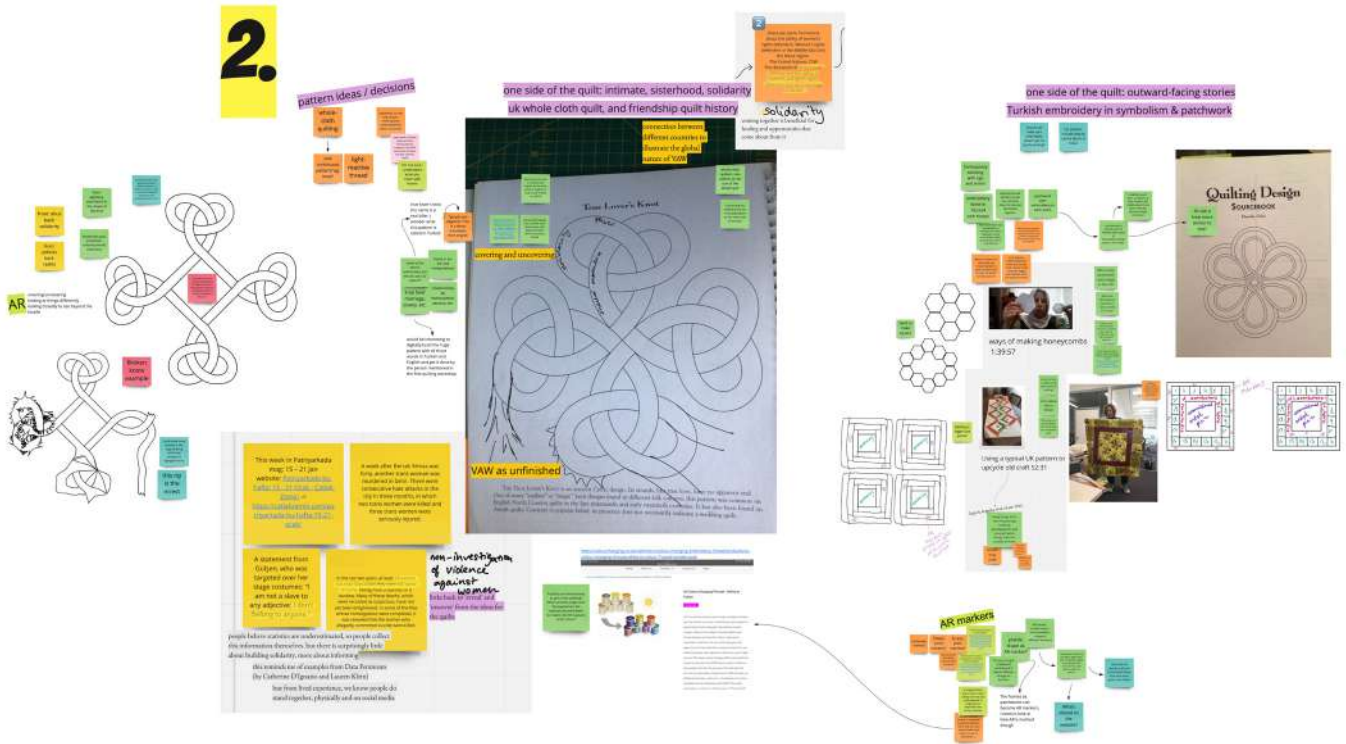


Image: Quilt pattern decisions

Designers becoming students

Overall, the project has benefited greatly from a fiat hierarchy of knowledge – to a degree within the project team, but particularly related to non-academic partner involvement. For example – we were keen to incorporate knowledge from NGOs, craftspeople, and other participants as experts in their sphere of knowledge, just as we were experts in our sphere of academic research knowledge. This allowed all project members to turn into ‘students’ at one time or another; it gave particularly the research team space for humility and learning, to broaden our horizons and open us up for critique to develop new knowledges with and from our collaborator.

Arguably, one of the most inspirational parts of the project was to restructure the service design role for the designers from within. The craftspeople and the trainings showed us how important it is to give enough time to fine details, and to respect the expectation of the trainers about mastery. This started with the training from the UK where 2 of the 4 members in Turkey were not able to do the quilting. This problem was only solved when one of the team members found a youtube video in Turkish using the traditional term ‘yorganlama’, explaining a very similar process. Another example is: in the first part of the Turkish training, the team was trying

to create a honeycomb patchwork. While doing so, the trainer pointed out that the work was not yet symmetrical, but that this may develop as we keep practising – a remark repeated many times by several of the trainers. Similarly, looking towards the craft: when it came to the creation of the quilt, all the craftspeople involved in Turkey mentioned that ‘it is impossible to reach a high quality within the given time frame, as such things usually take months’.

Language and translations

Finally, translation played an integral role in developing our cross-cultural understanding within the team and the project overall. As we have mentioned elsewhere, for example, we were not able to complete all our training synchronously due to language barriers. The key concern related to language however was related to translating the words and phrases that we wanted to embroider onto one side of our quilt – this related to aesthetic placement of the words as well as the translations of the words themselves, which we expand on below.

It became clear that as we progressed in creating our pattern, we had to adjust words for empowerment. The placement of the words on the quilts was initially allocated by an algorithm, and later adjusted by the research team. This

process of adjusting was necessary as, for example, on the Turkish sister-quilt the words were positioned along an angular water path motif. Due to the shape of the water path, some long phrases needed to be positioned on different axes, as the placement affected not only the legibility of words, but also the meaning of the Turkish words. Since Turkish is an agglutinative language (where suffixes play an important role in making meaning), there were some positions in the quilting paths where meanings of the broken words were affected. Let's take the word *dayanış-ma* as an example: While *dayanışma* refers to a positive meaning of "solidarity", *dayanış-ma* refers to "do not cooperate". For this reason, placements of selected words became ever more important as we started to look into the nuanced meaning of words and the visibility of their suffixes on the quilts.

Even when a whole word was visible on the quilt, there were times where finding an appropriate translation (either into English or Turkish) became difficult. One example of this is the word 'keçe'. This word was translated from the English word 'felt' - which can refer to both the past tense of 'feeling' as well as the textile material. The material was also mentioned in Turkish books, as well as some of the interviews we carried out at the start of our project. As we discussed the translations, the Turkish team members started to doubt their original translation of 'keçe' and

later replaced the word with 'hissedilen' as this provided a deeper meaning to the translation: 'something that is felt, like a feeling'.

Further to this, it became really important for us to accept not-translatables as an important part of our work. The words on the quilt were selected through meetings with different people in the training, NGO representatives, and council members, as well as during interviews with NGOs at the start of the project and published reports on women's safety. The list of words includes statements from women, as well as terms and notions that represent some of the important findings from our work. During the translation of some expressions, we needed to consider their connotation, especially when direct translations were not available. To illustrate what we mean, we look towards another example: *alı al moru mor*. This is a saying to 'emphasize the true colours', translating to 'it's red is red, it's purple is purple'. While the English translation may not be clear, when contextualised culturally in Turkish, it represents various meanings. For instance if someone is tired from working hard or is too tempered, one can use the saying 'alı al moru mor' to define the colour of their face. We used a translation like 'intense red and purple', knowing that it is impossible to translate the whole cultural and historical context, but we also resisted omitting words and phrases like this, simply because they do not fully translate. Although there are very different words and expressions in the quilt, most of the chosen words evoked the positive aspects of what can happen when we start to talk about gender-based violence: solidarity, hope, community, and so on.

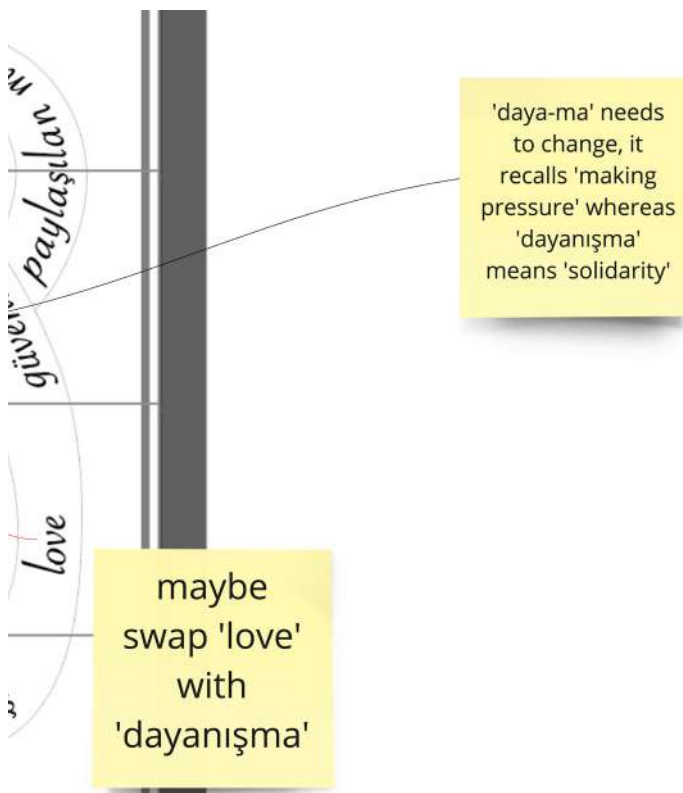


Image: Wording issues on one of the quilt versions

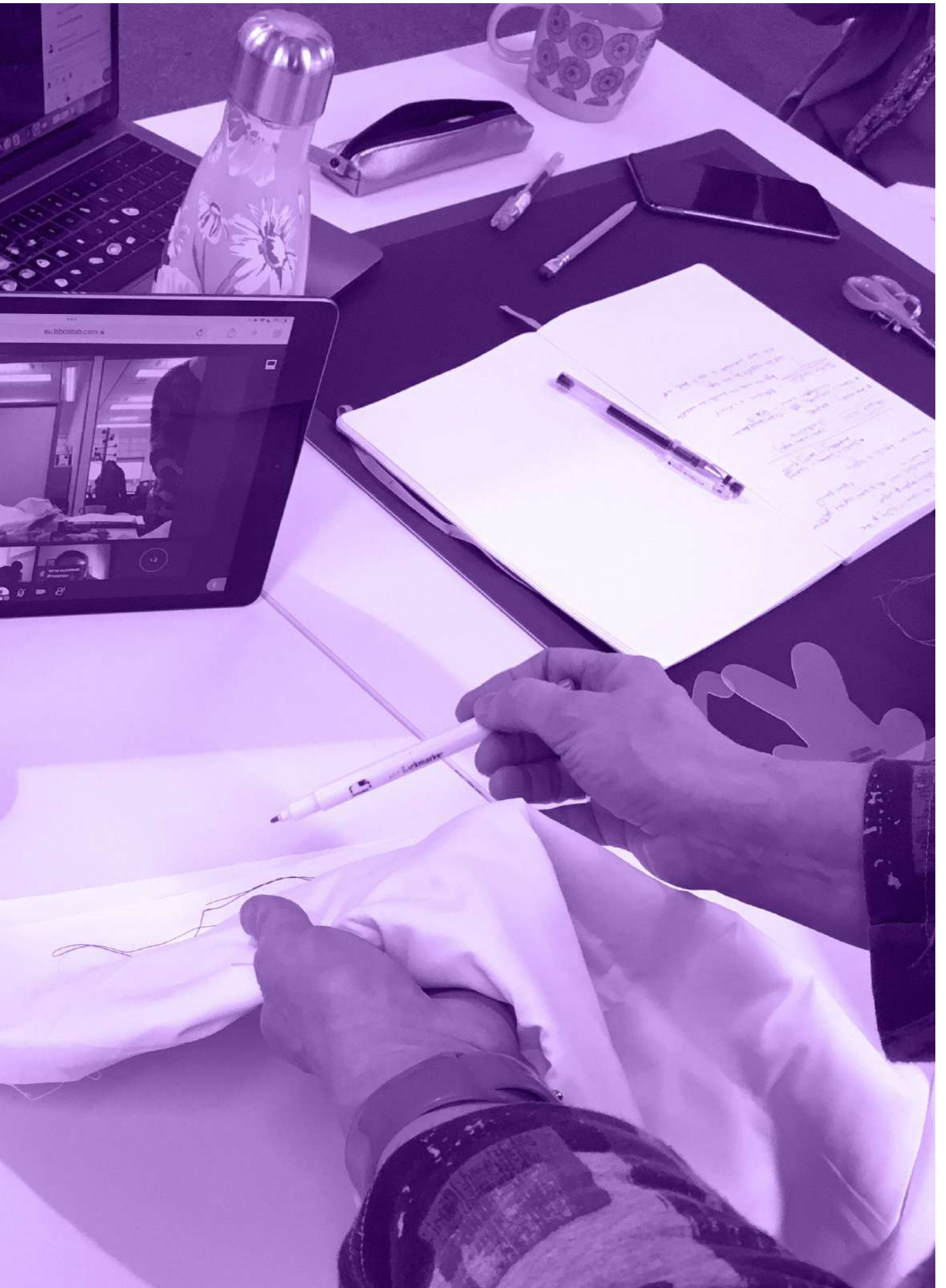
A large, faint purple line-art graphic of a triangle with decorative knot-like shapes at its vertices, spanning across the middle of the page.

LESSONS
LEARNT FROM
HYBRID CRAFT
WORKSHOPS

While it was a great idea to create hybrid workshops across two countries. This only worked one-way. The organisation of training with Turkish trainers with simultaneous translation became a burden for the organisation. This was due to many factors. We knew that finding a practitioner/master who knows English well enough to provide the training directly in English was a low chance. Most of the masters we talked with were also used to working in their own environments, which usually do not have reliable internet connections. The masters were usually either employed (as a part of vocational training schools) or they were self-employed with bookable classes. So the idea of giving a remote workshop for a full day also did not seem feasible. Due to the cultural and specific terms and techniques used in these fields, simultaneous translation would also be complicated for the Turkish team who know English and have some experience of this kind of simultaneous translation. The team decided to divide the training into smaller pieces, where the trainers connected to the Turkish team providing a lecture and a practical part (facilitated via Q&A or making together). This allowed the team in Turkey to asynchronously translate and share the videos with the team in the UK. The video recordings have been taken, transcribed, and translated for the UK team asynchronously. Unique words and phrases belonging to handcraft fields required extra time to learn and translate because in some cases, the direct translation of the particular word (e.g., motif name 'elibeline' vs 'hands-on-hips', the first one says 'their-hands-on-their-taille', whereas the translation is hands-on-hips') was not easily translated. This phase was one of the most labour intensive parts for the Turkish team, mostly because the two languages are so different.



Image: Hybrid quilting workshop in the UK



IV

DESIGNING THE SISTER
QUILTS

Looking towards the second ingredient, we will now reflect on the process of designing the sister quilts. This was, of course, not a straightforward process, but instead was a process of relational (un)learning through collaboration, critique, research, and collaboration. Below we present two ways in which we did this in our project: (1) building on research; and (2) finding meanings in contemporary craft and research practices.

Building on Research

Our initial search on what others were doing directed us to different craft types that still exist. Turkish traditional crafts seemed to have integrated some of the well known UK styles into existing historical context (e.g. patchworking). Once we started interacting with crafts experts in Turkey, it became clear that some motives are valued across textile disciplines. We also asked interviewees from associations, the NGO members and participants in council meetings whether they were aware of traditional Turkish patterns and their meanings at the beginning of the research process. Common traditional patterns and their meanings used in different handicrafts were mentioned by masters, as well as NGO activists during training and meetings. Following up from these interviews, we researched the named patterns and their meanings on digital resources as well as books in the Suna K raç Library, with a well known digital collection including Josephine Powell's kilim research¹. We discovered that a particular pattern could refer to many meanings according to the geography (such as which region was reading the pattern) and context and the representation of a motif. However, four elements of craft remained more or less consistent across different types of valued craftwork:

1. A frame that is used to frame the whole piece. This can have several types, though a flowing closed design framing all corners was frequent.

2. Use of diverse crafts practices side-by-side to create a language. Most of the patterns included more than one symbol to tell a story, or most of the craftwork used a combination of colours and the craft-type to strengthen their

stories.

3. People we spoke to mentioned the importance of local production and the importance of sustaining craft skills through generations (e.g. kilim making, or fiecee).

4. Lastly, some of the motifs such as hands on hips, plentifulness, or the tree of life relate to notions of rebirth, which is also often associated with women's solidarity.

Taking into consideration our interviews, training, and desk-based research we developed three central concepts for our work: (1) Rupturing traditional roles; (2) Combating poverty and working in from the margins; and (3) Resistance.

Rupturing traditional roles

There was a demand from solidarity groups that we not only rupture traditional roles, but also that we stay visibly in solidarity to be able to make this happen. In order to emphasise this we did two things, we used two very closed patterns and a patchwork that is made by many women piece by piece and side by side. This also resulted in our 'rupturing' of traditional quilting motifs.

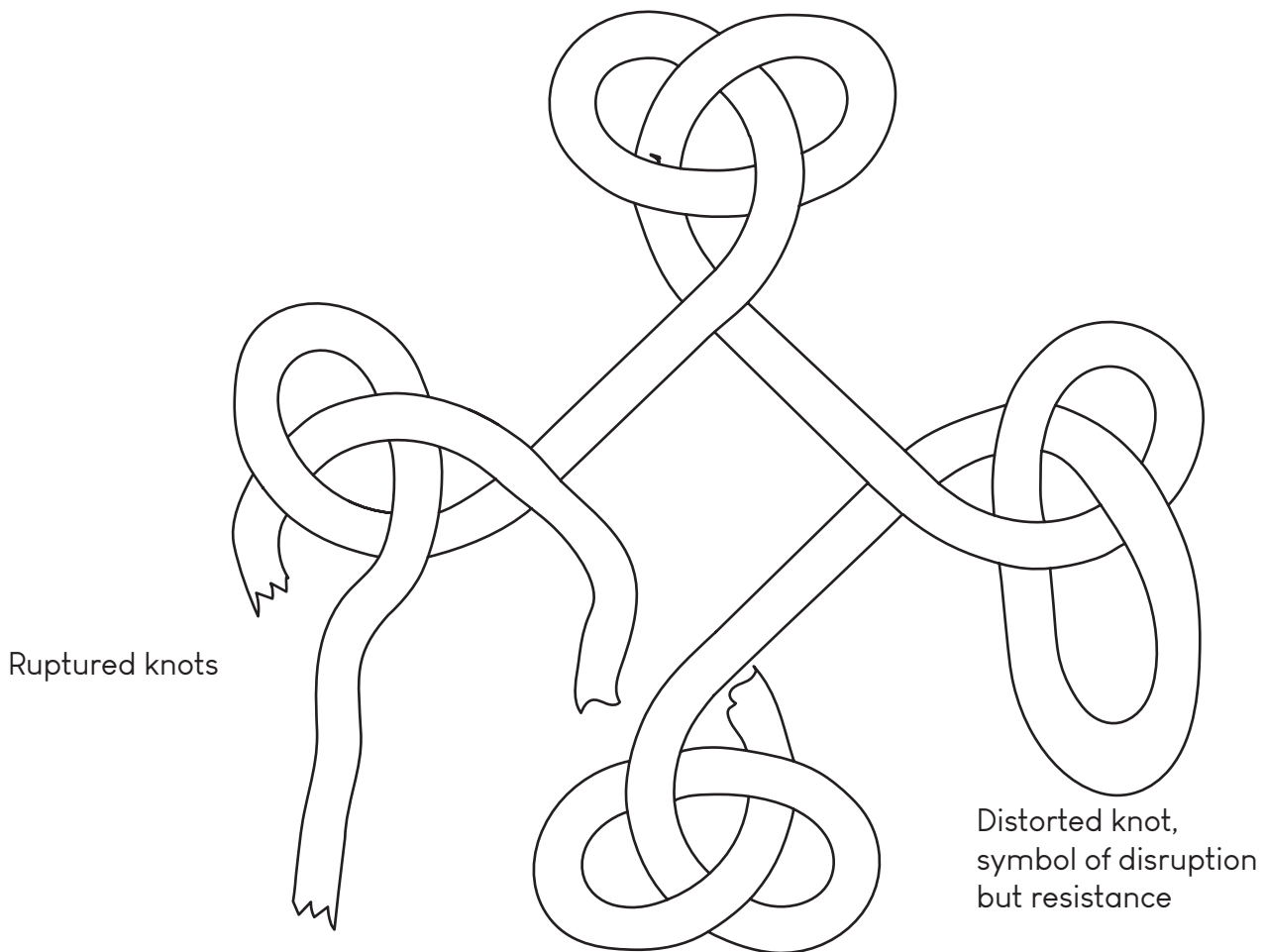
Combating poverty and working in from the margins

Most of the reports we read about Turkey as well as the researchers' experience of working on gender-based violence topics in the UK, we learnt that poverty plays an important role in how and where we experience violence. Furthermore, poverty (and especially 'deep poverty') are passed on through generations. As such, we wanted to use our project to engage more deeply with this topic and to engage people who may be able to make changes for the better, using our craft project as a starting point for conversations. To do this we applied social design methods to our meetings with NGOs, we collaborated with justice oriented groups, and we chose our artists and trainers with an eye to finding people who have a connection to these topics themselves.

Resistance and critique

While the previous two concepts came directly from the research, this third one is perhaps a more analytical response than a pragmatic one to what we learnt. As a research team, we felt that embedding notions of resistance into our project would help tie together the rupturing

1 <https://librarydigitalcollections.ku.edu.tr/en/collection/josephine-powell-slides-collection/>



of traditional roles as well as the combatting of poverty. The term ‘resistance’ was rarely read in the documents about gender-based violence, but the existence of the documents we read themselves represent this. A resistance to invisibility, a resistance to patriarchal structures, and a resistance to ignorance. We embedded this notion of resistance into our project at multiple levels, including the resistance to ‘perfection’ in the patchworking (though we complicate this in other sections of this recipe and our exhibition booklet) and embed notions of critique within our team by remaining open to critique to and from others in the research team as well as other collaborators in the project.

Building on these three concepts as well as the four elements of craft outlined above, we developed meaning for our project and created our sister-quilt patterns. We focused on square versions of patterns related to femininity, rebirth, plentifulness, and tree of life to sharpen the rupture effect later on. We decided to combine this with the soft language of punch embroidery for the heart of both quilts, and decided to use patchwork to be able to collect different pieces

from different people. Lastly, cross-stitching, a mathematical form of creating a pattern, was selected to create our AR markers as part of the patchwork.

Finding meaning in contemporary practice

Quilts are imbued with incredible amounts of meaning – whether in the choice in fabric, the thoughts and feelings stitched into the patchwork and quilting, or the meaning behind the people who were involved in making the pieces. Quilting and patchwork also has rich cultural value across the world as protection, as gifted love, or as tools for activism and advocacy. We want to encourage contemporary quilters, particularly those who engage in participatory practices to think about three aspects in particular: (1) symbolisms in patterns; (2) the addition of interactive elements; and (3) the running and facilitation of patchwork and quilting sessions.

Pattern symbolisms

Many traditional patterns have cultural meanings. These meanings may be related directly to local communities, and as such the same (or similar) patterns or motifs may have different meanings in different regions of the same country, or across different ethnicities in the same region. As contemporary craftspeople, we would encourage you to respectfully adapt some of these meanings by making changes to the traditional patterns, like we have done in the 'breaking' of our traditional quilt motifs. On top of this, particularly in the North East of England, quilters have long been inspired by objects around them. So we would encourage you to not only be inspired by physical objects around you, but also by the 'objects' of your exploration and study - for example, what would a visual quilting pattern inspired by 'safety' or 'unsafety' look like?

Interactive craft elements

Quilts are tactile and interactive by nature - they are used to wrap yourself up in on cold nights. Looking towards contemporary materials though, we want to encourage you to experiment with ways in which you can increase this interactivity. How can you deepen the meanings and symbolisms embedded in your quilt? And how can your choice in materials add to this? In our case, for example, this relates to the glow in the dark thread, as well as the digital augmentation through Augmented Reality - both of which make visible elements of our meanings in particular settings (the dark and when using a smartphone respectively). Other materials that may be of interest could be heat- or light-reactive threads and fabrics, or even digital actuators such as sensors or touch buttons that can trigger light, heating, vibrating, or moving elements to add meaning and interactivity to your quilted pieces. There are many how-to guides online for many of these types of materials, but we also want to encourage you to see them as recipes that are adaptable - giving space to the imagination of you and your team, to be driven by meaning rather than material in your creative practice.

Facilitating patchwork sessions

Like in any participatory design or craft process, the facilitation of workshops and making-sessions is important. In this recipe, we don't have space to provide in-depth information on how to best

go about this, and many such guides have been written before. We do not want to regurgitate many of the points that are already made incredibly well in other places. The 'stitching together' network Good Practice Guidance in particular, is very well presented, easy to follow, and built on many years of combined participatory stitching experience: <https://stitchingtogether.net/good-practice-guidelines/>.

Adding to this fantastic pre-existing guidance, we also want to share some insight about the importance of two particular elements of collaborative and/or participatory stitching project workshops: (1) silence and (2) 'show and tell'. As we outlined in our exhibition booklet, silence played an important part in some of our hybrid maker sessions.

(1) Often when we facilitate workshops, we try to avoid silence or see it as a 'failure' in our facilitation. Contrary to this however, we want to raise the importance of this silence! There are many reasons why people may be silent while making, particularly when they are making pieces that are related to personal or others' experiences, even more so when these may be tied to notions of violence, victimhood, or other traumatic situations. In such settings, silence is often not 'awkward' and can be a powerful tool for shared understanding and building solidarity.

(2) While participants are likely to see what people are working on in an in-person session, this becomes more difficult in hybrid sessions (especially in resource-constrained situation where people are participating from mobile devices with small screens). Even in in-person workshops however, the meanings and thoughts behind these pieces are not always immediately obvious. When working in a way as we describe in this recipe however, it is the meaning that is central to the pieces being made, with the craft or artistry coming second to this. Ensuring there is enough time at the end of a session for all participants to share as much (or as little) as they would like about the meaning of their piece, or what they were thinking about while making it, is really important. This sharing can be an opportunity for people to build on the shared experience of the workshop - and responding to peoples' stories can be opportunities for building solidarity.

V

MAKING THE QUILT

In this part of our recipe, we want to provide you with some more tangible guides on how to make sister quilts. Here we will present the finished pattern we developed as well as instructions on how to transfer the pattern and how we finished the quilt. Each of these sections will have additional reflections beyond what is traditionally included in such 'instructions' to elaborate on the metaphoric and symbolic meanings behind our choices. We do this as we hope others can learn from our thoughts and reflections to adapt the patterns we present for their own, unique, and locally situated sister-quilts.

We start with (1) a list of materials that we used, but want to highlight that this is what was available to us. We would encourage people to look into their local textiles practices and adapt materials based on what is available, used, and sustainable in their regions. Following this, (2) we present insights about 'preparing the canvas' for our quilts. Then we move on to (3) the pattern of the quilt, (4) how to transfer this onto the canvas, and (5) how to quilt the pattern. We end this section with a reflection on (6) finishing the quilt.

List of materials

We used the following materials for the quilt:

- 4 white/cream pieces of cotton 175cm x 91cm
- Embroidery needle
- Quilting needles (or milliner needles, if you prefer a longer needle)
- Wadding slightly bigger than 175cm x 175cm (roughly 2mm thickness)
- White sewing thread (for your machine)
- Glow in the dark thread - in our project we used Gütermann Sulky Glow in white and Madeira threads called 'Luna'
- White quilting thread (or white embroidery thread and a block of beeswax you can run your thread over to make it easier to thread and quilt with this thread)

We present information on how to use the following materials for tracing the pattern onto the canvas:

A light box, with quilting pen or pencil (Please take extra care in your choice of marker as this side of the quilt is white on white and marks will be visible)

Carbon paper with a very fine point pencil

Other materials that are likely to be useful to have at hand when working on our quilt pattern:

- Scissors (fabric and paper)
- Printer (A4)
- Tape
- Sewing pins and clips
- Iron
- Adjustable embroidery hoop

Preparing the canvas

Due to the size of our finished quilt - 175cmx175cm, it is likely you will have to combine two pieces of fabric to ensure the fabric is wide enough. You will need to do the following twice:

Using 2 of the 4 pieces of cloth, position the pieces vertically side by side on your floor/work surface. On the inner vertical edge of each piece, mark 3.5cm (this is a wide seam allowance to ensure a bit of movement/adjustment when the two pieces are sewn together).

If working alone on the quilt, you can go ahead and sew down the seam allowance to make a 175cm x 175cm square. If more than one person is working on embroidering or quilting the pieces, you may choose to keep your pieces separate until the end so you can work together but on separate pieces of the quilt. In this case, place matching pins/markers on the folded edge of each seam.

The quilting pattern

In this section of our recipe, we share our pattern with you. Please see this only as an example of the kinds of ways in which you can play around with and adapt traditional patterns to relate to contemporary conceptualisation.

Transferring the pattern

Once you have printed the pattern onto A4 pieces of paper, you can tape them together, following the map on page one and making sure to align markers. Before you print the whole 63 pages of the pattern, print only the first page and ensure that the orange (grey if printed in greyscale) square has 5cm long sides. If the square is a different size, the fit/scaling of your printer needs to be adjusted in the print settings.

Your fabric may be thin and light enough, so you can see the pattern through it when laying it

over the printed out paper. If this is the case, you can use a heat, water, or air soluble pen to draw on your pattern. If it is not, below we provide instructions of two ways in which you can now transfer the pattern onto your fabric: (1) using a light box; and (2) using carbon paper.

If using a light box: Line the top left corner of the fabric on top of the top left of the edge guide. Now you can place the rest of your fabric on top of the pattern, being careful to not tear the tape and making sure your fabric is flat. Then you can clip the pattern and fabric into place, pin them together, or simply place something heavy enough onto the fabric to stop things from moving around. You can then place the fabric and paper onto a light box and trace only the knot and words, not the edge guide. We recommend tracing the words in a single line rather than contouring the characters if you plan to hand embroider them.

Repeat with the second piece from the top right corner (or carry on from the middle if already sewn). You might find it easier to leave the first piece clipped to mark continuity lines in the center at the beginning.

If using carbon paper: Make sure you are using fabric quality carbon paper, as a different

quality may irreparably stain your fabric. Place the carbon paper on top of the fabric. Secure using masking tape if necessary. Lay the printed pattern and top, aligning the corners with the edge guide, and you can then pin or clip in a similar way as the lightbox method. Trace over the pattern (knot and words only) with a very fine pencil - you should see the lines appear on your fabric to be sewn over.

Embroidery

Start by threading your embroidery machine with the glow in the dark thread. Your bobbin does not have to be glow in the dark thread, but we recommend using a white thread so it remains invisible and does not interfere with the glow in the dark effect.

Use a relatively small embroidery hoop to ensure it fits under your machine. The hoop will keep your fabric taught as you use the machine. You will have to move it regularly and may not be able to embroider an entire word or statement without moving the hoop.

Use your traced pattern lines as a guide for your work - embroider only the words, not the lines.





Depending on your machine and skill, you can set the stitch length on your zig zag stitch to a pacific width, or adjust based on the pattern you drew out if you traced the letters. We recommend you do not use only the straight stitch, as the glow in the dark effect will not be as well-pronounced as it would be with the zig zag stitch.

Quilting

With the 2 remaining plain pieces of fabric, repeat the process to form a 175cm x 175cm square. This will become your quilt 'top' to the 'backing' that is now covered in embroidered words. Also cut your wadding to size - it should be a little bit bigger than the fabric pieces.

Layer the plain fabric on top, the wadding in the middle, and the embroidered piece on top of one another. The right side of each fabric square should be facing out, meaning the seams are hidden inside the 'sandwich' and touching the wadding. To secure the layers together, you can either use bent quilting pins, spray adhesive, or clip the pieces together using quilting clips. Once everything is securely in place, you can thread your needle with white quilting thread and quilt

along the traced lines, going through all three layers.

Finishing the quilt

As we have written about on earlier pages of this recipe as well as our exhibition booklet, we are working with concepts of rupture and unfinishedness. One way of showing this is with the potential for leaving the quilt 'unfinished'. This unfinished-ness however does not mean the quilt is left messy. Instead, we would encourage you to carefully machine-stitch the sides closed with a straight stitch at 173cm square, and then trim off the excess fabric with a rotary cutter to ensure a straight, clean, finish.

Having said this, depending on your engagement with cultural workers and craftspeople, it may be inappropriate to leave the work in this state. We understand that leaving something 'unfinished' may cause offence in some communities, and would not want to encourage this. We ran into this issue ourselves in Turkey. We collaborated with one of the trainers in the making of both sides of the quilt. She was clearly taken aback by our recommendation to leave parts of the quilt

unfinished, and at certain points we felt it more important to respect her skill and expertise as well as her team's expectations of 'perfection' than to adhere to our conceptual meaning entirely. As such, we changed our position on the expectation of unfinishedness and openness of the sister quilt. We thought that staying in solidarity with the makers themselves can also give us two slightly different quilts, built by two distinct groups with the same aims, but executed in culturally sensitive ways.





VI

DIGITALLY
CONNECTING THE
QUILTS

So much of our project is about connection – connecting communities, countries, meanings, and practices. We also wanted to ensure that our planned digital augmentation of the quilt to layer its meanings also facilitated this kind of connection. As such, we chose to create quilts that by themselves are non-digital. It is only in the interaction with them, through a smart device such as a smartphone, that the digital augmentation becomes visible, felt, and useful. Without exploring the quilts through our digital screen, the connection is made through touching, feeling, smelling, and other non-digital interactions such as the potential to hide under the quilt to make the glow in the dark words visible. It is through the digital augmentation however, that we are able to connect the two quilts physically, while they remain geographically separate (one in Turkey and the other in the UK). This connection is created by embedding augmented reality markers in the patchwork of the quilt, which can be scanned using a smart device. We outline what augmented reality is below, explain our markers, present the pattern we used to create them, and explain how the system works below.

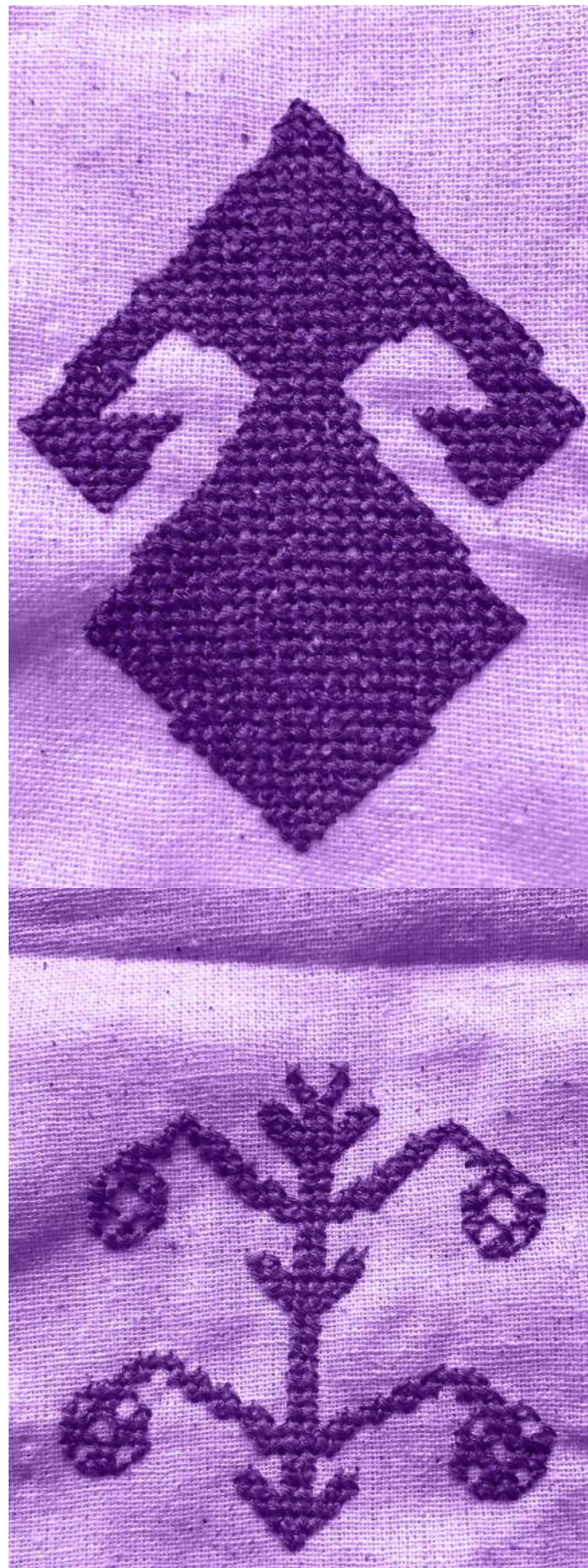
Explaining Augmented Reality

Augmented Reality (commonly known as AR) is a way to digitally layer information over a physical object or environment via a smart device, such as a smartphone or tablet. Our sister quilts use a specific sector of AR, Web AR, which is available via an Internet browser, without the need for specific applications or equipment. The mechanism to reveal digital content usually relies on recognisable markers: these can be patterns (bold black and white geometric shapes akin to QR codes) or even images, provided they have enough distinct features.

Cross-stitching Augmented Reality Markers

As mentioned above, markers are necessary to reveal digital content. For the sister quilts, we make use of cross-stitched symbols as our markers that allow us to reveal digital content. We photographed these and turned them into markers¹ that we can then scan using Natural

Feature Tracking via a webcam and the AR.js library from AFrame (<https://aframe.io/blog/arjs/>)



package to make our markers: <https://github.com/Carnaux/NFT-Marker-Creator>

1 We used the following pre-existing code



For the sister quilts, we used four Anatolian symbols as markers representing womanhood (hands on hips), plentifulness, fruit, and life tree. All of these symbols relate to women and strength or protection in multiple interpretations.

About the cross-stitch patterns

The final cross-stitched piece made from this pattern will be used as an AR marker on the sister quilts to help exhibition visitors uncover more content. It is important to stitch on plain fabric so any motif does not interfere with registering and detecting the marker. Plain cotton in a cream or light died colour is recommended.

Adjusting size

The marker's size will depend on the type of Aïda used, and which one of the sister quilts it is destined for (the Turkish knot has a slightly narrower path than the English one). Please note, the orientation of the motif will also depend on which section of the path it is due to appear. You might want to rotate the Aïda fabric in relation to the cotton fabric to adjust the orientation.

Pattern transfer techniques

This pattern uses counted cross-stitch but can be transferred in various different ways, depending on the desired result. If you plan to leave the Aïda fabric visible, you can move on to the next section and the pattern.

If using water-soluble Aïda, clip it over your cotton fabric and work through both fabrics, following the cross-stitch pattern. To finalise, wet the fabric to get rid of the Aïda per instructions and leave to dry.

The other options is to work with Aïda fabric on the back of your cotton fabric. Clip the 2 layers together. Either work over a lightbox to see the holes, or trace the outline of the pattern on the Aïda by checking the back (this last method is rather more tedious).

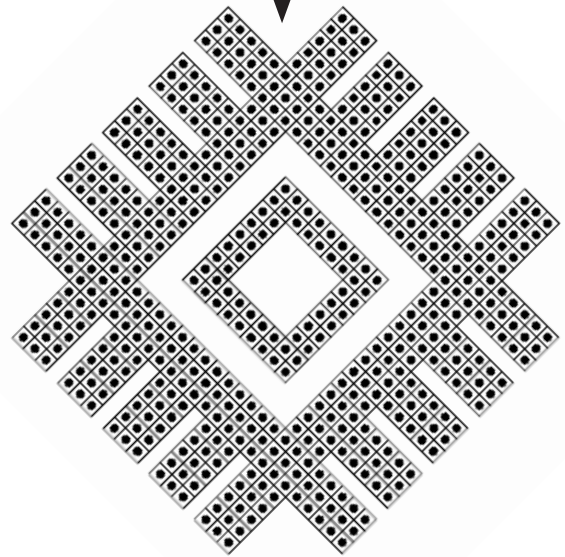
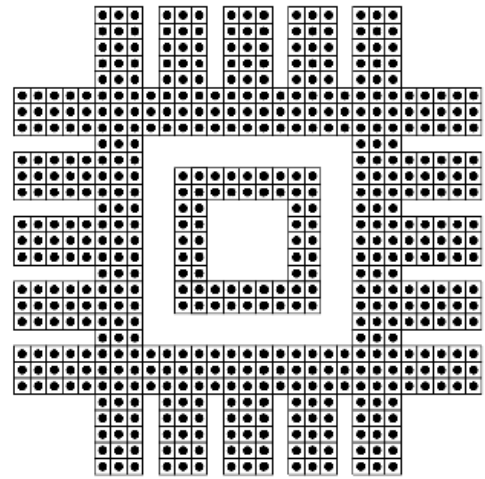
Stitches

Three of the patterns usss a combination of full cross stitches and 3-quarter and quarter stitches to give a more refined shape. Full cross-stitches are represented by the circle in a full square symbol. Quarter stitches are similar, however,

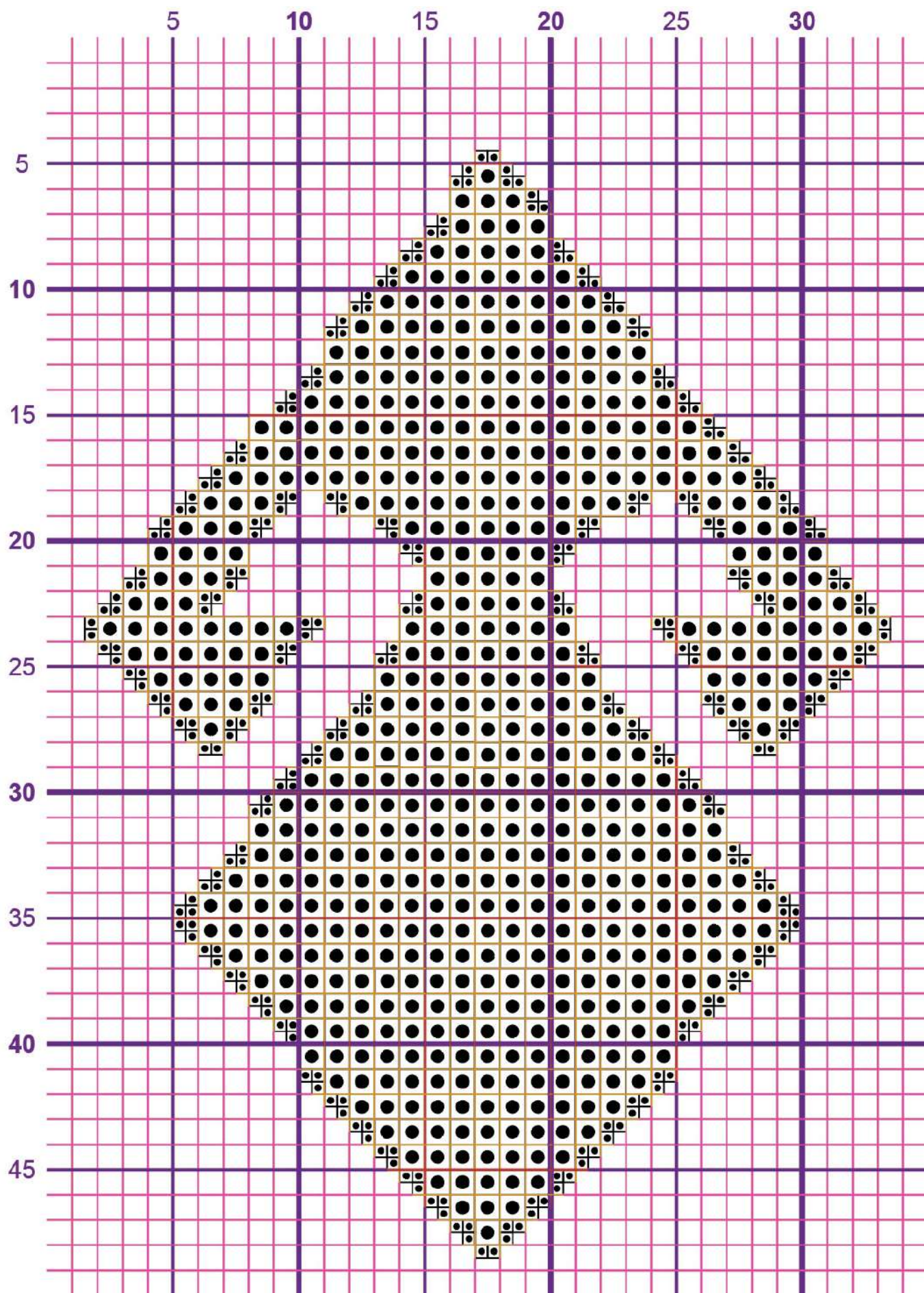
they will only fill a quarter of the chart square. This is why it is important to use Aïda fabric (with evenweave you wouldn't be able to come up in the center of a cross. Below is a selection of quarter stitch combinations and what they would physically represent when cross-stitched.

We recommend adjusting the amount of strands depending on the size of your Aïda, you want the stitches to be quite full and avoid gaps; 2 strands should be the minimum used.

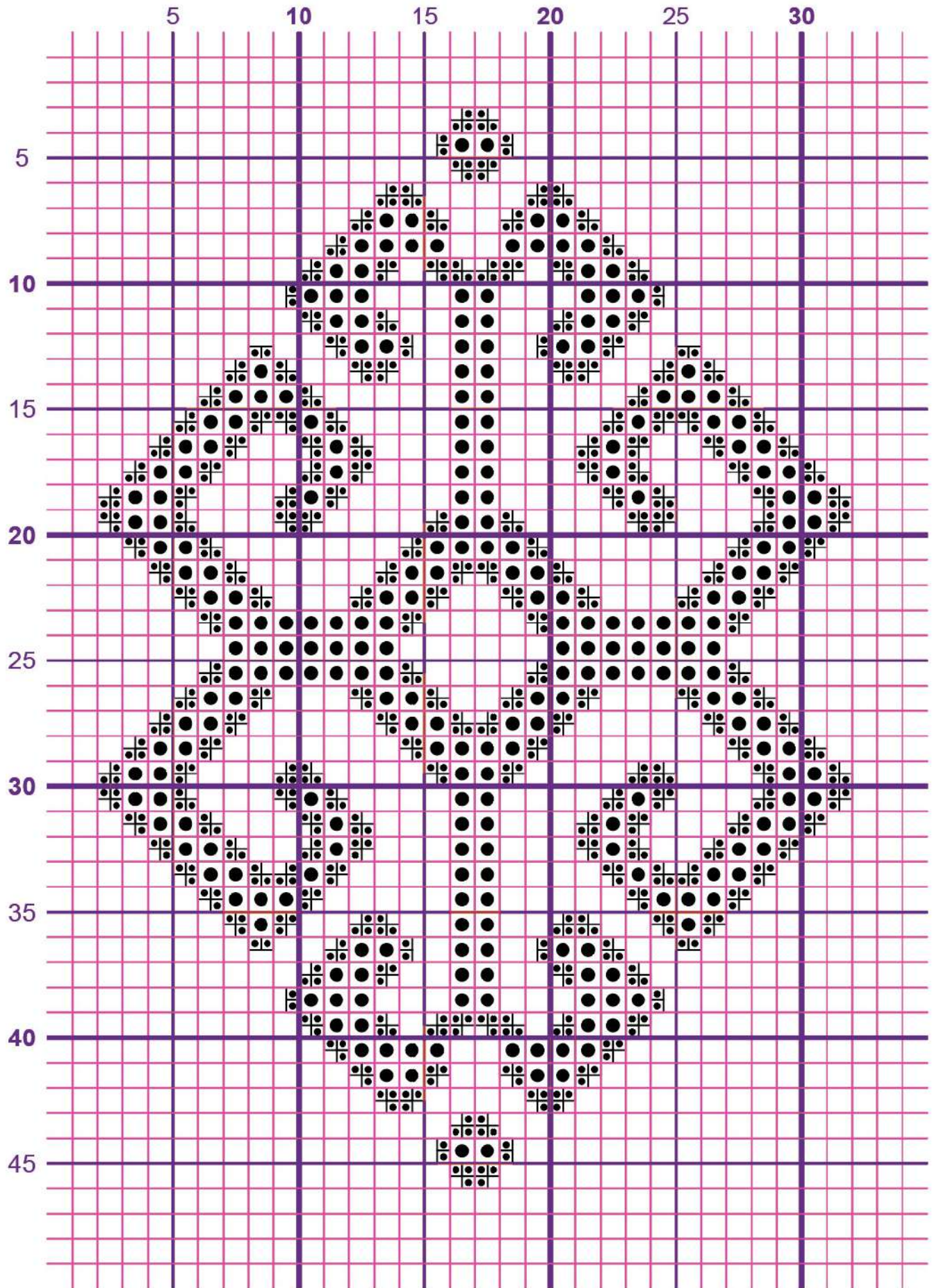
The plentifulness pattern uses only full cross-stitches for ease of stitching. When working, turn your Aïda fabric at a 45° angle from your cotton fabric to achieve the final look of the plentifulness symbol, as shown on the side.



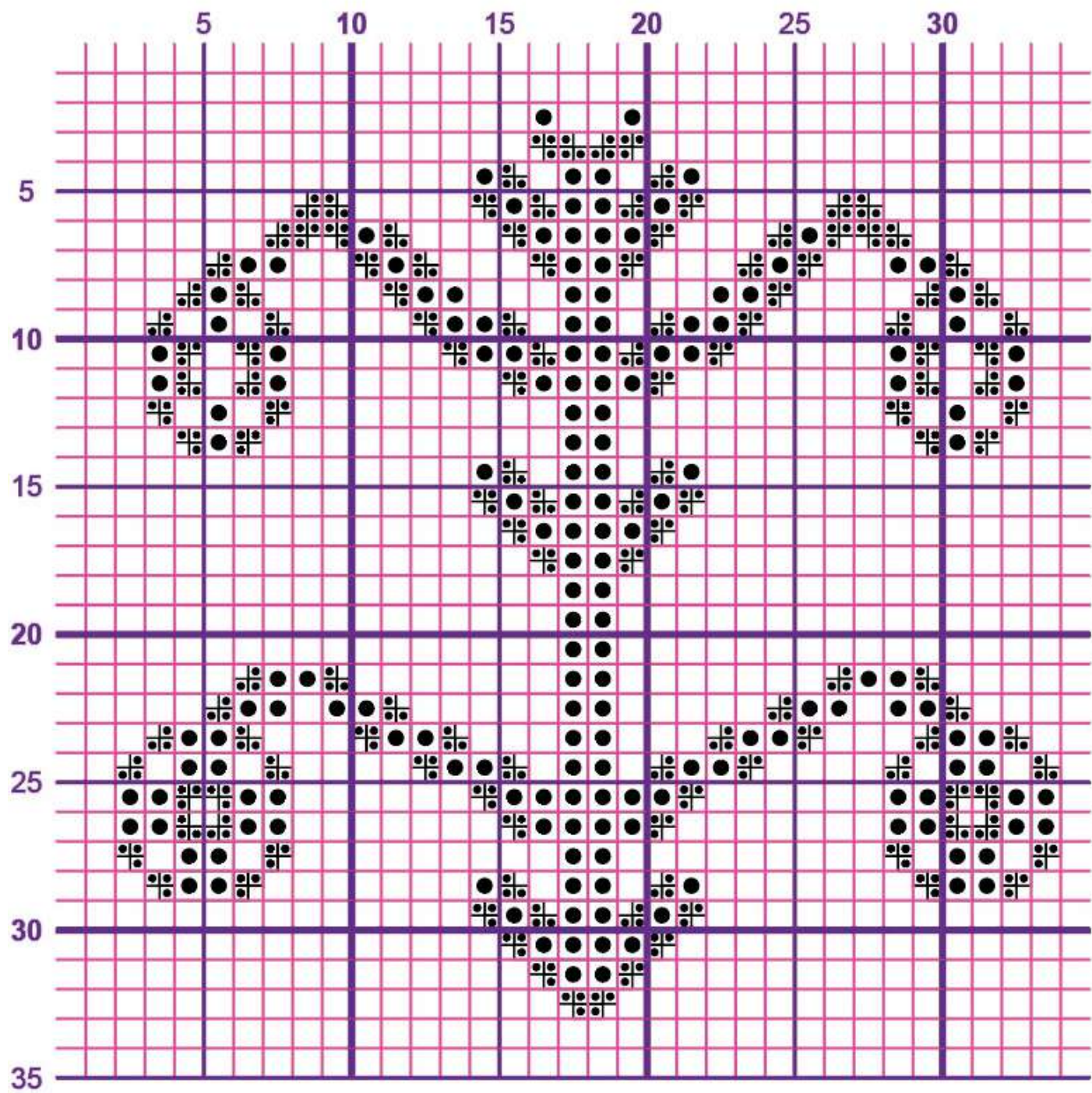
Quarter stitches



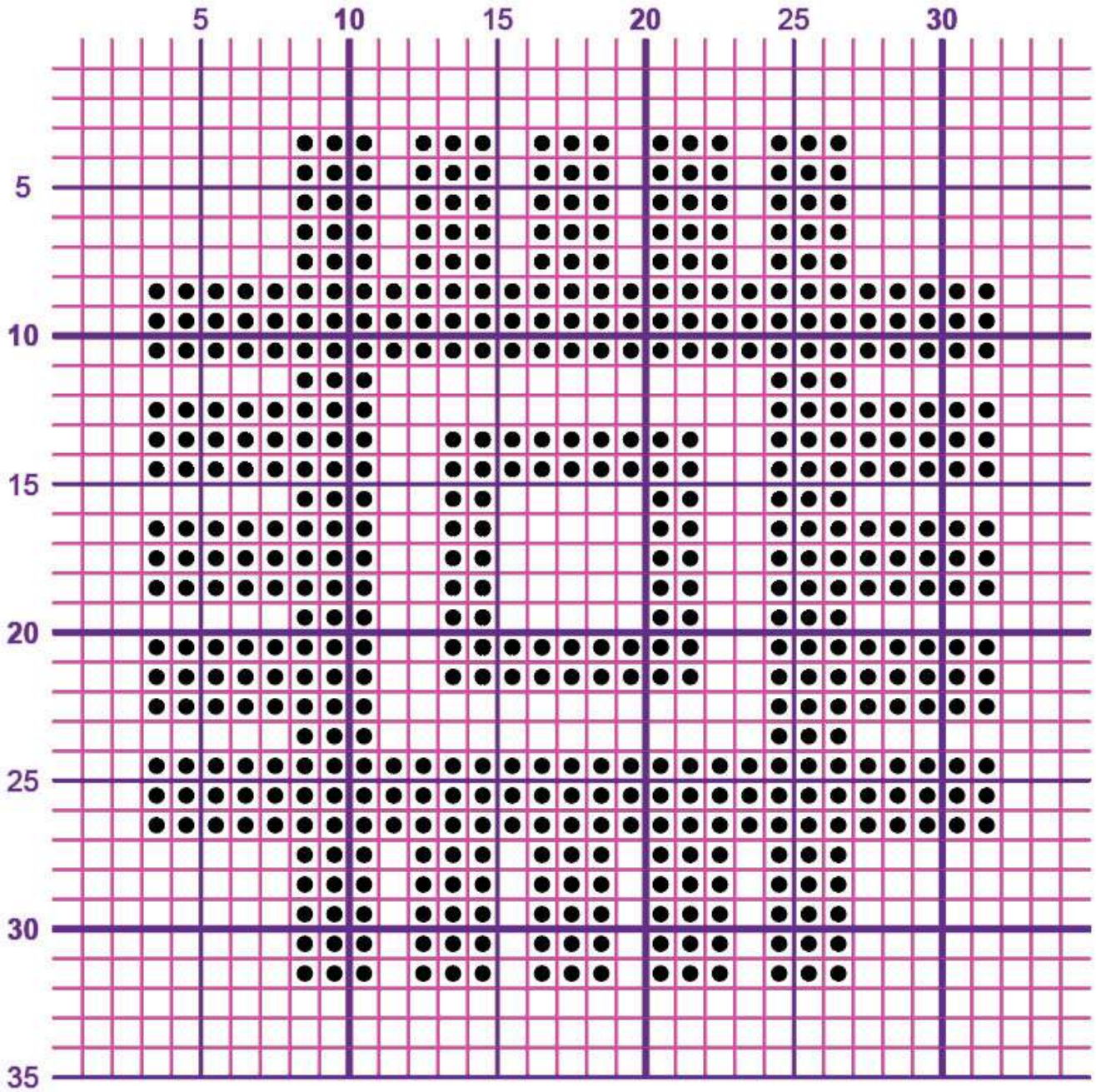
Hands on Hips (woman) marker pattern



Fruit marker pattern



Life tree marker pattern



Plentifulness marker pattern Making Augmented Reality Work

Visitors of the exhibition can experience the AR for themselves on their Internet-connected device and scanning any of the markers on the sister quilt. To get up-and-running on your own and build your own content, you can download the source code of the AR website from our projects' Embroidered Protections GitHub page: <https://github.com/Lily2point0/embroidered-protections>

VII

USING THE QUILTS
FOR REFLECTION AND
ADVOCACY

As part of our recipe, we also wanted to share some ideas of how our sister quilts (or quilts like ours) can be used for reflection and advocacy work. Below, we outline three activities: (1) seeing them as catalysts for conversations; (2) learning on cross-cultural sisterhood; and (3) making meaning about personal experiences.

Making sister quilts as catalysts for conversation on women's safety

Hopefully it will become clear in the exploration of our sister quilts that women's safety is an incredibly broad term - one that includes interpersonal, institutional, and societal pressures. The patches of our quilts, and their meanings are broad, including experiences by guide dog organisations, cycle-activism, meanings related to motherhood and so on. Importantly though, our pieces are incomplete, making them good catalysts for conversation on what is and isn't visible or touchable on our sister quilts. When looking through our pieces, it may be good to discuss the following questions:

- Which of the patches or words/phrases on the quilt most speak to you, and what is a reason for this?
- Which of the patches or words/phrases do not speak to you at all, and what is a reason for that?
- What topic related to women's safety is missing from the sister quilts? How might you represent this?

These questions can be discussed with friends, colleagues, or in support organisations - arguably with any age group. Additional patches can be made to add to our piece, or sketches can be drawn to illustrate additional things to consider when it comes to topics of (un)safety.

Sister quilts as starting points for learning on cross-cultural sisterhood

The process of making our sister quilts led to cross-cultural exchange among the research team, and in some cases also among our participants. We used the project as a starting point for learning (and unlearning) about safety, violence, and protection - and explored some of the many messy and complex meanings of these words. The making process was a great facilitator of these discussions, as were the hybrid research group meetings that spanned countries. We challenge you to make your own sister quilt,

following the recipe we outline in this booklet. You can do this by yourself or a group of friends, you could work with a support organisation (or several) to capture your own meanings of 'safety' and 'unsafety' in the patchwork pieces. Relating your own learning to the learning we present in this recipe and our exhibition booklet, can be a starting point to unpick the cultural meanings you ascribe to 'safety'. If you do this, please get in touch with us via instagram (<https://www.instagram.com/embroideredprotections>) or e-mail (angelika.strohmayer@northumbria.ac.uk or ozsubasi@ku.edu.tr), and we are happy to discuss ideas with you and share your work on our account.

If you want to take cross-cultural learning up a notch, you can find collaborators in another country to complete additional sister quilts. This can be done through a formal collaboration like ours, but may also be more informal. This could be done, for example, by using the making process as a trigger for you to contact support organisations in other countries. It has been our experience that people like participating in craft workshops, both online and hybrid, and that with online marketing of events (through social media an eventbrite or similar event hosting platforms) can lead to serendipitous cross-cultural collaborations.

Exploring the quilts and making meaning about personal experiences of (un)safety

As we strive to do with our sister quilts when we exhibit them, we encourage you to integrate making activities into your teaching, exhibitions, or other public engagement events. You could create 'patchwork corners' where baskets and materials are integrated into exhibition spaces, at panels or presentations, at research launch events, or any other public event where topics related to safety and unsafety are being discussed. Learning from other groups, and putting ideas side by side, making them material through craft, can help people build and be in solidarity. This could take place at festivals, literature events, NGO get-togethers, maker-fairs, research launch events, community events, and all other spaces where people can come together to communicate, share, and be together - all of these kinds of events can become spaces of solidarity through working on a shared craft project like our sister quilts.

GÜVENLİĞİ
NAKŞETMEK



EMBROIDERED
PROTECTIONS