Selina Martinez, is a member of the Pascua Yaqui Tribe and Xicana born and raised in Phoenix, AZ. She completed her master of Architecture degree from ASU in 2020, and is currently pursuing her architectural license. She has been involved in a diversity of projects with local tribal nations through the ASU Indigenous Design Collaborative. Selina is the cofounder and lead instructor for Design Empowerment Phoenix, a program of the Sagrado Galleria in South Phoenix that provides opportunities for youth and community to engage in design tools and processes.

UNEARTHING INDIGENOUS FUTURITY

SELINA MARTINEZ INTERVIEWED BY TONIA SING CHI

ABSTRACT

The following is a transcription of an interview conducted by editor Tonia Sing Chi with Selina Martinez of Design Empowerment Phoenix on May 23, 2020. The conversation explores the suppression of Indigenous building knowledges, the role of personal identity, experience, and ancestry in design practice, Indigenous futurity and plurality, adobe block making as a mechanism for collective healing, and the decolonization of architectural practice through informality. The interview is illustrated by a selection of Martinez' drawings from her thesis project *Bachia*, renderings from the design of the Sagrada Galleria backyard, and videos from the adobe block making workshops with Design Empowerment Phoenix.

Tonia Sing Chi (TSC): Personal identity plays a fundamental role in your practice. How has your ancestry, community, and lived experience shaped your work as designer? In thinking about the importance of legitimizing personal experience and perspective as a form of knowledge and expertise, what is the value of bringing your whole self to your work—including the facets of your identity that may have been historically excluded, silenced, or erased through the professionalization of architecture?

Selina Martinez (SM): I've always been connected to my Yaqui culture—but in more of an unanalyzed way, until I was exposed to the idea of Indigenous architecture. For most of the time I was in architecture school, I didn't relate to the history we were learning about, which skipped Native American architecture. It wasn't until I met Wanda Dalla Costa, who was in the construction school at the time teaching an Indigenous architecture, planning, and construction course, that I even considered Indigenous architecture as a possibility. This really opened my mind to what I could potentially do within my career. Much of what I was being taught were old generation approaches to design process to create a very objectified architecture, which always felt disconnected from reality and from the people it affects. Architecture is a heavy thing to place in a community. The role of an architect, until that point, was limited to very "iconic" architecture. Even the fact that Wanda was a woman was very empowering for me to see. That's when I began to further explore—through the lens of my Yaqui roots—what *our* architectures were and where they could go, considering the historical gap and the architecture in our communities that have been influenced by Eurocentric ideas.
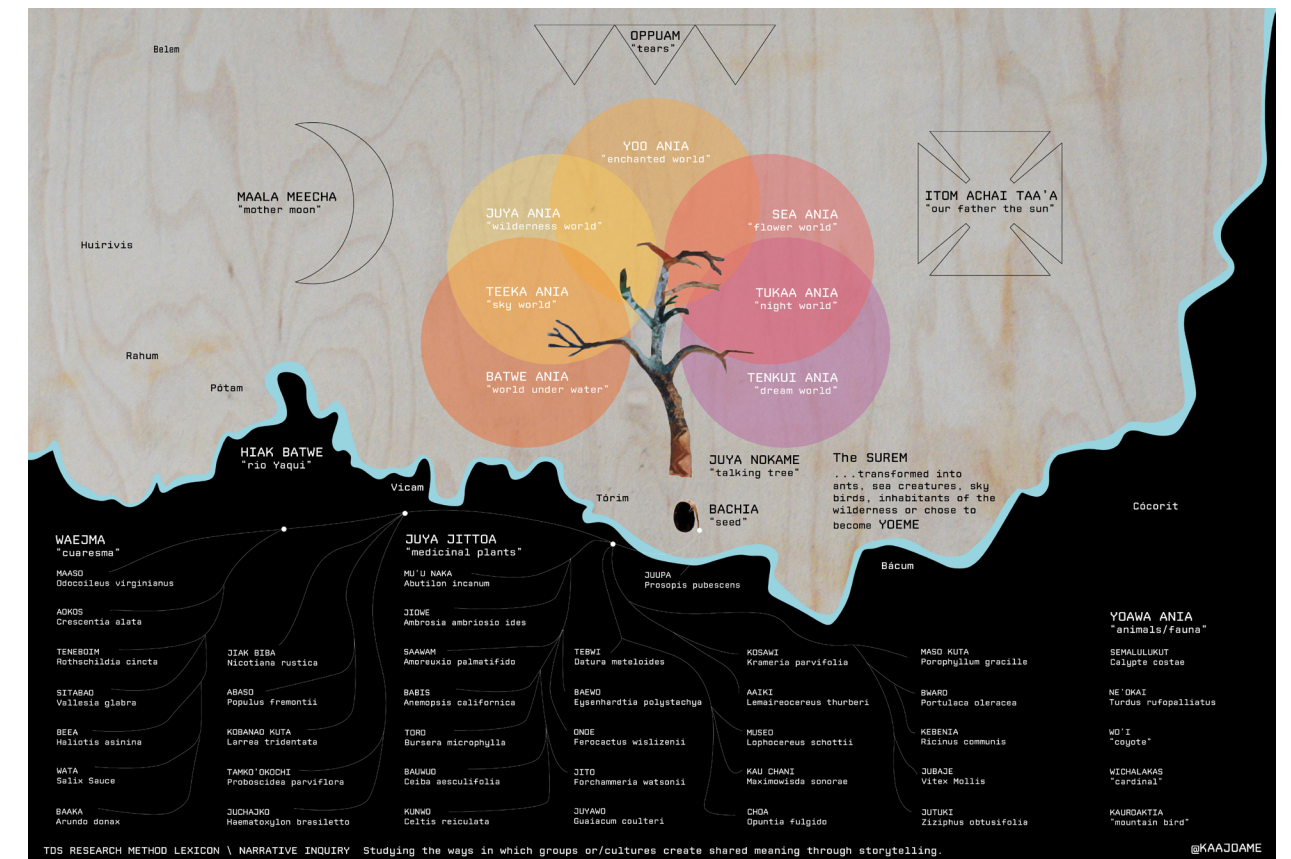

Figure 1: *Bachia Yaqui Emergence Story Diagram* Courtesy: Selina Martinez
This storytelling diagram displays the interconnected relationship between the Yaqui emergence story, Rio Yaqui in Sonora Mexico and the cultural keystone species the environment supports. Cultural keystone species are exemplified in a culture's life-ways, food-ways, ceremony, and world views and often contextualize the roots of one's indigeneity through nature.

Figure 2: *Bachia Rain Garden* Courtesy: Selina Martinez
Yaqui elders in Guadalupe, AZ have expressed it would be an asset for the community to have a public space for children to play during the times they babysit. A sunken garden would allow water to drain into a zone that can be utilized as a water catchment system and reused for a splash pad for children to play in during the summer months. The rain garden would support restoration of sacred medicines in an urban setting and accessibility to lush desert environments.

Figure 3: *Bachia Mariposario.* Courtesy: Selina Martinez
Establishing a butterfly habitat to provide an environment for 'teneboim' cuatro espejos (Rothschildia cinca) a silk moth species. The moth cocoon is utilized as ankle rattles in the Yaqui deer dancers regalia and is imported from the Yaqui homelands in Sonora, Mexico for ceremonies taking place in the United States. This moth species population is currently being affected in the Yaqui homelands due to diversion of waterflow into the Rio Yaqui that supports the ecosystem these moth cocoons are typically harvested from. Inspired by the Yo'o Juara mariposario in Cócorit, one of the original Yaqui villages, this space hopes to provide ecological education around the cultural keystone species of the Yaqui people in Guadalupe, Arizona.

I got deeper into my exploration of my identity in relation to architecture through my thesis project titled *Bachia*, meaning "seed" in Yaqui, which had a program focused on Yaqui culture and identity and how to reestablish our connection to this concept of cultural keystone species—the species that are embedded in our practices, in our regalia, in our food, and in everything that is connected to our emergent story and cultural practices. These species illuminate our innate relationality to nature. Because of colonization, my culture has been heavily influenced by Catholicism; I went to Catholic school growing up and have always been taught that Catholicism is the way. But I began to realize that it's not the *only* way to connect to our Yaqui identity—or to my Xicana identity. Mexican culture has also been hugely influenced by Catholicism. I think that's okay. Everybody has the right to their own worldview, but I also know that this next generation is beginning to deconstruct what that identity means— and create new ways of doing things that are still connected to our ancestry and who we were before colonization. Architecture helps me visualize what that future looks like. One of the concepts I like to explore in my work more currently is Indigenous futurity—along with the concept of plurality. There are many worlds and worldviews within this one world, and *all* should be validated—and are often *in*validated within institutions and universities.

TSC: I'm interested in the work that you're doing with Design Empowerment Phoenix, and in particular the extension of the Sagrado Galleria, where you're connecting with the earth through excavating the ground, sifting the dirt for a series of adobe block making workshops, and transforming the site into a meditation space. How did you arrive at the idea of excavating the site and using the dirt to make adobe blocks? Were members of the local community involved in the ideation process? What were the conversations you were having surrounding the process of unearthing the backyard and using what is typically considered construction "waste" to instead build a space for healing and reflection?

SM: Design Empowerment Phoenix came out of a request from a community member within South Phoenix, the owner of the Sagrado Galleria. His name is Sam Gomez and I met him at one of the Yaqui

Figure 4: *Alma Nacer.* Courtesy: Selina Martinez for Design Empowerment Phoenix
Alma Nacer is a project that hopes to transform an existing building, previously a liquor store, in the South Phoenix community into a cafe, community kitchen, artisan studios, regenerative garden, and eventually a location to develop affordable housing prototypes.

Figure 5: *Sagrado Galleria Healing Garden.* Courtesy: Selina Martinez for Design Empowerment Phoenix
The Sagrado backyard will include a sunken, stepped adobe space, a shade structure, and a surrounding healing garden for medicinal and herbal species. Stepped adobe space that will be plastered with natural pigments and include additional design features from local artists who have been exploring natural pigments. The moveable shade structure will allow people to adjust the shading to the path of direct sun and use it as shelter when it rains to drain the water into the gardens.

Figure 6: *Sagrado Futuro Garden.* Courtesy: Selina Martinez for Design Empowerment Phoenix. A vision created was to inspire the potential future of The Sagrado galleria evolution through new infrastructure and programming. Expanding on the existing building to provide indoor/outdoor gallery spaces post covid, showcase local plant species, and strong connection to green space to promote healing and well-being

ceremonies that we were having in Guadalupe, which is not too far from South Phoenix, where the gallery is. He is a friend of my brother-in-law and he invited me into the community to create this design workshop, which was first offered in the spring of 2019. Through his vision I was able to assist with design visualization tools to further what he would call conscious development from the perspective of a community member that integrates culture with people's wants and needs. It had similar values to those of the ASU Indigenous Design Collaborative.

In this past year, our team was introduced to some elders in the community who had been building with adobe for most of their careers. They also do straw bale. We visited their house, and it was so beautiful. They were—right at that moment—building an adobe wall and they invited us into their space and had us do the whole process with them. We were introduced first to the mixing, and then putting it into the forms, then pulling the forms. They already had some dried bricks, so we even got the chance to lay the bricks with

the adobe mortar to see if this was something that we would be able to bring to the Sagrado Galleria backyard redesign, which we hadn't even considered excavating at that point.

The excavation was something that I initially suggested because we were thinking of putting a shade structure back there. I started to think about my experience working with tribes like Gila River and my understanding of the indigenous history of Arizona. The canal system is very extensive and is what our current SRP canal systems have been based on, which is the ingenuity of the Indigenous people who were here before us—and we're still utilizing that system! It's a history that is often forgotten about. And so, I would bring this history up every time people asked why we chose to excavate.

We then reused the earth to create the adobe blocks.

There are also cooling factors. When you're submerged into the ground, there is a slight temperature change. And I think the process of excavating, for some people, can be a healing process. So we were also trying to rethink ways of doing things. How can various parts of this backyard redesign help people heal? We're in this time of COVID, and it's very stressful. We wanted to create a COVID-friendly space.

This adobe workshop has actually been the biggest thing that people have been interested in and engaged in. Residents from South Phoenix, artists, a lot of different people keep requesting us to offer them, and it's limited by our capacity as a group to continue them.

Figure 7: *Sagrado Futuro Galleria.* Courtesy: Selina Martinez for Design Empowerment Phoenix
The Sagrado Futuro would be a place where physical representation and references of culture could be embedded within the infrastructure.

We are very passionate about finishing the space and collaborating with all these different experts from the community. Without the elders who taught us the whole process and gave us some of the supplies and the frames to do it, we would probably not have even started.

For me, this has been something that I've always wanted to do. And I feel like we should be doing it in architecture school, especially in a desert that often has just a bunch of glass buildings. It's completely unsustainable and I don't know why that is the norm to be pushed within the context of the Sonoran Desert. It's horrible. This is another way to begin to discuss and even celebrate the vernacular intelligence that has been here and will continue to be here because earth is a resource that is readily available. I think a lot of people are ready to get their hands dirty. It brings value and community when you're doing the process together. It's really fun and I feel like everybody, whether they are heavily involved in the design process or not, is excited to contribute a piece. They know once the space is finished that they will remember creating it together.

TSC: Why do you think it's important to preserve and perpetuate earthen building traditions as a practice? What are ways that you imagine earthen construction being reinterpreted, re-valorized, or adapted to contemporary practice, which has pushed efficiency, performance, automation, modernist aesthetics, and globalization over community connection, local tradition, cultural expression, and hands-on engagement in spatial production?

SM: Adobe is a connection to nature, which is why I think it's attractive to people. Adobe construction is exciting because it can be messy. It doesn't need to be perfect or standardized. You can have a lot of flexibility with how you create the frames for the adobe. As far as where I would like to see this process going, we're already exploring the potential in single-story housing prototypes. There's a huge housing crisis, not only in Indian country but also in places like my homelands, Río Yaqui, where there are government programs that are building brick houses—but it's at the bottom of the Sonoran Desert. So it's very humid, but they're building these block and concrete houses. I think having the option to replace certain materials such as block,

which is so heavily used in Mexico and other places, is important. Adobe has always had a stigma by the dominant society that it is for poor people, and that it is actually a bad thing, when in reality, there is a reason why people were building with mud and it's for cooling effects, air quality, and resource availability.

TSC: Do you see vernacular, low-tech building practices as an effective way to include non-experts in the design process? Or does it serve a different role? What is the importance of teaching communities the tools of building? I think we often conflate participatory design with participation in the building process. And design professionals have a history of limiting the community's participation to labor under the paradigm of harnessing local knowledge, sweat equity, or demonstrating the accessibility of low-tech solutions. But I think it is equally important to empower communities by teaching them design thinking and planning principles and giving them the tools and inspiration to design themselves out of their own challenges. As I'm talking to you, though, I wonder if it is more fluid. Maybe authorship in design is not so separate from authorship through the building process.

SM: When we do these types of workshops, it's all about autonomy and ownership for the community. And when you have those two things, it not only brings the community together, but it also creates empowerment for people to feel like they can actually do something about their situation. Even if it's just adobe blocks, they can utilize what is already in their backyard, or within the desert, to create something out of nothing, essentially. One of the main reasons we created Design Empowerment was because we wanted community to not only participate in the development happening in the community, but also to have control over the direction that development will be going.

The support that we've been able to gather through these workshops has shown that people are looking for alternative ways to live in the desert and to interact with the desert. Right now, the way that we interact with nature and the desert is not reflected in the way that we build our houses. It's not responsive to our climate and it's not a priority for the people developing our communities. The climate approach has always been

really big for me. Responding to our bioclimatic situation is the best argument adobe brings to the conversation. Why are we utilizing materials and building in these ways that are completely unsustainable for the place that we live, and expecting everybody to relate to that? I think a lot of people feel limited by the current market and the status quo as far as development and construction goes.

Our hopes and goals are to find not only more adobe experts, but also more experts in the community who are open to exploring a different direction that is a mix of modern construction along with vernacular construction. Once again, due to colonization, we have a gap in the development of Indigenous architecture. Who knows what we could have developed in response to our environment? All the things that we learn from traditional architecture come from nature and our environments, and from the specific site that we are retrieving resources and materials from. I think that has been lost over time—maybe purposefully. That's what I want people to connect to, because that brings up the history of this place and a lot of these injustices. Although we can acknowledge these injustices, decolonizing—or deconditioning—our mindset from what has to be the status quo can change. And I think it's really about exposing those other ways of doing things, those other worldviews, and learning from each other. Because I think the people who live in these communities, and the ones who are affected by architecture and development, are the experts of their communities.

TSC: Colonial ideas of what is and is not "architecture" have placed earthen buildings in association with "primitive" and "substandard" housing, earning validation primarily through notions of heritage and romanticized ideas of preindustrial purity. The dichotomization of traditional and modern and rural and urban is also a common theme in settler colonial nations. Many Indigenous design professionals who are working in community-based contexts have shared with me that one of the greatest challenges they have experienced in perpetuating earthen building traditions is overcoming post-colonial attitudes and resistance from tribal leadership and communities, who may associate earthen architecture with "backwardness" due to the legacies of our settler colonial history. Have you observed or experienced this tension while

advocating for earthen construction? How have you grappled with it?

SM: Outside of Design Empowerment and more on the Indigenous Design Collaborative side, through work with some clients like Gila River, there have been conversations where people do want to return to those traditional ways, but then the next generation is not, I would say, educated about why. I think there is automatic resistance—probably due to colonization—about what the status quo is, and what wealth looks like as far as housing goes. I think that we probably cannot return to the traditional ways of building, but I think we *can* integrate some of those traditional ways into the way that we design and create architectures. When we are able to integrate those kind of vernacular responses, or climatic responses, and have that understanding, that is one way to practice your culture—or understand culture, even if you're not from this place. Adobe is appropriate within the Sonoran Desert because it is a material that is heavily utilized here historically. We can see it in all the different ruins that exist in Arizona. I think that is one way to also illuminate the histories that were here before us, and people want to erase that—or have erased that. As far as the controversy over "do we return or do we not return," there will always be a spectrum of what appeals to people and what they relate to. Generationally that has different perspectives as well, which means a plurality of different ways of living in the world. So I think one of the things that we're going to explore through these prototypes is how we can create these different variations that can be appealing to many generations, to many people, to different lifestyles.

We can still have modern amenities, but also utilize a practice that is traditionally important to the life ways of the people in the desert. I think that would help people relate to their environment a little better and remember that they're in a desert. There's never going to be one way. There are many ways to do things. Not everybody is going to be satisfied with living in an adobe house. Not everybody's going to want to maintain an adobe house. But luckily, we have different mixtures of mud as well. So maybe somebody would like to live in a mixed mud house that has some concrete so there is less maintenance. Maybe somebody would like to live in a fully raw adobe house that is very traditional.

Those are all possibilities that we can create—luckily—with modern technology. The technology of 3D printing mud houses is another way to connect to the next generation.

TSC: I'm curious to learn about your relationship with the tools of architecture. Representational techniques have been known to destroy and erase differences in race, culture, gender, and ability in pursuit of legibility and neutrality. Construction methods have pushed efficiency, progress, and standardization over local materials, place-based practices, and idiosyncrasies of the human hand. Even the process of licensure requires a level of assimilation into a profession shaped by Western value systems. Have you found conventional architectural tools and technologies to be limiting or even harmful? Have you reappropriated them, or even invented new ones to better resonate with your practice? Do you see architecture itself as capable of becoming a tool for delivering cultural sovereignty?

SM: I had a weird journey after I graduated from my

undergrad. I ended up working for an eclectic developer artist named Michael Levine in Phoenix, who I was also ironically introduced to by my brother-in-law. He was very influential in saving many properties in the downtown warehouse district. Others were trying to just delete all those buildings. He exposed me to 3D scanning. I had never even measured a building in my life, and I used a 3D scanner! I was immediately spoiled.

He has a super eclectic style and approach to the way he does his work, and I've learned the most about architecture from him. That says a lot about our architecture school at ASU and it's not to say that the professors are inadequate. I think it's more about the real experience of working with him and being able to capture technical data from a 3D scanner in an actual building that I can see in person, and then seeing that in a 3D model space, and understanding all the post-production that happens. It was really appealing to me because it was reality and not these line drawings that don't show the inconsistencies of what existing buildings look like, and what actual buildings become

Figure 8: *Guadalupe Yaqui Cemetery 3D Scan.* Courtesy: Selina Martinez for Juebenaria Juebenaria project has collected and documented 3D scan data of the Yaqui cemetery of the Guadalupe village. This location is the original settlement of the Yaqui's who fled persecution by the Mexican government during the early 1900s. Yaquis were relocated in 1910 to what is the current town of Guadalupe and this cemetery site is surrounded by non-Yaqui residential development.

when they're constructed.

I also think that understanding the histories of these buildings was a way for me to have a better relationship with those buildings instead of just working for a firm and doing some doorknob drawings in an office or something like that. I skipped that whole part! I was creating as-builts, which helped my 3D modeling skills. I would take the scans, use those as my base, create accurate plans with that real data to understand those inconsistencies and understand the structure. I began to realize that what I was learning in architecture was so conceptual compared to what the actual field was like, even though this was more of a specialized area. I think I was lucky but also spoiled.

At the same time, I was also working with Wanda on various grant projects that included culture and community. Both of those mentorships shaped my trajectory of how I wanted to integrate both of those areas in the future work that I did after grad school. I would say 3D scanning has had a huge impact on the way that I utilize technology in my practice, because I purchased a 3D scanner. I'm probably one of the only women who owns a 3D scanner on this side of the US and it's empowering to know that I have the technical ability and all of the knowledge to be able to do the postproduction and bring that into actual projects for clients.

I have my own business now and 3D scanning is part of my menu of services. As far as how I'm using it, I'm currently capturing assets of my Yaqui community in Guadalupe to collect data on the existing infrastructure and visualize what it could be in the future. I think this is also appealing to the younger generation. I've already trained two of my relatives in how to utilize the scanner—it's very easy. As far as output of visuals, it's such a cool way to merge reality with design concepts for the future.

TSC: This issue of *Dialectic* on decolonizing architectural technologies is a call to action for our field to disentangle itself from colonial tools of power and the supremacy of Western knowledge systems. What would be your call to action in decolonizing architectural technologies towards liberatory ends?

SM: As far as visualizations go, one of the biggest tools for me has been renderings and thinking about how these represent the population and the community that the architecture will be in. A lot of times we see renderings that show one group of people. I'm not sure if that is just because of the libraries that these people are using to create these renderings, but I think the representation of the population that is shown in renderings is very important. Another aspect is the integration of artists as collaborators within the visuals or within the design process, whether it is a security screen in front of a building, or whether it is a mural that's on the building. I think those bring a lot of value and interest to how people will perceive a project. Materiality is also crucial as far as that relationality to the actual context and understanding where we are within the larger context of the world. Is this an architecture that can be anywhere? Or is this an architecture that is rooted in the desert? I think that can be shown in the landscape—through placing native plant species in these renderings. Relationality between the different components within a rendering creates a better story for the community to understand where you're coming from—as a designer—especially if you're an outsider to that community. It really shows your connection to the people of that place.

Visuals are the main tool that helps people and community begin to advocate for what they want and what they don't want. If we are not creating our own visuals for our own communities, we can complain all we want and have our opinions all we want, but if we're not showing an alternative view, we're not speaking the language of the bureaucratic players making the decisions for our communities. I think that can be empowering, and can help with that decolonization process. I can create something that is status quo as far as renderings go, but that maintains the status quo and does not create a different futurity. I think that is where we have the opportunity as designers to decolonize. Maybe it's not through renderings for everybody. Maybe it's through fly-through videos, or maybe it's through zines or different ways to get information to people in a way that is more approachable and less formal. I would say informality is the way to go as it creates a comfortable at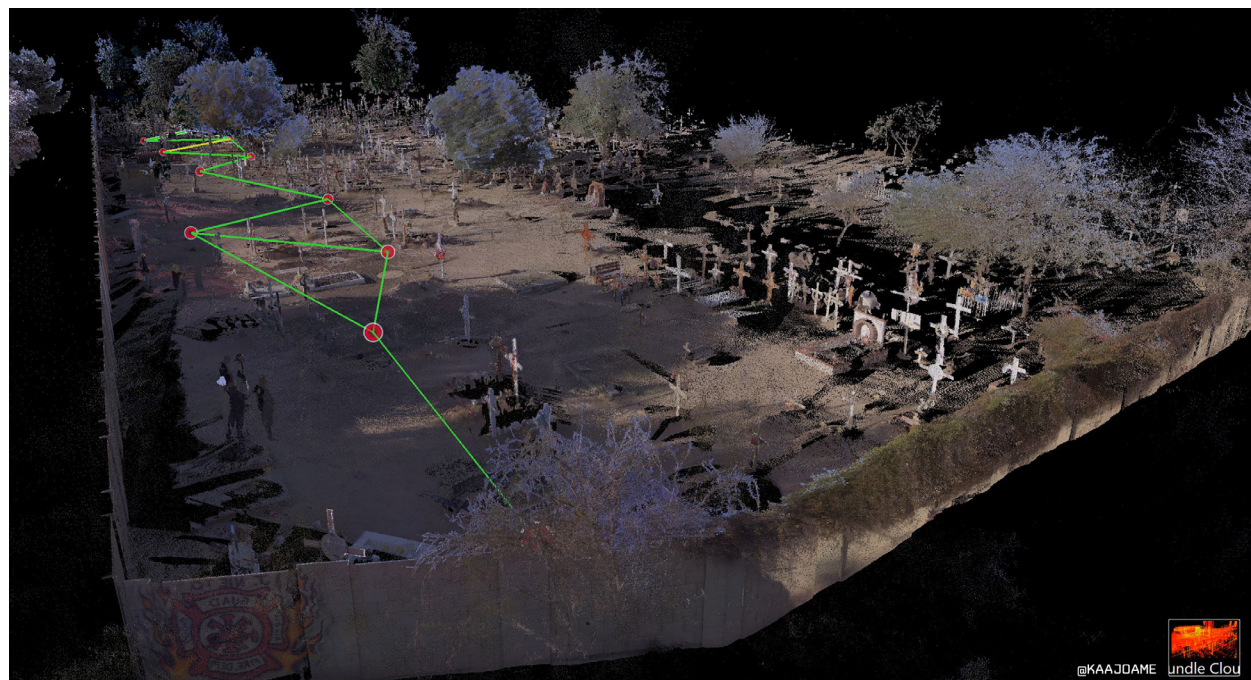mosphere for all to be experts in a design process.