

*KATE RUCK*

*We learn the names  
of those we never  
knew*

**x  
UNIARTS  
HELSINKI**

The University of the Arts Helsinki | The Academy of Fine Arts  
Sculpture Department | Master of Fine Arts Thesis | 2.10.2024

The University of the Arts Helsinki | The Academy of Fine Arts  
Sculpture Department | Master of Fine Arts Thesis | 2.10.2024  
Professor | Andrew Best-Dunkley  
Supervisors | Nina Liebenberg | Jill O'Bryan  
Examiners | Koko Hubara | Giovanna Esposito Yussif  
Kuvan Kevät | 4.5 – 2.6.2024

# ACKNOWLEDGEMENTS

*“The result of being colonized is the internalization of the need to remain invisible.” - Lee Maracle*

*The sunny embrace welcoming me these past few years in all I do is rooted from the strength of a distinct gathering, all whom I'd like to extend gratitude and thanks to. You've grounded me, you've seen me, and I see you.*

*For the limitless sessions of planning and pouring, I acknowledge A. Hunt and Petra Vehviläinen. Nothing was possible without your seeds of belief in this work and me.*

*For the insightful guidance of my mentors, I acknowledge Andrew Best-Dunkley, Frank Brümmel, Maija Fox, Kaisaleena Halinen, Kim Jotuni, Nina Liebenberg, Jill O'Bryan, James Prevett, Vesa Rahikainen, and Lena Seraphin.*

*I acknowledge Tuomo Rainio for trusting the vision for an external location, the suitable Kuoppa/Pit, to our small passionate group with A. Hunt and Viljami Nissi.*

*For the advice, care, and loving support I acknowledge:*

*Kristoffer Ala-Ketola*

*Isabela Hueara Carneiro*

*David Carter*

*Marissa Fassano*

*AJ Fusco*

*Ramina Habibollah*

*Artor Jesus Inkerö*

*Elina Khachatryan*

*Iiris Riihimäki*

*Romance*

*Charles Ross*

*Valter Tornberg*

*Iida Valme*

*Inkeri Virtanen*

*Kylee and Mark Aragon Wallis*

*Anna Karima Wane*

*My friends and family and fellow KuvA sculptors and cohort*

*For the generous support of my project from the Finnish Cultural Foundation with special thanks to Greta och Alfred Runebergs stiftelse. Without their support, this thesis would not have been possible.*

# ABSTRACT

This thesis examines *We learn the names of those we never knew*, an installation that rematerializes oral histories using bronze, graphite, and digital technologies. Inspired by *The Three Sisters*, an Indigenous agricultural practice and story originating in North and Central America, the project combines seventeen bronze sculptures with site-specific poetry to explore themes of memory, reclamation, and material agency. The sculptures, cast using *traditional* sand techniques, engage with the land and institutional architecture of KuvA and *The Kuoppa (or The Pit)*, reflecting on how cultural memory is both preserved and erased. By drawing on *Indigenous Knowledge* systems and the historical associations of bronze, the thesis offers a reflection on the role of art in making visible the narratives and *gestures* that have been obscured over time.

# TABLE OF CONTENTS

<i>Acknowledgements</i> .....	2
<i>Abstract</i> .....	3
<i>Table of Contents</i> .....	4
<i>Introduction</i> .....	5
<i>Glossary of Terms</i> .....	6
1. <i>A Dialogue with the Land</i>	
<i>Artwork and Exhibition Layout</i> .....	9
<i>Lyrical Poem   “The Call”</i> .....	14
2. <i>Symbolic Ground</i>	
<i>Uncovering Histories in “The Pit”</i> .....	16
3. <i>Resonant Forms</i>	
<i>Artistic Practice of Rematerialization</i> .....	18
4. <i>Harvesting Knowledge</i>	
<i>The Breath of Tradition   Whispers of the Earth</i> .....	22
5. <i>Forming Presence</i>	
<i>A Process of Collective Memory</i> .....	26
6. <i>Material Collaborators</i>	
<i>(Re)claiming Bronze: Materiality of Bronze and Its Historical Context</i> .....	40
<i>Bronze and the Development of Writing</i> .....	42
<i>Bronze as Witness: Modern-Day Monuments and Its Exclusionary Implications</i> .....	43
<i>(Re)casting the Storyteller</i> .....	45
<i>Graphite and the Weight of Imprint: Origins of Graphite as a Material</i> .....	46
<i>Materiality of Graphite</i> .....	47
<i>Tracing Language</i> .....	47
<i>Fleeting Gestures, Lasting Impressions</i> .....	48
<i>Marking Space: Vinyl Decal and the Act of Seeing</i> .....	49
<i>Energy: Purposeful Intention</i> .....	50
7. <i>Continuing Dialogues</i>	
<i>Reflections on Material, Memory, and Responsibility</i> .....	52
<i>Navigating Invisibility in Academia</i> .....	53
<i>References</i> .....	56
<i>Image Credits</i> .....	57

## *Introduction*

This thesis explores *We learn the names of those we never knew*, an installation of seventeen bronze sculptures cast using the sand-casting technique and a lyrical poem affixed to a window, which addresses themes of memory and reclamation. This project, which focuses on rematerializing oral histories and the role of materials as witnesses, has been deeply informed by ancestral *knowledge*, community practices, and the writings of Indigenous authors sharing their lived experiences. Their perspectives on land, memory, and storytelling have guided the conceptual framework, offering a pathway to reconnect with primal ways of knowing and being. In exploring the project's themes, parallels can be drawn to the works of many artists of color who engage with relationships to community, land, and heritage, including Maria Thereza Alves, Elaine Gan, Ana Mendieta, and MADEYOULOOK. Philosophers such as Isabelle Stengers, Karen Barad, and Donna Haraway have also contributed to the broader discourse on materiality, relationality, and interconnectedness. While these artists and thinkers offer significant context, the focus here remains on the artistic process, materialities, and the staging and reception of the work. The sculptures and installation form the core of the project, while this written component reflects on the approach and the challenges of material choices and their impact on the resulting works. Organized into chapters, it traces the project's development from initial ideas to final execution, highlighting key aspects of the artistic process in an effort to not only make visible untold stories and histories, but also evoke a reflection on memory and a sense of return.

## *Glossary of Terms*

In my thesis, I recognize that including a glossary aligns with a certain type of academic convention, but I use it primarily to reflect my personal understanding of terms integral to my practice. While I strive for clarity in defining key concepts such as "*Indigenous Knowledge*," "*Collective Memory*," "*Animism*," "*Data*," "*Information*," "*Knowledge*," "*Gestures*," "*Traditions*," and "*Technology*," I also aim to maintain their openness and flexibility. Language is inherently fluid, with terms carrying multiple interpretations depending on context and perspective. By presenting these definitions, I intend to provide a framework that guides discussions of my work while inviting dialogue and exploration beyond conventional meanings. This approach fosters a richer, more nuanced engagement with the ideas and practices I am exploring, ensuring clarity and precision in my thesis while embracing the complexities of language.

*Indigenous Knowledge* is, in my understanding, a living system of wisdom that emerges from the relationships in the world between people, land, and the non-human. It is transmitted through oral *traditions*, cultural practices, and lived experiences, continuously evolving rather than existing as a static set of facts. This *knowledge* offers insights into sustainability, community care, and interconnectedness, emphasizing the importance of listening to and attuning ourselves to the world's rhythms. In my practice, I draw on *Indigenous Knowledge* to link past and present, fostering dialogue between these deep-rooted wisdoms and contemporary contexts.

*Collective Memory* refers to the shared recollections and experiences of a group, often passed down through storytelling, rituals, and *traditions*. It is fluid, shaped by individual and communal experiences, and creates connections between past events and present identities. In my work, I engage with *Collective Memory* by exploring how cultural *knowledge* and oral histories are embodied in materials, *gestures*, and objects, inviting viewers to reflect on their connections to these evolving narratives.

*Animism* is the belief that all things—plants, animals, objects, and even places—carry their own spirit or energy. This perspective allows for a view of the world as interconnected, dissolving the divide between the 'human' and 'natural.' This understanding is central to my practice, where I collaborate with materials and processes that respect their intrinsic energies and histories seeking to restore a primal sense of awareness.

In my practice, I think of *data*, *information*, and *knowledge* as different layers of understanding that build upon one another, much like the transformation from raw materials to finished forms in my sculptures. *Data* is the raw, unprocessed input that forms the foundation of my creative process. It might be the sounds I hear, the shapes I capture through photogrammetry, or the digital scans of objects I encounter. This *data* is unfiltered and without context—abstract elements full of potential, waiting for me to give them meaning and context. When I begin to process, organize, or interpret this *data*, it transforms into *information*. This is where connections start to form, like when I map digital input onto physical forms or when the oral histories and *gestures* I've gathered begin to shape a narrative. In this phase, I give the *data* structure by relating the individual elements to one another so that a new language emerges. However, it is through deeper reflection and interpretation that I manifest *knowledge* from raw *information*. *Knowledge* is where the work gains insight and meaning—when I start connecting the *information* to broader themes such as *Indigenous Knowledge*, *Collective Memory*, and *Animistic* perspectives. It's at this stage that my creative intentions become clear, and my work begins to communicate something insightful about the intersections between land, technology, and culture. I see this progression from *data* to *knowledge* as a form of rematerialization, where raw sensory or digital inputs are transformed into meaningful expressions that resonate with broader cultural, historical, and environmental understandings. My sculptures and digital-to-physical translations then act as conduits for this *knowledge*, offering new ways to engage with these themes and ideas, much like how materials in the physical world carry their own histories and stories.

When I refer to *gestures* in my practice, I mean both the physical actions and intentional movements made during the creative process, as well as the resulting bronze sculptures

themselves. These *gestures* encompass the impressions formed during the process, the involvement of my body, and the energy I infuse into the work. The sculptures embody these *gestures* of (re)claiming materials, narratives, and personal and cultural significance. Thus, *gestures* represent both the process and the object, holding layers of non-verbal communication, intentionality, and symbolic meaning.

In the context of this thesis, *traditions* refer to the customs, practices, and beliefs that are passed down through generations within a particular culture or community, embodying collective *knowledge* and values. *Traditions* are not static but dynamic, evolving over time and subject to reinterpretation. In my work, particularly in pieces like, *We learn the names of those we never knew*, the use of *traditional* materials and techniques—such as bronze and sand casting—serves both as a means of connecting with historical practices and as a vehicle for reimagining and challenging dominant narratives. The term *traditional* in this context signifies adherence to established customs while also acknowledging the ways these practices can be transformed and recontextualized within a decolonizing framework. By engaging with *traditions* in a way that both respects and transforms them, my practice aims to (re)claim and reinterpret cultural heritage, highlighting its evolving nature and its role in critiquing colonial legacies and contemporary narratives.

For me, technology is not just a collection of tools or machines; it encompasses a more holistic understanding, where all things—materials, processes, and the environment—are part of a continuous flow of *information* and energy. In this way, technology is not separate from the organic, but rather intertwined with it, shaping how we understand and interact with the world. This perspective also allows me to consider the agency of objects and materials in my work, where they are not passive but active participants, influencing the way I engage with the world around us.

## *A Dialogue with the Land*

### *Artwork and Exhibition Layout*

For Kuvan Kevät 2024, I presented a site-specific installation titled *We learn the names of those we never knew*, which explores *Indigenous Knowledge* systems, their connection to the land, and the intersections of agriculture and technology. Drawing inspiration from a companion planting technique of Central and North America, the work reflects on the *traditional* practice of growing corn or maize, beans, and squash together—known as *The Three Sisters*.<sup>1</sup> These crops support one another through a synergistic relationship: the tall maize provides a natural trellis for the climbing beans, allowing them to grow upward and receive ample sunlight. In turn, the beans enrich the soil with nitrogen, benefiting the maize and squash, while the broad leaves of the squash spread across the ground, suppressing weeds and retaining moisture. Instead of being arranged in straight lines, the crops are clustered together, with maize planted in small mounds and beans and squash positioned nearby to enhance their mutual advantages. This harmonious interdependence embodies a model of mutual care and resilience passed down through generations of Indigenous farming practices, highlighting how collaborative ecosystems can thrive sustainably in tandem.

*We learn the names of those we never knew* consists of seventeen bronze sculptures (five representing reliefs of maize stalks, seven representing reliefs of beanstalks, and five representing reliefs of squashes) arranged in an outdoor area known as the *Kuoppa* (or

---

<sup>1</sup>Jane Mt. Pleasant, "The Science Behind the Three Sisters Mound System: An Agronomic Assessment of an Indigenous Agricultural System in the Northeast," in *Histories of Maize: Multidisciplinary Approaches to the Prehistory, Linguistics, Biogeography, Domestication, and Evolution of Maize*, ed. John Staller, Robert Tykot, and Bruce Benz (Walnut Creek, CA: Left Coast Press, 2006), 733–46.

*The Pit*<sup>2</sup>, breaking away from conventional exhibition settings. The installation was planned to begin from inside KuvA, where a lyrical poem was installed on a second floor west-facing window. The poetic window decal was intended to be accessible to all and capture attention, encouraging viewers to look beyond the institutional walls and out toward the sculptures below. This perspective offered a moment of reflection, inviting viewers to transcend the boundaries of the building and engage directly with the outdoor space.



Positioning the audience at the threshold between inside and outside emphasized the importance of reconnecting with the land and its stories, while also questioning how institutional settings shape, and sometimes obscure, *Indigenous Knowledge*. By guiding

---

<sup>2</sup> *Kuoppa* is Finnish for *pit*. *Kuoppa* was the official name of the exhibition location, but the students referred to it as *The Pit*, mostly it was a funny translation to English. There is a saying in American English, “that’s the pits!” meaning the worst possible thing, place, condition, etc.

viewers to step outside, the work aimed to disrupt the conventional limitations imposed by institutional frameworks, opening access to lived experience and cultural memory.



The bronze sculptures were spread across an area of approximately 20 meters on a human-made slope of rammed earth, gravel, and debris along the west side of *The Pit*, just above pools of rainwater collected on the lower flat areas. The tone of the slope's rocky surface closely mirrored the graphite-covered bronzes, rendering them partially camouflaged against the environment.



The maize sculptures ranged in size from 51.6 x 9.4 inches (131 x 24 cm) to 33.5 x 5.5 inches (85 x 14 cm), the beans from 32.7 x 5.1 inches (83 x 13 cm) to 20.5 x 3.5 inches (52 x 9 cm), and the squash sculptures had diameters between 9.8 and 12.6 inches (25 and 32 cm). Installed directly into the earth, the sculptures were grounded in the land, growing out of it, rather than separate from each other or the land. Through its integration with the landscape, the work preserved its essence by staying attuned to the land, while also addressing themes of (in)visibility, recognition, and the persistent erasure of Indigenous histories. The work, in this setting, asked viewers to look closer, both literally and metaphorically.



## Lyrical Poem | “The Call”



From the outset of the MFA program, I was determined to exhibit my work in an external location. I joined a small group with similar aspirations, and during a meeting with our curator in September 2023, someone proposed securing a placeholder site for our works at Mylly/Kuvan Kevät in case our original plans fell through. After considering this, I decided on a second-floor window at the end of a throughway—an understated, quiet spot that others might overlook in favor of a more prominent wall.

By chance, late fall brought confirmation of a location adjacent to the University, which perfectly aligned with my chosen window, now overlooking the outdoor exhibition space. Although we didn't gain access to *The Pit* until mid-April 2024, I spent months gazing through that window, grappling with a growing sense of anticipation and yearning.

Inspired by the birdsong I heard within *The Pit*; I added the poem *The Call* to my work late in the process. The sounds felt hauntingly familiar, as if they were reaching out to me. Closing my eyes at the window, I transformed those calls into words, weaving a personal response that tied the indoor and outdoor exhibition spaces.

*Sing of spring's bloom and  
dawn's golden ember,  
That in their whispered echoes,  
memories may remember.*

*The site is a place for reflection on memory and return.*

## Symbolic Ground

### Uncovering Histories in “The Pit”



In mid-October 2023, I, along with around fifteen other students, advocated for an exhibition space outside of KuvA. After some negotiations, curator Tuomo Rainio suggested an abandoned lot adjacent to the university as a potential site. Although this location was not what I had originally envisioned, I took a few days to reflect before ultimately agreeing. My hesitation arose from knowing that accepting this opportunity meant I would not be exhibiting alongside the others who had also fought for the space—a choice that weighed heavily on me. As winter approached and logistical challenges mounted, most of the original group withdrew, leaving only a few of us—A. Hunt and Viljami Nissi—to pursue this external location.

Looking out the window at the abandoned lot, a visitor would encounter *The Pit*, formerly the site of Finnish unemployment services. This demolished, displaced site became an unexpectedly fitting location for the work, embodying the reclamation of space for those who have been displaced.

Exhibiting outside felt incredibly personal, like coming home. Having spent much of my academic and professional life in the United States, I often found it challenging to take space in predominantly white institutional spaces. The *traditional* gallery or "white cube" setting often felt restrictive and, at times, uninviting. Presenting my work in an open-air environment was liberating. Without the confining walls of a gallery, I felt I could represent myself and my work without the pressures of conforming to institutional expectations. This sense of freedom also permeated the work itself, allowing me to collaborate with *The Pit* in a way that felt authentic and true to the spirit of my thesis.



## *Resonant Forms*

### *Artistic Practice of Rematerialization*

At the core of my practice lies a deep emphasis on translation—translating concepts, *data*, and materials across various media and temporalities. My methodology has evolved gradually, shaped by the skills I've cultivated through my professional experiences. These span my time as a collaborative team member in the gaming industry and my involvement in fabrication within various artists' studios.

From a young age, I was driven by a desire to understand the world: its limits, my place within it, and the invisible barriers that seemed to surround me. I believed that grasping these boundaries would enable me to expand my understanding of the space around me. This curiosity led me to explore everything I could and ask many questions to my family, my teachers, and the world around me. I wanted to know or come to understand why I felt this way. As I grew older, I continued to dedicate much of my time to listening to not just the stories in my own home but others' experiences of the world around them as well. I heard countless stories, some lived experiences and others told around the fire in jest, slowly taking away new *knowledge* (and more questions). Each story seemed to be carrying layers of meaning and often revealed hidden truths in their retellings. This reverence for storytelling naturally drew me to video games—particularly those that emphasized self-determination and required teamwork and strategy for success. I found in them a framework where I could orient myself and engage with limits.

Motivated by this passion, I pursued formal education in game design, focusing on environments and level design. I became captivated by the process of world-building through storytelling. The software tools I learned became essential in creating and

navigating the immersive worlds I was developing, allowing me to position myself within them.

As I continued my work in the game design field, the boundaries between the virtual and the “real” began to blur, fostering a unique orientation in both realms. In early 2010, I had the opportunity to collaborate with artists on large-scale sculptures, where I modeled armatures that transformed my digital concepts into tangible forms. Witnessing my virtual models materialize into the wood and metal frames supporting these sculptures was a profound experience, one that continues to inform my practice today. This transition from immaterial to material sparked my fascination with the rematerialization of *data* and *information*, a theme that runs through my work.

In my current work, I effortlessly move between 2D and 3D formats, employing techniques like photogrammetry, 3D printing, CNC routing, and laser etching, while grounding these contemporary technologies in *traditional* craft practices. The tension between the precision of digital tools and the intuitive, manual work of crafting is central to my process. I often use digital methods to record and process visual *data*, which is then interpreted through tactile, hands-on techniques, reintroducing my presence into what might initially seem detached from the physical world.

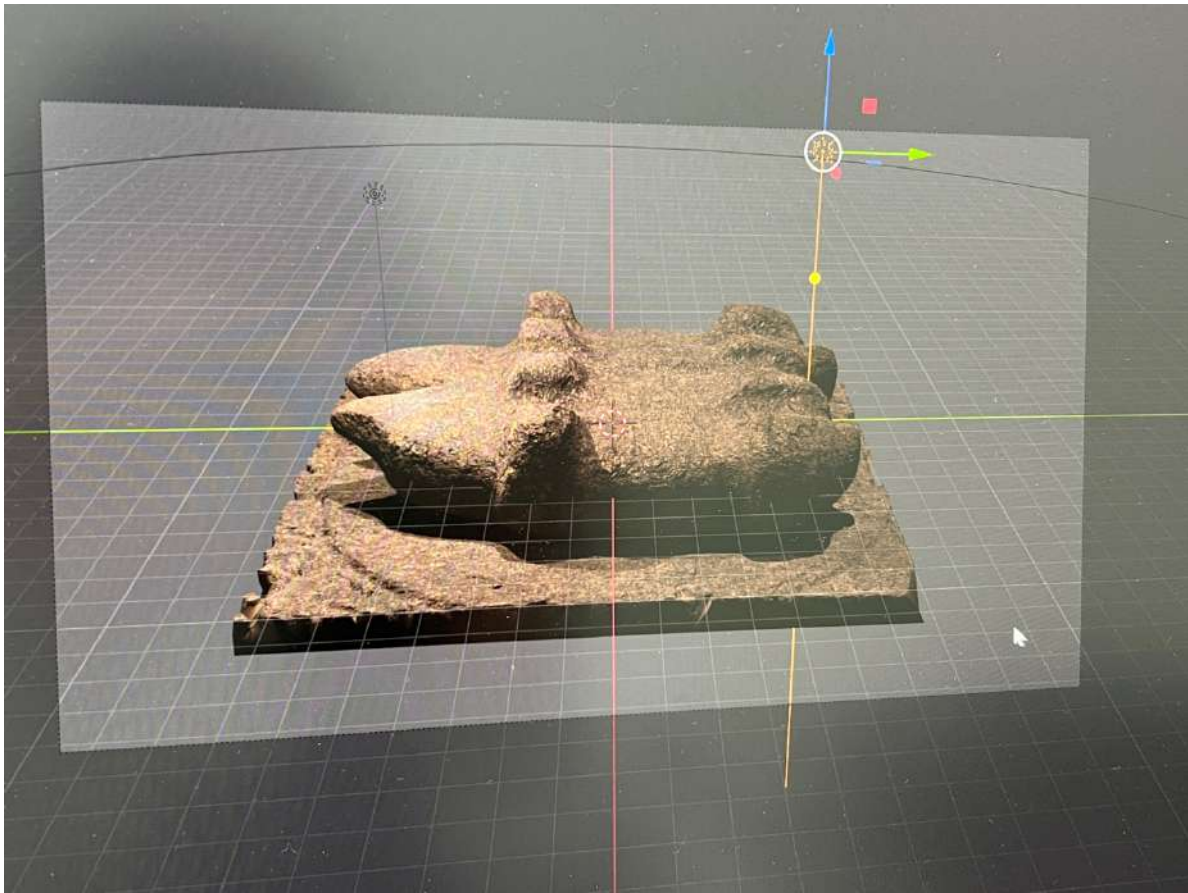
Material choices are equally foundational to my practice, thoughtfully selected for their physical properties and the conceptual narratives they contribute. These materials are not inert; they are witnesses, collaborators, each with their own voice in a sense.<sup>3</sup> I see no division between nature and technology—they are linked, sharing the same energy, the same spirit. My work lies in this space where the two meet, where materials and methods speak to one another. In this interplay, transformation occurs, and in that transformation, we rediscover what connects us to the world, both past and present.

Conceptually, I am most interested in the physicality of the resulting forms derived from digital processes, as well as the pathways or translations of that *data*. Gravitating towards reconfigurations and fortuitous mishaps, I let circumstances evolve on their own. Rather

---

<sup>3</sup> As physicist Karan Barad investigates in the book *Agential realism*.

than formalizing the rematerialized works by cleaning them up, I deliberately leave evidence of the physicality that occurs during these translations.



For instance, I allow excess bronze to remain at the edges of a piece, showcasing the overpour from a bronze casting, or I choose not to file down a printed 3D model. I prefer to embrace materials as they are, rather than erasing the traces of their transformation. I refer to these features as “slippage,” regarding them with reverence, as they too convey important stories about the transformation inherent in my work.

Listening, as I mentioned before, is also a fundamental tool and theme in my work, where I prioritize auditory experiences over visual ones, at times to orient myself in the world. Whether through spoken language, the whispers of the wind, or the melodies of birds, I am drawn to these sounds as forms of non-verbal *knowledge*. My time spent outdoors enhances my sensitivity to these auditory experiences, reaffirming my belief in the profound interconnectedness of all life.

Thematically, I am drawn to language, archival processes, depictions and representations of artifacts and ancient civilizations, as well as *traditional* and contemporary tool making and craftsmanship.

My practice exists in the liminal space between digital processes and physical craft, where transformation becomes both method and inquiry. Through rematerialization, I explore how materials—whether digital or physical—act as conduits for *Collective Memory*, history, and *knowledge*. The slippages that emerge in the process, such as excess bronze or unpolished surfaces, are not imperfections but invitations to reconsider how we perceive and interact with the world. These traces remind us that materials are active participants, carrying their own stories, histories, and energies. I think of my work as establishing a ‘spirit line’—a channel through which *information*, essence, and energy can flow, reconnecting us to a deeper, more primal awareness of the world around us. How can these materials, shaped by both technology and hand, open us to new ways of perceiving and understanding? In questioning the boundaries between the immaterial and material, past and present, my practice seeks to revive a heightened openness to perception, encouraging a re-engagement with the interconnectedness of all things.

## *Harvesting Knowledge*

### *The Breath of Tradition | Whispers of the Earth*

*"In the beginning, Sky Woman fell to the earth and gave birth to a daughter, Earth Woman. When Earth Woman became pregnant with twin sons—Sapling and Flint—she died in childbirth. As her body lay buried, plants began to grow from it, sustaining the people. From her breasts came corn, from her hands grew beans, and from her navel sprouted squash. These three crops, known as *The Three Sisters*, would feed the people for generations. Other plants also emerged from her body: sunflowers from her legs, strawberries from her heart, tobacco from her head, and sunchokes from her feet. Through her death, Earth Woman gave life to all who would follow."<sup>4</sup>*

The overarching theme of my thesis is a reverence for oral histories and storytelling, particularly how these intangible, yet profound forms of *knowledge* can be rematerialized and translated into physical, artistic expressions. My work is informed by the belief that these stories, passed down through generations, hold essential wisdom and that they deserve to be remembered, embodied, and retold in contemporary contexts. Storytelling, especially oral *traditions*, invites participation and interpretation from its listeners, empowering storytellers to decide how, when, and why these narratives should be shared. My practice seeks to honor these *traditions* by creating sculptures and installations that do more than depict—they embody memory, *gesture*, and presence.

The story of *The Three Sisters*, a Native American agricultural *tradition*, is the conceptual anchor of my project. It is a widely known legend and has many versions throughout Central and North America. This story, which revolves around the interdependence of three crops—maize, beans, and squash—has a longstanding presence in Indigenous cultures, particularly among the Haudenosaunee. Maize provides a structure for beans

---

<sup>4</sup> Arthur C. Parker, *Seneca Myths and Folk Tales* (Lincoln: University of Nebraska Press, 1989), 59-73.

to climb, beans fix nitrogen in the soil, and squash covers the ground to retain moisture and prevent weeds. Gregory Cajete explains that these plants symbolize a “coming-to-know” balance and reciprocity, acting as a model for sustainable coexistence.<sup>5</sup> These plants' cooperative nature reflects an Indigenous worldview that sees nature not as a resource to be exploited, but as a network of relationships that must be maintained and nurtured.

In this agricultural metaphor, each plant contributes to the well-being of the whole, much like oral *traditions* that function within communities to preserve, transmit, and cultivate *knowledge*. As Potawatomi botanist and author, Robin Wall Kimmerer suggests, these plants work together as “gifts of sustenance,” reinforcing a worldview rooted in reciprocity and mutual care.<sup>6</sup> Similarly, my artistic practice works in concert with the narratives I seek to honor, using materials, processes, and *gestures* that reflect both the content and the form of these oral histories. Agricultural scientist, Jane Mt. Pleasant describes how the physical layout of *The Three Sisters* planting—maize at the center, beans growing around it, and squash covering the ground—also acts as a living metaphor for how *Indigenous Knowledge* systems are layered and interconnected.<sup>7</sup> This metaphorical layering and interweaving of life, *knowledge*, and art became central to my approach in the studio.

Another story that came to mind when I was thinking of oral histories and stories is called, *Kwezens makes a lovely discovery*. This is discussed in renowned Michi Saagiig Nishnaabeg scholar, writer and artist, Leanne Betasamosake Simpson's paper *Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation*, where the act of being believed becomes an important step beyond simply being heard.<sup>8</sup> In this Nishnaabeg story, Kwezens, a young girl, discovers how to find maple syrup. The heart of this narrative lies in the importance of her learning through observation, experience,

---

<sup>5</sup> Gregory Cajete, *Native Science: Natural Laws of Interdependence* (Santa Fe: Clear Light Publishers, 2000), 80.

<sup>6</sup> Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Minneapolis: Milkweed Editions, 2013), 122.

<sup>7</sup> Jane Mt. Pleasant, “The Science Behind the Three Sisters Mound System,” 733.; C.G. Hill, “Pre-Colonial Foodways,” in *The Routledge History of American Foodways*, ed. Jennifer Jensen Wallach, Lindsey R. Swindall, and Michael D. Wise (London: Routledge Press, 2016), 9-22.

<sup>8</sup> Leanne Betasamosake Simpson, *Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation* (Decolonization: Indigeneity, Education & Society Vol. 3, No. 3, 2014), 7.

and engagement with the land. What stands out in Simpson's writing is not only Kwezens' discovery but also the fact that she is believed and trusted by her community. This kind of belief goes beyond validation—it signals a profound acknowledgment of her *knowledge* and the intelligence she gains from her relationship with the world. The emphasis on being believed resonates with my practice, which seeks to engage with materials and processes that hold an inherent intelligence, an agency that should not only be observed but trusted.

Simpson's idea of "land as pedagogy" also deepens my connection to *Indigenous Knowledge* systems. In her framework, the land itself becomes the teacher, embedding lessons within its very forms, cycles, and processes.<sup>9</sup> This perspective closely aligns with my artistic process, where I treat the materials I work with in *We learn the names of those we never knew*—bronze, graphite, birdsong—as active participants rather than passive subjects. Each material carries its own stories, history, and energy, much like the land carries *knowledge*. My role as an artist is to listen, to allow the land and materials to reveal their lessons, and to translate these teachings into physical form.

Simpson further describes how engaging with the land fosters an understanding that is not just cognitive but deeply embodied. This resonates with how I approach the *gestures* involved in my bronze works—each mold, each impression, and each cast is a conversation with the material, a way of listening to what it has to offer.<sup>10</sup> The land, like oral *traditions*, transmits *knowledge* not through linear narratives, but through an ongoing dialogue that requires attentiveness and care. My work honors this dialogic process by creating sculptures that are imbued with the same relational intelligence that Simpson speaks of in *Land as Pedagogy*.

Moreover, Simpson's distinction between "being heard" and "being believed" offers a compelling lens through which to view the broader impact of my practice.<sup>11</sup> It underscores the importance of not only presenting Indigenous stories and *knowledge* systems but doing so in a way that affirms their truth and significance. By working with materials that are deeply connected to land and community, I create works that ask to

---

<sup>9</sup> Simpson, *Land as Pedagogy*, 16-18.

<sup>10</sup> Simpson, *Land as Pedagogy*, 1-25.

<sup>11</sup> Simpson, *Land as Pedagogy*, 1-25.

be believed—not just seen, not just heard, but understood as carriers of *knowledge* that hold value in contemporary contexts. This is a form of "rebellious transformation," to use Simpson's words, as it challenges dominant narratives and invites viewers to engage with the world in a more reciprocal, embodied way.<sup>12</sup>

---

<sup>12</sup> Simpson, *Land as Pedagogy*, 23.

## *Forming Presence*

### *A Process of Collective Memory*

Building upon the reverence for oral histories and storytelling articulated in the previous chapter, I recognized the symbolic significance of *The Three Sisters* in Indigenous agricultural *traditions* as the foundation of my work. The interconnectedness of maize, beans, and squash not only exemplifies sustainable practices but also embodies layers of cultural and *Collective Memory* and *knowledge*. Inspired by this rich narrative, I decided to use 3D models of these crops—ears of maize, climbing beans, and squash—for bronze casting, allowing their stories to resonate. With a metal casting day scheduled for the entire department in early winter, I knew that capturing these narratives in physical form was essential.

Using the software, Blender, each plant was carefully modeled in detail, considering their distinct forms and textures. These digital models served as the foundation for the physical prototypes. I opted to print the models using PLA, a biodegradable thermoplastic derived from renewable resources such as cornstarch. PLA is commonly used in 3D printing because of its ease of use, low cost, and ability to accurately capture intricate details. To briefly explain how 3D printing works, the printer builds models layer by layer using the PLA. The plastic is heated until it melts and is then squeezed through a small nozzle onto a flat surface. The printer follows a digital design, moving the nozzle to create each thin layer of the model. As one layer cools and hardens, the next is added on top, repeating this process until the entire model is complete.

Initially, I printed these models at a much smaller scale. For example, the maize was printed at about 7.6 cm (3 inches) in height and 2.5 cm (1 inch) in diameter. However, I wanted to see the models at their actual, life-size proportions, as they would commonly

appear when grown. So, I reprinted the maize to stand approximately 30.5 cm (12 inches) tall and 5 cm (2 inches) in diameter. I did the same for the beans and squash, adjusting their scales to closely match their natural sizes.



To explore variations, I printed 4-5 copies of each plant at different scales, ranging from small prototypes to life-size representations. These iterations helped me visualize the final bronze castings and allowed me to experiment with the relationship between scale and material. Moving forward, I will refer to these printed objects as "models" in the context of this project.

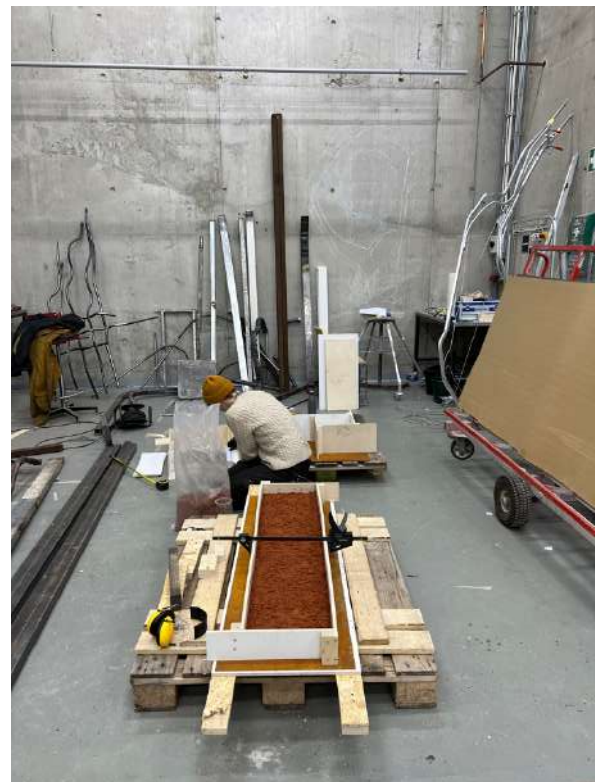
Originally, I planned to use the ceramic shell technique, a labor-intensive process in which a wax model is repeatedly dipped in liquid silica to form a durable mold. While other casting methods were available, the sculpture department had concrete or casting sand, a reddish, oily mixture of clay, sand, and oil. I began experimenting with the concrete sand to capture the first impressions of my models. Through this process, I realized that sand casting was more appealing to me, as it would conceal the visible layering created during 3D printing.



Recognizing the need for a test casting to better understand the material properties of bronze, I decided to fully transition to sand casting. This was a method I was already familiar with from my work in silver casting and in that way, it felt grounding. The switch

to sand casting led to an important discovery: the creation of bas reliefs. These shallow, sculptural forms became a way to evoke both memory and the essence of the plant, subtly suggesting the plant's presence as something remembered rather than merely replicated.

After this discovery, my focus on memory and the act of remembering expanded beyond the visual representation of *The Three Sisters*. I began to consider other ways in which memory is preserved and methods of recollection, particularly rote memorization—a technique where *information* is learned through repetition until it can be recalled easily. This concept intrigued me as it parallels the repetition inherent in both my casting process where each attempt built upon the last as well as the act of creating memory through these conduits.



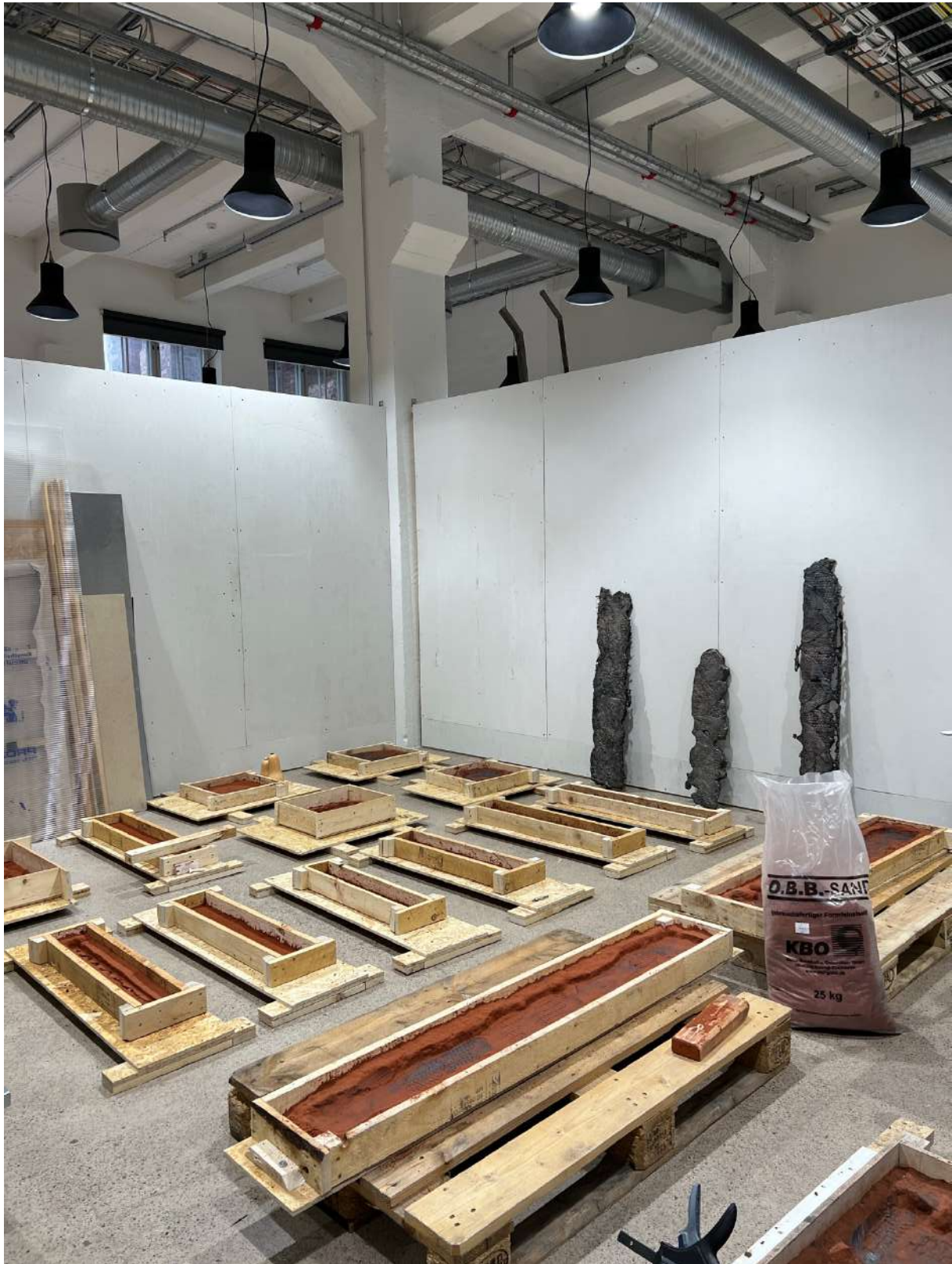
As I continued experimenting with the casting sand, I encountered technical challenges; the sand frequently adhered to the models, altering my *gestures* and the impressions. A colleague in the department recommended using graphite as a release agent, which effectively resolved this issue. I did not fully appreciate the addition to graphite at this moment, and how it would greatly contribute to my thoughts during and after the process

of using it. Through a process of trial and error, I refined each relief, adjusting the materials and my methods based on the outcomes of each attempt. This iterative approach was crucial. Each relief became a testament to the layers of memory—much like the process of rote memorization—where repetition and refinement contribute to deeper understanding and connection.



Once I resolved the issue with the sand, I consulted with Vesa Rahikainen, the department technician, to determine the available crucible sizes for the bronze casting. Understanding the size of the crucibles was critical to calculating how large the final sculptures could be and how many could be cast in a single pour. After these discussions, I decided to conduct a test casting with a full crucible, which yielded a sculpture approximately 51 inches (130 cm) tall and 6 inches (15 cm) wide. Based on these dimensions, I constructed custom casting boxes for each sculpture using scrap wood from the studio. With everyone that would be helping me in mind, I attached handles to the boxes to facilitate easier movement and lifting. Preparing the casting sand required careful layering and compacting; each layer needed to be pressed precisely by hand, sometimes using handmade tools or blocks of wood. This process was physically demanding, but as I spent long hours working with the sand, I discovered its fine texture

was incredibly responsive—it captured even the smallest details, including the fingerprints I left while shaping it. As the studio filled with wooden casting boxes prepared for pouring, some people remarked that it looked like a graveyard.



This comment resonated with me, as the studio had taken on a quiet, reflective atmosphere. In a way, the space seemed to hold the energy and care I and others had invested in the work.



With my method finalized, I moved on to physically create the bas reliefs. I applied graphite to the PLA models and worked on my knees beside the molds on the studio floor, rolling the models into the tightly packed casting sand in various ways. This process felt reminiscent of printmaking, with the graphite acting like ink, transferring the form into the sand. I worked intuitively, switching between models as I pleased. Each roll not only captured the texture and shape of the model but also embodied the energy of my *gestures* and the narratives inherent in the gestural forms of the plants. Through this process, I aimed to activate a sense of memory or curiosity in those viewing the work, inviting them to experience the evocation I had mentioned earlier. Moving slowly from box to box, I concentrated on imprinting the distinct *gestures* associated with each plant—maize, bean, and squash—using their respective PLA models. These individual impressions came together to form one large, unified *gesture*, blending the unique qualities of each plant into a single, cohesive expression.

After rolling the models, I hand-built walls around the impressions to complete the molds, ensuring the sand would hold its shape during the pour. Working mostly late at night, I allowed the process to guide me, relying heavily on intuition to decide when to advance or when to pause.



Friends and colleagues who visited the studio often spent time touching the sand, quietly offering wishes for the success of the upcoming casting. Their presence and participation became deeply meaningful—not just as support, but as an essential element of the work itself. The simple act of touching the sand created a shared, tactile connection to the process, layering the work with a sense of collective intention. This interaction was beautifully aligned with the core concepts of memory and gesture, making the presence and participation of others a vital part of both the narrative and the physical creation.

Metal casting, particularly with bronze, is a physically demanding and collaborative endeavor. The equipment required to melt and pour bronze is heavy, and the material itself becomes dangerous when heated to the necessary temperatures. Every step of the process demands careful attention and teamwork to ensure both safety and precision.

We cast the bronze outdoors on the rooftop of KuvA, where there was ample space and ventilation for our equipment.



Casting during the winter posed challenges, as we never knew what conditions we would encounter on the day of our pour. Fortunately, our casting group was lucky in this regard. Moisture can be a significant issue when casting, so we did our best to cover the molds and only uncovered them a few minutes before pouring the bronze. For my pours, I was grateful to have the support of my peers, who assisted at each stage of the process—from heating the bronze to pouring it into the molds. Their presence felt like an infusion of energy into the work itself, as if the collective care and focus of the group became embedded in the final pieces. This sense of collaboration became a crucial element in the completion of the bronze sculptures, adding a shared dimension to a project that had initially felt deeply personal.





Watching molten bronze fill the mold is a mesmerizing sight—it glows with a rich reddish-orange hue against the warm red of the casting sand. As the bronze is poured, it ignites a reaction between the oxygen and the oil in the sand, causing flames to flicker across the surface. This is a natural result of the open mold sand casting technique. After a few moments, the casting sand around the bronze transforms into the deepest, mattest black as the flames gradually die down and extinguish on their own.

A few hours later, we removed the casts from their molds, and immediately, I felt their presence with me. It was an emotional experience, like recognizing something that had returned after being long absent. It's hard to put into words—the feeling was profound. I wondered what it meant. In that moment, I no longer felt alone, as if the newly formed pieces were grounding me, humbling me with their quiet but powerful presence.

After spending some time with the pieces, I realized I didn't want to alter them with a finish or patina. I valued the rawness of the graphite, the traces of everyone's hands, the splashes from the bronze pours, and the variations in the *gestures*. This is why I ultimately

decided to install them with as little intervention as possible. The sculptures would be placed directly on the earth, standing together as a group, each one within sight of the next.



Wondering where they would want to be placed, I chose the slope of rammed earth and intuitively found the natural placement and loosened the soil for each piece. To stabilize them, I built a wooden clamp system that allowed the sculptures to be securely planted in the ground. As with the rest of the process, I had support at every step—working the soil with a friend, placing the works into the earth, reinforcing the sense of community embedded in the project. At many points, the weather seemed to break in our favor, or I would stumble upon a small discovery in the process, as if the world understood my intentions and made space for the energy I was returning.

Each *gesture* was installed vertically on the gravel slope, a decision meant to suggest visibility, while still allowing the works to blend with the environment. Some pieces were more prominent, closer to the flat areas, while others were positioned further up the



slope. Viewers could engage with the work from different perspectives—whether from the flats, where all the squash bronzes were placed, from the narrow path at the top of

the slope, or by venturing onto the slope itself to encounter the maize and climbing beans up close. The *gestures* were also visible through that second-floor window, offering yet another way to experience them.

Throughout the process of bringing these sculptures into being, there were many beautiful moments of happenstance and serendipity. Each step required careful decisions, technical challenges, and collaboration, yet it also allowed for moments of intuition—something I’m learning to trust more and more in my creative practice. In Indigenous cultures, intuition is highly valued, and I believe this process had integrity partly because I allowed myself to follow these instincts.

The shift from the ceramic shell method to sand casting opened a more intuitive and responsive way of working, enabling me to work efficiently without sacrificing the integrity of the narrative I sought to express. The use of graphite, initially introduced as a practical solution, evolved into a significant part of the work’s visual language, something I hadn’t planned but instinctively recognized as important.

The physical labor of preparing the sand and casting the bronze was intense, as was the install, but it was balanced by the energy, care, and support of those around me. Their contributions shaped not only the process but also the final sculptures, infusing the work with a sense of shared purpose. In this way, the sculptures came to life through a combination of intuition, effort, and collective intention.

## *Material Collaborators*

As discussed earlier, the primary material employed in *We learn the names of those we never knew* is bronze, cast through the *traditional* sand-casting technique. Graphite powder, used as a release agent in the sand preparation, serves a dual purpose. Initially selected for its practical properties, the graphite was ultimately retained in the final work, enriching its visual texture and conceptual depth by linking to themes of rote memorization, language, and the visualization of oral histories. Complementing the bronze sculptures, a vinyl window decal features a lyrical poem that beckons viewers to reflect on memory and its intricacies, preserving the ephemeral traces and energies of those involved in the creation process.

Throughout my exploration of materiality, I frequently found myself navigating the complexities and histories that each material embodies. A significant portion of the literature I encountered, particularly about the Bronze Age, emerged from a Western perspective that frequently overlooked the rich, nuanced Indigenous narratives shaping material use across cultures. My research into graphite revealed its late adoption; it wasn't until the mid-1500s, following a major discovery in England, that it became prevalent among communities.<sup>13</sup> This historical lens led me to view graphite not merely as a functional material but also as one that carries oppressive associations, particularly in the context of American Indian boarding schools.<sup>14</sup> In this sense, I now see graphite as an opportunity for reclamation as well, prompting me to redefine its significance within my artistic practice.

---

<sup>13</sup> Henry Petroski, *The Pencil: A History of Design and Circumstance* (New York: Alfred A. Knopf, 1990), 30-40).

<sup>14</sup> Amelia V. Katanski, *Learning to Write "Indian": The Boarding School Experience and American Indian Literature* (Norman: University of Oklahoma Press, 2007), 4.

My approach to materials is guided by a sense of responsibility to acknowledge their origins and implications. Engaging with materials demands a mindful perspective—akin to the careful consideration of where one chooses to dig a hole in the earth. This awareness has significantly shaped my philosophy of artmaking, driving me toward the notion of "making with" rather than "making from." By perceiving materials as collaborators, I strive to cultivate a practice that reflects a more regenerative and reciprocal relationship with the natural world. Each interaction with these materials becomes a dialogue, fostering an environment where their stories can be honored, reinterpreted, and integrated into contemporary narratives.

## *(Re)claiming Bronze | Materiality of Bronze and Its*

### *Historical Context*

Bronze is an alloy primarily composed of copper and tin, with varying proportions of other elements such as lead, zinc, and arsenic, depending on the specific context and era of its production. This complex mixture transforms individual components into a new substance with properties that surpass those of its constituent materials. Bronze's hardness, durability, and resistance to corrosion made it a revolutionary material for ancient civilizations, enabling the production of more effective tools, weapons, and artistic objects.<sup>15</sup> The introduction of bronze marked a turning point in human history, facilitating advancements in agriculture, warfare, and trade. This period of innovation laid the groundwork for more complex urban societies and supported the growth of large-scale state structures.<sup>16</sup>

The alchemical transformation of bronze, from raw copper and tin to a unified, functional alloy, mirrors the process of oral histories becoming physical through my artistic practice. Oral histories are fluid, evolving as they pass through generations, but they can be

---

<sup>15</sup> Encyclopaedia Britannica, s.v. "Bronze," September 11, 2024, <https://www.britannica.com/technology/bronze-alloy>.

<sup>16</sup> J. Barzun et al., "History of Europe," *Encyclopedia Britannica*, September 16, 2024, <https://www.britannica.com/topic/history-of-Europe>.

solidified—much like molten bronze cooling into a fixed form—through artistic representation. In the ancient world, bronze artifacts, whether practical or ceremonial, were seen as a reflection of cultural achievement and communal identity. Bronze Age societies across Mesopotamia, Egypt, and other regions used the material not only for utilitarian purposes but also for objects of symbolic importance, such as religious idols and ritual tools.<sup>17</sup> The historical resonance of bronze, particularly its association with transformation and endurance, is a key reason I chose it for this series. The material serves as a conduit for exploring themes of permanence, memory, and the reclaiming of Indigenous narratives.

The Sumerians, among the earliest users of bronze, utilized the material in a variety of ways, from the construction of tools to the creation of decorative and ceremonial objects that carried cultural and religious significance. Sumerian city-states, such as Uruk and Ur, relied on bronze tools to cultivate land and defend their territories, while their artisans used bronze to create votive statues, offering bowls, and other ritualistic items. The versatility of bronze allowed it to serve both practical and symbolic functions, embedding it deeply into the fabric of Sumerian culture.<sup>18</sup> In my work, I am particularly drawn to this duality—the idea that a material can be both utilitarian and symbolic, representing both the physical and metaphysical dimensions of human experience.

### *Bronze and the Development of Writing*

Bronze holds a significant position in the development of early human civilization, particularly during the Bronze Age, which began around 3300 BCE in the Near East. This period marked not only the emergence of advanced metallurgy but also the creation of early writing systems. The Sumerians, one of the first civilizations to master bronze metallurgy, simultaneously developed cuneiform, one of the earliest known forms of writing. Cuneiform was made by impressing wedge-shaped marks into clay tablets, encoding *information* in a durable medium that could preserve language across time.

---

<sup>17</sup> Brian M. Fagan, *World Prehistory: A Brief Introduction* (New York: Routledge, 2017), 277-302.

<sup>18</sup> Fagan, *World Prehistory*, 283-288.

This method of communication, which evolved from pictographic forms, allowed oral histories and complex societal functions to be recorded in ways that had not been possible before. Similarly, in Egypt, the development of hieroglyphs involved the use of visual symbols to represent both tangible and abstract concepts. Hieroglyphic writing, often inscribed on stone monuments, not only conveyed religious or royal decrees but also recorded narratives of cultural significance.<sup>19</sup>

Reading about these developments, selecting bronze became even more fitting, as I could draw a parallel between the material's role in early civilizations and its connection to the formalization of language. Bronze was central to the cultural, economic, and technological advancements of these societies, just as the development of writing systems was pivotal to the preservation of their histories. The relationship between these two innovations—bronze and writing—underscores the material's importance in the visualization of oral histories. In this way, I engage with its historical context, specifically how the material facilitated the creation of cultural artifacts that documented, commemorated, and solidified oral *traditions*.

## *Bronze as Witness: Modern-Day Monuments and Its*

### *Exclusionary Implications*

In contemporary society, bronze has become synonymous with monumental public sculpture, particularly in the United States, where it is frequently used to commemorate historical figures and events. Public bronzes often depict military leaders, colonizers, and statesmen, celebrating narratives of conquest, expansion, and national pride. Many of these monuments are situated in prominent public spaces, where they serve as enduring reminders of a particular version of history—one that frequently marginalizes or erases the experiences of Indigenous peoples, enslaved individuals, and other historically oppressed communities. Statues of Confederate leaders across the southern United

---

<sup>19</sup> Fagan, *World Prehistory*, 283-288.

States, for instance, celebrate a narrative of resistance against federal authority, yet they also symbolize the defense of slavery and white supremacy.<sup>20</sup>

Similarly, the legacy of Juan de Oñate, a Spanish conquistador who led an expedition in 1598 and established the first European settlement in what is now New Mexico, remains highly controversial.<sup>21</sup> His violent suppression of the Acoma Pueblo, which included the massacre of hundreds of people and the brutal punishment of amputating one foot from every man over 25 after a revolt, has made him a figure of contention. In 1998, an equestrian statue of Oñate was erected in Alcalde, New Mexico, but it quickly became a focal point for protest. A year before its unveiling, activists sawed off the statue's right foot, symbolically resisting the glorification of colonial figures. Though the foot was eventually replaced, this act underscored the ongoing struggle over historical memory and the representation of Indigenous histories.

The materiality of bronze itself contributes to the power of these monuments. Bronze, with its durability and association with historical significance, confers a sense of permanence and authority. When used in monuments, it suggests that the stories and individuals it depicts are meant to be remembered for eternity. However, this durability also makes it a problematic material when monuments reinforce exclusionary or oppressive histories. The same properties that make bronze a symbol of endurance—its resistance to corrosion and its permanence—also make it resistant to reinterpretation or removal. Many modern bronze statues serve as markers of colonialism, war, and the exclusion of marginalized communities from the national narrative.<sup>22</sup> These monuments honor individuals or events that are celebrated within a narrow, often nationalist context, overlooking the broader impacts of those individuals or events on Indigenous populations or other communities of color.

---

<sup>20</sup> Nora McGreevy, "Scholars Spent a Year Scrutinizing America's Monuments. Here's What They Learned," *Smithsonian Magazine*, October 2021, <https://www.smithsonianmag.com/smart-news/researchers-spent-one-year-scrutinizing-americas-monuments-heres-what-they-learned-180978791/>.

<sup>21</sup> Michael Trujillo, "Oñate's Foot: Remembering and Dismembering in Northern New Mexico," *Aztlán: A Journal of Chicano Studies* 34, no. 2 (2008): 91-113.

<sup>22</sup> Fabio Spirinelli, "Toppling Symbols: Statues, the Colonial Past and the Public Space," *Luxembourg Centre for Contemporary and Digital History*, Accessed August 13, 2024, <https://www.c2dh.uni.lu/thinking/toppling-symbols-statues-colonial-past-and-public-space>.

In contrast, the use of bronze in the Bronze Age did not focus on the glorification of singular individuals to the same extent. Instead, Bronze Age societies, including those in Mesopotamia and the Mediterranean, used the material to create objects that were integral to communal life, such as agricultural tools, weapons for collective defense, and objects for shared religious practices. The material played a role in unifying communities, facilitating trade, and supporting shared cultural and religious activities. Bronze artifacts from this period reflect a broader sense of collective identity, as opposed to the more individualistic commemorative uses, we see today.<sup>23</sup>

### *(Re)casting the Storyteller*

The decision to use bronze was not only a nod to its historical associations but a deliberate effort to (re)claim the material for the representation of marginalized narratives. The seventeen bronze pieces I created using the sand-casting technique mirrors the storytelling process, where impressions, memories, and spoken words gradually take shape over time, forming collective histories through retelling. Just as the bronze is shaped by everyone participating in pouring the mold, oral histories are shaped by the communities that preserve and share them.

These bronzes serve as visual representations of oral histories passed down through generations, often marginalized or excluded from dominant historical narratives. Indigenous cultures in Central and North America have relied on oral *traditions* to transmit *knowledge*, values, and histories. These *traditions*, however, have frequently been overshadowed by the prioritization of written records in Western historical frameworks. This project gives these oral histories a tangible form, resonating with the weight and significance they hold within their communities. Sharing them in Helsinki, I wondered if the cultural legibility would differ here from where I come from, but I believed the story still had something valuable to offer and to teach.

---

<sup>23</sup> Fagan, *World Prehistory*, 277-302.

Choosing bronze was also an attempt to challenge its contemporary associations with exclusionary narratives in monuments. By (re)claiming the material for the telling of other stories, I wanted to shift its connotations from symbols of oppression and marginalization to ones of resilience and cultural continuity. The communal energy—central to both the oral *traditions* of Indigenous peoples and the ancient uses of bronze—remains at the heart of this work. In this way, I seek to transform the role of bronze in public memorials, using it instead to honor the collective histories of communities that have been overlooked or erased.<sup>24</sup>

In (re)claiming bronze, I create the "spirit line" through which stories, memories, and cultural *knowledge* can flow, connecting past, present, and future generations. The enduring quality of bronze, used for millennia, echoes the lasting nature of these histories and their significance to the communities that continue to uphold them. By materializing oral histories in bronze, I honor not just the stories themselves, but the storytelling process as a vital act of cultural survival and resistance.

### *Graphite and the Weight of Imprint | Origins of Graphite as a Material*

Graphite is a naturally occurring form of crystalline carbon, closely related to diamond in its molecular structure but vastly different in its properties. First discovered in large quantities in England during the 16th century, it has since been found worldwide, with significant deposits in China, India, and Brazil. Its unique properties—being both soft and conductive—have made graphite an essential material for various applications. What distinguishes graphite from other carbon-based materials is its ability to layer and flake, allowing it to be used as a writing and drawing tool.<sup>25</sup> The material itself speaks to an ancient history of mark-making, connected both to artistic sketching and the very act of

---

<sup>24</sup> Richard Bradley, *The Significance of Monuments: On the Shaping of Human Experience in Neolithic and Bronze Age Europe* (London: Routledge, 1998).

<sup>25</sup> G.R. Robinson Jr., J.M. Hammarstrom, and D.W. Olson, "Graphite," in *Critical Mineral Resources of the United States—Economic and Environmental Geology and Prospects for Future Supply*, ed. K.J. Schulz, J.H. DeYoung Jr., R.R. Seal II, and D.C. Bradley, U.S. Geological Survey Professional Paper 1802 (2017), J1–J24, <https://doi.org/10.3133/pp1802J>.

writing, which relies on the repetition of a *gesture*, an element that I realized after the process was central to my work.

### *Materiality of Graphite*

Graphite is fascinating due to its molecular arrangement, composed of layers of carbon atoms held together by weak bonds, making it both a lubricant and a strong conductor of heat and electricity. In art and industry, its versatility extends from pencils to lubricants, and in my case, as a release agent in the sand-casting process. When I applied graphite powder to the 3D printed PLA models of maize, climbing beans, and squash, I was drawn to how its smooth, dark surface allowed for a clean imprint without adhering to the sand.<sup>26</sup> What began as a practical solution became a key conceptual choice when I observed the natural patina it left on the sculptures, lending the bronzes a subtle, rememberable, almost uncanny finish. The dark patina left behind by the graphite evoked the natural passage of time, echoing the ways in which memories are shaped, altered, and preserved within a community. Graphite was more than a release agent; it was a material witness to the act of imprinting history into the sand, later cast in bronze. This materiality became an integral part of the visual and symbolic language of the work.

### *Tracing Language*

Graphite's historical and functional connection to writing mesmerized me as I worked on *We learn the names of those we never knew*. In many ways, after its discovery, graphite emerged as a pivotal material for language (written, and shaped by the language of the hegemonic systems); it is the medium through which personal thoughts, histories, and *knowledge* has now been recorded for centuries.<sup>27</sup> My decision to leave the graphite

---

<sup>26</sup> François Cardarelli, *Materials Handbook: A Concise Desktop Reference* (New York: Springer, 2008).

<sup>27</sup> Encyclopaedia Britannica, s.v. "Graphite," July 5, 2024, <https://www.britannica.com/science/graphite-carbon>.

untouched on the sculptures extended beyond its aesthetic appeal—it became a metaphor for the recording of oral histories and reclamation. Just as graphite has facilitated the transfer of words to paper, the powder’s use in this casting process visualizes the transfer of my community’s *Collective Memory, tradition, and knowledge*.

### *Fleeting Gestures, Lasting Impressions*

The repeated act of rolling the models into the casting sand created a series of *gestures* that mimic the rote memorization integral to oral *traditions*, tying the process of imprinting in sand to the mental act of imprinting stories in the mind. The repeated act of rolling the models into the casting sand generated a series of *gestures* that echo the rote memorization integral to oral *traditions*. This process of imprinting in sand mirrors the mental act of internalizing stories, intertwining physical movement with the rhythm of memory. As the graphite-covered models left their impressions, these *gestures* became a tangible and conceptual aspect of the artwork, with graphite serving as a material trace of this interplay. The bronzes cast from these impressions stand as permanent records of fleeting movements, akin to the way oral histories endure through continuous retelling.

Oral *traditions*, which rely on voice and *gesture* rather than written language, carry the collective energy of community across generations.<sup>28</sup> However, my exploration of graphite—a material inherently linked to writing—allowed me to visualize these typically ephemeral histories. Its dark, earthy hue grounded the work, clearly delineating every detail in the molds and acting as both a physical medium and a metaphor for the voices of those who came before.

In retaining the graphite within the bronzes, I grappled with a sinking feeling: Does the use of graphite reflect Western culture, potentially serving as a tool of colonization? Moreover, considering that graphite’s marks can be erased, I pondered the implications

---

<sup>28</sup> Simpson, *Land as Pedagogy*, 1-25.

of this in relation to my work and the themes of memory and representation that extend throughout this project.



### *Marking Space: Vinyl Decal and the Act of Seeing*

The black window decal serves a dual purpose within the work. Its opaque, matte surface starkly contrasts with the glass, enhancing the legibility and impact of the text. Strategically positioned, the decal acts as a physical barrier that frames the view of the outdoor sculptures, subtly directing the viewer's gaze. This arrangement deepens the thematic connection between the indoor and outdoor spaces, inviting contemplation and reflection. The simplicity of the decal's materiality allows the poem to resonate within the architectural context, emphasizing the transition from the institution to the world beyond.

However, the vinyl itself introduces a tension with the in-situ sculptures of *The Pit*. The decal, composed of PVC (polyvinyl chloride), embodies an institutionalized format of exhibition design, further complicating the relationship with *We learn the names of those*

*we never knew.* Within the institution, these materialities coexist in a way that seems logical, yet I begin to subvert this dynamic. Through the message conveyed by the decal, I urge the viewer to step outside, prompting a reconsideration of their relationship with both the artwork and their environment.



### *Energy: Purposeful Intention*

The energy in my thesis project is a vital, intentional force that permeates every aspect of the work. From the bronzes to the accompanying poem, each element is infused with purpose, reflecting a deep commitment to conveying meaningful narratives. This energy is not a byproduct of the artistic process, but a deliberate infusion of thought and emotion that shapes the making. As I engage with materials and form, I channel these intentions into each *gesture*, creating a resonance that invites viewers to connect with the stories embedded within. The interplay of my *gestures* and the energy they generate transforms the sculptures into conduits of meaning, inviting a quiet exchange between the work and its audience, the community, enhancing the experience of reflection and connection.



## *Continuing Dialogues*

### *Reflections on Material, Memory, and Responsibility*

As this thesis comes to a close, I reflect on the many questions that emerged along the way: What does it mean to (re)claim materials and techniques that have been co-opted by dominant histories? How can we use sculpture and *gesture* to make visible the stories and *knowledge* systems that have been overlooked or actively erased? These questions have guided my exploration of bronze, graphite, and digital processes, where the tension between *tradition* and experimentation became central to my inquiry.

In working with *The Three Sisters*, I was confronted with the ways *Indigenous Knowledge* systems and oral histories persist through *gestures* — both in the land and in the hands that shape it. But how can we, as artists, contribute to the survival and revitalization of these stories without appropriating or flattening their complexity? What is the role of the artist in not only representing stories but in holding space for them to evolve? Can a material like bronze, historically associated with power and conquest, be transformed into a medium of reclamation and resilience?

This work has also raised important questions about the role of space and site. The institution provided the setting of *The Pit*, which created a framework for viewing the space from multiple angles—from above and within, looking down into it. But what does it mean to position Indigenous narratives from the Americas within institutional structures like KuvA? And how might these structures influence or restrict how these stories are understood and experienced?

Ultimately, this process has reaffirmed my belief in the importance of listening — to materials, to the land, and to the voices often silenced in historical narratives. As I move forward, these questions will continue to challenge me: How can we ensure that our artistic *gestures* — whether physical, conceptual, or technological — remain rooted in integrity and responsibility? What does it mean to engage with *Collective Memory* and material in a way that both honors the past and allows space for new interpretations and future dialogues? These are the questions that remain open, guiding my ongoing practice.

### *Navigating Invisibility in Academia*

When I began writing this thesis, I felt it necessary to reflect on my experience navigating invisibility within KuvA, and how this shaped the direction of my project. Originally, I had envisioned a different outcome, but the institutional context pushed me toward a pivotal shift in my focus.

Throughout my time at the University, I've taken on roles that go beyond my individual work—advocating for change within KuvA as well. While I've been grateful for the opportunity of short-term engagements with visiting professors, the absence of permanent faculty of color, whose lived experiences align more closely with the complexity of my work, became evident. My project, rooted in intricate cultural narratives, required sustained, critical engagement. Without that, I felt at risk of reinforcing surface-level or harmful interpretations, leading me to rethink the path I was on.

I do recognize that KuvA has taken important steps forward, including opening its doors to international and non-EU/EEA students like me. I deeply appreciate the opportunities this institution has provided me: the privilege of continuing my education here, the network across Europe, and the support I've received for my relocation and studies. These *gestures* have made a meaningful impact on my ability to pursue my work.

However, these opportunities have also clarified the challenges we still face. For KuvA to fully realize its commitment to diversity, it must go beyond admissions and short-term

faculty visits. This requires actively integrating diverse perspectives by hiring permanent non-EU/EEA faculty and staff of color and offering courses that address the broader global contexts we're engaging with as artists. A course like Sonja Lindfors' "Racialisation and the Politics of Visibility," already offered at TeaK, could be a vital addition here at KuvA for both students and faculty alike.

I'd like to share a specific experience. During one of the mandatory courses, "Exhibition Studies," the initial presentation titled "Landmark Contemporary Art Exhibitions" excluded any exhibitions from outside Europe and the US. When I suggested that more diverse references would be valuable, I was told there wasn't enough time to cover everything. While the course aimed to highlight the structures of exhibiting art today, rooted in specific *Western traditions*, I feel this is exactly why we need a more inclusive, global approach. These frameworks are not universal, and it's essential to engage with them critically, from various perspectives.

This is just one example of the broader systemic issues that many international students and students of color face. As it stands, we are often left to educate the university on what art can be in a more expansive context—all while navigating our studies. There's a real need for the institution to engage with these issues on a more meaningful level, understanding that we aren't just students but participants in a global inclusive art dialogue, which deserves to be reflected in the education we receive.

Many of us, myself included, seek to build lasting relationships with Helsinki and Finland. For this to happen, it is essential that we, too, are seen, heard, and included in the university's dialogue and pedagogy. During my time here, I've contributed to the community by co-leading a lecture series for the Sculpture Department, organizing an open studios event, engaging peers in collaborations, and negotiating the outdoor exhibition space. Through these efforts, I've worked to broaden the ways of seeing and participating in our shared artistic community.

If we are to believe in KuvA's potential, then steps must be taken to ensure the inclusion of other cultural and global perspectives. The university has an opportunity here to expand how it approaches diversity and pedagogy, moving beyond admissions and financial support toward a richer integration of diverse worldviews. This thesis stands as

a testament to the value of such perspectives. My work is inseparable from my lived experiences, and it has been shaped by the institutional dynamics that surround it.



## REFERENCES

- Barzun, J., Donald Weinstein, N. Geoffrey Parker, Edward Peters, Richard J. Mayne, Geoffrey Russell Richards Treasure, Hermann Aubin, Peter N. Stearns, Timothy C. Champion, Marie-Louise Stig Sørensen, John Hearsey McMillan Salmon, David Herlihy, Michael Frassetto, and Judith Eleanor Herrin. "History of Europe." *Encyclopædia Britannica*. Last modified September 16, 2024. <https://www.britannica.com/topic/history-of-Europe>.
- Bradley, Richard. *The Significance of Monuments: On the Shaping of Human Experience in Neolithic and Bronze Age Europe*. London: Routledge, 1998.
- Cajete, Gregory. *Native Science: Natural Laws of Interdependence*. Santa Fe: Clear Light Publishers, 2000.
- Cardarelli, François. *Materials Handbook: A Concise Desktop Reference*. New York: Springer, 2008.
- Encyclopædia Britannica. s.v. "Bronze." September 11, 2024. <https://www.britannica.com/technology/bronze-alloy>.
- Encyclopædia Britannica. s.v. "Graphite." July 5, 2024. <https://www.britannica.com/science/graphite-carbon>.
- Fagan, Brian M. *World Prehistory: A Brief Introduction*. New York: Routledge, 2020.
- Hill, C.G. "Pre-Colonial Foodways." In *The Routledge History of American Foodways*, edited by Jennifer Jensen Wallach, Lindsey R. Swindall, and Michael D. Wise, 9-22. London: Routledge Press, 2016.
- Katanski, Amelia V. *Learning to Write "Indian": The Boarding School Experience and American Indian Literature*. Norman: University of Oklahoma Press, 2007.
- Kimmerer, Robin Wall. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Minneapolis: Milkweed Editions, 2013.
- McGreevy, Nora. "Scholars Spent a Year Scrutinizing America's Monuments. Here's What They Learned." *Smithsonian Magazine*, October 2021. <https://www.smithsonianmag.com/smart-news/researchers-spent-one-year-scrutinizing-americas-monuments-heres-what-they-learned-180978791/>.
- Mt. Pleasant, Jane. "The Science Behind the Three Sisters Mound System: An Agronomic Assessment of an Indigenous Agricultural System in the Northeast." In *Histories of Maize: Multidisciplinary Approaches to the Prehistory, Linguistics, Biogeography, Domestication, and Evolution of Maize*, edited by John Staller, Robert Tykot, and Bruce Benz, 733-46. Walnut Creek, CA: Left Coast Press, 2006.
- Parker, Arthur C. *Seneca Myths and Folk Tales*. Lincoln: University of Nebraska Press, 1989.
- Petroski, Henry. *The Pencil: A History of Design and Circumstance*. New York: Alfred A. Knopf, 1990.
- Robinson, G.R. Jr., J.M. Hammarstrom, and D.W. Olson. "Graphite." In *Critical Mineral Resources of the United States—Economic and Environmental Geology and Prospects for Future Supply*, edited by K.J.

Schulz, J.H. DeYoung Jr., R.R. Seal II, and D.C. Bradley, J1–J24. U.S. Geological Survey Professional Paper 1802, 2017. <https://doi.org/10.3133/pp1802J>.

Simpson, Leanne Betasamosake. "Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation." *Canadian Journal of Education* 34, no. 2 (2011): 1-25.

Spirinelli, Fabio. "Toppling Symbols: Statues, the Colonial Past and the Public Space." *Luxembourg Centre for Contemporary and Digital History*. Accessed October 1, 2024. <https://www.c2dh.uni.lu>.

Trujillo, Michael. "Oñate's Foot: Remembering and Dismembering in Northern New Mexico." *Aztlán: A Journal of Chicano Studies* 34, no. 2, 2008.

## *IMAGE CREDITS*

All images copyrighted and courtesy of the Artist unless stated with pages below.

Joel Hilska-Heikkinen | pg. 54

Kastehelmi Korpijaako | pg. 9-12

Petri Summanen / Taideyliopiston Kuvataideakatemia | pg. 13

Romance Clermont | pg. 31-32