Core Memory: Encoded

Robin Kang interview transcript. Running time 10 min, 21 sec Conducted via Zoom on November 3, 2021, by Curator Laura Blereau. Written interview transcription by Curatorial Assistant Alex Landry. Interview text and audio have been edited for clarity by Blereau and Landry.

Hi, my name is Robin Kang. My Shipibo name is Metsa Kate. I'm based currently in Brooklyn, New York City, and I grew up in Kerrville, Texas, around.

Growing up in Texas, I was naturally influenced by craft traditions of the Southwest, which essentially is a melting pot of the rich and cultural traditions from Mexico, tapestries of Native American artisans from the southwest, and early American colonial weaving and folk art traditions. And so these influences I really believe planted seeds of interest in craft history, traditional techniques with natural materials, and interests in ancient mythology of North and South America. And additionally, a culture of video games and graphics connected to digital innovations of the 1980s and 90s were a dominant influence on entertainment, social life, and general communication for my entire generation.

So these influences have led me to research both technological developments connected to the history of textiles, as well as focus studies with master weavers and living descendants of some of the most ancient textile traditions on the globe. I've studied medieval weaving traditions in Belgium and the Netherlands, historic Scandinavian traditions in Denmark, and South American traditions from Mexico and Guatemala. However, the more in-depth apprenticeship experiences that I've had have been in Peru, with Quechua weavers and the highlands of the Andes, and also a deep personal connection with the Amazonian artisans of the Shipibo-Conibo tradition.

And additionally, research involving the industrial history of the Jacquard Loom, early computer history, and the craftswomen behind the woven

assembly and programming hardware for the Apollo 11 points to the strong role that weaving has played in technological development. I feel all of that strongly influences in the work that I make.

Much of my research has been technical, such as learning about different cultural traditions' loom setups--weft yarn and knotting techniques, or natural plant materials used for colored dyes. But perhaps the most memorable experiences have more to do with the cultural traditions beyond the cloth itself. For example, my apprenticeships in Peru equally involved a study of shamanic spiritual traditions immersed in a lifestyle of respect for the ancestors and living in harmony with the natural world. The time that I've spent over the years in the upper Amazon forest, living off the grid in an ecologically sustainable way in a grass roof hut, learning the ways that various plants carry medicinal, ancient wisdom was absolutely life changing. The textile patterns of the tradition of the Shipibo involve correlations to sound vibrations and healing energies of sacred plants. This concept that visual patterns are associated with a vibration or a current shares an exciting relationship to the woven electric currents that I've studied in relation to Ferrite Memory Cores of early computers.

I'm so grateful to have opportunities to study with Indigenous elders, who have humbly and resiliently embodied ancient practices in the face of tremendous obstacles over many generations. And I feel that I will forever be a student of these wisdom carriers, because I believe that they hold a special medicine that a contemporary Western society desperately needs, especially in these times.

The foundation of my practice involves over 10 years of specifically working with the TC-2 digital Jacquard Loom as my primary tool for weaving my artwork. This machine is a very specialized version of the Jacquard Loom that combines components of contemporary, digitally-operated looms that are used in mass production and mills, also with hand-weaving and manual capabilities. So, utilizing this contemporary version of what's considered the

first binary-operated machine, and argued the precursor to the invention of our modern computer--I'm essentially hand weaving tapestries that invoke mythic motifs familiar to long histories of textile traditions, with an added industrial mediation of this mechanized process, and some cyber mysticism. Like Photoshop, pin tool gestures layered with motherboard hardware graphics echo symbols reminiscent of ancient cultures fusing together amid interlocking threads. The juxtaposition of textiles and electronics opens an interesting conversation of reconciling old with the new traditions that have new possibilities, as well as the relationship between textiles, information systems, language, memory, and the sacred.

I consider myself a weaver and a craftsperson because of the amount of research that I've put into these craft techniques. I hand weave each of my works myself thread by thread. My loom lifts its heddles according to the computer file that I program by way of a manual foot pedal. And I throw the weft yarn shuttles back and forth by hand, just like one would on a traditional floor loom from the 1800s--not to mention all the labor that actually goes into the loom setup and the warp winding for a machine that weaves 3520 threads at 60 ends per inch. So, I guess I'm also a technician, too. The process that's inherent in this work involves countless hours engaged in a labor of precise, repetitive action. But within that there's also space for improvisational variation, and I think that's why I'm actually engaged with this as an artist, because there's this system that's set up, but I'm still able to engage with that creatively in the moment as I work.

I feel my woven tapestry definitely explores connections between contemporary technology and the history of textile fabrication. And by incorporating graphics drawn from both circuit boards and patterns, reminiscent of ancient weaving traditions, the work points to the influence that weaving technology has had on the development of modern computing. From the influence of Jaquard's punch-card system that he developed for his loom in the creation of early computers, to the hand-woven copper wires found in early memory storage hardware, Ferrite Memory Cores, it seems like our current technological landscape has all these wonderful connection

points that are linked to the history of weaving. These intertwined histories, which often remain unacknowledged, upend traditional expectations surrounding gender within technology, labor, the development of technology, history, and cultural ritual.

Manifesting something completely tactile from what initially exists from a digital sketch feels almost alchemic, and the exciting part of the process is that the translation from the computer to the weaving is never exactly what you expect. Many ancient traditions involve intentional variations within patterns that seem like errors in their designs and often incorporated into the making process as a way to honor the Divine. These deliberate mistakes highlight the humaneness of the hand that's creating the weaving. And this concept feels quite relevant in a digital age where human and machine are in constant dialogue.

One of the first weavings I ever produced on the TC-2 digital Jacquard Loom was a piece that I titled "Core Memory". It was essentially a rendition of the earliest kind of form of computer memory which is called a Ferrite Memory Core. This piece of hardware is basically a mini loom and weaving at the same time. It's a square that has little copper wires, that are carefully inter-woven by hand, and there are little magnetic iron beads that are woven into the copper wires that then get charged with a positive or negative vibration that then creates this data setup of a binary programmed code that is programmed while it's being made in this very tactile way. This type of memory storage predated RAM, but I found it to be super beautiful as a way that this link between computer history and weaving really is at the core, connected by this gridded structure of binary data.