

# Listening Patterns: Encountering Slowness and Resistance

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## Abstract

This work-in-progress investigates the convergence of tradition and technology—and technology as tradition—in the creation of the *Listening Pattern*, an interactive prayer mat that explores the relationship between textile-mediated soundscapes and spiritual ritual. The mat integrates Persian and Palestinian embroidery with embroidered speakers to invite reflection upon the current, deeply distressing conflict in the Middle East. By documenting the development of the mat, we interrogate the forms of multi-sensory listening within a textile encounter, and its entanglements with the spaces—spiritual, psychic, sonic—that it creates. The mat embodies the essence of a Persian garden, symbolizing a haven in Persian culture. It combines the renowned Persian design with the resilient symbols of Palestinian embroidery—referred to as Tareez in this paper—to create a private space for contemplation. With the mat, we do not intend to replicate a religious experience; instead, we inspect the role technology and electronic textiles can play in the expansion of religious and spiritual experiences.

## Keywords

Middle Eastern Embroidery, Tareez, Electronic Textile, Embroidered Speaker, Persian Garden, Embodied knowledge, Spirituality and Design

## Introduction

Within the field of electronic textiles, analysis tends to focus on the creation of products and experiences that contribute to bodily experiences. This work-in-progress attempts to examine the role these experiences play in the expansion of spiritual ritual.

In particular, we probe a series of questions concerning the relationship between computing and embodiment such as “What are the effects of using machine to translate a handmade craft to a machine-made piece?” “Can sound augmentation help activate different capacities to transcend our spiritual experiences?”. With these questions, we examine the transformative potential of textile soundscapes through the lens of an embroidery machine, with a connection to Iranian and Palestinian traditions.

At the heart of this exploration is the intricate process of translating a manual craft into a machine-made prayer mat. Through a comprehensive investigation, we aim to unravel the symbiotic relationship between human creativity and technological precision, shedding light on the profound impact this collaboration has on our understanding of ritual and culture. Acknowledging the rich tapestry of Tareez and Persian garden designs, we describe an artifact woven with symbols and images drawn from Persian garden designs and Tareez traditions. With borrowed sounds such as people talking in the streets, pet shops, rain, call to prayer, etc. uploaded from Palestine by sound artists [3,4,5,6,7,9,10,11,12,13,15] on radio Aporee [2], the fabric becomes a canvas that holds space, triggering contemplation on the cultural and political dimensions of the Middle East. The embroidered speakers, shaped like Tareez Rosettes, serve not only as aesthetic elements but as conduits for Palestinian resistance sounds, adding a layer of political commentary to the narrative.

## Background

The Persian Garden, often regarded as a paradise, emerges as a curated haven amid otherwise arid landscape, a marvel thriving within its enclosed boundaries with meandering waterways and unexpected pools. Its historical roots trace back to the Achaemenid era, where Persia was metaphorically likened to a protective garden, providing its citizens with a representation of heavenly abundance. [8] As Islam permeated Iran, the Persian garden transformed into a depiction of paradise as articulated in the Quran. [16]

The Persian Garden serves as the conceptual framework, offering a vessel for the Tareez symbols within this piece. Symbols hold immense significance in fostering a collective identity, particularly in the context of Palestine, where they play a pivotal role in fostering a sense of belonging amidst challenging circumstances. [1] Tareez, functioning as a language in Palestine, evolved post-1948 into a symbol of resistance. [17] We discern a shared purpose between Palestinian embroidery and the Persian garden. Like the gardens, Tareez utilizes abstraction and repetition to convey messages of the present while laying the groundwork for envisioning a speculative future. [14] Just as Palestine stands as the land of resistance, these symbols and the craftsmanship

encapsulating them mirror resilience. The selected symbols from the Palestinian embroidery archive echo patterns found in Persian textiles that signify shared meanings. For instance, the Rosette, denoting beauty, and love in Iran, symbolizes growth and fertility in Palestine. We used this symbol for our embroidered speakers on the piece (Figure 1) Similarly, the Olive tree, a national symbol in Palestine, signifies the ancient Palestinian existence and heritage due to its enduring presence in the West Bank landscape. [1] Additionally, symbols like leeches express health and prosperity and the road of stars signifies guidance and hope. [18]

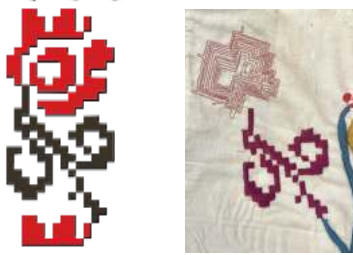


Figure 1, Rosette Symbol and the embroidered speaker

## Documentation

**Design Stage** The initial stages of this work are focused on the development of our concept and the final manifestation of the piece as an artistic work. After numerous brainstorming sessions and discussions regarding the various forms our concept could take, we decided to create a prayer mat that provides a space for our audience to engage with recorded sounds. These sounds include everyday ambient noises uploaded from the land on Aporee Radio. Unlike the common tradition of experiencing an art piece only when it is completed, our emphasis is on the ongoing development of meaning throughout the creation process and our collaboration with our machine.

After spending some time on our final design, we chose a Persian hanging demonstrating a Persian garden using the chain stitch from the 19<sup>th</sup> century and Safavid era (figure 2). This brief explanation, borrowed from the MET website, proved to us that this design is suitable for our concept.

“The unique charm of this prayer-niche hanging, however, is in the elegant rendition of the meditative tree design, replete with Sufi symbolism. The layered, symmetrical tree alludes to the stages (*maqamat*) of Sufism, while the birds, creatures that link the Earth and the Heavens, symbolize the divine guidance in the ascent of the believer's soul in prayer.” [19]



Figure 2. Persian Textile, 19<sup>th</sup> Century, the MET Collection

During the selection of our Tatzreez designs, we came across Tirazain's online archive [20], which showcases in-depth research on Tatzreez and represents a valuable effort to safeguard this endangered and meaningful craft. Drawing inspiration from their archive, we utilized Floriani Embroidery software to translate the chosen designs into Brother PES files. After finalizing our design, selecting colors and fabrics, we employed our Brother Persona PRS 100 in the DXARTS SoftLab to bring the pattern to life. Our research, coupled with encounters with various Tatzreez pieces, revealed that Cross-Stitch is the most popular and common stitch in Tatzreez. However, upon working with the machine, we realized that the cross-stitch performed by the machine (Figure 3) lacks the richness inherent in Tatzreez. Consequently, we opted for the normal fill in our embroidery application as our chosen stitch type.



Figure 3. PRS 100 cross-stitch demonstration

To create a contrast between the Tatzreez and the Persian embroidery as the host of Tatzreez, we chose Satin Stitches for the centered design of this mat. (Figure 4).



Figure 4. Satin-Stitch demonstration

### Human-Machine Collaboration (Reflection by Sadaf Sadri)

Not having created a relatively large piece (90cm x 120cm) with a single-needle embroidery machine, I assumed the process would be fast and maybe even dissociating. However, spending one month with the machine proved my assumption wrong.

Spending hours and days listening to the repetitive sound of the needle marked the beginning of a relationship between me and the machine. Initially, communication was deficient and dependent on the machine's screen, which translated its code into the English language. After a week of work, communication became direct. The needle's sound became a language, articulating its nuances and troubles.

While expecting the machine to shoulder the workload, I offered the machine the PES files, and the satisfying sound of the needle moving fast filled the SoftLab. However, to remind me that this is a collaboration, and the machine is not here to do the labor alone, it requested my attention every few minutes. This could be asking me to change a perfectly fine bobbin thread without any apparent reason or just to press the lock button again, as nothing seemed to be wrong.

During this collaboration, I found hand embroidery to be more forgiving than its machine counterpart. I realized that I had carelessly relied too much on the machine, expecting it to share the same spectrum of common sense with humans. This often resulted in complications due to the features of fabric as my medium, leading to many flaws in the piece. These flaws made the end result resemble an amateur handmade piece rather than a sterile machine work. One of these problems was the overlapping of the layers of the piece, which was impossible to fix without damaging the piece (Figure 5). Another issue was missing some parts of the work, again due to considering a shared intelligence between me and the machine (Figure 6). All of these were signals that we needed to do our parts perfectly in this collaboration.

I embraced these flaws as part of the process, reminding myself that the end result of this work is not about recreating a perfect piece of art but examining the role of the machine in learning about Palestinian culture, its craft, and rituals.



Figure 5. Double Layered Stitches and the attempted fix



Figure 6. Missing part of the Line of Stars

### Conclusion

During the creation of this piece, we anticipated speed, assuming efficiency from the machine. However, what we encountered was slowness and the space offered by our machine. This contrasted sharply with our expectations, making the creation of this piece lengthier than we could have anticipated. Yet, it provided us with space to connect, contemplate, and reflect both on the machine and with the machine. The unexpected slowness aligned seamlessly with our concept of examining the possibility of using the machine for designing rituals. This slowness demonstrated that the machine, as our collaborator, enhanced our experience in creating this piece. It turned out that the pace, although different from our initial expectations, allowed for a deeper engagement with the creative process.

### Future Steps

While we are yet to incorporate amplifiers, wires, conductive threads, and batteries into our design (Figure 7), we have a clear vision of how this piece will be presented and interacted with.

Making this piece has become an invitation to experiment with a ritual. While familiarizing ourselves with Palestine's culture and history, the piece created a space and time for us to slow down for a minute or two and listen to the sounds that emanate from the land. This experience is distinct from our usual exposure through social media, providing a connection to the rituals of the land of Palestine.



Figure 7. Image of the work in progress

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## Biographies

**Sadaf Sadri** is a new media artist currently based in Seattle. The focal point of their work revolves around the concept of interruption. Their interest in disruption lies in the void that emerges in the wake of the discontinuation of the established power systems. This void, they believe, offers a space to imagine alternative narratives that might otherwise remain unexplored. To translate their imaginations to a more palpable communicative form, they employ e-textile, video, AI and Mechatronics.

**Daniela Rosner** is an Associate Professor in Human Centered Design & Engineering (HCDE) at the University of Washington. Her research investigates the social, political, and material circumstances of technology development, with an emphasis on foregrounding marginalized histories of practice, from maintenance to needlecraft. She has worked in design research at Microsoft Research, Adobe Systems, Nokia Research and as an exhibit designer at several museums, including the Adler Planetarium and Astronomy Museum