

# *For Submersion*

Sarah Rosalena



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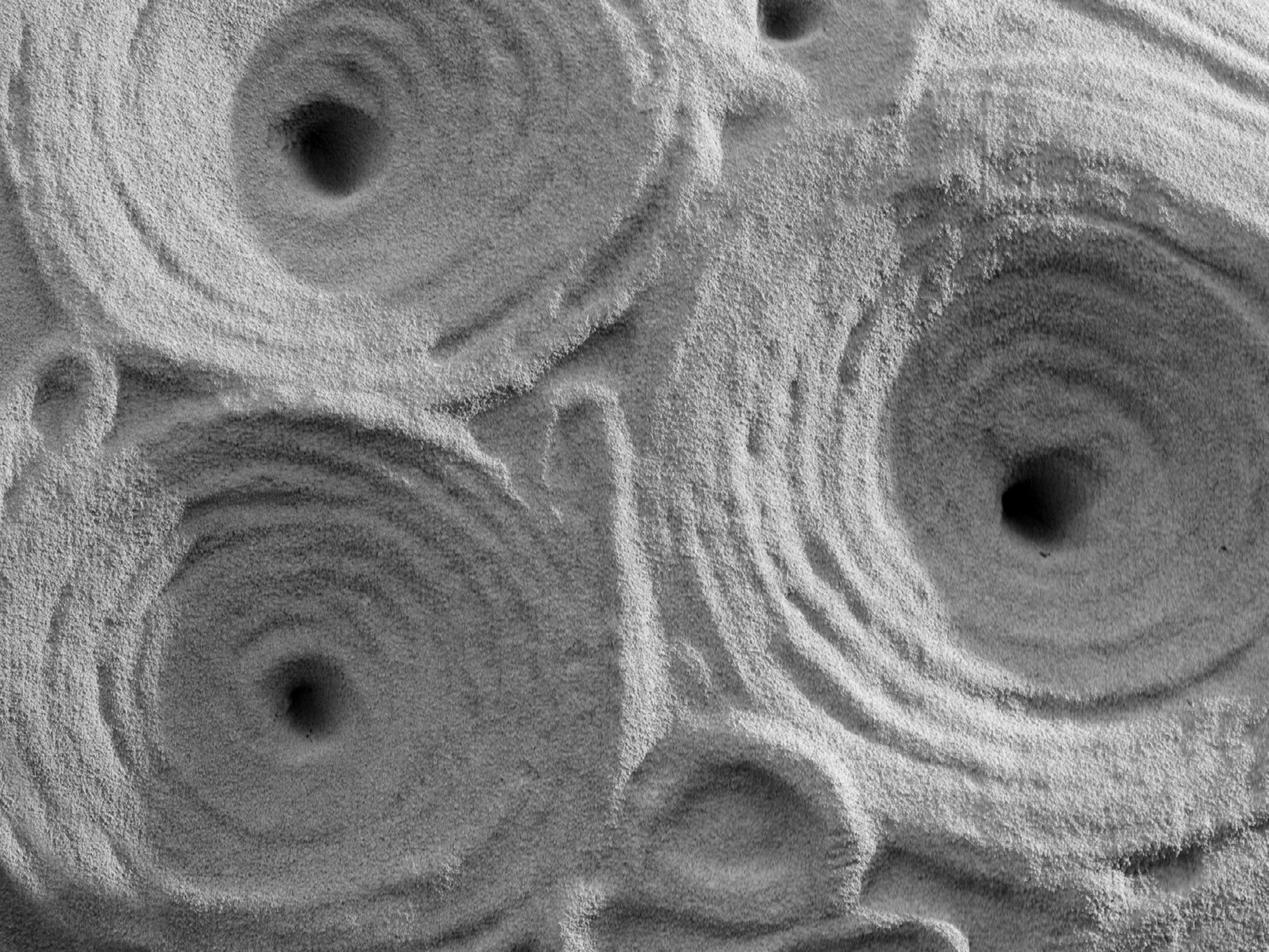
# Director's Note

## Sue Bell Yank

Clockshop's mission is to work with artists to deepen the connection between community and public land. We cannot do this without acknowledging that the land we live and work on is originally and still, inhabited and cared for by the Native First peoples of this region. Clockshop is dedicated to growing and sustaining relationships with Native peoples and local tribe governments, including (in no particular order) the Fernandeno Tataviam Band of Mission Indians, Gabrielino Tongva Indians of California Tribal Council, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrieleño Band of Mission Indians—Kizh Nation, San Manuel Band of Mission Indians, San Fernando Band of Mission Indians, through a commitment to truth, healing, and elevating stories, culture, and community of these original inhabitants.

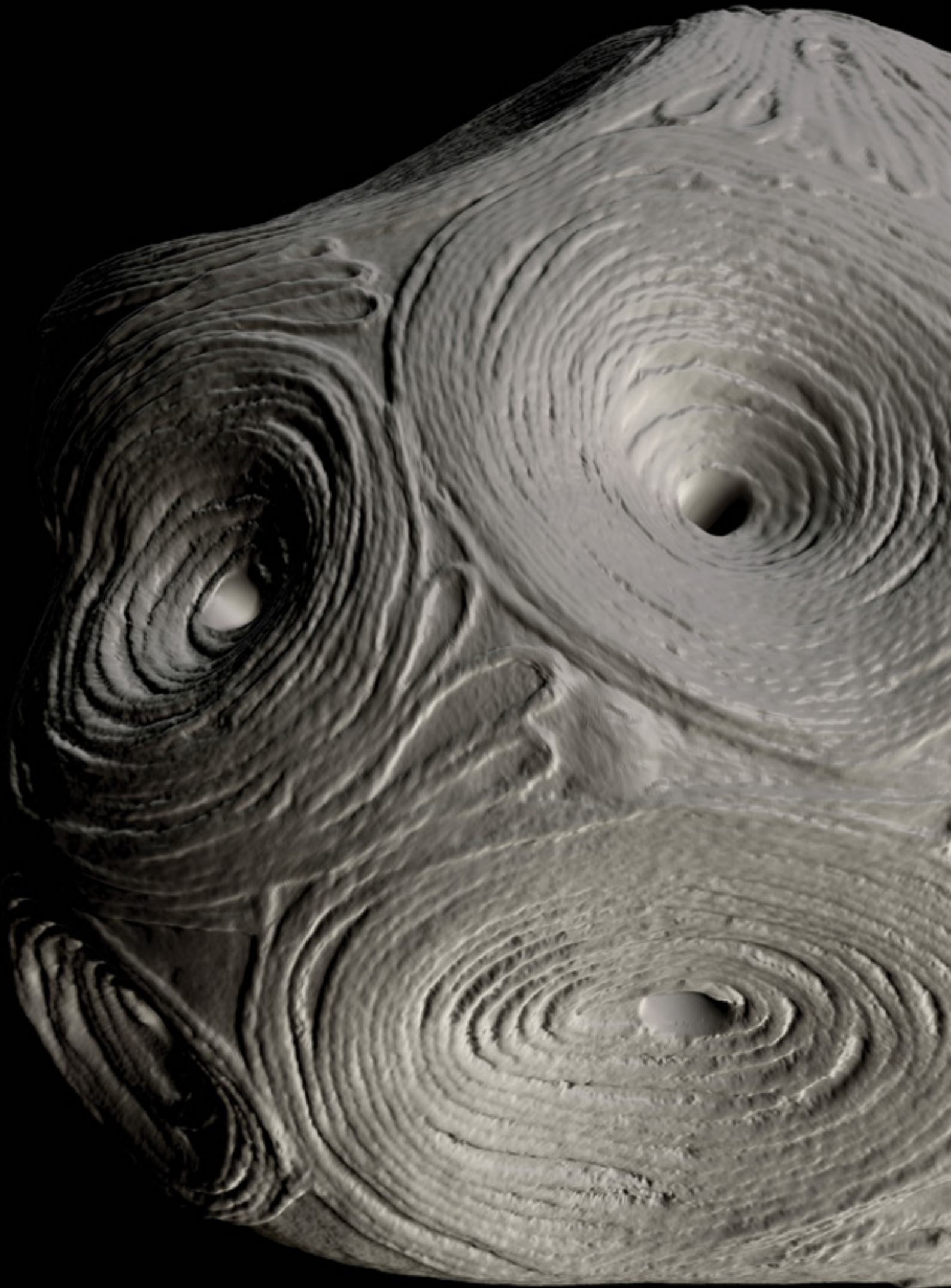
Part of Clockshop's dedication has been to work with artists like Sarah Rosalena who explore our connections and interdependence with the land, to ancestors, and to making and craft as ways to think through how we navigate the future with those cultural values at the root of what we do. The site of *For Submersion* is on the original floodplain of Paayme Paxaat, an important water source for the Tongva people for time immemorial. The floodplain then became the site of Zanja Madre (mother ditch), an aqueduct that connected water from the river to the fledgling Spanish colonial project we now know as the City of Los Angeles. Over generations, this site and neighborhood became the Ellis Island of Los Angeles, which brought immigrants to Chinatown and Sonoratown on the railroad. In recent years, it was slated to be developed into warehouses, but through the incredible efforts of community groups and organizers over decades, it was preserved as public space and opened in 2017 as Los Angeles State Historic Park in a city in desperate need of public, open green space, especially in working-class neighborhoods like

Chinatown and Lincoln Heights. The particular section of the park that *For Submersion* occupies is a bioswale wetland that is designed to fill with floodwater when it rains and is one of the few areas in Los Angeles' urban built environment where we see a glimpse of the river as it once was. Sarah Rosalena was interested in exploring this alluvial history, and as she developed her work, the conversation around water and our built environment reached even more urgent levels. Developed in a historic drought, *For Submersion* has experienced equally historic rainfall—so much so that its site was under six feet of water on the week we had planned its original installation in December 2022. As the sculpture interacts with the natural cycles of flood, drainage, and downpour, *For Submersion* clarifies an understanding of how the land can nourish us, if we learn interdependence, humility, and respect for our watersheds.



# Conceptual Threading

Nora N. Khan



On my first day visiting *For Submersion*, I sat before the sculpture on a cloudy day in Los Angeles, the threat of another heavy rain a few hours away. The piece is totemic, in a clearing amid wildflowers in Los Angeles State Historic Park. After an hour, it seemed it could have been seated there for 800 years. From its surface, one taut, raised spiral rounds tightly inward and pulls the eye down into a fist-sized hole in its center, which is drilled into what seems to be a rock. Following each spiral back out from the hole, the curve flows out into a single thread, which warps and folds into a tight fan of loops. The thread curves back into another spiral, which leads the eye back down into a new hole. Following the thread this way—from hole to spiral to fan, and back to spiral to hole—has a meditative, cycling effect.

Following the thread also maps the topology of the artifact in my mind: where it dips, shallows, rises, and turns. I imagine the far side of the ritual artifact and turn it around on an axis, as in a 3D software. It was modeled on a river rock the size of my hand, and then printed at a massive scale. From the small, origin rock, made smooth by centuries of water in the floodplain of Paayme Paxaayt, the Los Angeles River that once flooded and ran wild, I see an artifact that is both future and ancient. Later, thumbing the origin rock hugged by skeins of yarn painting in my hand, I move from the dry riverbed to the former river to the floodplain, from the floodplain to the settlements of the Tongva reaching up into present-day Glendale, the former Elysian Valley, back to Downtown Los Angeles, to the concrete riverbeds. All these eras collapse and fold into the site of the artifact, and the site of the artifact in the mind.

Sarah Rosalena's conceptual and material practice allows for this fluid ambling, a shuttling between scalar frames of reference—the microbial and the galactic, the handmade and the computational, the short-view and deep

time, the natural and the engineered—by creating threads that manifest the deep relationship between these frames. These schemas are so often described within binaries that in turn define how we relate to them. We might think of engineering and the use of technological tools as somehow separate or in opposition to the natural. Technology is then always an intervention, rather than an expression of our relationship to the natural world. Climate change is narrated as a set of cataclysmic events, rather than as an iterative, slow, unfolding process happening everywhere on every scale, especially on those we can't perceive.

To even begin movement between these frames, Rosalena complicates one persistent binary: between computational methods and the tactile, handmade, and embodied work of craft. Some yards away from the ancient artifact, a woven textile hangs at the end of a wooden causeway. Created with parachute cord on a computational loom, it reveals a set of lavender veins, like dendrites. From the crown, a fall of silk black hair. As the sun goes down, the stitches and detail of the Los Angeles watershed emerge from the ground, a topographical map outlining ledges and shadows, edging land earmarked for cultivation. Rosalena says the weaving was too unwieldy and challenging on the loom, and almost broke the machine.

Rosalena's conceptual ground, a glittering tapestry of theoretical references, personal lore and collective history, and analytical reflection on technological "progress," allows us to collapse these schemas and move between them with ease and clarity. As Rosalena speaks on the loom, the pixel, and satellite maps in the same breath, shared metaphors between each tool, system, and computational process emerge. Looking at a map of the Los Angeles River Basin on Rosalena's computer together, while listening to



her speak of weaving, hand-beading, and the textures of her tapestry substrates, we watch the map iterate and shift, as if made by hand. This allows our view to interrupt and deepen the satellite's view, which maps the land with 1:1 certainty as a neutral field.

In watching her work unfold, viewers can better understand how weaving served as an early, instructive manual and methodology for computation [1]. Rosalena's process itself is computational. She uses meticulous, revisionist patterning, working in an iterative and algorithmic fashion within the productive bounds of the grid. In her hands, the map is always constructed, as are its boundaries and names. Each name indicates an inside, a civilization, bound at the edge by an unknown. Her new maps guide us to think of the subsumed layers of socio-political engineering of the land, in the service of colonial and neocolonial aims. The viewer can consider the driving question of large swathes of theory at this moment: how do we begin to understand land, culture, and ideas as autonomous, to be stewarded rather than unowned, purchased, parceled, and drilled? This question seems answered, in part, by a thorough understanding of the map as handmade. The pixel and the thread are where the sovereign image of the territory is controlled.

Even as Rosalena works with the computer binary, she refuses, at each step, the seduction of binary thinking. Machines and technological systems may extract data, process it, and offer it up as material for rapacious algorithms which create our futures. And yet, the unwieldy, "incorrect," and glitchy use of those systems allows for recoding and retooling, and, with time, new systems altogether. In between these poles is the field in which we negotiate daily our agency and position in relation to algorithmic logic. Rosalena models this space between, standing for hours before her intimidatingly heavy computational loom. She edits her digital substrates to then warp, realign, and manipulate each thread. She works back and forth between her own conceptual arguments to process the question and answer the algorithm has built into it. Each technological output

is constructed as much as processed. In her frequently cited *The Carrier Bag Theory of Fiction*, Ursula K. Le Guin [2] urges us to think of the carrier bag, and gathering, as an alternative model of relation to our natural environment and other living beings in place of the hero or the pioneer who harnesses *techne* as a method of direct, unremitting conquest of land. The classic paradigm for the design of computational systems today is that man invents and uses these tools to reshape reality for the better good. One can imagine the sack—in which we gather our necessary references and alternative tools—as computationally woven, a heavy carrier bag which halts a galactic machine for a time, allowing us to reconsider the loom's purpose and relation to the futures we want.

1. The importance of jacquard weaving in inspiring the early history of computing is well explored in James Essinger's 2004 book *Jacquard's Web: How a hand-loom led to the birth of the information age*, published by Oxford University Press. Subsequent writings have added nuance to the frequently repeated claim that the jacquard loom is a "direct predecessor" to the modern computer, including "Mistaken Ancestry: The Jacquard and the Computer" by Martin Davis and Virginia Davis, and "Weaving as Binary Art and the Algebra of Patterns," by Ellen Harlizius-Klück. They emphasize the ways weaving has been a pattern algebra-based binary art for millenia. Jacquard's punch card system made those patterns clear through notation; engineers learned to see the patterns inherent to weaving through the punch card notations.
2. Ursula K. Le Guin, "The Carrier Bag Theory of Fiction," with an introduction by Donna Haraway. Published by Ignota Books, 2020.

Nora N. Khan is a curator, editor, and writer of criticism on digital visual culture, the politics of software, and philosophy of emerging technology. She is the Executive Director of Project X for Art and Criticism, publishing *X-TRA* Contemporary Art Journal in Los Angeles. Khan's short books are *Seeing, Naming, Knowing* (Brooklyn Rail) on the logic of machine vision, and *Fear Indexing the X-Files* (Primary Information), co-written with Steven Warwick. Forthcoming are *No Context: AI Art, Machine Learning, and the Stakes for Art Criticism* (Lund Humphries), *Kingdom* (Primary Information), and *The Artificial and the Real* (Art Metropole). Her writing has been honored by the Visual Arts Foundation, the Crossed Purposes Foundation, and a Thoma Foundation Arts Writing Award in Digital Art.



# Sarah Rosalena

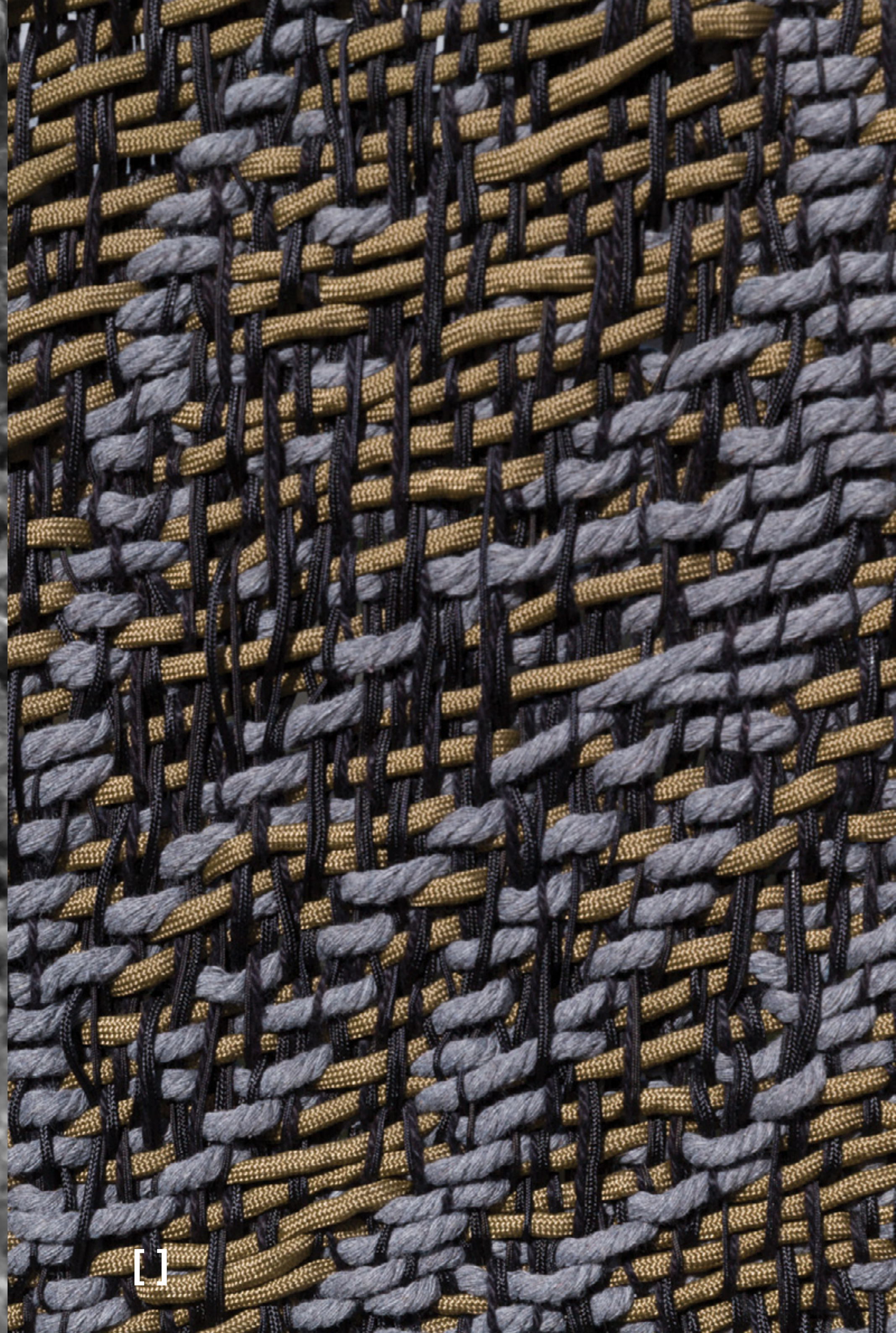
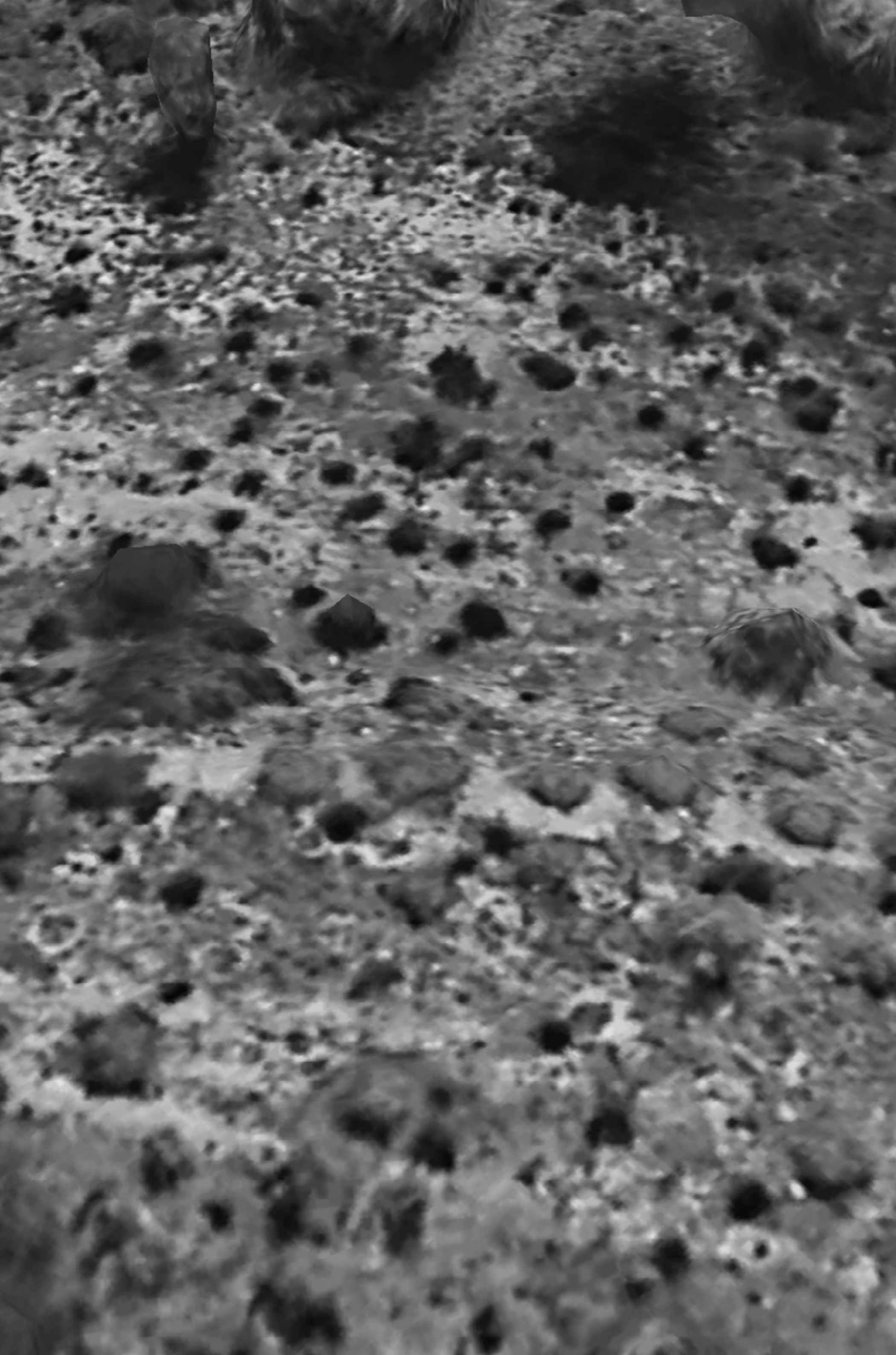
Sarah Rosalena (Wixárika) is an interdisciplinary artist and researcher based in Los Angeles. Her work deconstructs technology with material interventions, creating new narratives for hybrid objects that function between human/nonhuman, ancient/future, and handmade/autonomous to override power structures rooted in colonialism. She is an Assistant Professor of Art at UC Santa Barbara in Computational Craft and Haptic Media. She has received awards from Creative Capital; the LACMA Art + Tech Lab; Carolyn Glasoe Bailey Foundation; the Steve Wilson Award from Leonardo; the International Society for Art, Sciences, and Technology; and the Craft Futures Grant from the Center for Craft. Rosalena recently showed her work at Frieze LA and Blum & Poe Gallery.











[1]





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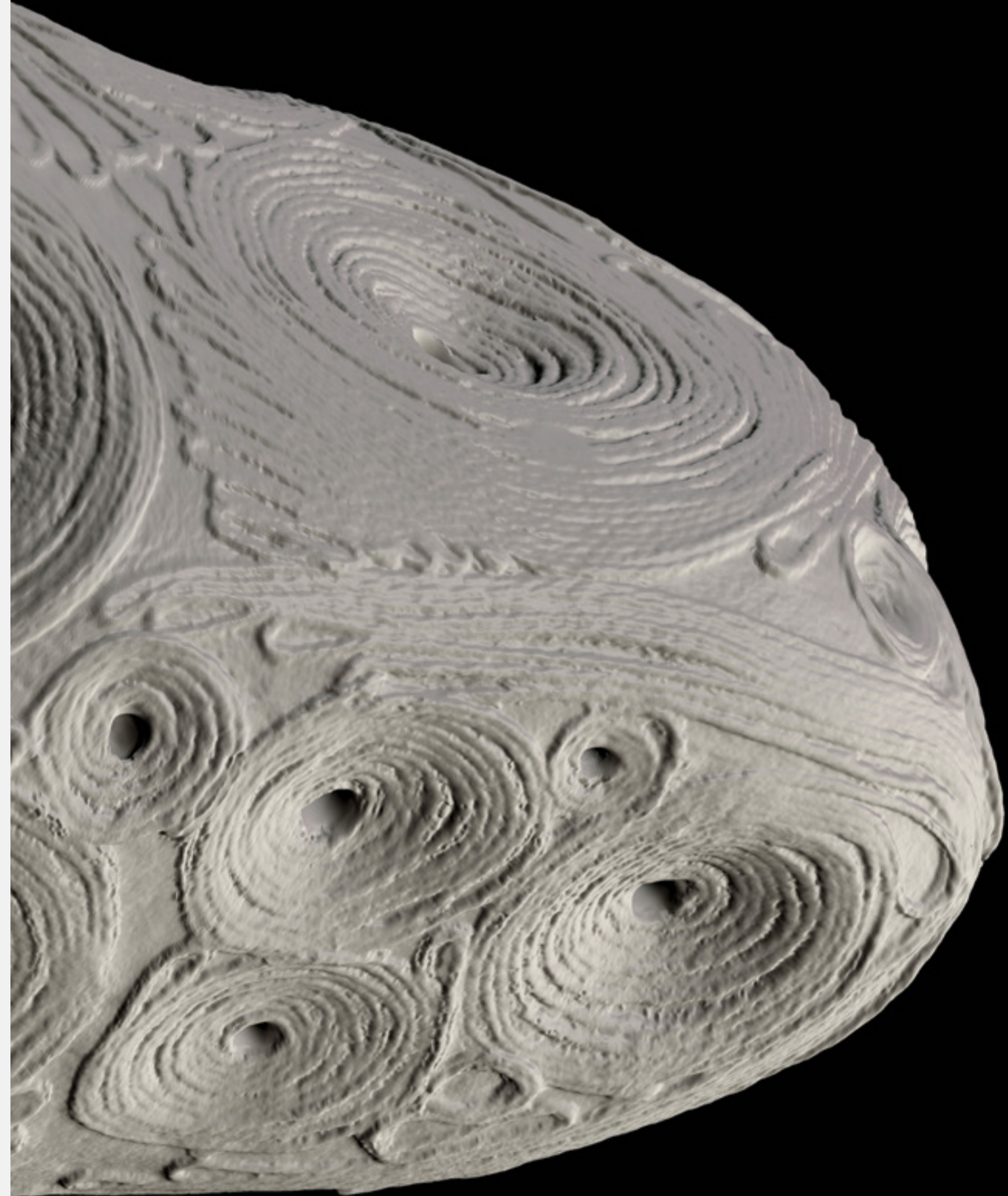
# For Submersion

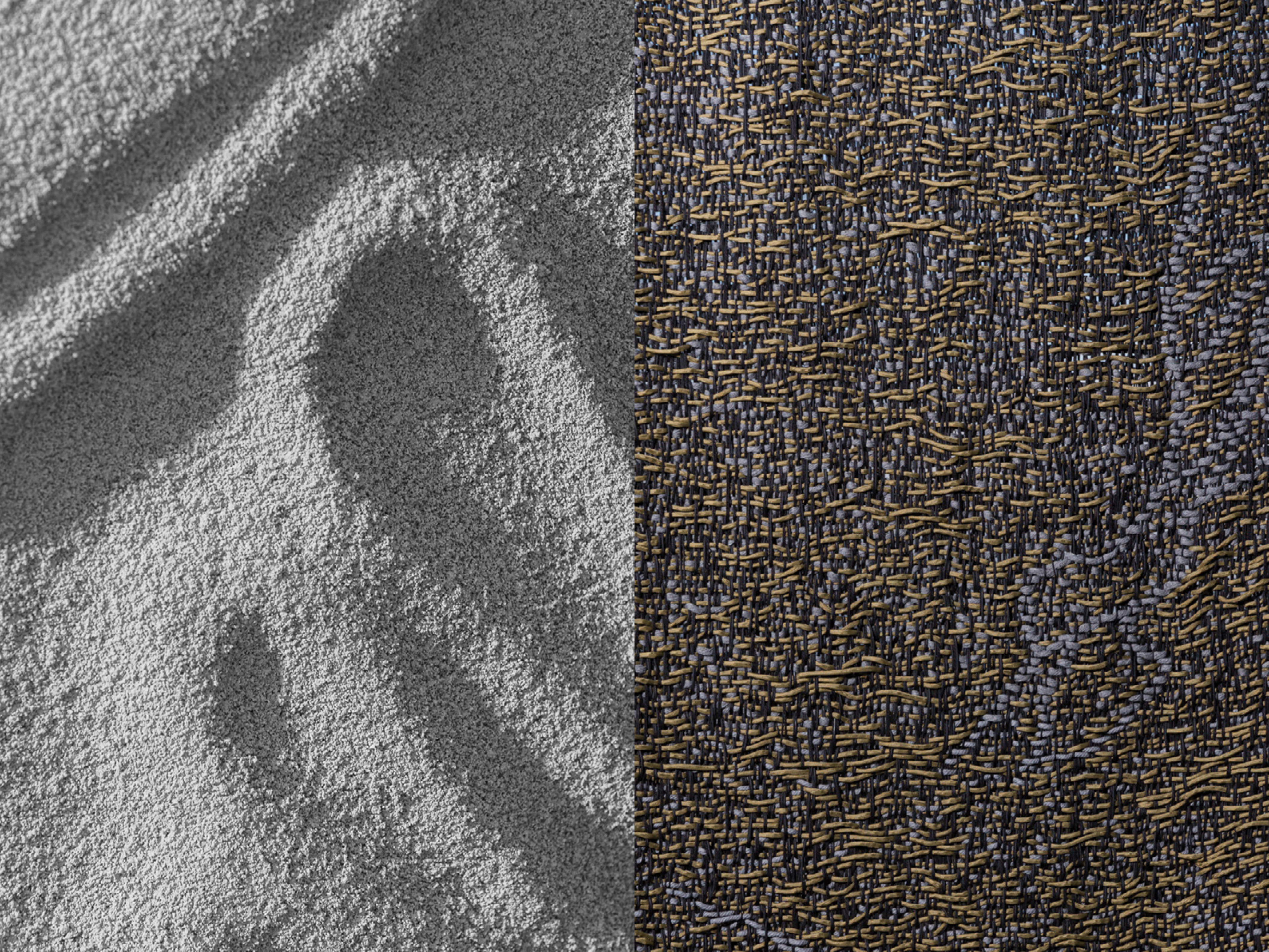
Before settler colonization, LA State Historic Park was the floodplain of Paayme Paxaayt, the Los Angeles River, that supported Tongva people and wildlife. *For Submersion* recalls the Los Angeles River's importance by honoring its history as an ancestral pathway. The mediums used to create *For Submersion* highlight Rosalena's attention to the Los Angeles River's evolution over time, honoring practices used in the past and present, she merges craft-making and digital arts as a way to interpret and reenvision land.

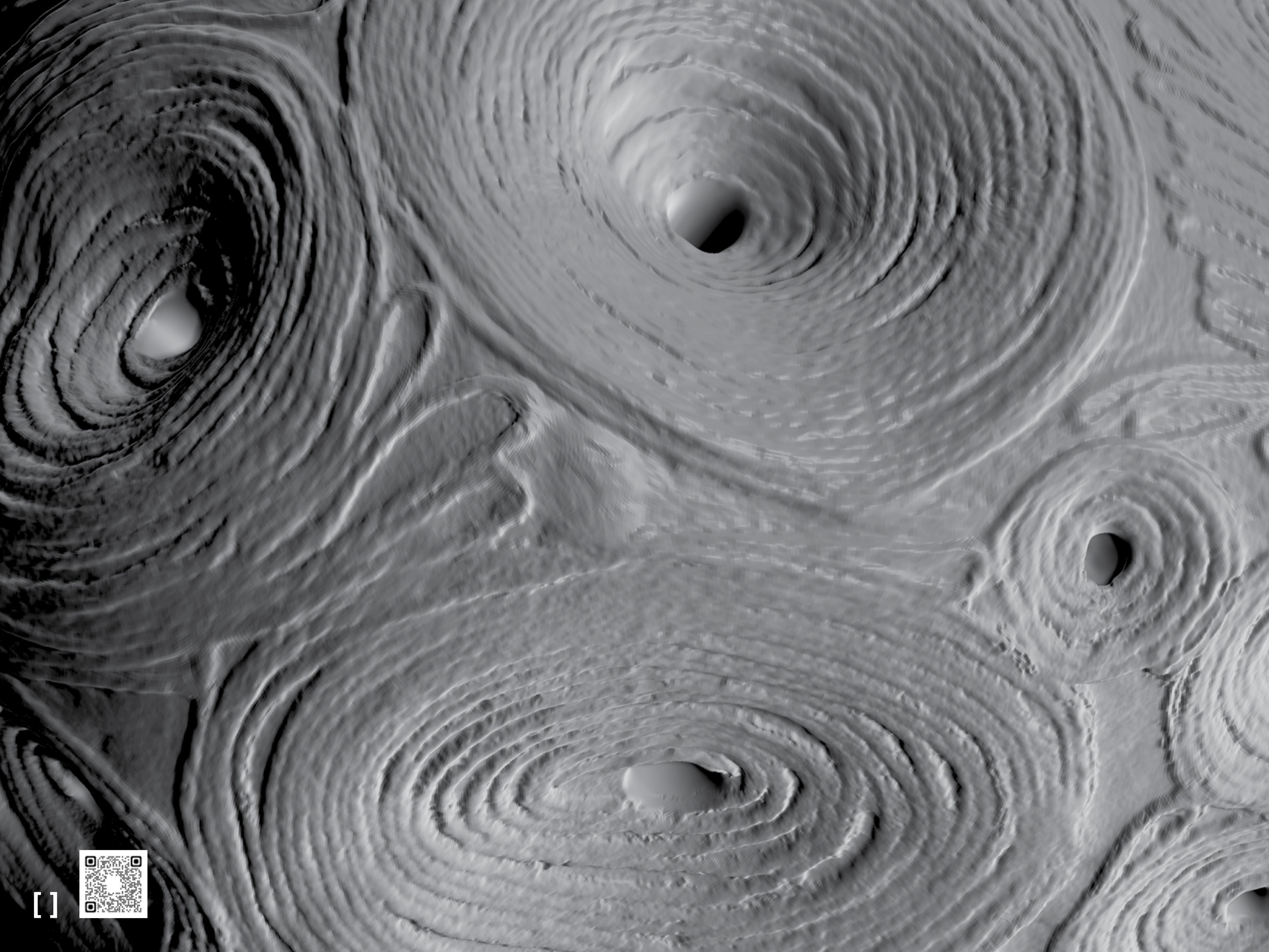
*For Submersion* is both a physical work and digital artifact, which aims to re-narrativize, through yarn painting, the river's temporalities and historicity as a watershifter. Rosalena adorned a river rock from Paayme Paxaayt with Wixárika yarn painting, a method of image-making traditionally done with beeswax, pine sap, and handspun yarn that has been passed down in her family for generations. The yarn represents a throughline to mother earth and to the matrilineal bloodline of weavers in her family. The yarn-painted rock was 3D scanned, then digitally fabricated into a physical sculpture that will collect and interact with rainwater. In addition, a large commissioned textile was handwoven as a companion piece and uses satellite imagery of the Los Angeles River as a weaving pattern.

Central to this commission is a partnership with Indigenous-led arts organization The Chapter House. The Chapter House and Rosalena led hands-on workshops for intergenerational Indigenous youth, engaging them with the land at LAHSP through traditional craft and digital technology. The participants learned new technologies like 3D scanning and post-processing, which was interwoven with traditional crafts like Navajo weaving to create "future heirlooms," expanding imaginings of life, land, and heritage in Los Angeles. Each workshop was designed to mirror the process of

creating *For Submersion*, wherein technology functions as a means of digital preservation and archive for future generations. Workshop facilitators in chronological order: Luis Rincon, Samantha Morales Johnson, Thanh Mai, Melissa Cody, Sarah Rosalena, and Solange Aguilar.









# Image Credits

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The yarn painted rock was 3D scanned, then digitally fabricated into a physical sculpture that collects and interacts with rainwater. Courtesy of Sarah Rosalena.

Page 10 & 29  
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Artist photo courtesy of Sarah Rosalena. Satellite imagery of the Los Angeles River as a weaving pattern on a TC2 Jacquard loom. Courtesy of Clockshop and Sarah Rosalena.

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Historic courses of the Los Angeles River as visualized by Google Earth. Courtesy of Sarah Rosalena.

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Distortions of land masses and plant forms at the site of For Submersion as visualized by Google Earth. Courtesy of Sarah Rosalena.

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3D scan; Courtesy of Sarah Rosalena.

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The .xl file replicates the historic courses of the LA River in a reconfiguration of a satellite view of the earth. Courtesy of Sarah Rosalena.

# Acknowledgements

Clockshop works with artists to deepen the connection between communities and public land, in order to build a shared vision of a future based in belonging and care. As a Los Angeles-based arts and culture nonprofit, Clockshop produces free public programming and commissions contemporary artist projects on public land to better connect Angelenos to the land we live on. We bring this mission to our work at Los Angeles State Historic Park in Chinatown and Rio de Los Angeles State Park (“The Bowtie”) in Glassell Park, in collaboration with California State Parks.

*For Submersion* was commissioned by Clockshop and supported through our long-standing partnership with California State Parks. The production of this work was generously supported by the California Arts Council, Mike Kelley Foundation for the Arts, and the Pasadena Art Alliance, with additional support from the City of Los Angeles Department of Cultural Affairs, Los Angeles County Department of Arts and Culture, and Clockshop’s generous community of supporters. Special thanks to Arktura for their donation of services to fabricate this project.

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