A PEDAGOGY OF WATER:
RESTORYING THE RIO GRANDE/RIO BRAVO

by

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**A PEDAGOGY OF WATER: RESTORING THE RIO GRANDE/RIO BRAVO**

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Abstract

Water is life. For millennia, the Rio Grande/Rio Bravo has nourished many Indigenous peoples along its 1,255 mile length, from its source in the San Juan Mountains to the Gulf of Mexico. The river is a lifeline, read as a map between the interrelated communities. Colonization turned the Rio Grande/Rio Bravo into an international border between the United States and Mexico, and in the last 40 years, our river/border has become heavily militarized.

This project engages a practice of Indigenizing/decolonizing the Rio Grande/Rio Bravo as ancestral waters to various local Indigenous peoples, drawing from the collective memory of intergenerational Indigenous fronterizxs (border residents) to examine the relationships between people of the Laredo/Nuevo Laredo community and the Rio Grande/Rio Bravo.

To do this, I theorized a new theoretical framework called an Indigenous Fronterizx Cosmography, which braids Indigenous epistemologies, Xicanx ontologies, and borderland positionalities. This way, first-hand accounts are understood as intellectual traditions that revitalize, restore, and restory the holistic ancestral knowledges of the land and river. Next, I created a culturally-centric research methodology, named Fronterawork, drawing from Indigenous methodologies, oral history/testimonio sharing, and witnessing to document the lived experiences of 25 community elders and knowledge-keepers in/of/with/near/over/across the river's waters. Participants shared their knowledge of the Rio Grande/Rio Bravo, as well as their perspectives of how the river has changed over their lifetimes. Their testimonios were examined holistically, and in-context as embodied and emplaced situated knowledges.
of the river. When considered in conversation with each other, themes and subthemes
developed, suggesting two major approaches to understanding: river-as-water (Water
Thinking) and river-as-border (Border Thinking).

In response, I created a Pedagogy of Water that emerged from the collective
memory of community elders in order to teach the next generations about our river. This
pedagogy interrupts dominant forms of displacement and violence against the diverse
Indigenous peoples of the river/border communities, while revitalizing the ancestral
relationships between the Indigenous peoples and the Rio Grande/Rio Bravo. Our
collective memory serves as foundation from which to honor the Rio Grande/Rio Bravo
as part of the sacred landscape of what is today called south Texas.
Lay Summary

The purpose of this research project is to facilitate intergenerational teaching and learning of Indigenous knowledge in my community of Laredo, Texas. Our Rio Grande/Rio Bravo is our main source of clean water, and is also a militarized, international border between Texas and Mexico. I created an Indigenous Fronterizx Cosmography to understand what life is like there, from the perspective of Laredo-area locals with deep ancestral roots connected to the land. Next, I created a respectful research process called Fronterawork, that invites elders to share their stories and lived experiences. I used the teachings of the elders to create a Pedagogy of Water that focuses on the Rio Grande/Rio Bravo as part of the sacred, ancestral landscape of south Texas. This project strengthens the community by connecting multiple generations to the land and river where we live, and demonstrates the perseverance of Indigenous peoples and knowledges through time.
Preface

All research, analysis, and writing is the original, independent work of author Marissa Isela Muñoz.

All of the elements required by the Faculty of Graduate and Postdoctoral Studies and the Department of Educational Studies at the University of British Columbia have been included in this dissertation.

The UBC Behavioral Research Ethics Board (BREB) approved the project according to the Tri-Council Policy for Ethical Conduct for Research Involving Human Subjects, certificate # H13-02720.

An early draft of Chapter 2, specifically the Historical Background section, was edited and published as part of a chapter in an edited book:

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Below, please find the important terms and concepts used in the development of the research project. Each definition is citation rich, yet concise, intended to inform the reader of the academic genealogies that nourished and informed my thinking. While I am most familiar with the academic literature of education, the literatures mentioned here are transdisciplinary, and often develop through curiosity, intuition, and combing the reference lists of scholars whose work resonates deeply, all of which are entirely informal and self-guided learning practices. My goal was/is/will always be to think thoroughly. Concepts may appear in the body of the dissertation with additional, different, or no references, but this glossary serves to guide us to a common vocabulary so that we may make space for the voices of non-academic teachers in the body of the dissertation.

In this research project, it is necessary to recognize the influence and constraints of both the English and Spanish languages as languages of colonization, shaping how we think, understand, and relate both to our interests and to each other. In developing a vocabulary that allows us to attend to decolonization and Indigenous knowledge, these language limitations must be made explicit, so that they may be challenged, disrupted and used differently, so that we may think differently.

In my own languaging of the text, I will follow the precedent of other Xicana scholars (Anzaldúa, 1999; Castillo, 1995; Moraga, 2011) by code-switching, mixing language without differentiating through the use of italics, but will offer translations in the footnotes. In doing so, I write the way I think without privileging or othering non-dominant modes of communication.

Also worth noting, I often play with language conventions such as grammar, punctuation, and spellings to make a point. Sometimes, bending the language allows me to play with concepts (greatful, restor(y)ing, restorying), or to graphically insert reminders and or visuals into the words themselves (Rio Grande/Rio Bravo). Each time I disrupt conventions or linguistic expectations (Texas Mexico or US Mexico) creates tiny interventions in using the colonial languages to describe my personal river-based, Indigenous fronteriza ways of thinking.

**being-in-relation**

Being-in-relation is a play on the phrase human being, which is commonly considered a noun. I coined this phrase as the reminder that humans are one aspect of a dynamic living system, not as a being superior to and apart from the natural world, but simply as a being in relation to other beings. By renaming humans as beings-in-relation, our attention is shifted from a noun to the verb of being, and to the specific ties and relationships of always being-in-relation to other beings. This phrase seemed a necessary intervention to destabilize dominant, normalized concepts of individuality and independence as the a default orientation of humans (Jaggar, 1989) in conversations about ecology and pedagogy.
borderlands/fronteras

In the literal sense, borderlands are the places at the margins of a state’s geopolitical boundaries. Anzaldúa's seminal work *Borderlands/La Frontera: The New Mestiza* (1999), provided a foundation and language for understanding the cultural overlap specific to the US Mexican border, introducing to a wide audience concepts drawn from intellectual traditions of pre-contact Mesoamerica. Border studies have grown out of the interdisciplinary attempt to understand the multiple, layered meanings of borders by examining the real, imagined, symbolic, metaphorical, and embodied understandings of such spaces and ideas (Murphy, 1993). In addition to the study of border places, the cognitive processes that emerge from border places and spaces have also been further developed. Borderland rhetoric is intentionally complex, inviting multiple ideologies, simultaneous incongruous perspectives, different constructions of identity, and various forms of resistance (Elenes, 2001). Meaning is made in/from/with the complexity. In the literature, there is no single definition for what the borderlands include. For the purpose of this work, I use the term borderlands to refer to the territories and communities on both sides of the line. In Texas, our border is the Rio Grande/Rio Bravo, and our borderlands are the territories and communities sustained by the water of the river.

I also use the term *frontera*, which is the Spanish translation of the term, and is more commonly used in my community. Frontera implies that when someone is thinking in Spanish, the frontera/borderlands is not understood from a US-centric perspective, nor necessarily positioned on the US (English-thinking) side of the line. Using the term *frontera* instead of *borderland* makes space for how the concepts, theories, and actual places are understood from both sides of the border. When the term is adjusted to be self-referential, such as when I use *fronteriza/fronterizo/fronterizx*, it functions to describe the conceptual (ways of knowing), relational (context), positional (in/of/from the confluence of both sides), and geographical (in/of/from the river) orientations to the river. When we compare to the English equivalent, to be off/from the borderlands may suggest a geographical or conceptual orientation but does not necessarily include any of the other orientations to the river. Specifically, my frame of reference is the Texas Mexico interface, living on the U.S. side of my ancestral waters, in a community that spans both sides of the river, understanding that the border is slowly severing the two sides from each other. My goal is to focus on revitalizing the Indigenous knowledges in/of/from/with/through the Rio Grande/Rio Bravo, to revitalize the Indigenous Fronterizx orientation to river, to the land, and to each other.

**collective memory**

To best understand this concept, I offer the following progression: *History* is the study of the past, linking events in a chronological order. *Historical consciousness* is the metacognitive study of how people relate to the past, paying attention to contexts of space and time during which events happened (Trofanenko, 2008). *Collective memory*, seeks to understand how a community subjectively constructs meaning from historical events, which often include interpretations, emotions, reflections of identity, and political positions (Hom & Yamamoto, 2000). Stories and testimonies are interwoven with the commentary, and are framed toward particular ends that serve both individuals and the
group. Wertsch & Roediger (2008) explain "collective memory is more like a space of contestation than a body of knowledge- a space in which local groups engage in an ongoing struggle against elites and state authorities to control the understanding of the past" (p. 319). I expand this definition to include the contestations of imposed categories of identity, such as when the US national census imposed the category of Hispanic in 1970 (Rodríguez, 2014), with little room for how identity was understood by the very people being described.

Collective memory works to narrate historical events with multiple voices from an embodied and emplaced perspective (Riaño-Alcalá & Baines, 2011), and is automatically positioned as a form of resistance against imposed dominant narratives of history (Seixas, 2004), which some would argue are narratives that normalize colonization, and therefore, can be understood as intellectual colonialism (Castillo & Tabuenca-Córdoba, 2002; Gaudry, 2011; Rodríguez, 2014). Identity is directly shaped by our histories. Therefore, the danger of normalizing singular, dominant white-supremacist, colonial narratives of history is the frequency with which marginalized, Indigenous, and/or racialized communities are narrated as passive, supporting characters in the stories of their own oppression, to the exclusion of all other stories.

In contexts of ongoing violence, written records are often systematically destroyed. Oral traditions that include collective memory serve as living archives (Riaño-Alcalá & Baines, 2011) to give accounts the histories, contexts and meanings of/within communities to counter the dominant narratives. One notable example of the power of collective memory is the record of the fall of the Mexica (Aztec) empire. First hand accounts of the violence were not recorded in written form, but were instead composed as canciones de luto, songs of mourning, and shared amongst the survivors (León Portilla, Garibay, Kemp& Beltrán, 2006). The dominant xenophobic US-centric politics are direct threats to the knowledge and survivance of Indigenous frontera communities, and I am interested in the pedagogical implications of our oral collective memory practices. In this project, I use collective memory to document the traditional knowledges that have survived in the everyday cultural practices of Indigenous frontera families.

decolonizing, Indigenizing, anticolonizing, insurgent research

Each of these four terms describes a slightly different response to the violence of colonization. Decolonizing methodologies seek to interrupt colonial narratives to witness and revitalize the Indigenous world (Smith, 1999), free from the expectation of reacting to colonial forces (Monture-Angus, 1999), for the purpose of repatriating the land back to Indigenous peoples (Tuck & Yang, 2012). The concept of Indigenizing prioritizes the political power of Indigenous identity and culture (Smith, 1999), and seeks to divest from settler colonial authority, approval, and systems of legitimacy in favor of Indigenous intellectual systems, values, and ethics (Simpson, 2014). Anticolonization (Serrano-Nájera, 2014) responds to the overuse and rampant evacuation of the politics of the term decolonization (Tuck & Yang, 2012) to examine the multiple intersections of colonial hegemony, describe the new forms of colonization, and also to critically analyze the complexity of our positionalities in anti-oppression work (Calderón, 2014). Similarly, insurgent approaches to research serve the needs of the Indigenous community with action that "targets the demise of colonial interference within our lives"
and communities.” (Gaudry, 2011). While the literature indicates an ongoing development of vocabulary and concepts over time, all four terms are examples of oppositional consciousness (Sandoval, 2000), which seeks to transform dominant power relations in support of Indigenous knowledge, people, and places.

**embodied, emplaced knowledges**

Embodied and emplaced knowledges refer to the multisensory ways that we know where and how our physical bodies move and relate through space and in places, working from the assumption that we are connected to our surroundings in a relational ecology. *Embodied* refers to the critical awareness not only of our bodies in relation to other bodies, but also an awareness of the impact of our surroundings on our physical being (Irwin & Springgay, 2008; Nayak, 2011). Our bodies are physical receptors and transmitters of relationship to our surroundings, as well as the means through which we understand relationships in space, encoding meaning through learning, emotions, and understandings (Cobos, 2012; Lara, 2014). Similarly, the term *emplaced* refers to the knowledge held in specific locations, as well as how our bodies find and/or make meaning in particular spaces as part of the processes of witnessing, remembering, and storying (Riaño-Alcalá & Baines, 2011). Though distinct concepts, I often use the terms together as I consider them mutually co-constructed.

**holism, holistic**

Holism is an Indigenous concept that describes four interrelated aspects of a healthy personal well-being: the intellectual, spiritual, emotional, and physical realms of being (Archibald, 2008). Archibald further elaborates how individuals are supported by rings of context that include family, community and nation, which influence each other, as well as the four realms of self. See Figure 1: Holism (Archibald, 2008).

Holism grows out of Indigenous epistemology, and similar conceptions are shared by different Indigenous nations, each suggesting a relational understanding of self. The term *holistic* shifts the concept into an adjective (grammatical) form. For example, a holistic education describes an educational approach that supports intellectual, spiritual, emotional, and physical development. In addition, holistic education draws from the support and knowledge of the individual's multiple contexts in order to "nourish the learning spirit" (Battiste, 2010) for the purpose of nurturing learners to be contributing community members.

This project specifically seeks to create an intervention in the recent shift toward business models of education that use the language of capitalist metaphors, such as *customers* and *customer satisfaction*, to describe *learners* and *teaching outcomes*. As the goal of the project is to restory the Rio Grande/Rio Bravo as ancestral waters, it is necessary to specify our approach as holistic and relational.
Indígena/Indigenous

I use the terms *Indígena/Indigenous* to denote descendants of the First Peoples of the land. The terms mean more than ethnic heritage. According to the United Nations Permanent Forum on Indigenous Issues (n.d.), to be Indígena or Indigenous implies a familiarity with a specific body of cultural, traditional and intergenerational knowledges, firmly rooted in, to, and of land. While the concept includes Indigenous peoples from each continent, I use it to refer primarily to people of the Americas, inclusive of both the North and South American continents. *Indigenous* includes a wide diversity of positionalities, including both federally-recognized Indigenous peoples, who may self-identity as Native American, as well as Indigenous peoples without federal recognition, who may or may not self-identify as Native American. While *indigenous*, written with a lowercase *i*, is an adjective, *Indigenous*, capitalized, is a proper noun, referring to a particular group of peoples, distinguished by cultural heterogeneity and/or political sovereignty (Yellow Bird, 1999). In Spanish, the term *Indígena* has also become a powerful form of self-identification that honors the significant human rights and social movements of the past 40 or so years (Burman, 2014). Recently, scholars have also adopted the term Indígena as forms of reclamation (Speed, 2006) and Chicana solidarity (Moraga, 2011). The term Indígena is not universally used in South American contexts due to their widespread use by anthropologists (Boelens, Getches & Guevara-Gil, 2010), as some communities prefer an ancestral self-referential name. However, *Indigenous/Indígena* are the words that best fit my understandings as a bilingual non-recognized Indigenous person of the US Mexican frontera.
The tension between self-identification and the names we are attributed by institutions, governments, and others is central to Native and Indigenous studies. My purpose in choosing Indígena/Indigenous as a self-referential term is to find a common vocabulary that is sensitive to the many ways that people are allowed to and not allowed to identify in the US and Mexico. In the project, Indigenous heritage was approached in two ways: first, as a direct question asking participants to self-identify, and secondly, as a series of questions that recalled an intergenerational, familial cultural practice of land- and river- based traditional knowledges. Therefore, in this project, I use the term Indigenous to describe the diverse peoples who share land- and water-based cultural, traditional, and intergenerational knowledges of the Rio Grande/Rio Bravo, inclusive of the many ways that community members do/do not self-identify and are/are not recognized by colonial definitions of Indigeneity. My focus is less on the politics of identity, and more on the revitalization of Indigenous river- and land-based knowledge that has survived through the generations. In this way, Indigeneity works to revitalize ancestral and intergenerational ways of knowing and being in relation to the Rio Grande/ Rio Bravo.

relational ecologies

This phrase appears in the literature to describe a wide variety of subjects, such as urban foraging (Poe, LeCompte, McLain, & Hurley, 2014), animal agency in human/ecological relationships (Betts, Herdenberg, & Stirling, 2015; Putney, 2013), and local/global culinary culture (VanWinkle, 2017). In each of these studies, the author uses the phrase relational ecology to expand upon concepts of ecology, while focused primarily on human beings.

In this research project, I repurpose the phrase to focus on the long-standing conversation between scholars of environmental education (Bowers, 2002; Gruenewald, 2003, Bowers 2008; Stevenson, 2008), critical pedagogy (hooks, 2003; Darder, 2011), and Indigenous knowledges (Battiste & Henderson, 2000; Simpson, 2004). I define a relational ecology as a concept embedded in Indigenous epistemologies, in which a dynamic and responsive network of intradependent beings share places, resources, and life within an ecosystem. Specifically, I seek to interrupt the anthropocentrism and constructed separation of humans from the non-human world of environmental education (Barrett, 2012), and update the epistemological foundations of critical ecopedagogy (Kahn, 2009; McLaren, 2013) and move toward the decolonizing/anticolonizing/indigenizing priorities of land repatriation and freedom from ongoing occupation (Smith, 1999; Tuck & Yang, 2012).

storying, restorying, and restor(y)ing

People share stories to create meaningful connections between the self, family, community, culture, and the land (Archibald, 2008). Practices of storying, which includes story-telling and story-listening (Razack, 1993), often encode worldviews, ecological knowledge, cultural norms, ethics, and values to create meaning (Martinez, 1998; Smith, 1999; Beaucage, 2005). Stories offer both implicit and explicit teachings, offering multiple entry points for meaning to be made, creating collective strength. In contexts of colonization, in which the goal is to dehumanize and dominate entire communities of
people, storying is considered dangerous. Colonization systematically functions to eliminate community resistance by creating one singular dominant narrative, crafted by those in power and normalized as truth.

*Restorying*, by contrast, speaks back to the dominant narratives to make space for Indigenous knowledges, to recover, remember, and/or revitalize the cultural knowledges of the community. Through mutual understanding, relationships between a community and the land (and water) can be strengthened and nurtured. Comtassell, Chaw-win-is & T’lakwadzi (2009) write “A restorying process for Indigenous peoples entails questioning the imposition of colonial histories on our communities…. Ultimately, restorying is just a first step toward remembering and revitalizing our collective and individual consciousness” (p. 155). By extension, the use of the parenthesis in the spelling of *restor(y)ing* serves as a grammatical reminder of the mutual processes of restoring Indigenous knowledge through restorying.

When considered in the context of the U.S. Mexico borderlands, restorying allows Indigenous peoples to connect themselves back onto their ancestral territories through collective memory and traditional knowledge of the land and Rio Grande/Rio Bravo. While counter-narrative (Romero, Arce, & Cammarota, 2009; Solorzano & Yosso, 2009) has been used across the southwest to explore issues of intersectionality and critical race theory, Indigenous storying and restor(y)ing of the Rio Grande/Rio Bravo will be a new intervention in this particular context.

traditional knowledge(s)

According to the United Nations Environmental Programme, the Convention on Biological Diversity (n.d) states:

*Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds.*

Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, and forestry.

Thus, *traditional knowledge* is a term that includes all aspects of thinking and understanding from an Indigenous perspective, focused primarily on relationships (LittleBear, 2009). I use the phrase to recognize the specific land- and water- based systems of knowledge that deeply embed people within their own ancestral territories, as living beings within a dynamic, intradependent living system. This project focuses on the pedagogical aspects of revitalizing traditional knowledge of the Rio Grande/Rio Bravo, and fully embraces the political implications of such practices. Revitalization of traditional knowledge inherently creates a direct resistance to the ongoing settler colonialism, the primary purpose of which is to sever Indigenous peoples, knowledge, and claims to the land (Wildcat, Simpson, Irlbacher-Fox & Coulthard, 2014). In the context of the Rio Grande/Rio Bravo, the claim is not made by a singular nation of Indigenous peoples, but does make room for variously positioned and diversely-
identifying Indigenous peoples to claim belonging based on the continuous relationships of/with/through traditional knowledge of the land and river. Occasionally, I will use the term traditional ecological knowledge to specifically focus on overlap of cultural and biological factors (Cajete, 2000), or Indigenous intellectual traditions to highlight pedagogical practices (Simpson, 2004).

**witness, witnessing**

For Indigenous communities that continue to practice their oral traditions, storying creates complementary roles for both story-tellers and story-listeners or *witnesses*. For the Coast Salish communities, and for many Indigenous communities, these roles are not taken lightly. To be responsible for a correct telling of a story (Archibald, 2008) or to agree to be a witness is to accept sacred responsibilities, formalized with a series of ceremonial protocols and community expectations (Gaudry, 2011; Thompson, 2002). As a witness, one is expected to pay close attention to the details, and serve as the expert or archive of the events for the community (Thomas, 2005). The witnesses are held accountable by the community, and the formal process of witnessing legitimizes their accounts as true.

Witnessing also appears in memory studies, and particularly, in work around genocide and complex community trauma. Whereas *listening* implies focusing on the words spoken, *witnessing* includes noticing the emotional, affective, and embodied details (Hirsch & Spitzer, 2009), including silences, soundscapes, processes of transmission, and how memory marks the landscape (Riaño-Alcalá, 2000). For this project, I understand my own responsibilities as the researcher-as-witness, and fine-tuned my approach listening to the many layers of meaning conveyed in the participant testimonios, which are first-hand accounts of their lifetimes in relation to the Rio Grande/Rio Bravo.
Acknowledgements

In Indigenous communities, when a young person is sent out into the world to learn about life, they go with the expectation that when they return, they will be better prepared to take up responsibilities at home. This practice goes by many names, but in my family, we call it a caminata. Grad school has been my caminata.

I am most thankful for the opportunity to fully embrace and center my own cultura from Coast Salish territory, while translating two vastly different international borderlands. Although far from home, I was surrounded and uplifted by a local community amongst whom my spirit was loved and nurtured. Thank you, Vancouver community, for such a rich learning experience and so many wonderful connections. And thank you, friends and family in my home community of Laredo/Nuevo Laredo, for sending me off into the world and trusting me with our stories.

I am forever grateful to Dr. Jo-ann Archibald for her calm guidance and gentle encouragement as my committee co-chair and mentor. Her thoughtful questions helped me to clarify my thoughts, strengthen my voice, and examine my own teaching practices. Thank you, Dr. Archibald, for being such a generous and patient mentor.

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Thank you, Ben. You have been a brilliant adventure companion. I am most appreciative of your humor and spontaneity. Our Canadian adventure was your idea, and with my whole heart, thank you.

And thank you to my greatest, tiniest teacher, Ofelia, who fills me with wonder.

Mil gracias, queridxs. Por todas mis relaciones.¹

¹ A thousand thanks, loved ones. For all my relations.
Dedication

For those who came before me

and

For those who will make their way after

All I have are my Grampa Toya's words,

and the memory of his voice:

"Everything you need is already inside of you."
Prologue

In accordance with local Indigenous protocols, I am a visitor to the unceded ancestral territories of the xʷməθkwəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and Səl̓ílwətaʔ (Tsleil-Waututh) nations, where I completed my graduate studies. I acknowledge the local waterways that inspirit this territory, and the relational ecologies that connect me to home.

My name is Marissa Isela Muñoz, daughter of Norma Montoya and Oscar Jesús Muñoz; granddaughter of Maria Luisa Ramirez, Eustacio Montoya, Leonor Valdez, and Oscar Muñoz Dena. I am Xicana Tejana, Estok’ Gna, thirteenth generation rooted on both sides of my family to what is now called the city of Laredo, Texas, on the banks of the Rio Grande/Rio Bravo. On my mother’s side, we trace our roots to the Tlaxcalteca- and Coahuilteca-speaking peoples of the greater region. On my father’s side, my roots trace to the Wixairika communities from the Real de Catorce region of San Luis Potosi, Mexico. The Rio Grande/Rio Bravo are my ancestral waters, understood by Indigenous peoples as a map read lengthwise, guiding the journeys of our relatives across the territory.

This project prioritizes Indigenous knowledges and ways-of-being, recognizing and honoring the distinct relationships that grow between the land, waters, and peoples of particular ecologies. All work described in this dissertation is an Indigenous methodology, guided by a practice of being a good relation to and with Indigenous communities, understood as diverse, dynamic, and polyvocal communities practicing diverse, dynamic, and land-based bodies of knowledge.
Chapter 1: Introduction to the Research

The first time I was invited to ceremonia\(^2\) in Canada, I was really excited to join the Ladies, my Indigenous Canadian friends, for a sweat in North Vancouver. It was a familiar ceremony, which I have participated in many times, yet, I was still a little bit nervous.

We parked near the community meeting place in the middle of town, collected our ceremonial items and stepped into the tree line. As I slipped off my city shoes and slipped into my huaraches, every cell in my body relaxed into a relational way of being. Within a few steps, the trees folded closed around us, and the city fell away from my awareness. Out of habit, I carefully stepped in my friend Alannah's footprints, vigilant to stay on the cleared path that twisted around the Pacific Northwest rainforest.

Ceremony always requires work. There are teachings in the work. So, after a few introductions, I asked Alannah what I could do to help. She handed me a pair of snips, and said, "Bring me two big handfuls of balsam needles." So I went, walking carefully over the well-worn paths to the edge of the clearing. I knew what she wanted, and I could see the bluish hue of the balsam tree just on the other side of a dense patch of undergrowth. I stopped. There was no path. I'd have to fully step in and negotiate this land that was not my own.

I stood on the edge of the clearing, looking, thinking, and trying to solve the riddle of how to step into the wild understory of this unfamiliar forest. My feet

\(^2\) Ceremony
would not step into the dense layer of mixed foliage. My Texas mind wanted to be careful of the hidden dangers that could scratch, bite, sting, or tangle me as I came through. These feet, that know how to walk across the arid, scrubby monte\(^3\) of home, were paralyzed in the lush temperate rainforest.

After a minute of tentatively stepping around plants and trees and moving branches to see the ground, Alannah came over. She smiled and said, "I'll show you," as she walked through the wilderness to the balsam tree. I was astonished to watch her move with such ease and familiarity. I tried explaining my racing thoughts. She just smiled and started snipping.

Over the course of five years, there were many moments of learning from the local Coast Salish communities, specifically xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and Səl̓ílwətaʔ (Tsleil-Waututh) nations within whose unceded ancestral territory I was living. More than culture shock, I was witnessing the unspoken, holistic relationships and intergenerational knowings of my friends, the Ladies. Each practiced the traditional knowledges of their home communities, and each contributed to the local Coast Salish community as good relations. They knew the songs of the local ancestors, and where the medicine plants lived. They knew the stories of the beings after whom mountains were named, and knew how to mark the year with seasons of salmon, blueberries, elk, dungeness crab, as well as halibut, oolichan and seaweed from relatives up the coast. To them, this was tacit cultural knowledge, the basics of living in-relation

\(^3\) Wild, arid landscape.
to these lands, these waters, and these ancestors. My friends were fluent in the relationships between landscape and culture of our home.

For the first few months, I experienced a combination of culture shock, as well as an ecological shock. I quickly discovered the limitations of my Wildlife and Fisheries Biology degree as being specific to the flora and fauna of Texas, as very few species in the landscape were familiar. I would sit quietly in the unattended areas of forest around Vancouver and intently watch the velvety black squirrels and listen to the birdsong of my new neighbors. For me, the new ecology brought into stark relief the many ways in which Native and Indigenous peoples are deeply embedded in the cultural and ecological landscapes of their own, and each other’s, ancestral territories. I had to learn how to be a good relation in this new home, not just to the people in the community but to the life-forms, spirits, knowledge, and memories tied to the landscape.

1.1 Ofrenda⁴,⁵

Most respectfully,

we begin the way we were taught to begin ceremony⁶

This is a ceremony of witnessing,

Of listening with all of our being

Of being-in-relation.

---

⁴ Offering. We begin with ceremony as a protocol, a waking of all senses, understanding that not everything shared will be sacred knowledge, but everything shared carries a responsibility for attention and respect.

⁵ “Calling the sacred directions is an act of historical consciousness.” (Celia Herrera Rodríguez, cited by Gonzales, 2012, p. 189). As an introduction to this dissertation, it creates space and prioritizes ancestral ways of knowing.

⁶ Research for, with, and amongst Indigenous peoples is ceremony (Wilson, 2008).
We begin with offerings and an invitation
passed through the generations,
remembered,
practiced.
I'll add copal to the sahumador\(^7\)
And with my sonaja\(^8\) and ayoyotes\(^9\) ready
the quiqitzli\(^10\) calls
to invite the spirits
from each direction
With a turn to face the sky, and
a turn to face nuestra querida madrecita tierra\(^11\) and
with a deep breath,
my heart is ready
Tiahui!

1.2 Problem Statement

Mni wiconi\(^12\) (Gilio-Whitaker, 2018; Larned, 2018). Water is life. Peoples all over the world have regarded water as sacred (Hikuroa, Slade, & Gravely, 2011; Indigenous World Forum on Water and Peace, 2014; Young & Nadeau, 2005), connecting spirit to all aspects of life (Anderson, 2010, Sanderson, 2008).

\(^7\) Ceramic cup where one burns copal (tree resin) to make the smoke that carries prayers.
\(^8\) Hand-held rattle.
\(^9\) Ankle rattles, used in Danza Mexica.
\(^10\) Conch shell, played like a trumpet to call the community
\(^11\) Our beloved Mother Earth.
\(^12\) In the Lakota language, "water is life," used as a rallying cry during the 2016 protest of the construction of the Dakota Access Pipeline through the Standing Rock Reservation.
Knowledge of water is vital for the survival of all peoples, intimately implicating us within the interdependent aspects of our local ecologies. As the contexts of our communities have shifted through time, so too, have the meanings we attribute to water. In only a few generations, knowledge can be lost to forgetting. Yet, the stories of our elders serve as a map, documenting the long perspective of life experience, reminding us of the trajectory of who we are, how we got here, and what we have collectively known along the way.

The existing relationships between people, land, and water were profoundly altered with the onset of European colonization in the Americas (Peña, 1998; Simpson, 2014; Tuck, McKenzie, & McCoy, 2014). We now understand that settler colonialism to be "a persistent social and political formation in which newcomers/colonizers/settlers come to a place, claim it as their own, and do whatever it takes to disappear the Indigenous peoples that are there" (Arvin, Tuck, & Morrill, 2013, p. 12). To many Indigenous peoples, land is the source of knowledge, responsive and alive; yet to the colonizers, land is an item of property, a commodity to own, full of resources to use and sell. Eurocentric understandings based on the human domination of Nature have literally paved the way for urban sprawl across our planet- local people are violently removed and/or displaced; ecologies are razed; concrete is poured; and cities grown. For a vast majority of people living in urban communities, water simply comes from the faucet, with little or no understanding of local water cycles involved. In the urban environment, people have to go out of their normal, daily
routines to catch a glimpse of the local "natural world" to see how the land, water, flora and fauna support life in the places they consider home.

This is true in my home community of Laredo, Texas. There is evidence of continuous habitation along the banks of our river for several thousands of years (Maestas, 2003; Sansom, 2008). However, for many Laredoans, our rich inheritance of Indigenous river knowledges and stories is not common knowledge. Similar to the way that in particularly dry years, the water of the Rio Grande/Rio Bravo does not reach the Gulf of Mexico. In these particularly fraught generations, the intellectual traditions of our ancestral waters and lands have not reached many of the younger people in our community. The Rio Grande/Rio Bravo\textsuperscript{13} is our only source of potable water, and in our curve of the river, surrounded by the arid landscape, access to potable water has always ensured survival. In 1848, the signing of the Treaty of Guadalupe Hidalgo formalized a US Mexico colonial system of land and water dispossession (Hernandez, 2001; Martinez, 2012; Menchaca, 1993), making \textit{our river} \textit{their} international border\textsuperscript{14}.

Not only did the border permanently disrupt the local community and ecology that had grown on both sides of the river, it also changed how locals identified themselves in relation to the land, to the river, and to each other. For many, we know our Indigenous relatives, but systemically, we have been de-Indigenized through violence, systemic assimilation, and tricky census categories (Menchaca, \textsuperscript{______________}

\textsuperscript{13} The river is named differently on each side of the border, thus, Rio Grande/Rio Bravo is a literal representation of the river split by the border line. For residents, the names are interchangeable. I write both to remind myself to think like a Laredoan.

\textsuperscript{14} \textit{Our}, referring to Indigenous peoples for whom the greater area is ancestral territory, and \textit{their}, referring to the US and Mexico as colonial entities.
However, the Indigenous knowledge has survived, and our elders remember.

The occupation of Rio Grande/Rio Bravo as an international border has created a whole new set of meanings and implications with regards to both the river and water in the region. These meanings have shifted dramatically over time, most noticeably in how the mainstream media in the United States has sensationalized depictions of border life. Further complicating the tension for border communities is the ongoing militarized occupation by the US Department of Homeland Security in response to both the "war on terror" and "war on drugs" (Fregoso, 2007; Saldaña-Portillo, 2017). The uniformed and heavily-armed agents have altered the landscape not only by their physical presence, but also by the heightened tension, and psychological dominance that permeate all aspects of daily life. For the locals who live in my community, the presence of armored vehicles and machine guns in public spaces makes it easy to forget that our life-giving ancestral river is immediately close by.

However, Laredo/Nuevo Laredo community members understand the river, the land, and themselves differently than most mainstream depictions of border life. In the last 40 years or so, within my lifetime, I have witnessed a change in how we know, live with, and talk about the Rio Grande/Rio Bravo in my community. Elders tell stories of when the river used to bring the community together, before border politics and the US Department of Homeland Security split our community into two distinct halves. While there are relatively few stories that exclusively focus on the Rio Grande/Rio Bravo, the river is ever-present in
conversations about daily community life. Collective memory of the river has shaped peoples' bodies, the landscapes, and the ongoing daily practices of the community (Riaño-Alcalá & Baines, 2011). The influence and importance of the river permeates all life here, even if the younger generations are unaware.

In spite of the globalized Eurocentric worldview of Man dominating Nature, Indigenous and land-based knowledges have survived in the collective memories of many peoples who continue to live near/in/on/with their ancestral territories (LaDuke, 1994; Maestas, 2003; Martinez, 1998; Ybarra, 2009). Therefore, this project focuses on recovering the Indigenous knowledges of the Rio Grande/Rio Bravo that have survived in the collective memory of my community of Laredo, Texas. Much of this cultural knowledge is shared informally, through being on the land. These traditions are often tacit, built into the local culture, and as such, may be invisible to a person not familiar with the community and/or landscape.

The three major areas of inquiry are the relationships between the people, the land, and water, as seen in Figure 2: Concept Map Guiding the Study. Each of the three areas of inquiry seem to offer insight independently of the other areas, but also suggest that some significance will be co-constructed in the overlap of areas of inquiry: the relationship between people and water, between water and the land, between land and the people, and in the overlap of all three. Drawn as intersecting circles, the areas of inquiry are further contextualized when understood within the context of the Rio Grande/Rio Bravo in the specific geographic location of south Texas, and/or Laredo/Nuevo Laredo.
The geographical context can be seen in Figure 3: Watershed of the Rio Grande/Rio Bravo, which shows the footprint of the river system, as it extends into both Mexico and the US, including the smaller rivers that join the waterway. Development of the concept map and geographical context helped to clarify the research questions, and also made immediately obvious the challenges of visually representing key decolonial/Indigenizing concepts. For example, I specifically was searching for a map that showed the river, not the border. The challenge was in locating an image\textsuperscript{15} that represented the river as a biological entity, mindful that each particular aesthetic choice prioritizes particular ways of seeing that are culturally-centric and embedded with values and ethics\textsuperscript{16}.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{concept_map.png}
\caption{Concept Map Guiding the Study}
\end{figure}

\textsuperscript{15} I did eventually create a few images of my own, later in the process.
\textsuperscript{16} Future work may include examining a Xicanx decolonial aesthetic in mapping practices.
Figure 3: Watershed of the Rio Grande/Rio Bravo

(Used with permission of the Texas Commission on Environmental Quality.)
1.3 Purpose

The purpose of the project is to understand the relationship between the community, river, and land, and to revitalize river and water knowledge as an intergenerational intellectual tradition. Community elders and knowledge keepers were invited to share their stories and knowledge about the Rio Grande/Rio Bravo, and to give witness of the changes that have occurred in their lifetimes. This project used a holistic approach to incorporate stories, testimonios, life histories, emplaced and embodied experiences to understand the many meanings of the Rio Grande/Rio Bravo to the community of Laredo/Nuevo Laredo. Community stories provided insight into how the river and the land have shaped how we understand ourselves as a community of diverse Indigenous peoples. The stories of our collective memory were then used as the basis of a river-based approach to pedagogy, as understood through the eyes of sixth-grade science teacher from and of the frontera community. This project intended:

- To document and understand the local relationships among the people, the land, and waters;
- To restore an intergenerational practice of traditional ecological knowledge, focusing on water and ecologies of the Rio Grande/Rio Bravo;
- To explore remembrance and restorying as approaches toward Indigenous revitalization in the context of ongoing colonization, environmental racism, and exploitation, which have impacted the peoples, the river, and the land.
1.4 Research Questions

This project asks the following questions:

1. How do Indigenous people who live along the Rio Grande/Rio Bravo understand and talk about the river?
2. What is the relationship of water to the people, in their lives, and in their communities?
3. How might these relationships inform a culturally-relevant and intergenerational pedagogy that shares Indigenous intellectual traditions of the Rio Grande/Rio Bravo? How might this pedagogy be shaped of/by/with/through the traditional knowledge of water?

1.5 Significance

Colonization is ongoing, including the multi-level, structural erasure, silencing, and displacement of Indigenous peoples and knowledges from the land. The greatest significance of this project lies in the timeliness of the focus:

- Our collective past: Many community elders and knowledge keepers are still with us, and remember when our Rio Grande/Rio Bravo was our sacred water, before the current era of colonial occupation; and
- Our collective future: More and more communities are moving toward culturally-centric educational practices to support their young learners, in spite of legal maneuvering to maintain the whitewashed status quo in education.

To understand the importance of the work, we must begin with a bit of context to situate how the Rio Grande/Rio Bravo is understood by mainstream US society.
Common portrayals of the Rio Grande/Rio Bravo in the dominant US media use the river primarily as a line to mark the division between us-versus-them, American-versus-Mexican, and first-world-versus-third-world (Campbell & Heyman, 2007; Elenes, 2002; Santa Ana, 2002). The two sides of the line are emphasized in news stories to suggest a binary, which aligns with Eurocentric and Cartesian thinking17. Ahistorical, oppositional thinking is applied to the people as easily as it is to the land, making assumptions about the communities using the terms Latina/o, Hispanic, and/or Mexican, problematically conflating race, ethnicity, geography, and linguistic abilities across multiple distinct populations (Santa Ana, 2002; Tabuenca-Cordoba, 2005). As a result, each of these terms has historically been used to erase or assimilate the various Indigenous peoples for whom the river is shared ancestral territory18. Furthermore, these misrepresentations are so often repeated, they are often assumed to be truths (Santa Ana, 2002; Torres & Mercado, 2006; Trofanenko, 2008), normalizing the historical and ongoing colonial dynamics, misconceptions, and political (settler) agendas in the greater borderland region (Irwin, 2013; Tabuena-Cordoba, 2005). The predominance of the white-supremacist colonial system has shaped acceptable categories of identity (Gross, 2003; Menchaca, 1993; Saldaña-Portillo, 2017), has erased Indigenous and/or ancestral names (Galindo, 2003; Mancias & Torres, 2015) and has been internalized through the generations under the threats of violence (Campbell & Heyman, 2007; Maestas, 2008).

17 By contrast, in Indigenous philosophy, the river would be considered as a system of relationships.
18 An expanded discussion of this appears in Chapter 2.
While many community members know their Indigenous ancestry, there may not be a cohesive cultural or linguistic community to which they belong.19

While dealing with stereotypes and racist microaggressions are certainly taxing on individuals, the implications of normalizing and internalizing the dominant, racialized system as a community are far-reaching. Decisions made by misinformed politicians dramatically impact the daily reality of everyone living in border communities, regardless of identity. Consider the following systemic policy-level decisions, and material reality that are the results:

- The US spends roughly $19 billion on border security, principally to manage the US Mexico border (Schneider, 2016), funding the US Border Patrol and US Immigration and Customs Enforcement Agencies, who employ more than 49,000 enforcement personnel (American Immigration Council, 2017).
- Even though the federal government has jurisdiction over the US Mexico border, the state of Texas spent an additional $800 million in the 2016-2017 budget to supplement border enforcement with Texas State Troopers, Texas Rangers, special agents of the Department of Public

19 An expanded discussion of this appears in Chapter 2.
Safety, Texas National Guard, and Texas State Game Wardens (Schneider, 2016).

- The cost of building the Trump Administration's border wall is estimated to be approximately $21.6 billion, which only accounts for initial construction, not including annual maintenance, personnel, or environmental remediation (Shabad, 2017).

For frontera residents living in border communities, homeland security has produced a daily, racially-charged, military occupation of the places we call home. Billions of dollars have been spent to occupy the US Mexico border with personnel, surveillance technology and the construction of a border wall by multiple levels of government, with little to no knowledge of relational ecologies nourished on both sides of the river, or interrelated peoples on both sides of the border. Our relationships to the river, the land, and each other as riverside communities are forever changed by the colonial apartheid structures, but the people have not forgotten that this current hegemonic occupation is not normal.

For much of the population of the southwest, who are of IndigenousMexicanAmerican\textsuperscript{20} descent, the politics of identity have always been historically dangerous (EagleWoman, 2008; Irwin, 2013; Montoya, 1994), and yet cultural traditions based in traditional knowledge have survived (Anzaldúa, 1999; Maestas, 2003; Tabuenca-Cordoba, 2005). Although individuals may choose to self-identify in many diverse ways (depending on the context and depending on

\textsuperscript{20} IndigenousMexicanAmerican is written as a run-on phrase to indicate the confluence of these identities.
who is asking) the stories, practices, songs, testimonies, and uses of language connect them as fronterizxs\textsuperscript{21} to the collective and blood memories of land-based cultures that predate colonization. In this way, this project seeks to reinvigorate the conversation around Indigenous knowledge, drawing strength from the connections to the ancestral intellectual traditions of the Rio Grande/Rio Bravo, not as a singular entity, but as a diverse and poly-vocal network of communities.

As an Indigenous scholar, part of my work is to recognize that "ecocide and ethnocide go hand in hand" (Peña, 1998, p. 14; Cannella & Manuelito, 2008). In other words, destruction of the land, and of traditional knowledge of the land, often occurs simultaneously with the destruction of culture, and the traditional knowledge embedded in that culture. The systemic violence of colonization can be seen in how both private and public lands are taken and occupied in the name of national security, and also in how our children are assimilated by Eurocentric educational institutions. The disappearance of Indigenous peoples, knowledge, and lands happens simultaneously in multiple ways in educational contexts, from the interpersonal, to the curricular, to the programmatic, and to the legal rights and structures upheld as dominant.

In public school classrooms across the nation, which include a growing population of Latinx children\textsuperscript{22}, mandated curricula standards normalize colonial worldviews and histories as the natural and inevitable outcome of human progress (Palacios, 2012). In Texas state history standards, Indigenous pre-

\textsuperscript{21} Borderland residents. Further discussion of this term is in Chapter 3.
\textsuperscript{22} They are generalized as Latinx students, but can also be understood to be of diverse Indigenous-to-the-Americas ancestries.
colonial civilizations are relegated to ancient histories (Diaz, 2014; Iasevol, 2017), are framed by the patriotic colonial mythology as inferior and barbaric (Godina, 2003; Maestas, 2003), or are altogether missing (Hernandes, 2005; Noboa, 2013). Indigenous Mesoamerican intellectual traditions are not considered foundational to the curriculum (Acosta, 2014; Godina, 2003), unless they assimilate (Montoya, 1994) or can be appropriated by (Calderón, 2014), and made palatable to (bells, 1992) the Whitestream norm. In this way, today’s youth are the targets of an ongoing ethnocide, as their right to learn the Indigenous knowledge that affirms their identity, inalienable human rights, and strengthens their connection to their ancestral territories are at risk.

One well-documented example of how education is often coopted for the purpose of colonization took place in 2010, when Republican lawmakers Tom Horne and John Huppenthal wrote legislation in Arizona targeting the removal of the Mexican-American Studies (MAS or Raza) Program at Tucson High School (Esquivel & Santa Cruz, 2010). Educator Curtis Acosta explains that because 88% of the student body was considered Latino/Hispanic and at-risk, the MAS program was designed to draw from Indigenous Mesoamerican epistemologies to "rehumanize the educational experience" (Acosta, 2014, p. 4; Godina, 2003). Pedagogical praxes were based on trust, authentic caring, and justice, so that education could move toward liberation in guiding students as critical and engaged community members (Acosta, 2014; Rodriguez, 2011; Romero, Arce, & Camarota, 2009). The documentary film Precious Knowledge (2011) explores the culturally-relevant pedagogies and remarkable success of the MAS program. In
the film, Horne goes on record describing (Toscano Villanueva, 2013) Studies as "divisive and unAmerican"23 (Khimm, 2010; McGinnis & Palos, 2011; McKechnie & Riechers, 2017; Shaheed, 2013). The lawmaker claimed that classes were radicalizing students, promoting racial animosity, and promoting the overthrow of the US government (Depenbrock, 2017; McKechnie & Riechers, 2011; Santa Cruz, 2010). In 2012, the bill was passed into law based on the mistaken notion that teaching the pre-colonial history of our country is damaging, extraneous, and confusing to students (Depenbrock, 2017; Khimm, 2010; Shaheed, 2013). In spite of their remarkable 93% high school graduation rate (Acosta, 2014; McKechnie & Riechers, 2017), the MAS program at Tucson High School was shut down in 2012 under the threat of the school losing all state funding (Kaleem, 2017; Santa Cruz, 2010). The students of Tucson High lost a significant, critical and culturally-relevant school program, and watched as teachers, student leaders, and supportive community members were marginalized in the years that followed the passing of the law (Depenbrock, 2017; McKechnie & Riechers, 2011).

In August of 2017, a federal appellate judge named A. Wallace Tashima sided with the students of Tucson, deciding that the law was discriminatory against the Mexican-American students in both enactment and enforcement, and also interfered with their Constitutional rights (Harris, 2017; Kaleem, 2017). While the legal victory is important, the media coverage of the original controversy was

23 Read the subtext as: because Mexicans are considered divisive and unAmerican.
widespread, reinforcing the association between the phrases, *un-American*\textsuperscript{24}, *ethnic chauvinism*\textsuperscript{25}, and *reverse racism*\textsuperscript{26}. Little has been done to correct these misconceptions about Mexican-American studies, or publically celebrate the success of ethnic studies courses in dramatically increasing retention and graduation rates for at-risk youth. In spite of this misdirected media attention, the outcomes are remarkable, inspiring the creation of educational programs based in Indigenous Mesoamerican intellectual traditions in cities such as El Paso, Texas, Phoenix, Arizona, and St. Paul, Minnesota (Ayala, 2014, Depenbrock, 2017, Hermosillo, 2013; Planas, 2013).

In 2013, a similar law was introduced in Texas by State Senator Dan Patrick, named SB1128, which would disqualify ethnic studies courses from counting as core history courses toward high school graduation requirements (Planas, 2013). Senator Patrick argued that there was enough representation of Latinos in K-12 curriculum, and that Latino history is not general Texas or US history (Hermosillo, 2013). SB1128 was left to die in the 83rd Legislature. Two years later, State Representative Rafael Anchia introduced an act to the 85 Legislature, advocating for the adoption of content-based curriculum standards for different ethnic studies courses. In other words, ethnic studies would be considered a valid elective, as long as the course adheres to the accepted structures decided by the State Board of Education. Again, Mexican American intellectual traditions, histories, and identities would only be allowed if it was

\textsuperscript{24} (Khimm, 2010; McGinnis & Palos, 2011; McKechnie & Riechers, 2011; Shaheed, 2013)  
\textsuperscript{25} (Fox News, 2010)  
\textsuperscript{26} (Ayala, 2014)
made palatable and gained the approval of the colonizing Eurocentric educational system.

Colonization also manifests in the form of educational curricular materials. Take, for example, the recent textbook entitled *Mexican American Heritage* submitted to the Texas State Board of Education (TSBOE) for adoption for the 2017-2018 school year. The text was written by Jaime Riddle and Valerie Angle, neither of whom are scholars of Mexican American studies. It was published by Cynthia Dunbar, of Momentum Instruction, a former member of the Texas State Board of Education, known for her far-right conservative criticisms of public education (Sáenz, 2016). According to Dunbar, Mexican American scholars, historians, or communities were not consulted in the development of the content in order to avoid bias (Oyeniyi, 2016). The resulting text was so inaccurate, it had the potential to do more harm than good to the Texas' growing majority of Mexican-American students.

In response, a group of academics and concerned community members joined to form the Responsible Ethnic Studies Textbook Coalition, to give the text a thorough critique. The coalition found the text full of factual errors, racial stereotypes, academic laziness, and cultural insensitivity (Michels, 2016, Sáenz, 2016), averaging three errors per page (Zelinski, 2016). Celia Moreno, speaking on behalf of Texas Latino Education Coalition (TLEC), explained,

> The textbook not only insults Mexican Americans, but also African Americans and other people of color. Every parent and taxpayer should take offense that such a poorly researched and written textbook would even be considered for use in Texas public schools” (Quinn, 2016).
The text was met with widespread protest from students, educators, and community members and was ultimately rejected by the TSBOE (Quinn, 2016). Communities across Texas continued to organize in support of accurate, relevant, respectful MAS curriculum.

Shortly thereafter, the Texas State Board of Education put out a new call for submissions for MAS textbook materials. Professor Tony Diaz helped to organize a team of scholars, committed educators and organizations to create a text called the *Mexican American Studies Toolkit*. In August of 2017, the TSBOE rejected the draft and requested revisions to the text, citing lack of critical thinking and interdisciplinarity in the social studies content (Iasevoli, 2017). An additional 100 pages of content were added to address all of the requested revisions, created through consultations with the Texas Education Association, professors and educators, and concerned community members. In spite of these efforts, the TSBOE rejected the text a second time in November of 2017. As the state that sets the standard for textbook adoptions across the country, Texas has strategically avoided legitimating or establishing standards for MAS. As such, Mexican American studies in the state of Texas are on hold indefinitely for lack of "satisfactory" textbook materials or clear curriculum standards (Diaz, 2017). In spite of the legal setback, demand for culturally-centric content and pedagogical practices has increased in the last few years to meet the needs of diverse student populations.

In each of these examples, we can see that the silencing, displacement, and erasure of Mesoamerican intellectual traditions are forms of violence...
intended to dehumanize and assimilate the growing population of Indigenous Mexican American youth. Education (or lack thereof) is one of the many ways in which colonization removes the people from the land, and land from the people. While the whitewashed colonial version of history may suggest the spontaneous emergence of Mexicans and Americans as distinct peoples on each side of the river, Indigenous peoples and knowledges have survived in relation to the land, river, and across the greater landscape, as emplaced witnesses throughout time.

This project actively problematizes the dominant generalizations of a Hispanic/Latino/Spanish south Texas, and rejects the white-supremacist colonial occupation of the Indigenous communities in the diverse cultural overlap of the Texas Mexico borderlands. The work honors the embodied and emplaced Indigenous borderland perspectives that have survived in the collective memories of community elders as an active practice of decolonizing/Indigenizing the Rio Grande/Rio Bravo. The revitalization of collective memory creates a process of recognition and restoration that moves toward community renewal. Education, framed as intergenerational pedagogy, works in the service of communities, and honors the particular strengths and challenges of holistic learners, embedded in various layers of context. Historically, the sharing of land-based knowledges have ensured the survival of Indigenous peoples for centuries, directly shaping Indigenous epistemologies, language development, and cultural practices creating a spiritual landscape across south Texas (Gonzales, 2012; Maestas, 2003). Similarly, the sharing of land- and river-based
knowledges has the potential to ensure the continued survival of Indigenous fronterizx peoples.

The significance of the work is also deeply personal. It is the culmination of my caminata in the form of a love letter to my home community. As an Indigenous educator/scholar/fronteriza, I am reclaiming and revitalizing my own ancestral knowledge, fully aware of the nuance, texture, and richness that may be invisible to non-Laredoans. In ceremony, we hear the phrase por todas mis relaciones, for all my relations. For me, this dissertation project is the active engagement of traditional teachings por todos mis relaciones as a pedagogical praxis, inclusive of beings, land, sacred waters, and other relations I consider my ancestral home. Relatives, nipaqui nimixmati: it brings joy to see your faces and know your hearts.

1.6 Positionality

This dissertation project builds upon 40 years of knowing the river my ancestral home, and visiting when I visit my relatives in Laredo. Academically, I've studied different aspects of the river, land, and community for much of the past 20 years. My first interest in the Rio Grande/Rio Bravo emerged during an undergraduate internship at Texas A&M International University, when I had the opportunity to work in a toxicology lab in the summer of 1997. I spent much of the summer visiting different sites along the riverbanks, collecting water and sediment samples, and developing both biological and chemical experiments to measure the health of the river’s ecology. My culminating paper focused on the abundance of maquiladoras along the river, presence of heavy metals in the
wastewaters of such operations, and the longitudinal effects on ecological and public health.

The combination of dangerous, low-wage manufacturing jobs and lax environmental law enforcement along the border has made the entire region susceptible to serious environmental injustices (Grineski & Collins, 2010; Johnson & Niemeyer, 2008) and human rights abuses. As a result, water-borne illnesses (gastrointestinal illness, cholera) as well as water-related illnesses (malaria, dengue) are significantly higher along the border than in the rest of Texas, as are respiratory conditions, neurological disorders, and skin irritations related to direct contact with industrial tailings (Grineski & Collins, 2010; Muñoz, Muñoz, & Arcak, 2010). In communities all along the Rio Grande, healthy, potable water is available to those who can afford it, but devastatingly unavailable to many who cannot (Muñoz, 2010). As a fronteriza, the rationale for critical work was personal- it is not just data connected to a notion of danger. My community is directly impacted by these hazards, and my family drinks the water of the Rio Grande/Rio Bravo.

My Master’s thesis documented the work of a project called The Texas A&M University Water Project, which was an interdisciplinary collaboration between educators, artists, engineers, and community advocates in the service of community members with limited access to potable water. Collaborators met
weekly for the purpose of increasing access to potable water in colonias\textsuperscript{27} along the Rio Grande/Rio Bravo (Muñoz, 2010). Some weeks, we would share knowledge from our respective fields, other weeks, we’d build various types of water filters, working with non-proprietary, open-source, appropriate technology that could be implemented in rural communities immediately. I theorized a non-formal learning framework, which I called critical environmental justice, as the lens with which to understand the content, context, and collaborative learning process specific to the work of The TAMU Water Project.

In the research process for my Master’s thesis, I found that academic literatures in the areas of colonias, rural public health, and water accessibility tended to focus on objective, observable, text-based, intellectualized understandings of water, often devoid of context, relationships, and other ways that people learn and understand their world. In retrospect, one of the limitations of my Master’s thesis was that I examined the economic, legal, political, and rights-based approaches to the global water disparities, to the exclusion of other ways of knowing water. While academically sound, the thesis turned toward documenting and theorizing one case study as an example of critical environmental justice, which spoke to academia, but not to the border itself. The theoretical framework lacked borderland voices, borderland relationships, and borderland ways of knowing, forcing the borderland case study to fit within the narrow confines of Eurocentric academic expectations.

\textsuperscript{27} Colonias are rural communities along the border with varying access to such things as running water, electricity, and paved roads. Residents are usually American citizens experiencing intergenerational economic disadvantage.
My doctoral research is still concerned with water in/of/along the frontera.28 This project holistically recognizes people, and their cultural and spiritual practices as a part of their ecological system, rather than separate from it (LaDuke, 1994; Peña, 2005), myself included. I am writing from home. I am engaging with and including my relatives. I am including teachings from my own ceremonial practices, inviting my ceremonial elders to witness my project. I am intentionally including deeply personal aspects of my life as an intervention that explicitly challenges the normalized and default Eurocentric approaches to research, moving away from thinking about water toward feeling, perceiving, and being-in-relation to water.

My own family history includes the Indigenous and colonial histories of Laredo, Texas. In the words of Patricia Gonzales, "I write as an ancestor to the future" (2012, p. 12). In one single sentence, Gonzales captures my own sense of responsibility in the service of my community. I write to remind myself of the teachings, past and present, to honor the elders while they are still with us. I write to revitalize the traditional knowledges of waters that have nourished my community since time immemorial. I write to witness the river. I write to disrupt the national narrative of border life. Most importantly, I write to remember and share with my daughter, who may never know our ancestral waters first-hand.

To prepare myself for the responsibility of this work, I must be a good relation to the communities that nurture my learning spirit. By honoring my

28 I am intentionally switching from borderland to frontera here. While borderlands is a term that carries many expectations of academic ways of knowing, frontera/o/x is a term that prioritizes embodied and emplaced frontera ways of knowing to a frontera audience.
community relations and recognizing the multiple ways of knowing and being-in-the-world, my positionality necessitates that I consider knowledges pluralistically and holistically, enacting research that reciprocates in the service of my communities. As such, research entails braiding, bridging, and/or recognizing the irreconcilable aspects in the process of coming to know, and navigating the concentric and intersecting contexts as an act of resistance against marginalization and erasure.

The process of restorying is hopeful. It has the potential to re-define, re-create, and re-vitalize the ancestral understandings of the frontera as a network of interrelated relational ecologies. While the process(es) of colonization cannot be reversed, reactivating traditional ecological knowledges of the Rio Grande/Rio Bravo can rejuvenate our responsibilities to our local relational ecologies, creating a critical mass of engaged, diverse fronterizxs inspired to fight for the health and recuperation of our river and our communities. Reconceptualized in this way, education is repurposed from a system that perpetuates the hegemony of colonization and Indigenous erasure, into a tool of decolonization and Indigenization focused on our collective well-being and futures.

### 1.7 Delimitations

This project will not focus on demographics to shape the concepts of Indigenous identity. This project is not intended as a bid for federal recognition. This project is not intended to suggest a water solution for the thirsty world population. This project is not an exploration of sacred practices or places. This project will not focus on, or generalize across, the greater borderland region.
1.8 Assumptions

One of the blind spots built into the project is the fact that it was thought, completed, and represented in English and Spanish, both of which are colonial languages. The literature woven throughout the text is composed almost entirely of English-written resources, authored by both US and Canadian scholars, as these are the expected bodies of literature reflecting my education in the U.S. and in Canada. I moved forward with the assumption that the combination of English and Spanish would be able to adequately convey Indigenous epistemology. Neither I, nor any of the community participants is fluent in any Indigenous language to the point of thinking in that language. While some of the analysis touches on the fact that the project was not conceived in one of Texas' Indigenous languages such as Carrizo, Nahuatl, Coahuitlca, or Nde', it was necessary to start somewhere. Perhaps in future work, the project can be reimagined in an Indigenous language.

1.9 Organization of the Thesis

In place of a formal literature review chapter, important concepts are defined in the glossary, and pertinent literature has been woven throughout the text, including aspects of discussion and critique. This approach honors the community testimonios as the primary source of knowing, such that academic references and my own commentaries work to uphold and create approaches for understanding without dominating as authoritative voices in the thesis text.

29 While there are a few Native language speakers, the level of proficiency is thinking in English or Spanish and translating it into the Native language.
Chapter 2: Introduction to the Land, River, and Community provides an overview of the Laredo/Nuevo Laredo community, building contexts for understanding the irreconcilable dynamics of living on the banks of a river that is also an international border. The chapter is conversational, and weaves an assemblage of history, maps, photos, and testimonies from community members as a gentle introduction to the nuance and texture that emerge from the relationships between the land, river, and people in my community.

Chapter 3 is called An Indigenous Fronterizx Cosmography as Theoretical Framework. In this chapter, I present an Indigenous Fronterizx Cosmography as the theoretical foundation, detailing the braid of Indigenous epistemologies, Xicanx ontologies, and Borderland positionalities that are crucial for understanding life along the frontera. The term cosmography refers to the process of uncovering the ancestral landscapes where our community stories and testimonios were lived, and how these landmarks of our collective memory map places in our oral intellectual traditions.

Chapter 4: Fronterawork Methodology uses pedagogy-making as a guide for research design. As a person with deep roots in the Laredo/Nuevo Laredo community, I outlined the culturally-based concepts and respectful community protocols used to complete the project, cognizant of the political, racial, and environmental implications of asking an arguably vulnerable community to go on the record and give testimonios of our river/border home.

In Chapter 5: Our Teachings of the Rio Grande/Rio Bravo, I share how community elders talk about the Rio Grande/Rio Bravo. The excerpts from their
testimonios are organized into streams of thought, using the behavior of a wide, fast-moving river to describe the ways that their stories flow in and out of River-as-Water Thinking and River-as-Border Thinking. The testimonios of our community elders and knowledge-keepers are honored as the fundamental source of knowledge, out of which the findings and pedagogy emerge.

Chapter 6: Metacognitive Considerations, offers an analysis of how our local understanding of the Rio Grande/Rio Bravo has changed over time. Often, community participants responded to the question of changes over time through stories, offering their lived experiences comparing river memories with border memories. This chapter examines the timeliness of remembering the River-as-Water, and clarifies the teachings our elders wish to share with young learners.

As a fronteriza/educator/activist/scholar/granddaughter/daughter/mother, Chapter 7: An Indigenous Fronterizx Pedagogy of Water details my pedagogical response to the words of my elders. My pedagogy-making and the resulting pedagogy of water demonstrate the generation of new knowledges that embody, emplace, and enliven the ancestral knowledges that have survived in our collective memory as enduring Mesoamerican intellectual traditions.

In Chapter 8, the Conclusion chapter, I offer a concise review of the project, and elaborate upon the contributions of the project to land, river, community, and educational conversations, and offer concluding reflections.
Chapter 2: Introduction to the Land, River and Community

This project is based on collective remembering, sharing stories and testimonies, listening, and making connections between the land, river, and the Indigenous peoples who live in Laredo, Texas. Indigenous knowledge has survived in our collective memory in spite of the devastation of de-tribalization, official accounts of Indigenous extinction, and myriad ways that community members self-identify. Intentionally, this is not a (strictly) history chapter, nor is it a chapter intended to rely on colonial classifications of Indigenous identity. Instead, it is a manifestation of collective memory in the form of histories, maps, photos and stories arranged in conversation with each other to give shape to the Indigenous community and Indigenous knowledges that have survived.

Specifically, I started with a historical narrative, and wove the images, personal photos, and the voices of my community into it, as a way of making space for the embodied, holistic, emotional, and spiritual elements of collective remembering. In this chapter, we will meet a few of the community knowledge-keepers, through their direct quotes, as they narrate community histories, both shared and personal. Understandably, the process is creative, intuitive, and shaped by contexts of my community participants, and will serve to guide our way through the memoryscape (Riaño-Alcalá & Baines, 2011) of Laredo, Texas.

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30 As will be discussed in Chapter 4: Fronterawork Methodology, all participants self-identified as having Indigenous ancestry, though some were more comfortable with Mexican, Mexican-American, American, Indigenous, Carrizo, Coahuilteco, Apache, Hispanic, Latina/o or other such designation.
31 The fraught nature of imposed colonial systems of identity will be discussed in Chapter 3.
32 A closer examination of participant testimonios will be examined in Chapter 5: Our Teachings.
2.1 Shared Ancestral Territories

I was taught to begin with the ancestral languages so that the land understands when we call it by name. In Carrizo/Comecrudo language, the land is called Somi’ Sek (Mancias & Torres, 2015). In English, we call most of the territory Texas. Told in its long form, the history of Texas begins with Native peoples, and their relationships to the land. The particular ecosystems found across the territory include arid scrub lands bounded by the Great Plains to the north, the Gulf Coast and piney forests to the east, the Sierra Madre Occidental mountains to the south, and the Chihuahuan desert to the west. These ecoregions dictated the cultural practices of the many Native peoples, who lived in familial bands and strategically moved according to seasonal pressures (Galindo, 2003; Maestas, 2003; Swanton, 1940). Resources such as chert, pecans, white-tailed deer, and bison were traded extensively, creating elaborate networks that included established community meeting areas connected by well-worn routes, passed down through the generations. Familial bands lived, travelled, made alliances, waged wars, and lived in complex societies for thousands of years before the arrival of the European colonists. Of critical importance for the purpose of this study is the notion that Mesoamerican intellectual traditions were based on many generations of being-in-relation with the land, not as a magically imbued Native power, but as the accumulation of thousands of years of intergenerational land-based knowledge.
2.2 Colonial Encounters

The three Eurocentric concepts that fueled colonization of the Americas were the Doctrine of Discovery\textsuperscript{33}, Terra Nullius\textsuperscript{34}, and Manifest Destiny\textsuperscript{35}, used in combination to claim a *divine right* over the *unused, empty* land occupied by *heathen* and *uncivil* people (Arvin, Tuck, & Morrill, 2013; Calderón, 2014; UN Permanent Forum on Indigenous Issues, 2012). Although the land was neither empty nor unused, the United States of America was built on these concepts to dehumanize Indigenous peoples, constructing a framework of European racial superiority (Calderón, 2014; Rodríguez Diaz, 2003), gender violence (Arvin, Tuck, & Morrill, 2013; Gaspar de Alba & Guzman, 2010; Smith, 2011), and entitlement, wrapped in religious rhetoric. As legal precedents, these three concepts have been invoked repeatedly in the last 500 years to strip rights and protections from Indigenous peoples for the economic gain of various settler societies (Arvin, Tuck, & Morrill, 2013; Hernandez, 2001), and continue to be used as precedents to this day (*City of Sherrill v Oneida Indian Nation of New York, 2005, conflict at Standing Rock over the Dakota Access Pipeline*).

Upon arriving in Texas, many of the Spanish explorers wrote detailed accounts of the people and landscape, trying to make sense of what they were seeing through Eurocentric eyes to justify their endeavors (Maestas, 2003).

\textsuperscript{33} Papal decree establishing Spain's exclusive rights to claiming the New World for the Catholic Church.
\textsuperscript{34} Latin for "No one's land", regarding land that has no known/recognized sovereign.
\textsuperscript{35} Colonial occupation from coast to coast as a divine American fate.
Figure 4: Ethnolinguistic Distribution of Native Texas Indians

(Used by permission of the University of Texas Libraries, The University of Texas at Austin.)
Missionaries also documented the systemic underreporting of the Indigenous population (Maestas, 2003; Menchaca, 1993; Galindo, 2003). Records were managed to fit the dictates of the church. Indigenous peoples were diverse and migratory, and the Spanish authors would often conflate identifiers such as linguistic groups, self-identifying band/nation names, and names given by neighboring Indigenous peoples (imposed identifiers). Records were often written with the expectation that all Indigenous peoples would be converted to Christianity, or become extinct, so the finer details distinguishing the various Indigenous peoples were not well documented.

For example, missionaries of the 1500s studied the linguistic families of Texas, including the Muskhoğean, Caddoan, Athapascan, Uto-Aztecan, and Mayan speaking peoples, as mapped in Figure 4: Ethnolinguistic Distribution of Native Texas Indians. Specific vocabularies were also recorded for the Coahuilteco-, Comecrudo-, Cotoname-, Karankawa-, Atakapa-, Tamaulipecan-, and Janambrian-speaking peoples (Swanton, 1940). Similarly, the glossaries of many Indigenous languages are confusing, as some were heard and documented with Spanish-attuned ears in Spanish phonemes, while others were heard and documented with English-attuned ears in English phonemes. One example of this is the place name of the San Antonio sacred springs, which is sometimes spelled Yanaguana (Spanish) or Yanawena (English), though neither quite captures the soft sounds spoken by locals who speak Coahuiltecan, from

36 This list of vocabularies does not correspond to the list of linguistic families, each is discussed in separate reference materials.
which the name originates. In spite of the challenges, the diversity of linguistic characteristics offer evidence of the shared knowledge and interdependence of Indigenous peoples of Texas, as well as the etymological roots of many words and concepts that are embedded in the colonial languages we use today.

Consider also that linguistic families and language names are not the same as the names that Indigenous peoples called themselves, and that any particular band of people likely spoke more than one language. Self-identifying band/nation names documented across south Texas included the Pajalates, Orejones, Pacaos, Pacoas, Tilijayas, Alasapas, Pausanes, Phihuiques, Borrados, Sanipaos, Chayopines, Manos de Perro, Parchaque, Mescaleros, Yoricas, Chomes, Alachomes, Pamais, and Payayas (Swanton, 1940). Bands/nations specific to the Lower Rio Grande Valley documented between 1790 and 1818 include the Malagueros, Garzas, Zalayas, Aguichacas, Anda el Camino, Chinitos, Cotonames, Cueros Quemados, Pajaritos, the Eastern and Western Carrizos, and Guajolotes (Galindo, 2003). Surely, the diversity of Indigenous peoples in the area of south Texas must also represent the populations of migratory, interdependent familial bands/nations of Indigenous peoples both south of the river, and also along its length.

When colonization happened in other territories, missionaries often found cohesive communities of Indigenous peoples, sharing the same culture, language, and knowledge of the local ecosystem. Whereas, in the greater region nourished by the Rio Grande/Rio Bravo, the smaller community size, diversity of languages, diversity of cultures, and diversity of land-based ecological
knowledge was easier for the colonizers to erase, displace, and assimilate. This historical context illuminates how so many fronterizxs know they have Indigenous ancestry, but may or may not know with certainty which band/nation(s) their roots connect to, much less whether their Indigenous ancestry is considered recognized at the state or federal levels of the colonial system.

The history that was recorded by the colonizers simply reinforced their claims to a *divine right* over the *empty land* occupied by *heathen* and *uncivil* people, as was originally put forth by the Doctrine of Discovery, *Terra Nullius*, and Manifest Destiny. The circular argument was used to justify all manner of atrocities committed against Indigenous peoples. Dehumanizing tropes and racist stereotypes endure to this day, and are repeated in countless Texas history books and monuments that uphold the colonial mythology of white supremacy over the primitive Native people in the empty land (Calderón, 2014; Romero, 2002; Serrano Nájera, 2014). Colonization devastated the rich archives of Mesoamerican intellectual traditions, impacting the knowledges, peoples, and cultural connections to/with the land. However, Maestas (2003) reminds us that for Indigenous people of Mexican descent, Native American identity is learned and shared through family oral traditions and cultural practices. We learn from our elders, who remember the teachings from their elders. Indigeneity does not have to be defined by the colonial system.
2.3 Surviving the Six (Seven) Flags

In Texas history, the phrase *six flags of Texas*\(^{37}\) refers to eight periods\(^{38}\) of colonial occupation beginning in 1519, during which all of part of the state we know today was claimed by a colonial empire. Laredo is the only community with the history of seven flags\(^ {39}\), as its location on the Rio Bravo was considered strategically ideal for settlement (Handbook of Texas Online, & Spain, Jr., 2010), chosen because the bend in the river created a low-water seasonal passage across the treacherous river (Adams, 2008). As we can see in Figure 5: Spanish Missions in the 17th and 18th Centuries, the map depicts the overlap of Indigenous territories and colonial missions. This map is distinct in that it represents both Indigenous and settler populations simultaneously, defying the common map-making practices which depict Indigenous peoples of Texas as either ancient history, or as simply having vanished with the arrival of the Spanish. As a viewing audience, we can understand the tension and conflict that must have arose over the 300 plus years of Texas history, with each population understanding of the significance of the land differently.

\(^{37}\) Spain, France, Mexico, Republic of Texas, Confederate States of America, United States of America.

\(^{38}\) Spain (1519-1685); France (1685-1690); Spain (1690-1821); Mexico (1821-1836); Republic of Texas (1836-1845); United States of America (1845-1861); Confederate States of America. (1861-1865); and back into the USA (1865 until present) (Handbook of Texas Online, & Spain, Jr., 2010)

\(^{39}\) The Republic of the Rio Grande lasted from January to November of 1840.
Figure 5: Spanish Missions in the 17th and 18th Centuries

(Used by permission of the University of Texas Libraries, The University of Texas at Austin.)
When we listen to history as told by community knowledge-keepers, the focus is not on the colonial powers, but instead the many peoples who survived. Mr. Perez is one of our community knowledge-keepers whose personal research clarifies the connection between the local sacred springs, astronomy, and rock art. He shares his work at public lectures to teach locals of the rich Indigenous intellectual traditions connected to our local landscape. He explains,

*It’s these rich lands...even with the six flags that laid over Texas all those years, from Bexar county south to the Rio Grande River, the people remained the same. They never changed, never. I have a professor that I’m working [with]... she showed me how the geopolitical landscape changed and how in South Texas, [it’s] the same people, the same cultures, the same foods, the same demographics never changed. I think that that’s what helped to keep the cultures of South Texas intact because the same people [that have stayed].* (G. Perez, oral communication, June 5, 2015)

Interestingly, archaeological and anthropological studies support Mr. Perez’s observations: the population was relatively stable as the demographic labels and categories of identification changed throughout time. The social dynamics around race during the 1700s to early 1800s indicate that categories of racial classification were dynamic based on gender. Out-of-wedlock children were considered shameful to the church, and rather than document the generations of mestizo children descended from European settler men and the local Indigenous women, racial categories were adjusted. To avoid implicating anyone, marriage could make a woman who was india or mestiza into an española, in which case, any children would also be considered españoles (Galindo, 2003)\(^40\). Similarly, mestizos could serve in the Spanish or Mexican armies, gain the respect of the

\(^{40}\) These were designations in the Spanish colonial caste system, of which there were many terms to describe racial parentage and determine social standing in Spanish colonies.
community, be baptized, and earn the designation of español. In some records, Indigenous peoples gained social status by accepting a Christian name. Although recorded as an español, the title did not guarantee the same rights or privileges afforded to the white colonists. In this way, the census records systemically erased Indigenous peoples without assimilating them, leaving the people to stay on their land without any rights, privileges or protections by law.

In 1755, Laredo was founded by Don Tomas Sanchez de la Barrera as a Spanish colony, within the Mexican state of Coahuila y Tejas, under the third of its seven flags. Figure 6: Mexico at the Time of Laredo's Founding in 1755 uses color to indicate the location of the US Mexico international boundary. The particular location for the settlement was well-known and used by Indigenous peoples long before rediscovered by Spanish patrols, as evidenced in how the place was (re)named *Paso de los Indios* by Spanish colonists. The not-so-subtext of the name suggests there were Indigenous peoples living here, however, there is no indication on this map of the many Indigenous nations living across the territory. Typical of most historical maps of Texas, colonial history has been prioritized, and the many accounts that detail rights, histories, and records of Indigenous belonging here have been silenced, erased, and refused. In Texas, the erasure of Indigenous peoples was normalized very early in the colonial process, and permeated all aspects of the society, influencing in the ways that people today self-identify.
Figure 6: Mexico at the Time of Laredo's Founding in 1755
(Used by permission of the University of Texas Libraries, The University of Texas at Austin.)
2.4 In the Time of my Grandparents’ Grandparents

In the Laredo community, Indigenous ancestry is often mentioned in family stories, and with regard to grandparents or great-grandparents. Ms. Muñoz, a knowledge keeper, can trace parts of her family genealogy to the founding families of Laredo/Nuevo Laredo, and follow those roots to Europe as far back as the mid 1100s AD. In spite of extensive research, her Indigenous roots have been more elusive.

On my father’s side he had recollections, but they were very disjointed. He would talk about them in little bits and pieces. He would talk about how he knew that there was Native blood, but he always felt like it was a huge loss not having more information to share with his children about it. He knew that there had been a mix of the Spanish and Native people, but he was not able to say which Native [nation]. He would say that it was enough to know that we carried Indian blood and that we should celebrate it.

Recently I discovered a registro of death in 1779, reported by my 2nd great grandfather. He is described as Indigeno from Real de Catorce, San Luis Potosi. (N. Muñoz, oral communication, December 4, 2014)

Many of the community participants are detribalized, but speak of the Indigenous knowledge and cultural practices that connect them to the land and their Indigenous ancestry, though they are no longer connected to a particular Indigenous community or nation.

My grandfather was a big, big avid fisherman. He was a Native from one of the tribes in Mexico... And so, he lived off the land and took care of the land- that was my grandfather, Frank. Back then, I think my grandfather would go and be able tohone himself in when he was close to the river... He would teach us things along the riverbanks... He’d tell you to take out a cattail and he could do this thing with it, and how you can catch a certain fish with it, and so on. But the traditions, I’d say the last 30 years, maybe 40 or 50 years, have ceased because our riverbanks have become so modernized. (J. Gutierrez, oral communication, June 7, 2014)

In this short excerpt, we are able to glimpse the local ecological practices, and understand the way cultural knowledge is passed in regular everyday moments.
between family members. Mr. Gutiérrez, a knowledge keeper, goes on to explain how it is harder to teach his own children due to the many ways that the community and river have changed over time.

Personal photo albums also help families and communities remember details that are not recorded in the official archives. Mrs. Haynes-Ramirez, a career educator and knowledge keeper, has also done extensive genealogical research on her ancestry. She keeps her family photo albums accessible in her living room, sharing that today's generation of youth miss out on the stories shared when families look through their photo albums.

*My oldest brother Jorge teases us, he said, “Well we have 1/16th Native American through my great grandmother. She was [Carrizo]. We can own a casino.” But no, really, we do have Native roots. I will show you a picture of my grandmother.* (C. Haynes Ramirez, oral communication, May 22, 2015)

One interesting observation is the wide diversity of Indigenous ancestries, and the tendency of community members to name the band/nation or specific region where their family member came from an Indigenous community. Their ancestry is not mythologized or romanticized, and the lack of specific details is often expressed with shame and sadness. Other community members know more of the details of their heritage. Dr. Garza, a local elder, speaks Coahuilteca, and occasionally offers classes to the public. He shares,

*My father was from the Garza Band. When I was a kid and people found out I was Garza they always asked me, “From which Garzas are you?” It wasn’t until I grew up that I realized what they were asking me was, “There are 2 bands of Garza. From which band do you belong to?” So, being a smartass,*

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41 Across the southwest, many settler folks who discover and claim Native heritage, often speak of having discovered a grandmother who was a Cherokee, without any knowledge of or ties to a specific band or existing community of Cherokee nation.
I always said, “Well, I am from the good ones.” [laughing]

But there were 2 bands, one was from Mier, which is where my father was from and the other band was from Camargo. So, doing some research, I found out that our regional name was Miakan. Then somehow the name, and this probably from the Spaniards, got changed to Garza... I have done some research, usually, very few books mention the word Miakan. I have read that another name for the Miakan was Carrizo. A lot of the Carrizo Indians were called Garza or Carrizo by different groups in different areas. The ones that lived in the Laredo, the Laredo area were called the Carrizo and the ones that lived in Camargo were called Garza. (Dr. M. Garza, oral communication, June 1, 2015)

Indigeneity is not bound by the current border, as many of Texas first peoples moved freely across the territory. Oftentimes, family histories include Indigenous communities from both the US and Mexico, with similar stories of displacement or assimilation. Clearly, the confusion caused by differences in naming is not limited to the settlers.

For community members who knew they were Indigenous, the land-based knowledge they practiced was considered Indigenous knowledge. For other community members who are uncertain of their right to claim Indigenous identity, their land-based knowledge is often considered Mexican cultural knowledge. The difference is somewhat arbitrary as both bodies of knowledge are land-based traditions, however, in effect, the body of Indigenous intellectual traditions has been subdivided and delegitimized. In this way, the process of recovering Native or Indigenous identity must include an active engagement to recognize the practices of Mexican cultural knowledge that are actually land-based Indigenous knowledges passed through our/their families. Consider the following conversation between life-long friends, Ms. Ramirez, a community elder, and Ms. Campos, a community knowledge keeper. Both women are career educators,
who opted to participate in the oral history interview together, providing an
example of how a community can remember together:

Marissa: How much do you think is Indigenous knowledge, because of the
history and people who live here, and from the Indigenous peoples that
used to be here?

Ms. Ramirez: Right now? In the present time? I think is about...well, as far
as my Abuelita Filipita was concerned, it must have been about maybe 85%
Indigenous people and knowledge back then. Sí, porque, actually, the ones
that were living here were the Comanches, and Abuelita would say that
some were mean, and others were friendly. Y ella les decía que they would
make bows and arrows from the carrizo. También, plantas del río, y nos
decían como traeran las - how to carry the water in those things. [gesturing
over her shoulders]. They would show them how to do it. And how to gather
wood for the fire, firewood. Todo eso, they learned from the Indians.

Ms. Campos: My grandma was descended from an Indian, too ...¿Cómo se
llamaban? Los de la montaña de aquí-- donde iba por los Guaraches, los--

Ms. Ramirez: Taramara.

Ms. Campos: Taramara, la sierra Los Taramaras. So she was descended
from them. [baby screaming]

Ms. Ramirez: Actually, I think it was the Indians. Porque, mira, Don Tomás
Sánchez was a Spaniard, their customs were totally different from the
Indian ways.... Pero, who knew the land better than the Native peoples?
Nadie. ¿Verdad? Entonces they [the Spanish] learned everything from the
Native people here. (J. Ramirez, M. Campos, oral communication, May 15
2015)

Both talked about being Indigenous, but in this conversation, Ms. Ramirez and
Ms. Campos use the terms Native and Indian to refer to Indigenous communities
that they do not consider themselves a part of. This was a common feature
across many of the oral histories. Amongst ourselves, Indigenizing our thinking
includes recognizing our daily cultural practices rooted in land-based knowledges
as both Indigenous knowledges, and also Mexican cultural knowledge. The two
are not mutually exclusive, in spite of what was taught in Texas history classes in
school. Furthermore, reclaiming Indigenous knowledge and identity reaffirms what we have collectively known for generations—that as Indigenous Mexican American peoples, the southwest is our ancestral territory. Regardless of the current mainstream anti-Mexican political rhetoric, embedded in our stories as Indigenous peoples is the deep, intergenerational sense that we belong here\textsuperscript{42}.

2.5 The Border that Erased Our River On Maps

In 1848, the Treaty of Guadalupe Hidalgo was signed to end the Mexican American War, costing Mexico almost one million square miles of territory, including California, Arizona, New Mexico, as well as parts of Colorado, Utah, and Nevada. In Texas, this treaty shifted the international border from the Nueces River, south to the Rio Grande, in effect causing the border to jump over thousands of Indigenous Mexican and Tejano families\textsuperscript{43}. In its original form, the treaty was written with provisions for the Mexican citizens residing in the territory, consisting primarily of “pueblos de indios, genizaros, … and mestizos”\textsuperscript{44} (Urrieta, 2003, p. 160) to be granted American citizenship, and to retain the title to their lands. However, President James Polk omitted these articles upon ratification in 1848 (Hernandez, 2001) withholding citizenship on the basis of race (land ownership was a right granted only to white people at the time) (Menchaca, \textsuperscript{42} Familiar with the dangers of overgeneralizing (Alcoff, 1991), I am not speaking for everyone in Texas, but am voicing the specific intervention created by acts of reclaiming Indigenous histories, knowledges, and inheritances.\textsuperscript{43} Many local families, including my own, tell stories of how we did not cross the border, the border crossed us (Mireles, 2014; Cobos, 2012; Eagle Woman, 2008).\textsuperscript{44} Indian villages, detribalized Indians, and mixed race Indians, which are designations in the Spanish colonial casta system.
In effect, the US government nullified the Mexican system of land grants, and reclassified the territory as unclaimed (Hernandez, 2001), rendering Mexican and Indigenous descended peoples across the southwest landless exiles in their own ancestral territories. While the treaty is best known for dramatically increasing the geographic size of the United States, it did so by dispossessing many thousands of families of their homelands, and effectively systematizing the construction of an inferior non-citizen class and lasting legacy of oppression and racial hatred (Hernandez, 2001, Menchaca, 1993). The new location of the international border also split our community in half, into sister cities, such that Laredo, Texas, was now part of the US, while Nuevo Laredo, Tamaulipas, is part of Mexico.

Many community members tell stories to remember that they are us. Dr. Valle, a community historian, storyteller, and semi-retired professor, makes direct connections between our colonial history and our current border dynamic.

*Of all the border cities, Laredo has the highest concentration of ethnic Mexicans. We’ve got immigrants, legal and illegal, people who have visas and just don’t go back, and those of us who are born here. And I’ve spent my entire career as a college professor in 36 years, telling students that we’re the same people. ...If you look at a satellite photograph of Laredo, Nuevo Laredo, they look like one city with a river running through it. (Dr. C. Valle, oral communication, June 14, 2014)*

We can see the close proximity of the sister cities in Figure 7: Laredo, Texas, 1892, which positions the viewer over Nuevo Laredo, looking toward Laredo.
Figure 7: Laredo, Texas, 1892

(Used by permission of the University of Texas Libraries, The University of Texas at Austin.)
Figure 8: Standing in Laredo, Looking toward Nuevo Laredo

(Used by permission of the University of Texas Libraries, The University of Texas at Austin.)
This rendering visually captures what Dr. Valle suggests, that from above, the sister cities look like one single city with a not-so-wide river running through it. The curve of the river in the distance suggests a give and take between the sister cities, as the opposite river bank is never far from reach.

The relative proximity is further understood by the historical photograph seen in Figure 8: Standing in Laredo, Looking toward Nuevo Laredo, which shows the oldest of the four bridges that connect the two Laredos. The people standing in the foreground help us to understand the shortened visual perspective of the river that divides the two cities. From this viewpoint, with the two sandbars in the waterway, the distance between sides does not seem far, and from the photo, there is no evidence of the dangerous undercurrents that claim lives almost daily.

For many Laredoans and Nuevo Laredoans, the split between the cities did not happen in 1848 when our river became a border. It happened much more recently, in 1924, or about three generations ago, when locals could no longer cross the border freely, creating a permanent sense of loss and conflict. Many community participants shared that in their childhood, people could cross back and forth without papers, and without problems. Ms. Calderón Porter, a knowledge keeper, describes the reluctance of the interrelated binational community to stay on their side in accordance with increased US border security:

_As I recall, from the stories of my early childhood, when the division was made, those of my relatives that had to stay on this side, because their ranches and land and belongings were on this side, they were embarrassed. Texas was very rural and very backwards, and to live in Laredo was like... ugh, it was terrible. You wanted to live in Nuevo Laredo and be part of Mexico, because Mexico City was the center of culture,
Bellas Artes, all the European moda, the architecture. I mean, that was a hub of culture and world profile of graciousness, and here in Texas, in Laredo, was just a rural and dusty town. (M. E. Calderón Porter, oral communication, June 13, 2014)

The closing of the border also created undeniable privilege, wealth, and opportunities for those families who stayed on the US side, compared to those who chose the Mexican side. Several generations later, the US side continues to benefit from those privileges, which have become normalized as inherent characteristics of each side, rather than the outcome of an apartheid border system. In my own lifetime, I’ve witnessed a dramatic cultural shift away from families being able to build happy, healthy lives sharing time in both communities, to choosing a life entirely in the US.

One factor that pushes people north is the violence between drug cartels and military and law enforcement officers from both sides of the border, which has become very dangerous, especially for community members who commute across the river, or who have family who live in Nuevo Laredo, Tamaulipas. Ms. Muñoz, a local knowledge keeper, has lived most of her life in Nuevo Laredo, and began commuting to the US at age 15 for work. She shares the visible and invisible dangers of crossing the river/border:

*Hay mucha migración de este lado [a los E.U.] si, Hay mucha migración, pero de aquel lado [a México] no, pues pura gente mala. Nosotros ya sabemos. Casi la gente que vive hay en México, en Nuevo Laredo, ya sabemos que no nos podemos acercar al río. Y la gente que viene de fuera, ya de lejos, se acercan al río y los asaltan, los matan, los secuestran, pero son gente que no sabe. Nosotros que vivimos ahí, ya sabemos que no tenemos que ir.*45 (C. Muñoz, oral communication, June 14, 2014)

45 There is a lot of migration to this side [US side], yes. there is a lot of migration, but not to that side [to México], because [of] bad people. We already know. The people who live there in
In this testimonio, Ms. Muñoz shares her understanding of the Nuevo Laredo memoryscape, including the invisible dangers of physically getting close to the river. She knows the riverbanks are one of the places that people are forced to pay bribes or be violently assaulted. Or worse. (She shared a similar warning about riding in taxicabs after 10 pm.) In both cases, she shared her experience as a person who recognizes the real dangers of her life in Nuevo Laredo, which do not happen in Laredo. The dangers are hyperlocal, invisible to outsiders, and make obvious the way that the international border has made Laredoans outsiders to Nuevo Laredo. Even though we share the river, and history of the land, and are connected by water, the US side does not experience violence in the same way. Relative location renders many of the dangers invisible from the US side.

Similarly, Ms. Salas, an elder, shared that she lived much of her young life in Nuevo Laredo, moved to Laredo to raise her children, and has retired in Rio Bravo, a rural colonia outside of Laredo, where it is peaceful. She shared her concern for family members who still live across the river in Nuevo Laredo,

> En particular, hay mucha delincuencia en México, bastante delincuencia. Puros chamacos de 14, 15 años matando gente sin motivo y los secuestran, les hacen daños muy profundos. Entonces es muy difícil que vayas tú a México y digas que todo está bien y son mentiras. Por eso yo no he ido a ver a mi hermano. ¿Sabes dónde lo miro? ¡En Facebook!46 (J.

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46 In particular, there is a lot of crime in Mexico, a lot of crime. Many youngsters of 14, 15 years [old] killing people without motive, and kidnapping them. They inflict [horrible injuries]. So it is
In her testimonio, Ms. Salas describes having family who are relatively happy to live on the Nuevo Laredo side, because they know how to navigate the landscape. We can understand the notion of belonging no matter how bad it gets, which echoes the Indigenous survival strategies of previous eras of colonial occupation. Similarly, for many of the people living on the US side, the racist violence of lynchings or Jim Crow segregation of the US did not deter them in any way from the frontera. This is where they have always been, and where they belong, and comes from a deep knowing of one's place on/of the land and river, with or without official documents. Dr. Garza shared,

*I was born in 1943 and I was born in Falfurrias, Texas. I was born at home. They told me, because at that time, they didn’t allow non-white people in the hospital. So, I was born at home. (Dr. M. Garza, oral communication, June 1, 2015)*

For those elders born at home, systemic marginalization began at birth. Legal paperwork and forms of identification are difficult to procure, especially without a hospital-recorded birth certificate. Ms. Ramirez shared her recent frustration,

*Because you know, they really restricted the daily coming and going [across the border] when they wanted passports that you have to have get to cross. When I applied for a passport, Marta and I did, they sent me a whole bunch of forms, and they wanted to know all the names of my thirteen brothers and sisters, when they were born, where they were born, who was the doctor, or the treatments my mother was getting while she was pregnant...when they were baptized, which school they went to from first grade on, the grades they made from first grade until they graduated...Can you imagine?*

*I sent a really ugly letter to them [laughing]. And so, I told Marta “Mira, I*

very difficult for you to go to Mexico and say everything is fine. It is lies. That's why I have not gone to see my brother. Do you know where I see him? On Facebook!
don’t want to go across anyway, what for?” And back then it wasn’t as bad as it is now. I told Marta "I don’t care if I ever go." So then... the passport came in the mail [laughing]. (J. Ramirez, oral communication, May 15 2015)

Even with proper paperwork, Ms. Ramirez wasn't planning on leaving Laredo to go on a far-away adventure. She wanted to go to the Nuevo Laredo side of her own community. Yet, we hear her angry response at being treated as a second-class person, and being denied access to the places from her childhood. The daily racist indignities are systemic and have been going on for generations. Many community members recall stories not recorded in history books. Dr. Valle shares the story of his grandfather being drafted by the Carranza Government as a cavalryman, serving his time fighting Pancho Villa's troops, then fleeing Mexico during the Mexican Revolution\(^47\). He came to Laredo as a baker.

\[\text{The next morning the police officer offered to help him arrange his papers and immigrate with my mother and my grandmother. And one interesting thing about the immigration process is that people coming from Mexico were deloused. They were stripped naked and then they blew this insecticide powder on them, and my grandfather became very angry and he jumped over the line and had an argument with the US Immigration Officials, and convinced them that “Somos gente limpia!” “We are clean people! We don’t have lice!” But I guess it was standard operational procedures for everybody coming in from Mexico. The question has arisen: were other immigrants like on Ellis Island, or Galveston, or New Orleans, were they also deloused? I don’t know what the answer is. I have to research it. (Dr. C. Valle, oral communication, June 14, 2014)}\]

To this day, European-descended politicians and mainstream media often parrot a race-based entitlement to what is now the United States, by conflating Mexican Indigenous heritage with “illegal alien” immigration status. Rhetorical stereotypes repeated at the national level have served to flatten the real diversity

\(^{47}\) Future work may explore collective memory of the Mexican Revolution from the frontera, as roughly half of the community participants shared similar family stories.
of the borderlands, erasing the Indigenous ancestry of many communities. Yet, Maestas (2003) reminds us "Human migration back and forth across the Rio Grande has been an important aspect of local Indigenous life for thousands of years" (p. 1). Long before any colonial encounters, there was a rich diversity of Indigenous peoples for whom there were no colonial borders. While some families can name the genealogies of their Indigenous heritage, there are also traces of Indigenous knowledges in the social history, language, cultural practices, and ceremonial observances that have led to the establishment of south Texas as a Native sacred geography (Maestas, 2003). Understood broadly, this includes the specific knowledge of burial grounds, sacred medicines, headwaters and natural springs, which I understand as different aspects of the traditional ecological knowledge. In spite of shifting identities and politics of ongoing occupation, these stories and responsibilities survive in the collective memory of the people who continue to live in the sacred geography of south Texas. In particular, for me, the Memoriescape includes the uninterrupted horizon, as seen in Figure 9: Looking Out Over my Grandfather's Land. A non-local viewer may not see much, looking out over the arid landscape, but to me it is a land of ancestral and traditional ecological knowledge, stretching out in all directions.
Figure 9: Looking Out Over my Grandfather's Land
2.6 **Nuestro Río, Sagrado y Olvidado**

Mrs. Bernal Flores, a knowledge keeper and retired educator, now lives closer to the center of town, but she recalls the significance of the river to her childhood, growing up in her parents' home, a block and a half from the river.

‘The river? My dad used to take us to it. The river was the playground. I learned how to swim in the river. My dad would take us fishing...But my fondest [memory] is at night when I could hear the river, the sounds of the river. When I would go to sleep, I would leave the window open and I could hear it. Barely... but you could hear it. Everything it provided for us was the significance for us growing up there. (P. Bernal Flores, oral communication, June 8, 2014)

In Ms. Bernal Flores' story, we can understand a particular dynamic true for many of our community members living in/with/near the Rio Grande/Rio Bravo - our river is at once sacred and forgotten. It nourishes all life, provides us with everything we need to live in the arid landscape, yet it is no longer a part of daily life in the busy community that Laredo has become. The river has not changed. We, as a community, have. In listening to the elders, we not only remember the significance of the river, but also who we were/are as people of the river.

Mi papá también me decía, que cuando no había tiempo de ir a la iglesia, los bautizaban en el río. Un tío mío nació malito, era de noche y dijeron: "Para mañana no amanece. Pues a llevárnoslo al río". Y dijeron: "¿Por qué no lo bautizas con agua de los cántaros? No, porque el río va corriendo". Se fueron y lo bautizaron en el Río Grande. Le llamaban el Río Grande o Rio Bravo. También a veces era parte de la cultura, pues ahora ya nadie lo va hacer.49 (M. Campos, oral communication, May 15 2015)

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48 Our River, Sacred and Forgotten
49 My dad also told me that when there was no time to go to church, [people] were baptized in the river. An uncle of mine was born sick, and one night and they said: “Tomorrow morning, he won’t wake, so let’s take him to the river”. And they said: “Why do not you baptize him with water from the cisterns? No, because the river is running.” They baptized him in the Rio Grande. They called it the Rio Grande or Rio Bravo. Also, then, it was part of the culture, but now nobody can do that.
When Ms. Campos shares about the river, Spanish conveys a nuance that is missing from our English discussion. They took the child to baptize him in the river because it is running or moving water, and is considered alive, whereas still water is not moving, therefore not alive in the same way. Today, the river is not often spoken of with such love and respect, nor is the riverside a safe place for locals to go or spend time.

Mrs. de Llano, an elder with a keen memory at 93 years of age, remembers when water was delivered by barrileros, young men who would collect barrels of river water, back when the water was potable, and deliver to the families who needed water for drinking and household use.

*One of my uncles lived with us because he was orphaned at age 16. Daddy was the oldest and he said that 16 year old boy can't live by himself. So, they got and he lived with us. He never married. He used to distribute water to all the peoples from the Rio Grande.*

*They had pumps near the mine that he would go in and fill a big, big... it was like a drum, big drum of water and distribute to the people that didn’t have running water. Tia Maria had running water in her place, but we didn’t, because we lived out on the hill and they couldn’t pump water to that place.*

*So, a few people had running water, and those who didn’t had the barrileros. You know, to wash and everything. The only water we had, that came from the Rio Grande. Can you imagine? It was a village of about 300 people I would say. Most of those people worked either at the mine or in plantations. There were a lot of plantations. Even I remember that my sisters were picking tomatoes, picking whatever, but I was too little. (Z. de Llano, oral communication, June 14, 2014)*

We can see one such moment in Figure 10: A Barrilero Collecting Water from the Rio Grande/Rio Bravo. Today, there are also traces of what the landscape used
Figure 10: A Barrilero Collecting Water from the Rio Grande/Rio Bravo

(Used by permission of the University of Texas Libraries, The University of Texas at Austin.)
to look like encoded in the names of places that seem to mark different periods of colonial occupation. For example, Laredo has very old subdivisions named Plantation, and the major road north along the river is Mines Road, but time has erased all major landmarks of the past, as new businesses and developments have reshaped the community.

Some of the land-based knowledge we can learn through the stories is not general, but very specific to particular places in the river ecology. The Laredo/Nuevo Laredo region of the river is one of several critically endangered niches nurturing a rich biodiverse community of species not found anywhere else in the world. Many locals know the flora and fauna, and cultivate spiritual ways-of-knowing specific to the community and our local ecology. Mr. Muñoz, a knowledge keeper, has worked closely for the last 25 years with/in many of the residents of the colonias along length of the Rio Grande/Rio Bravo, shares,

_Tia Josefa in particular, Tia Josefa was my curandera. She knew to curar de susto, how to deliver babies she had all kind of herbs in either alcohol or vodka. I knew if it was in a vodka bottle it was stuff that we were going to be drinking. If it was in an alcohol bottle, I had to bring the alcohol, go buy her the alcohol sometimes it was a whole nickel for alcohol. It wasn’t for drinking, it was going to be something that you would rub._

_She would say, "Alright," she’d hand me a plant and she’d say, “See this plant?” Then she gave me a paper bag, and she’d say “fill this bag with this kind of plant.” Or she’d give me 2 plants and she’d say “Give me a bag of this and a bag of this.”_

_And I remember I asked "What are you going to use it for?" She goes “son para mis remedios.” Every once in a while she would tell me, what the remedio was and what it is going to be for. I wish I had remembered and I had asked more questions_

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50 Rural communities with varying degrees of access to resources such as sewage, paved roads, and/or electricity.

51 In Central American cultures, _susto_ is a soul-wrenching fright, caused by a physical or emotional trauma, in which the soul is believed to leave the body. It can be cured through physical, emotional, and spiritual treatments.
now. But in her kitchen there was a cupboard that she had with all the remedios. Some of these plants that I would get her they would be in like mason jars. No labels, she’d just do it. She just knew what was for what. So the plants that she would put in mason jars, was for making teas, the plant that she would put in vodka that was going in to mason jars with plants, would be for your drinking and whatever went into alcohol was going to be for rubbing. So, she had a bunch of them, a bunch of them. Like I said, I never knew what I was gathering, I just knew that I was helping her get some of her medicinal remedies. (O. Muñoz, oral communication, May 10, 2015)

As a child, Mr. Muñoz knew that some of the plants found on the riverbank were medicinal plants, which his auntie Josefa knew how to use to heal people. Mr. Muñoz’s story reminds us that the land, river, and people are not considered separate entities, but instead, an interconnected network of living beings in the particular ecologies along the Rio Grande/Rio Bravo. Understandably, the practice of traditional plant medicines is more widespread in communities that have free access to their medicinal plants. Along the Rio Grande/Rio Bravo, the increase of border security has made cultural practices more difficult and dangerous to continue, as our river ecology are the only natural habitats where these particular plant medicines grow.

### 2.7 Creating a Living Archive of Collective Memories

There are particular patterns that I notice as a local: conversations about people tend to focus on identity; and conversations about the land tend to focus on histories; while conversations about the river focus on the border. In this project, I am intentionally making space for other ways of understanding the people, land, and river that do not necessarily rely on familiar habits of mind. I want to actively decolonize/Indigenize my own thinking to cultivate and revitalize my own Indigenous ways of knowing. While there certainly well-known studies in which Indigenous authors write about identity (Anzaldúa, 1999; Yellow Bird, 1999; Menchaca, 1993), and land (Armstrong, 1998; Peña, 1998; Simpson, 2014), reclaiming one’s ancestral waters is much less common.
Stories of the Rio Grande/Rio Bravo tend to be inclusive of the land and people, and also tend to flow into all kinds of other topics. As such, river-specific knowledge requires a more holistic approach to listening, one that prioritizes the connections and interdependencies between the river, land, and people. While community members are eager to share what they know and have experienced in/near/of the Rio Grande/Rio Bravo, the process of platicando\textsuperscript{52} and sharing memories is often unpredictable. Our stories about our river are much more than a singular account of the events that took place. The process of storytelling and storylistening recognizes the community as a living archive (Riaño-Alcalá & Baines, 2011) building a diverse, polyvocal, collective memory of embodied and emplaced stories about the Rio Grande/Rio Bravo, as well as how we understand ourselves in relation to our river.

In Native and First Nations Studies, there is a growing body of literature focused on revitalizing traditional knowledges for Indigenous communities who have survived colonization with a collective, recognized identity. What is distinct about my community is that, although many of us know we have Indigenous ancestry, we are detribalized. The collective Indigenous identity has been interrupted, yet the proximity to our ancestral territories have allowed the Indigenous knowledges to survive in our oral traditions, daily cultural practices, and in our understandings of home. This project explores how collective memory can revitalize the Indigenous knowledge of the sacred geography of the Rio Grande/Rio Bravo. Meaning is made through the process of remembering how to be-in-relation to each other in/with our ancestral waters, revitalizing the living archive within the Indigenous fronterizo community.

\textsuperscript{52} An informal way of sharing stories in a group.
2.8 Summary

This chapter serves as an introduction to the land, river, and people of my community of Laredo/Nuevo Laredo, Texas. Rather than rely on descriptions to curate a timeline of historical events, I chose to take a restorying approach, weaving history, first-hand testimonios, maps, images, and my own understandings of my community. Each of these aspects of our collective memory document home, where we have been, how we got here, and what we have gained and lost along the way.

In the next chapter, I will articulate the theoretical framework of the project, which I have named an Indigenous Fronterizx Cosmography. The same way that collective memory expands on the practice of history to include a polyvocal, embodied and emplaced body of holistic knowledge, an Indigenous Fronterizx Cosmography works to expand on the practice of mapmaking to include a holistic, embodied and emplaced articulation of our community in relation to the universe. Whereas mapmaking results in a two-dimensional portrayal of landforms at a particular moment in time, a cosmography portrays the dynamics of geography, ecology, and the related cosmos from the perspective of Indigenous fronterizx community members. In this way, I will frame the project with appropriate academic literatures, and elaborate the ways-of-knowing, ways-of-being, positionalities and vocabularies that support the voices and knowledges of my community members.
Chapter 3: An Indigenous Fronterizx Cosmography as Theoretical Framework

Grandma was a seed saver. Every summer after harvest she left a few of the cornstalks and bean bushes standing in the garden, gathering dust. After the plants dried, she collected the crops and stripped the seeds from them…"La semilla es la memoria de la planta," she said, "crece con lo que vive en la tierra." (Peña, 1998, p. 27)

In a single sentence, Peña’s grandmother provides a metaphor for land-based, holistic ecologies, explaining how the land nurtures both the seed and intergenerational memory. While the seed is the plant’s memory, so, too, is the practice of seed-saving a traditional cultural memory, both intimately based on the relationships with the land that are passed from one generation to the next. Seed memories are just one example of the traditional, land-based, storied, and relational practices that are at the heart of this project.

In order to listen receptively and recognize the teachings with the appropriate frames of reference, it is necessary to clarify the theoretical framework, which I named an Indigenous Fronterizx Cosmography. I’ve chosen this name to indicate the emplaced collective memories embedded in the stories of the community knowledge keepers which effectively map the sacred landscape of our community in relation to the land, river, sister cities, and beyond. The Indigenous Fronterizo Cosmography details the perspective(s), location(s), and positionality(ies) of fronterizx lived experiences, immersed in the waters of the Rio Grande/Rio Bravo, which unifies and nourishes the

53 The seed is the plant's memory and grows with what lives in the soil.
54 By the same logic, the seed is the plant's premonition of the future, such that seeds are simultaneously past, present, and future, a proleptic being.
sister cities of Laredo/Nuevo Laredo. This is the first time such work has been articulated in this way, as a written pedagogy, though many of these ideas have been spoken, created, danced, and sung through the generations. To do so, I will begin from the widest context and work to elaborate on the intersections and overlaps of Indigenous ways of knowing, Xicanx ways of being, and finally, borderland positionalities. Each strand represents a specific aspect of knowing and being that arises from/with/in relation to the Rio Grande/Rio Bravo.

3.1 Indigenous Epistemologies – Ways of Knowing

Epistemology is the branch of philosophy that speaks to what it means to know, and the nature of how we come to know. In choosing to work from within an Indigenous epistemology, part of my responsibility is to honor a specific, regional, land-based way of knowing nurtured by the Rio Grande/Rio Bravo. However, there is no single body of knowledge known as the Indigenous epistemology from the US Mexico border. There are many epistemologies that have emerged along the river, as there are many combinations of peoples, languages, and ecological niches found along the nearly 1,954 mile length. The work of Anzaldúa (Anzaldúa, 1999; Keating, 2009) is often held as the benchmark for Chicana ways of knowing, to the point of eclipsing Indigenous fronterizx scholars. For many frontera communities, Indigenous epistemologies are encoded in the language, stories, and oral traditions, and strategically were kept hidden from colonial consumption. In some cases, the content is documented, but the significance or teachings, as they are understood by the local community members may

55 The phrase is intentionally written as one of many possibilities, as there are other Indigenous fronterizx communities, each with their own epistemological and cosmographical considerations.
not have been recorded. Mignolo (2011) reminds us that decolonial thinking resists universalizing our own epistemologies across different peoples, who may understand the universe, rooted in their own creation stories, to be different from our own. Instead, we can start with respectful approaches to working with and within Indigenous knowledge systems by making space for epistemological difference (Arvin, Tuck, & Morrill, 2013; Rios, 2012) amongst each other.

It is important to note that systems of knowledge are also sites of colonization, in which Eurocentric ways of knowing are by default regarded as dominant, prioritized, and deeply embedded within our contemporary colonial society. As this project has been conducted in English and Spanish, both colonial languages, we will begin with a gentle invitation that we actively shift our thinking and assumptions around knowledge and how we come to know. Rather than the specifics of what to think, which aligns with EuroWestern habits of binary right/wrong thinking, we will focus on approaches for understanding, as there are many ways of knowing, many ways of learning.

At the heart of all Indigenous knowledge systems is the idea that all life is connected and interrelated (Cajete, 2000; Gonzales, 2012; Lara, 2014). Knowledge is deeply tied to being and becoming aware of these inter- and intra-connections, building understandings of the dynamics of life from a holistic perspective (Rios, 2012; Villanueva, 2013). The term ecological is used in a broad sense, to collectively refer to the flora and fauna of specific places, connected by much more than physical biological logistics. Kuokkanen (2007) writes the "self and the world are not separate entities" (p. 41), but are connected by a "response-ability – that is, an ability to respond, to remain attuned to the world beyond oneself" (p. 39). Living beings are connected by their
response-ability. While easy to understand if we think of a bear, or tree, or insect responding to its natural surroundings, it offers a radical reconceptualization of the role of humans in our natural surroundings. All elements and beings within an ecosystem has response-ability. The term ecology can be repurposed by shifting to the phrase relational ecology, which suggests a non-hierarchical and non-anthropocentric orientation, inclusive of all beings and elements in-relation (read as a verb), connected by place and time. Similarly, prioritizing relationality shifts the phrase traditional ecological knowledge toward traditional ecological knowing, as both a practice (verb), and content (noun). We can understand that such knowing develops from being in-relation to the ecosystem over long periods of time (Tuck, McKenzie, & McCoy, 2014), "founded on spiritual-cultural instructions from ‘time immemorial’ and on generations of careful observation within an ecosystem of continuous residence" (LaDuke, 1994, p. 127). Evidence of the intergenerational land-based knowledges can be seen in the way that many creation stories include the creation of the land, water, and people within the same story, often portraying each as interdependent and inseparable of the others.

For Indigenous peoples, a relationship with the land serves as the foundation for all knowledge (Arvin, Tuck, & Morrill, 2013; Corntassel, Chaw-win-is, & T'lakwadzi, 2009). Indigenous languages emerged from the relationships to land (Armstrong, 1998) based on the embedded, contextual, relational ecologies communities live in, with, and around. Relational ecologies recognize people as a connected part of the complex network of beings, past, present, and future to and through land, and water. Within each Indigenous language is the specific, nuanced understanding of how all life is related within the specific ecology, extending through the embedded contexts, from the micro to
the cosmos. Nuance is lost when we think in English, using dominant Eurocentric frames of reference, requiring work not only to transliterate the concepts of relational ecologies and traditional ecological knowledges, but also to actively interpret the implications around teaching and learning of such concepts.

For example, we can consider the difference of what it would mean for Indigenous learners to be in-relation to Texas versus what it may mean for Estok' Gna (the people of the lower Rio Grande/Rio Bravo) to be in-relation to Somi’ Sek (the ancestral name of Texas). The language automatically encodes specific ways of knowing and understanding of the relationships between the peoples and the land. The first phrase is general, while the second captures the dynamic innerworkings of an intradependent relational universe distinct to the Carrizo language. Thus, rather than work to define a conceptual framework as the general theoretical basis of the project that continues to think with a colonial language in a dominant/other frame of reference, it became necessary to define a cosmography inclusive of the mix of languages spoken in the frontera, which specifically includes epistemological, ontological, and positionality elements.

Furthermore, humans are not simply a brain transported by a body within the ecology. Consider the processes of art-making or music-making, of what we call flow, or captivation, is when we are so engrossed in creation that we lose our sense of time. Flow is not an external event that happens to a passive body. Creating is a whole-being creative response. Gonzales writes “Knowledge is experienced with the whole of

56 Whereas translation works to convert the words of one language into another, transliteration works to effectively communicate the concepts or ideas that may differ from literal translations.
our being” (2012, p. xvii). Coming to know as a whole-being process. Many Indigenous scholar educators are theorizing whole-being ways of knowing (Archibald, 2008; Battiste, 2010; Rasmussen & Akulukjuk, 2009) and revitalizing the process of coming to know that our communities have relied on for centuries (Little Bear, 2009; Sanderson, 2008; Simpson, 2014; Urrieta, 2016). For example, the concept of holism (Archibald, 2008) describes the interrelated realms that together form a whole healthy person: the mind, body, heart, and spirit. Indigenous learning grows from being deeply embedded within community, within our local ecology, coming to know in a wide variety of ways, and understanding oneself as a being-in-relation (read as a noun-verb phrase). Indigenous ways of knowing provide tools for reframing, valuing, and prioritizing the intellectual traditions of our communities undervalued by dominant colonial society.

Epistemology, including what counts as valuable knowledge, directly shapes education. Whereas Eurocentric learning is predominantly based on defining, categorizing and reproducing the standardized book knowledge in institutions of learning, Indigenous learning is much more personal, relying on holistic, multi-modal, multi-sensory, ways of learning by doing, creating, engaging, conversing, and being in-relation to the world. The English language encodes knowledge as a noun for a learner to possess, which is different than in many Indigenous languages, in which knowing is held in verbs, such as creating, dancing, building, and exploring (Aikenhead & Ogawa, 2007; Cruikshank, 2005; Ronald, 2009). In this way, learning is a life-long response-ability entwined with living, and is unique to one’s abilities. Ultimately, the purpose of knowing is to cultivate each person’s divine gifts for the mutual enrichment of the community (Kuokkanen, 2007; Zibechi, quoted in Meyer & Maldonado, 2010). This, in
turn, points back to the notion that there are as many ways to learn as there are learners, who are response-able to their communities and ecologies. Similarly, there are as many ways to understand the relational place-based elements of Indigenous epistemologies, as each person in the community, with their unique positionality, may offer a different perspective of how they understand their context and universe.

Colonization, and the dispossession of people from their ancestral lands, was devastating at multiple levels: to the people, to the dynamics of relational ecologies, and also to the various Indigenous epistemologies. Many generations later, Indigenous peoples are working to recover and revive the land-based intellectual traditions as a way to enrich and prepare Indigenous learners in contemporary contexts. As Alfred and Corntassel remind us, "Land is life—our people must reconnect with the terrain and geography of their Indigenous heritage" (2005, p. 613). Doing so interrupts the intergenerational violence of colonization, reconnecting Indigenous peoples to their/our ancestors and wealth of land-based knowledge, in order to imagine a healthy future for their/our children.

Indigenous epistemologies prioritize land as central to Indigenous knowledge systems, creating a foundation for recognizing that the continuously-inhabited communities of the Rio Grande/Rio Bravo must also have a rich intellectual heritage of traditional ecological knowledge. In previous sections, we discussed the land that is now called Texas in terms of bioregions, in terms of how the landscape directly shaped Indigenous cultures, and in terms of Indigenous ways of knowing. In the next section, we will consider the ways that people live their ways of knowing by examining the circumstances that shape Xicanx ways of being.
3.2 Xicanx$^{57}$ Ontologies – Ways of Being

The Gringo, locked in the fiction of white superiority, seized complete political power, a stripping Indians and Mexicans of their land while their feet were still rooted in it. Con el destierro y el exilio fuimos desuñados, destroncados, destripados- we were jerked out by the roots, truncated, disemboweled, dispossessed, and separated from our identity and our history (Anzaldúa, 1999, p. 29-30).

In this section, we focus on the people with ancestral ties to the land who continued to live in their ancestral territories in spite of ongoing and violent settler occupation. While some communities were designated and protected as federally recognized Native American tribal nations, for many others, survival depended on a flexible sense of identity in response to the settlers, and a prevailing priority of staying on the land (Galindo, 2003; Maestas, 2003). Similar survival mechanisms can be seen today in how difficult it is to collect accurate demographic data from frontera communities (Campbell & Heyman, 2007). Answers shift based on whom is asking and/or listening.

Spanish colonizers and missionaries arrived to an Indigenous territory shared by hundreds of small tribal family communities. The original peoples lived with the land as they always had, drawing from the wealth of traditional ecological knowledge to survive each passing wave of violence, and systemic displacement. As the land was claimed by different colonial governments, the ancestral peoples were displaced, raped, infected, enslaved, and/or assimilated, at the will of the colonial forces, changing the population across the territory. Some Indigenous peoples kept their language and communities intact and fought for federal recognition, other communities did not. At its core, Xicanx ways of being make space for the wide range of experiences across the greater area,

$^{57}$ Gender neutral term for a person of Indigenous Mexican American heritage, not as a mixed race, or mestizo/a suggesting part Indigenous, but intentionally prioritizing a fully Indigenous person.
and honors the diversity of Indigenous ancestries in spite of, and in the face of ongoing settler colonial violences (intentionally plural).

However, staying on the land came at great cost. The easiest way for the colonial governments to solve the Indian problem was to convince the Indigenous peoples they were no longer Indigenous\textsuperscript{58}. In different eras, the colonial government, through the census and legal systems, has carefully curated the identity of people of Indigenous Mexican-descent (Galindo, 2003; Gross, 2003; Menchaca, 1993; Palacios, 2012), using such terms as:

- Indios (fluent in an Indigenous language, used pejoratively)
- Mestizas/os (mixed race, a term used to assimilate)
- Hispanic (categorizes all Spanish-speaking peoples)
- Latina/os (having geographic ties to all of Latin America)

In the progression of names imposed by colonial powers, Indigeneity has been erased bit by bit by over-generalizing widely different groups of peoples, to uphold the myth of Terra Nullius (empty, uninhabited land) for the purpose of taking the land out from under the original peoples. Each of these terms has consequences for individuals and communities that have shifted dramatically over time, in terms of who has legal rights and protections. Terminology changes, peoples are included or excluded by the terms stated in the law, and the general population finds ways to continue doing what it has

\textsuperscript{58} In the US today, the phrase \textit{paper genocide} is used to describe the systemic invisibility perpetuated through the U.S. legal system and census (Rodríguez, 2014). The most recent example of this can be seen in the decision of a U.S. Court of Appeals to rule in favor of the term Hispanic as a new racial category in a reverse racism case. See (Iafolla, 2016) as the reference from the case Village of Freeport v. Barrella, No. 14-2270 (2d Cir. 2016). In effect, this decision will split the Native population between two racial categories, and minimizing Native representation, and creating confusion.
always done, finding the paths of least resistance to maintain the status quo, whether that be upholding the hegemonic colonial system or staying close to one's ancestral home.

During the Civil Rights movement, Indigenous peoples of Mexican American descent residing in the US were able to organize public pedagogies aimed toward raising critical awareness. The conversations included considering new ways of naming themselves, and disrupting the census categories of racial identity:

- Mexicana/o (of Mexica\textsuperscript{59} descent)
- Chicana/o (derived from the Nahuatl pronunciation of Mexica\textsuperscript{60})
- Xicana/o (derived from the Nahuatl spelling of Mexica)
- Xicana@ or Xicanx (rejects the gender specificity of the Spanish language)

The development of the Xicanx identity traces the rich Mesoamerican history of the continent that predate existing borders. In the last 500 years, Mexican Spanish has become infused with many words, concepts and metaphors of Nahuatl, the language shared across the Aztec empire. Hernandes explains the etymology of these terms:

\textit{Mexicano was thus a reference to the Mexica, or Aztecs, as later called by the Spanish colonists, and was derived from the union of four terms: \textit{meztli} (moon), \textit{xictli} (bellybutton), \textit{cayotl} (offspring of, child), \textit{noxt} (yes!)... [Thus] "Mexica" translates roughly to "children form the belly button of the moon". Likewise, xicano, from its Nahuatl base can be taken to mean an affirmation "Yes! I am a child of the bellybutton /earth!""} (2005, p. 130)

The Chicana/o movement arose during the Civil Rights struggles of the 1960s, as an organized resistance against the systemic racial injustice that remains the ongoing legacy of colonization. Communities faced the terror of lynchings, sun-down laws,

\textsuperscript{59} Mexica is the name the people called themselves, today, we know them as the Aztecs.
\textsuperscript{60} /meh shee ka/
disappearances, and other violent acts of racism that paralleled the struggle in African American communities. The history of our country frames racism as a black and white issue, further erasing the many generations of trauma survived by our Indigenous and racialized communities at the hands of a colonial white supremacist nation (Brayboy, 2005; Delgado Bernal, 2002; Solorzano & Yosso, 2001). Since colonial times, Indigenous and racialized peoples have had to fight for the rights to own land (Gross, 2003), keep inherited titles (Tamez, 2010), citizenship (Maestas, 2003; Menchaca, 1993), to travel freely across the border (Bejarano, 2010), to produce knowledge (Castillo & Tabuenca-Córdoba, 2002), to access education (Romero, Arce, & Cammarota, 2009; Acosta, 2014; Serrano-Nájera, 2014), to healthcare (Peña, 2011), and to municipal services (Gonzalez-Arizmendi & Ortiz, 2004). The struggle continues.

The process of self-naming was not merely a label of identity. Hernandez (2005) writes:

so while in the 1960s young MeXicanas took to the streets and proudly proclaimed themselves Xicanas/os, underlaying this affirmation was a radically different cosmological understanding of one’s relationship to self, the land, the earth, and all living things, that Xicanxes have now consciously embraced. (2005, p.130)

The knowledge that survived through several generations hidden from public as tacit, personal, familial knowledge is now being discussed and revived as a vast cultural resource, and as a means for healing personally and as a community. Gonzales writes of her own experience "as an Indigenous woman learning traditional medicine among elders variously positioned as Nahua, Chicana, and Mexican. Indigenous knowledge persisted across these various labels that signal a certain historical situation of dislocation from Indigeneity" (2012, p. xxv). The flexible sense of identity has persisted through these different eras of colonization, yet the traditional ecological knowledges
that connect Indigenous peoples to the land have survived, demonstrating one of many acts of resistance to ongoing colonization.

Similarly, Peña (2005) explains, "The resurgence of land grant struggles since the 1980s signals a persistent memory of place. It is a strong sense of place, a fierce cultural attachment to, and identity based on, a direct relationship with the land and water" (p. 191). In other words, identity comes from being in-relation to the lands.

Under both Spanish, and later Mexican law, land grants were considered by the people to be non-commercial, "life-sustaining gifts" (p. 105), and were treated as ejidos\(^61\) (Hernandez, 2001); this loving relationship to land can be seen across south Texas today. For some families, the only surviving legal claims to land are the original Spanish land grants, as all Indigenous written records including histories, genealogies, titles, and archives were decimated by colonization. Yet, the detailed record-keeping of the colonizers suggest that many of the Spanish land-grant founding families also have Indigenous relatives that made life in the local landscape possible for the early colonial ancestors. Very few others have maintained their ancestral, hereditary Indigenous titles, yet, these examples provide powerful testimony of Indigenous resistance in south Texas. Xicanx ways-of-being recognizes the need to read history against the grain, finding clues to the displaced Indigenous histories, ancestors, and knowledges present and absent from written and living archives.

To be Xicanx is to always have to prove your identity. In the United States, the qualification of federal-recognition creates a hierarchy of legitimacy that attempts to

\(^{61}\) Land farmed communally. Interestingly, Hernandez also notes that the change in attitude from land being considered a part of the individual to land as commodity changed when land came under Anglo ownership.
contain, possess and define Indigeneity with colonial criteria such as the Dawes Roll and blood quantum (Contreras, 2008; Urrieta, Jr., 2016), while silencing community movements toward self-determination, sovereignty, and diverse self-representations (Gross, 2003; Menchaca, 1993; Saldaña-Portillo, 2017; Yellow Bird, 1999). In Mexico, Indigeneity is marked by fluency in an Indigenous language, and/or life in a rural, Indigenous village in Mexico (Urrieta, Jr., 2003). Therefore, on each side of the colonial border, in each colonial nation, the defining criteria defining Indigenous identity is mutually exclusive, erasing the Indigenous heritage of detribalized Xicanx borderland communities. In spite of all of the different imposed identity categories, to be Xicanx is to be Othered, never fully assimilated into “whitestream” society (Grande, 2008), never fully American enough for the U.S., and never fully Mexican enough for Mexico. Contreras (2008) explains, “even as Chicanas/os might look to Mexico as a homeland of sorts, Mexico does not necessarily return the affection. Xicanxs/os remain “ex-Mexicans” or even “gringas/os” foreign to Mexico, but also [foreign] to the United States” (p. 6). Xicanx ways of being invite open engagement with multiple consciousnesses and multiple simultaneous irreconcilable discrepancies of ongoing violent colonial erasure. While it is primarily people who live in the U.S. who identify as Xicanxs, there is an ever-present tension between experiencing the violence of colonization while also benefitting from it. The privileges of power and wealth due to their relative location on the north side of the border are undeniable.

For the people connected to Laredo/Nuevo Laredo through multiple generations, knowledge of the river and knowledge of the land is more than a lesson in biology. It is a sacred geography across which categories of identity are fluid, while the cultural
practices continue to connect people to their ancestral territories. In carefully honoring the multiple layers of knowledge and multiple audiences, this project rejects the Eurocentric expectation to use an objective omniscient voice. Instead, I humbly and respectfully move toward reclaiming and enlivening diverse Xicanx intellectual traditions that are at once deeply personal, relational, embodied and emplaced within our communities.

I began the discussion of the theoretical framework by describing the Indigenous ways of knowing, then moved to understanding Xicanx ways of being. In the next section, we will focus on the positionalities of an Indigenous Fonterizx Cosmography, in-relation to the land, river, and each other to ground our understanding in specific contexts on the banks of the Rio Grande/Rio Bravo, in the U.S. Mexico borderlands.

3.3 Borderland Positionalities

“Is border literature about, on, of, or from the border?” (Castillo and Tabuenca-Córdoba, 2002, p. 27)

In their groundbreaking book, entitled Border Women: Writing from La Frontera, Castillo and Tabuenca-Córdoba (2002) invite readers to pay critical attention to the work in the field of borderland studies, problematizing the frequency which the border is treated as metaphor, rather than a positionality and location from which intellectual work is produced. Furthermore, we are reminded that “the cultural products of these two countries fall into a distinct power differential...what and who crosses the border [and what does not] applies to literary texts as well as persons” (p. 6). They speak to the selective permeability of the border, warning readers that intellectual colonialism happens when well-known American authors speak for the border, rather than allowing other border perspectives to be heard.
Upon closer analysis, patterns of both real and symbolic violence and erasure have occurred in four major ways. Castillo and Tabuenca-Córdoba (2002) help us to understand the first three aspects of border displacement:

1) Historically, Indigenous peoples were, and continue to be, physically displaced from their traditional territories (Contreras, 2008). Over time, this has resulted in non-recognition of Indigenous peoples, of their rights, and of their agency (Johnson & Niemeyer, 2008). Examples of displaced and destroyed histories include the destruction of codices, libraries, ceremonial centers and burial grounds, as well as the murder of elders, who are living archives. A community that forgets its own history, rights, and ancestral ties to the land is easier to occupy, exploit, and control.

2) Local place-based knowledges are diminished by distant expert knowledges, in which homogenized generalizations are valued over first-hand embodied and emplaced lived experiences. Some place-based knowledge is philosophical, emerging from relationships between individuals and the land, which is quite extensive in scale. "The cosmological and philosophical aspects of the local culture provide the foundation upon which views of ourselves and our relationships to nature are founded. Local religions, customs, traditions, and folkways have ecological implications and their meanings must be discerned" (Martinez, 1998, p. 74). These relationships shape daily life in a particular place. While place-based considerations fit easily within Indigenous epistemologies, mainstream research often relies on generalization, analysis, and concise synthesis, which may miss multiple layers of meaning embedded within places.

3) The material realities of life in the borderland are usurped by theoretical abstractions, vacating border of any real, grounded, embodied or emplaced meaning.
With the increased visibility of Chicanx/Xicanx literature, concepts such as Anzaldúa’s borderlands (1999) have been taken up and incorporated into many other fields of study. While potentially useful as a metaphor, the trouble is the cooptation of the original idea, which has been synthesized and remixed to the point of non-recognition. Furthermore, Anzaldúa’s work is often used to the exclusion of any other borderland perspectives. In reality, any place along the border is populated by at least two dominant voices, and countless other local perspectives, each speaking from a different positionality, and each narrating a different, yet equally valid, reality of the border. Life on each side is integrally dependent on the community that lives just on the other side of the river. Yet, when we hear about the border or borderlands in the media, the portrayal is oppositional, and nationalistic. The reality that is often erased is that they (pointing to Mexico) are us (Mexican-descended Americans), and we are all Indigenous peoples residing in an occupied territory.

As seen in Figure 11: Sites of Fronterizx Displacement, I suggest a fourth site of displacement:

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62 Chicana/o, spelled with an X at the front to signal a relationship to Mexican Indigenous peoples, and an X at the end to disrupt the gender binary of words ending in -a/-o.
4) Internally, conceptions of Indigenous identity have long been disputed and imposed based on colonizing political and religious agendas, replacing the traditional ways that people have self-identified. Interestingly, Mexican-American, Chicana, and Xicanx identifying peoples have increasingly embraced the Indigenous racial category in the U.S. census (Decker, 2011; Iafolla, 2016), rejecting the Euro-Caucasian, Asian-descended, African-descended, and Other categories. Simultaneously, legal cases have been made in the US to recategorize the term Hispanic, so that it no longer marks a linguistic group (Spanish-speaking), but instead indicates a new category of race separate from an Indigenous racial category (El Nasser, 2013). Clearly, the attempt is

Displacement of identities does not always happen directly from systems of power. "The most recent form of colonialism is the kind we do internally to ourselves as individuals and to those with whom we have relationships. This is the most devastating form of colonialism because of the invisibility of the colonizer" (Monture Angus, 1999, p. 74). Shame and intergenerational trauma often interact to create various implicit and explicit forms of lateral violence, often unintentionally perpetuated. Yet, regardless of intention, the resulting erasure of Indigenous identity reifies the system of oppression and invites a critical understanding of identity as a site of meaning. While research exists documenting official attitudes of identity, such as the US census, in the Texas Mexico borderlands, there is little attention paid on the displaced, hidden, and fluid aspects of self-identification, or how our stories shape who we are.

In combination, these displacements result in "intellectual colonialism" (Castillo & Tabuenca-Córdoba, 2002) of the U.S.-Mexico borderland and people, in which land- and river-based knowledge is rendered invisible (in academia) and identity is dictated by hegemonies of assimilation. Urrieta pushes the criticism further, describing the disconnect between theory and actual border realities, when he writes,

_I wonder how many of the scholars that build fame by using the border-crossing metaphor have ever risked their lives across the barbed wire, the sewer drains, the hot deserts, or the polluted and deadly waters of the Rio Grande._ (2003, p. 149)

It is a valid query. Crossing the arid landscape and swimming through the waters of the Rio Grande/Rio Bravo from one side to the other is dangerous. Having that experience would absolutely change how one would write about the border or reference it in their written work. Risking one's life to swim across the river is also one single story of many
possibilities about how people interact with and understand the river, and separately, how they interact with and understand the U.S. Mexico border. As discussed earlier, in our colonial culture, this embodied and emplaced river knowledge is not prioritized.

In the simplest sense, this project’s many collected stories emphasize the relationship between community and river. For this reason, in this work, the borderland is not a theoretical space or useful metaphor for conveying meaning. The borderland is an actual physical location, marked by the river, the confluence of language and culture which carries complex and overlapping meanings. In order to represent the complexity of the context, I remain mindful of the history of colonization and the many changes such occupation caused to the local relational ecologies, the borderland must be both a physical location, as well as a common thread unifying the many distinct voices and social locations of participants. By grounding the project in the daily lives of fronterizxs, the land and river are of primary importance as sources of traditional ecological knowledge, told through first-hand accounts, by peoples with deep-time intergenerational knowledge of these specific places. Tuck and Yang (2012) remind us,

Land is what is most valuable, contested, required. This is both because the settlers make Indigenous land their new home and source of capital, and also because the disruption of Indigenous relationships to land represents a profound epistemic, ontological, cosmological violence. This violence is not temporally contained in the arrival of the settler but is reasserted each day of occupation. (p. 5)

Violence is reasserted every day on the river. Stated this way, conversations about violence and occupation are not softened by remaining at a theoretical level, but are told through the embodied and emplaced experiences of those who call the borderlands

63 border community residents
home. Furthermore, we can begin to connect the ways in which violence against the peoples and violence against the land and river are interrelated. Cannella and Manuellito (2008) propose, "the erosion of (and/or genocide) of peoples, cultures, and environments is understood as inextricably linked by these new forms of conquest" (p. 54). In this way, conquest is understood as an ongoing structure related to the violence of continuous occupation that provides insight into current conditions (Arvin, Tuck, & Morrill, 2013) and establishes a basis for predicting Indigenous borderland futurities.

3.4 Weaving the Soft Basket of an Indigenous Fronterizx Cosmography

Woven together, Indigenous ways of knowing, Xicanx ways of being, and borderland positionalities come together to form an Indigenous Fronterizx Cosmography as a theoretical framework for understanding the project. While there is certainly a wealth of Indigenous or Xicanx or borderland knowledge to draw from, the connections, conflicts, and overlaps between these three intellectual frames are emergent fields of study. Weaving is an apt metaphor depicting the movement of how at different times, one frame may take priority over others, yet all three offer support from which to build understanding. The different strands of thought come together to form a soft basket, as seen in Figure 12: Braided Basket Representing an Indigenous Fronterizx Cosmography, responsive to elements collected inside, accommodating a wide variety of identities, knowledges, and positionalities. Our soft basket moves with the water, through the water, and acts as a filter to critically engage traditional ecological

64 This is not surprising considering the ongoing marginalization of Indigenous Mexican American content as ethnic studies, treated as a low priority elective, rather than the mutual, required pre-colonial history of the US.
knowledge of the Rio Grande/Rio Bravo as a sacred Indigenous landscape, while letting less important colonial debris pass through.

Considering a much longer chronological perspective, colonization is a relatively recent phenomenon as "historically, the area now claimed as the southern political land border of the United States has been a place of indigenous territories, communities, gatherings, markets, and crossroads for thousands of years" (EagleWoman, 2008, pp. 555-556). I use the term cosmography to suggest an unearthing of ancestral maps of the cosmos based on the revitalization of Indigenous fronterizx knowledges, through

![Figure 12: Braided Basket Representing an Indigenous Fronterizx Cosmography](image-url)
collective memory and storying, in the footsteps of other Indigenous cosmographers/mapmakers including Cajete (2000) and Blackwell, Goeman, & Teeter (2017).

Centering Indigenous knowledge engages a healing process of recognition, creating safe spaces from which to approach the embodied and emplaced stories and silences of collective memory. The process of storying is simultaneously internal and external, as it shifts our relationship with the river by restorying the landscape, revitalizing the maps embedded in our collective memory, and recuperating the ancestral ways of knowing. The transformation toward articulating a critical Indigenous fronterizx consciousness is not an end goal but rather a commitment to engage and be shaped by a process that requires practice and attention to being and becoming. The process of transformation, in this case, is a delicate dance of expressing one’s experience without misrepresenting or crowding out other indigenous voices, or slipping into the existing default of colonial dysconsciousness (King, 1991) or uncritical habits of mind. Monture-Angus (1999) elaborates,

*Generally, all Euro-Americans have to do to perpetuate colonialism today is to ignore that colonialism is a vibrant fiber in the texture of this society. Given that privilege (in its various forms) is very infrequently expressed (or examined) by those who possess it, perpetuating colonialism now occurs without their further energy and investment. (p. 75)*

Colonialism, as a social structure, has become so normalized, that I would extend the argument to suggest that it is not just Euro-Americans, but all dysconscious peoples, regardless of ancestry, who passively perpetuate the intersecting hegemonies of settler colonialism along the U.S. Mexico border. To be clear, it is not a matter of genealogy or culture, but is a matter of critical awareness of self, of the colonial contexts, and one's
relations to and within society. As with all hegemonies, social norms operate as a form of social control to which there do not seem to be viable alternatives (Four Arrows, 2006). However, there are individuals, families, and communities who resist colonization and have a different orientation to the land through Indigenous collective memory, which predates colonization. The Indigenous fronterizx cosmography works to actively revitalize ancestral knowledges by elaborating a different orientation to the geography, ecology, and universe. Building an Indigenous orientation to the Rio Grande/Rio Bravo allows Indigenous peoples to recover their relationships with each other across shared territories, across various creation stories and linguistic relationships to land.

For example, there are many shared stories and symbols connecting the older brothers of Central and South America with the younger brothers of North America. EagleWoman reminds us that "a primary symbol for those from North American is the eagle, and those from Central and South America embrace the condor; hence the entire hemisphere is represented by the joining of the eagle and the condor" (EagleWoman, 2008, p.556). This is an old story, and there are different versions shared across the continent (Rodríguez, 2012, Palacios, 2012), and yet, we can understand through the metaphor of brothers, and through the relational ways of thinking, a landscape that is vastly different than our current Mercator map projection. In my community, Dr. Garza tells the story this way:

'Let me tell you the story of the Eagle and the Condor that has been taught to me, because, I mean, there are different stories. Basically, the Prophecy of the Eagle and the Condor was that at one time the Eagle and the Condor used to fly together. Then, one day, where the two continents are divided, the Eagle was at the bottom of North America and the Condor was at the top of South America. Then they started noticing what was going on especially between the Indians, like “Oh you are not really a real Indian.” So, they started crying and... then the water started filling up. Then you got that Panama Canal, that did that.
So, they made a promise that when Indians from the north, the Eagle Indians, and Indians from the south, the Condor Indians, would again reunite, that the earth would be healed. So, basically that's the bottom line of the Prophecy that we've heard and we believe in. That's why we made that part of the objective of our powwow, to reunite the Condor and the Eagle. (Dr. M. Garza, oral communication, June 1, 2015)

In the Prophecy of the Eagle and the Condor, it is said that when the two meet, a great awakening will occur, healing the relationship between nuestra madre tierra\textsuperscript{65}, the life-giver, and her many peoples. The relationship between brothers unearths the ancestral maps connecting space and time, suggesting a familiar sibling relationship as a guide for relating similarity and differences across vastly different first peoples of Abiayala\textsuperscript{66}. While an Indigenous fronterizx cosmography may not dismantle or interrupt the colonial machinery in a visible way, it does provide a useful strategy of Indigenous resistance, modeling how collective memory can be used to Indigenize across colonial borders and revitalize our relationships as First Peoples across the continents.

Today, there is a critical mass of Xicanx scholars standing in the footprints of our parents and grandparents, engaging difficult conversations toward justice. Our elder relatives lived in a segregated Jim Crow south, of which the lynching of black and brown bodies was a reality. In a context so fraught with danger, it is not just about asking the right questions. It is about a deep intuition and response-ability to listen holistically, learn from, and revitalize the ancestral knowledge of our river in a way that serves my home community, within a system of interrelated Indigenous communities.

\textsuperscript{65} Our Mother Earth
\textsuperscript{66} Name in Kuna language for all of the Americas, understood as a singular land mass. Sometimes this name is written as Abya Yala, but in Kuna, it is Abiayala.
3.5 Unsettling the Borderlands

The Rio Grande/Rio Bravo has many meanings, both as a river and as an international border. To unearth the ancestral land-based ways of knowing, and understand our stories about/with/from the Rio Grande/Rio Bravo, it is necessary to challenge the many assumptions imposed on both the river and people in the borderlands, and build a framework for understanding the world through fronterizx eyes, when your feet are planted on our riverbanks. The process of unsettling demands multiple interventions, reframing our process toward generative and authentic orientations. Unsettling must simultaneously resist colonialism, while also revitalizing Indigenous knowledge and culture, and generating new knowledge that responds to our new contexts.

Decolonization is a multi-layered undertaking, working to uproot the settler colonial systems of racial superiority and patriarchy such that Indigenous peoples, lands, and knowledges are free from an obligation to respond to colonial structures (Monture Angus, 1999). Decolonization unsettles everyone by intentionally recognizing land as knowledge, and demands its repatriation to the ancestral caretakers (Tuck & Yang, 2012). While decolonization is gaining traction within Indigenous studies, and is favored by scholars in the US, Canada, Australia, and New Zealand, academic definitions and discussions do not easily fit the embodied and emplaced ways that my community discusses the US Mexico border context.

67 Frontera is the border, fronteriza/fronterizo is a person from the border, fronterizx is the gender-neutral play on the spelling.
• How can we take up the work of decolonization in the current context, which includes military occupation, perpetual surveillance, a suspension of our basic Constitutional rights?

• As an person of Indigenous ancestry without a cohesive Indigenous community, what does decolonization accomplish?

• After many generations of fighting for survival against erasure, displacement and violent assimilation, how do we simply be?

• Furthermore, how can we be free in the carceral shadow of the growing border wall intended to sever the communities and ecologies that straddle the US Mexico international border?

The answers for each of these questions is complicated, and must be land-based (Simpson, 2004), polyvocal (Grande, 2004; Tabuenca-Cordoba, 2005), and intersectional (Clark, 2008). There is much potential in the practice of unsettling borderlands, part of which includes decolonization.

In particular, discussions around decolonization seem to naturalize colonization, pointing to the Whitestream dominant society as the normalized referent from which decolonization is derived (Kovach, 2009). Linguistically, this implies that colonization is somehow reversible or deconstruct-able, as though a temporary condition, rather than recognizing colonization as a political and social structure that self-perpetuates (Arvin, Tuck, & Morril, 2013) through hegemony (Kovach, 2009). Furthermore, the binary of colonization/decolonization suggests that they are opposites, whereas, in reality,
individuals can be both, capable of perpetuating lateral oppression onto others (Anzaldúa, 1999; Monture-Angus, 1999; Clark, 2008). Kovach (2009) rewords and thus reconceptualizes the conversation, “I prefer to use the term and talk about conscientización” (p. 91). Concientización (Asher, 2009; Freire, 1970), or the process of becoming critically aware, is much more inclusive of Indigenous struggles from a global perspective (Ermine, 2007; Sandoval, 1991; Soto, Cervantes-Soon, Villarreal, & Campos, 2009). For the purposes of my project, I work from the definition that borrows from the Freireian use of the term that recognizes the powerful ways that conscientización has also been mobilized by the movimientos por derechos humanos of Central and South America.

Yet, perhaps working toward an end goal of critical awareness is too specific to capture the range of Indigenous borderland experiences. Anzaldúa suggests a process, rather than a particular result.

_Nepantla is the Nahuatl word for an in-between state, that uncertain terrain one crosses when moving from one place to another, when changing from one class, race, or sexual position to another, when traveling from the present identity in to a new identity. (Anzaldúa, in Keating, 2009, p. 180)_

While conscientización implies an enlightened resolution, nepantla embraces the chaos of uncomfortable metamorphosis. In this way, critical awareness does not reach a conclusion, but cycles through perpetual transformation. Although different in their approaches, both Kovach and Anzaldúa draw from an embodied and emplaced

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68 My own privilege and power as a US citizen is not lost on me - I directly benefit from the unequal power relations created by the international border, and struggle with issues of gentrification in moving back home to San Antonio, Texas. I am complicit in upholding capitalistic Eurocentric institutions while simultaneously working to decolonize/Indigenize/revitalize my community.

69 human rights movements
Indigenous knowledge, each voicing a critical element of understanding how we may unsettle the border.

Similarly, the concept of Borderland Mestizaje Feminism “emerges from contestations of colonialism and dominant cultural politics that have denied not only our experiencias70, but our existencia71 as, and history of, producers of culture” (Saavedra and Nymark, 2008, p. 260). Such scholarship specifically addresses overlapping oppressions, writing to reclaim collective memories buried by forced assimilation and erasure. The process is quite powerful. Grande writes, "Language and the ability to name one’s experience are precursors to emancipation" (2004, p. 5). For many Indigenous peoples, the move from protective, terrified, resistant or habitual silence to speaking our truths is a powerful individual transformation. When witnessed by borderland communities, such testimonies and shared collective memories hold the potential to heal relations toward community empowerment.

Although Anzaldúa’s seminal work Borderlands/LaFrontera: The New Mestiza, and Saavedra and Nymark’s theory, Borderland Mestizaje Feminism, indicate a reclaiming of the term of mestiza/o, this term has a controversial history. "Spanish colonizers intended to extinguish the indigenous identity…by substituting labels such as ‘campesinos’ (peasants), ladino, and mestizos (mixed race). The label ‘indios’ (Indians) had the connotation of racial inferiority" (EagleWoman, 2008, p. 558). Not only is there a geographic preference as to how terms are used, there is a distinct difference in meaning depending on who is using the vocabulary of colonization.

70 experiencias
71 existencia
For instance, 'indigenous/indigena' (or even indio, nativo, or runa) can be used pejoratively as a racial slur against an ethnic group but may also be a self-affirming category of pride, recently appropriated by the indigenous movement in their discourse on 'first nations' or 'original peoples'. Similarly, 'peasant/campesino' is both a construct imposed on indigenous by reformist governments to deny their cultural identity and a term (often insisted on by indigenous peoples themselves) to strengthen class-consciousness and political alliances. (Boelens, Getches, & Guevara-Gil, 2010, p. 21)

Thus, in considering an academic foundation for how to unsettle the borderlands, both terminology and concepts require some careful attention in addressing the shared and parallel understandings that shift according to positionality. Common subjects of conversation or stories may have very different vocabularies in different contexts with different audiences and can certainly lead to misrepresentation and misunderstandings.

For the purpose of my own borderland study, and for many peoples in south Texas, "Chicano and Mexicano Native American cultural revitalization is based upon the notion of Texas Indian survival in Texas and Mexico and rejects a colonial mestizo identity" (Maestas, 2003, p. 15). Not only were mestizos considered of higher class standing than their indio relatives due to their European mixed heritage, but the term also embodies a normalization of gendered violence (Urrieta, 2003; Palacios, 2012). Specifically, mixed race peoples in this continent are descended from the few Spanish conquistador men who raped/took/married many Indigenous women (Maestas, 2003; Palacios, 2012; Urrieta, 2003). This reality has been mythologized, retold through the dominant colonial Mexican perspective condemning Malinche/Malintzin, the symbolic Indigenous mother of the Mexican people, taken by Spanish conquistador Hernan Cortez, as La Chingada72 (Anzaldua, 1999; Cobos, 2012; Godayol, 2012; Palacios, 2012).

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72 Literally translated, means “the f*cked one”
This is one example of how the dominant hegemonic rhetoric from Mexico further complicates and normalizes violence against Indigenous women and systematizes shame and illegitimacy as the grounds for dispossession. For this reason, I do not to use the term mestiza to describe myself, though I do invoke many concepts that use the term to refer to Mexican Indigenous ancestry, not as a mix, but as a specific cultural and linguistic, detribalized, and dispossessed Indigenous population.

To unsettle the borderlands requires three simultaneous interventions: decolonization, revitalizing Indigenous knowledge and culture, and generating new knowledge that responds to our new contexts. Decolonization has been taken up by many scholars, both in broad terms, and also as place- and culture-specific approaches in the border communities. By contrast, significantly less scholarship has been developed that revitalizes Indigenous knowledge, or generates new understandings in border communities, and specifically, in Laredo, Texas.

Part of my responsibility is to carefully and critically situate this project within the field in a way that does not misrepresent the voices of my community. As such, I take up the idea of indigenization, or the awakening of Indigenous knowledge as a Nepantlera73, focused on the process of witnessing the Rio Grande/Rio Bravo, rather than moving toward any particular outcome. I belong to the land nourished by the Rio Grande/Rio Bravo, connecting life through time, from my ancestors and my grandchildren yet to come. This project honors the multi-generational life stories of my family, my community, and my ancestral waters.

73 person who actively engages Nepantia thinking and being
3.6 Summary

This chapter outlined a theoretical framework called an Indigenous Fronterizx Cosmography, by braiding Indigenous ways of knowing, Xicanx ways of being, and Borderland positionalities. Each of these strands focuses on a different layer of context in which colonization operates to erase, silence, and assimilate the Indigenous people, land, and knowledges of the frontera. By carefully weaving a basket, we design the tools by which to sort and collect teachings. In the next chapter, I will use an Indigenous Fronterizx Cosmography to inform the research methodology and methods, to be of service to the community.
Chapter 4: Fronterawork Methodology

The Rio Grande/Rio Bravo is a complex network of interrelated beings along a nearly 1,255 mile stretch of different ecological landscapes, and often, the local land-based traditional ecological and cultural knowledges are often hidden from plain sight. For these reasons, each aspect of this research process was carefully considered to keep the river in mind, in conversation, and in-relation to every aspect of the project. In this chapter, I will introduce A Fronterawork Methodology, designed to prioritize the emplaced and embodied ways of understanding the Rio Grande/Rio Bravo, while intuitively inviting water knowledges to guide the research path with the community, in the service of the community. I will elaborate upon the process of building a pedagogy of/with/around the Rio Grande/Rio Bravo, from the perspective of the fronterizx community members, specific to my home community in Laredo/Nuevo Laredo.

4.1 The Elements of Fronterawork

The research question appears straightforward: "How do people who live along the Rio Grande/Rio Bravo understand and talk about the river?" Much like the river itself, the calm surface of the question hides the complex, and often fraught undercurrents. The overlap of the river and border through the community creates a wide range of effects/affects on the people, suggesting that responses would be wide-ranging, unpredictable, and likely contradictory. Moving forward with my project felt like I was simultaneously mapping and navigating metaphorical rapids- I could only study the water from the banks for so long. Eventually, I had to just jump in.

In the process, I was able to clarify a research methodology which I call Fronterawork, that is inclusive, holistic, engages multiple diverse perspectives and
allows for multiple entry points into the conversation, as a way to find meaning in the distinct cultural interface of the frontera community. The five elements of a Fronterawork Methodology include:

- Thinking with metaphors
- Being in-relation
- Embodied and emplaced ecologies
- Showing the unspeakable
- Remembrance as healing

Rather than suggest a specific, step-by-step set of instructions to the research project, the next sections detail the considerations necessary for holistic witnessing and story-listening in fraught contexts, for the purpose of building an intergenerational pedagogy of water with and for Indigenous frontera residents. Activating my own teaching experience as a sixth grade teacher in public school classrooms, the process is not to be read as a personal think-aloud of what do I need to do, but the preparations for co-construction of meaning between myself and a community of learners, asking what do we need to do to help co-learning happen?

4.1.1 Preparing My Mind: Thinking with Metaphors

In the first page of my research notebook, I wrote myself a reminder:

\[ \text{Water is life.} \]
\[ \text{Water is alive.} \]
\[ \text{Water is spirit.} \]

These three little metaphors are examples of how one word or concept can be used to create an image, an action, or a set of relationships as a way of understanding a second word or concept. In the above trio, water can be understood as a vital aspect of being,
water can be understood as a fragile biological process of response-ability, and water can be understood as a manifestation of the sacred.

To prepare for the process of inclusive, holistic listening, it was necessary to challenge the metaphors that inform my use of language, habits of mind, and assumptions about the Rio Grande/Rio Bravo. Human cognition is constructed through images and symbols. “We first invent, and then rely almost exclusively on, metaphors to make sense of the world we live in.” (Santa Ana, 2002, p. xv). In this way, metaphors illustrate the relationships through which we perceive and understand reality. This is precisely the reason that oral traditions and storytelling are powerful pedagogies amongst Indigenous communities- within each story, the world is recreated according to a specific land-based ontology coded in the form of metaphors and symbols. Santa Ana (2002) elaborates, “Metaphor is more than poetic color and superficial ornamentation. It shapes everyday discourse, and by this means, it shapes how people discern and enact the everyday” (p. 26). In this way, Coyote and Mockingbird are not merely characters for our entertainment, but often instruct and guide story-listeners to learn culturally-appropriate behavior. Similarly, in shifting our metaphors around water, we shift our understandings of water, and shift our responsibilities and actions toward water (and toward each other).

Thinking with metaphors can also help us to Indigenize our understandings by envisioning various relationships, tracing the connections between humans and the dynamic and animate world of which we are a part. Thinking in this way can inspire new courses of action. As an example, consider the following metaphors which are
used as the daily affirmation and philosophy of Mexican American Studies classes in Tucson Unified School District. Drawing from the concept of *In Lak Ech*:

\[
\begin{align*}
&Tú eres mi otro yo. \quad \text{You are my other me.} \\
&Si te hago daño a ti, \quad \text{If I do harm to you,} \\
&me hago daño a mí mismo. \quad \text{I do harm to myself.} \\
&Si te amo y respeto, \quad \text{If I love and respect you,} \\
&me amo y respeto yo \quad \text{I love and respect myself} \quad \text{(Rodríguez, 2011)}
\end{align*}
\]

In other words, based on culturally-centric metaphors and ways of understanding, youth are being taught as beings-in-relation to refer to all other aspects of creation. Rio Grande, you are my other me. Water, you are my other me. Neighbors, you are my other me. Blooming huisache, you are my other me. Not only do these metaphors indicate a different ontology, but they also point toward a much more relational and response-able approach toward the places and realities of life in the frontera communities. We must first think relationally so that we can *be* (passive) and *be response-able* (active) as beings-in-relation. Thinking with metaphors seems to be one important factor in understanding traditional knowledge in its many forms, especially in regards to appreciating our role, responsibilities, and relationships to water.

Throughout time, people have created thousands of works of literature and art that engage, reflect, honor, and depict the waterways in the world around them. Both the material and affective characteristics of water are well studied. Strang (2005) elaborates,

*Water’s diversity is, in some respects, a key to its meanings. Here is an object that is endlessly transmutable, moving readily from one shape to another: from ice to steam, from vapour to rain, from fluid to steam…The process of transformation*
Water, by its very nature, provides countless metaphors and images for understanding. As active learners, we can think with metaphors to expect the stories of our elders to similarly be “endlessly transmutable,” teaching about water as the subject, but also as a pedagogical model for attending to student and community needs.

Furthermore, metaphors transcend the limitations of linguistic fluency, i.e., we do not have to be fluent in any particular language to understand the imagery, sensations, or relationality that are conveyed by metaphors. This is not to say multilingual fluency could in any way be replaced by thinking with metaphors, however, to navigate a dynamic cultural interface, a relational way of thinking helps to overcome what could otherwise be a barrier to understanding. On the frontera, finding common ground and thinking relationally are essential skills, not often explicitly practiced in the US.

4.1.2 The Approach: Practicing Being in-Relation

Indigenous borderland ways of knowing must include the physical and embodied modes of engagement. Although most people are taught that we have five senses, in reality, humans have closer to twenty different sensitivities to the world around them, including a sense of balance (equilibrioception), a sense of temperature (thermoception), sense of pain (nociception), a sense of our bodies in space (proprioception), and to the passage of time (chronoception) (Gray, 2017; Hiskey, 2010). While colonization did not diminish the many ways in which people experience the world around them, it did prioritize the sense of sight above all others, training us to equate seeing with believing, corresponding to the European bias toward occular-centrism. Wilshire (2006) writes, “seeing…is the sense in which we are least involved as
whole bodies, least involved emotionally, and existentially in whole environments over
the long term” (p. 261). In this way, occular-centrism supports the expectation of
distanced observation and emotional stoicism. As these ways of being and engaging
with our surroundings become unconscious habits, we forget the many other physical
and embodied ways of knowing. Furthermore, learning of/with/in/on the Rio Grande/ Rio
Bravo provides learners with an entry point for the "teachings implanted and offered up
by their ancestors" (Gonzales, 2012, p. 175). These teachings are personally
customized to connect each learner within the local ecology in ways that cannot be
shared in formal school classroom environments of passive, controlled seated activities,
such as what are typically seen in a public school classroom.

In centering traditional and Indigenous knowledges, we can engage the process
of restoring ourselves as holistic, engaged learners, and restory ourselves back into a
relationship with our land and waters. Intellectual, spiritual, emotional, and embodied
efforts combine to shift the work toward self-actualization. The process is circular. As
we restory our relationships with the land, and with the waterways, we restory
ourselves, honoring the ancestral knowledge and traditions that shape who we are as
Indigenous peoples. In this way, Indigeneity comes from the ground, up, restoring,
reviving, and regenerating our ancestral connections as beings-in-relation.

4.1.3 Embodied and Emplaced Ecologies

Embodiment is being aware of how we relate to other bodies and things, and the
ways in which a body’s engagement with the world creates meaning (Csordas, 1994;
Irwin & Springgay, 2008). Humans are not minds carried along in meaningless bodies,
but are holistic beings that create and become experiences as we interact with our
surroundings. For example, we say "I am happy" or "I am hungry," rather than "I am feeling happiness" or "I am experiencing hunger." Our senses help us name our state of being. Our bodies matter. Our skin protects the health of our bodies, contains our essential organs, and is a site at which we experience the world around us. Our bodies are also tools that we use to influence our surroundings. Considered this way, the relationships between time, place, humans, and nature are mutually co-constructed, and meanings are layered.

Considering the following example: Ana walks down to the riverside banks, sits on a rock, and listens to the sounds that surround her. She may feel the coolness of the shade, the hard rock underneath her, holding her, and the sounds of the river, the birds, and the airplane overhead. She may understand it as an embodied experience within a relational and emplaced ecology.

The aforementioned scenario paints a relatively serene picture, but we can also use the same vocabulary to understand less pleasant circumstances, such as places that are dangerous or have a history of violence. If we return to the example of Ana, sitting on the banks of the Rio Grande/Rio Bravo, her quiet moment is disrupted by the roar of the oncoming US Border Patrol speedboats, that pass every half hour or so within the Laredo/Nuevo Laredo interface. The boat has several armed agents and a large machine gun is mounted onto the front of the boat. Her relative location on the north side of the river affords her a small comfort - she will only be questioned and asked to show identification instead of being apprehended. These added details of Ana's specific location add new meanings to the relative ecology. We can speculate how Ana's presence on a rock by the riverside impacts the immediate ecologies around
her, and also surmise how her context impacts her being physically, intellectually, emotionally, and spiritually74.

Ana’s example can also illustrate how danger is emplaced, demonstrating the geographies (plural) of race, which illustrate how racism operates in places over time. Nayak (2011) argues evidences of racism, “in all their messy misrecognized and globalized assemblage, live on: they are displaced onto people, objects, things, and brought to bear in everyday events… They seep into the collective imagination, the psychic pulse and nerve tissue of many societies” (p. 556). The geographical interrogation afforded by map-making may be useful in constructing maps of racialized places that could be particularly insightful in areas of dynamic, conflicting power and cultural interfaces, such as the borderlands. Tracing the embodied and emplaced cartographies of racism offer a potential approach to discussing what might otherwise remain silenced. Nayak (2011) elaborates,

*Gestures, fleeting glances, strained silences and the discreet performances of othering have come to mark difference…processes of racialization simultaneously work through a palette of senses including sounds, smells, tastes, and touch….In this way, eliciting the embodied geographies of race can add depth and richness to the cut and dried data generated through interview. (pp. 554-555)*

In the borderlands, emplaced and embodied testimonios historicize existing contexts, connecting performances and experiences of racism to the colonial rhetoric of white-supremacy, evident in ongoing incidences of feminicidio and terracide.

Other contemporary issues that include a specific, unspoken element of racism include the construction of the U.S. border wall through Indigenous communities

74 Future work will also take up the ways that violence enters the collective memory, influencing out understandings and relationships in our frontera river communities.
(EagleWoman, 2008), the feminicidio of the borderlands (Gaspar de Alba & Guzman, 2010), the “hunting” of newly crossed immigrants using military drones (Dinan, 2013), the criminalization of humanitarian efforts to leave water in the desert (Fernandez, 2009), the widespread use of the chemical defoliant, Imazapyr, to clear riverbanks as a “national security measure” (XicanoPwr, 2009), and the unrestricted dumping of industrial waste by maquiladoras near colonias (Bullard, Johnson & Torres, 2005). In each of these examples, we can see the complex intersectionality of race, class, and gender. We can also infer how the sharing of testimonios can be essential in moving toward justice. The process of emplaced and embodied storytelling (and emplaced and embodied storylistening) may invite communities to understand overlapping layers of context differently and find ways to organize toward healing.

Of particular importance in our practice of understanding embodied and emplaced ecologies is the gendered aspects of knowing and recognizing danger. When a girl or woman is murdered for being female, the act is a gendered violence. Interestingly, in Mexico, the term feminicidio allows conversations to focus on the girls/women, while in Canada, a parallel phenomena is the Missing and Murdered Indigenous Women, which similarly, provides a useful framework for recognizing the gendered violence. In the US, however, we do not use a specific term or framework for recognizing the gendered violence, thus, we do not often focus critical attention on the patterns and circumstances that women and girls face. We talk about violence in general, or domestic violence, or even look at murder in particular, but each of these phrases generalizes across the population, so that the gendered aspect is not recognized. However, when gender

75 Usually, a U.S. owned factory built in Mexico.
intersects with race and/or class, then a few select examples of violence against particular girls/women call our attention. The systemic and normalized racism and sexism on both sides of the U.S. Mexico border permeates all aspects of how to understand the cultural landscape, and frames the conversations around what we do and do not recognize as important.

If we return to the example of Ana for a moment, sitting on the side of the river, we can add one more dimension to the situation. Ana is dark brown-skinned, black-haired; her clothing is clean, but second-hand. Every moment she spends sitting on the riverbanks, she knows that if she were to get into trouble, no one would help her. She would be on her own. On the frontera, white(r) women call the police, headlines are written, monetary rewards offered, and search parties formed, while brown(er) women quietly disappear and become faceless statistics. It is not just the ecology, but also the embodied and emplaced ways we understand our relational ecologies that matter, especially in contexts that include multiple possible sources of danger.

4.1.4 Showing the Unspeakable

Recognizing that our topic includes the normalized, daily occurrence of violence, both directly and indirectly, impacting the lives of each community participant, I had a responsibility and response-ability to make space for experiences that are unspeakable (Vinitzky-Seroussi & Teeger, 2010). Silence is/was meaningful (Kidron, 2009). As I developed the process of memory work in a context that is/was often dangerous, it was important to be explicit in the ways to hold space for the aspects that cannot be spoken, and to keep participants safe and respected. Specifically, this meant I had to practice compassionate witnessing, in which I was willing to be with someone as they worked
through a difficulty without judgment or intervention. As an interviewer, this meant taking care to practice whole body witnessing, and self-monitoring not to finish the sentences, interrupt, or give oral prompts to the community participants. Once the interview process was over, I took care to sit with the community member, and wrap up the process in a gentle way, in case there was emotional discomfort or after care needs. I made sure to explain the rest of the research process, describing the transcription, translation, and process of verification. Each community member knew to expect a transcript in their mailbox, which they could approve, correct, or redact, and I would only use with their permission. In all cases, community members seemed to relax with the knowledge that they would have the chance to verify and take out any or all parts of the interview with which they were uncomfortable.

In this way, the project was built on the first-hand testimonios of community members with the expectation of hearing varying voices, experiences, and entry points, all of which were treated with respect. To show the unspeakable, I listened for silences and stories of trauma, and practiced holistic witnessing based on mutual respect and trust.

4.1.4.1 Listening for Silences

The same way that danger lies in specific places along the river, it is also embedded in how we talk about the river, in how and what we allow to be recorded, and where our stories go once we share them. "The problems of voice and identity are packed with internal dilemmas not only for the listeners but also the tellers of the tale… There are penalties for choosing the wrong voice at the wrong time, for telling an inappropriate tale" (Razack, 1993, no page). Specifically, in designing a project that
used oral history and testimonio to discuss the fraught context of the river, there were moments in which some participants felt unsure or unsafe with some part of our process. For some, the discomfort was not in the process itself, but in not knowing where their stories would go after I completed the project. I considered these as moments of resistance, and respected the boundaries of relatives who declined to participate. There were moments when the responses were short phrases instead of stories, some with the subtext of moving on, others due to lack of interest. In some cases, the silence was due to discomfort; in other cases it was an intentional response, sometimes with meaning, sometimes without. In all cases the silences were a part of the conversation. I was careful to listen to such things as tone of voice, sighs, and notice body language, and find space for silence, and work with and around these moments. Participants also knew that they could stop the interview at any time.

4.1.4.2 Listening Around Trauma

In the context of the Rio Grande/Rio Bravo, multiple eras of colonization and multiple sites of erasure have caused generations of fronterizxs trauma and shame. Some of the trauma was/is fresh, caused by the current contexts of surveillance and systemic racism, while other traumas are older, passed from one generation to the next in the form of fear, habits, and sensitivities. Care was taken to respect the memory work, acknowledging how trauma affects our abilities to recall, retell, and listen to the stories of community members. Razack reminds us that “the risks taken in the course of critical reflection are never equally shared.” (1993, no page). Privilege is always manifest, and in spite of best intentions and shared purposes, and participation in this type of work is always more hazardous for some than for others.
Giving testimony to experiences of violence can re-traumatize survivors and witnesses by recreating the emotional turmoil of the original event. Oftentimes, the most difficult traumatic incidences cannot be spoken, and yet the silence, the tears, the tension, and the embodied memories speak volumes of the impact of such events (Kidron, 2009; Riaño-Alcalá & Baines, 2011). These nuanced and performative details are not often captured in interview transcripts. I prepared to respond appropriately, as needed. Simon (2004) suggests that the act of giving testimonio asks questions of the listener as an active participant in deciphering what is being said and what is not being said, and examining the context and connections between the two. Listening, in this way, entails an embodied awareness and attentiveness to more than just the words being spoken. This was reminiscent of the old saying that to really listen, one must listen with their eyes, their ears, and their heart. Active listening was especially pertinent around trauma, as dealing with trauma is a personal process, and the person giving a testimonio may or may not have the words for such memories.

Looking back, none of the interviews seemed to touch memories that were traumatic narratives, but I prepared for them, just in case. For example, in a few of the interviews, community participants shared stories of someone having drowned in the river. Their stories included pain, fear, and a deep sense of loss, even though the memories are 40 or more years old. As I listened, I was mindful of my own emotional response, and followed the cues of the storyteller. It was important to remain gentle and responsive, out of respect for both the storyteller, as well as those friends and neighbors whose lives were lost. By allowing the storyteller to lead the conversation, and deviate from the interview script, it gave us time and space to feel emotions, and be in-relation,
in the moment. In each case, allowing the time to feel, to listen, and to sit with each other also allowed the community member to lead our way into other areas of conversation. In this way, the listening process was built around mutual respect and trust. Not only was listening around trauma important in the research process, but it is also a necessary skill to teach learners about - we have to learn *how to listen* to the elders’ stories.

### 4.1.5 Remembrance as Healing

Within Indigenous borderlands ways of knowing, collective memory provides an entry point from which to restore and re-story traditional knowledge within the frontera communities. For our community elders, who are our living archives, the process of witnessing their oral histories is validating. The act of sharing and witnessing each others’ stories revitalizes the relationships between generations of the community, building a bank of knowledge as community strength, while reconnecting people to the land and river. Furthermore, building a pedagogy based on collective memory communicates to every community member that their lives matter, and that our collective survival and resistance is deeply connected to each other and the land and river that nourish us. Although difficult, the work of critical remembrance:

> *might enact possibilities for an ethical learning that impels us into a confrontation and ‘reckoning’ not only with stories of the past but also with ourselves as we are (historically, existentially, ethically) in the present…[and] for what it means to live relationally, to live justly and publicly, with others, both living and dead. (Simon, 2004, p. 187)*

Critical remembrance helps to move survivors, witnesses, and descendants to address, attend to, and heal the traumas of historical violence, while exploring new ways of addressing contemporary contexts of violence in the borderlands. When today’s youth are encouraged to understand the contexts and struggles of our grandparents, they can
come to understand how these events directly influence the contexts and struggles of today. As a community, we are better able to interrupt the dominant narratives of blame and deficit framing that are often attached to our Indigenous and racialized frontera communities. Historical context allows us to reframe community challenges in ways that address systemic sources of trauma, so as to disrupt ongoing harm, rather than solely focusing healing at a personal level. Beaucage (2005) elaborates upon the process of healing:

How we name ourselves and remember ourselves in different times and places is a way of making history. Displacement has been a cultural reality for Aboriginal peoples on this land. Identifying the dominant codes and ethics/values that put us in this place is the journey of re-covery, re-memory, re-naming our history. (p. 140)

The process of re-naming (and restorying) our history is especially pertinent in the frontera, where labels of identity have been imposed by colonial governments, determined to erase Indigenous knowledge and people from the land. Remembrance works to recover and heal the relationships that have been erased or colonized in our frontera communities, allowing us to restore ourselves as holistic, relational, embodied and emplaced beings. More than giving ourselves permission to reclaim our Indigenous ancestry and practice the land-based cultural practices that have survived in our families, we are also reminded of our responsibilities as caretakers of the river, the land, and each other.

4.1.6 Ethics of Fronterawork

As I moved forward in this Indigenous research process, it was important to articulate a process reflective of my ceremonial teachings (Wilson, 2008). The four main principles guiding this project are what I collectively refer to as the Ethics of
Fronterawork (Muñoz & Muñoz, forthcoming), that informs research with/for/by fronterizxs. It was essential that the research project:

• prioritize and build upon Indigenous/racialized scholarship toward articulating an Indigenous fronterzx framework,

• build a research process that gives back, rather than takes from, the borderland community,

• create a system of accountability for myself as a community member/researcher, and for the results of the project that communicates to a wider public audience, and

• intervene in the erasure of Indigenous fronterizxs by making space for the complex ways we represent ourselves.

To build in accountability, four elders, grandmothers, were asked to witness the doctoral research process and serve on an Advisory Elders’ Council. Each of these women were mentors and teachers at various times during my youth whom I came to know through a ceremony called Kanto de la Tierra: Ruby Vargas (Wukchumni), Teresa Candelaria (Ohlone/Xicana), Lorena Herrera (Huichol), and Yvette Mendez (Apache/Xicana). In 2014, before I began the work, each of the grandmothers was sent a paper copy of my research proposal. I called each elder and talked them through the purpose and process for the research, and updated them with general progress reports.

76Kanto de la Tierra was an intertribal ceremony created by an elder named Reymundo Tigre Perez, and brought to Laredo, Texas, in 1990. One of the guiding principles of the ceremony was the Prophesy of the Eagle and the Condor. Elders were invited from across the Americas to participate, reuniting knowledge keepers from the northern (Eagle), central (Quetzal), and southern (Condor) directions. My family was involved in from 1990-2005. As locals, my family had the honor of hosting and developing friendships with elders and knowledge keepers from all over the Americas.
along the way. In the beginning, I was unsure if the project would collect information that could be understood as sacred knowledge, which is not intended for a public audience. In areas of uncertainty, it seemed wise to have an Advisory Elders’ Council ready to help. As the project wrapped up, this was not necessary, and the primary purpose of the Council was to witness my own research journey as the culmination of my lifelong teachings.

The results of the project were presented at a public event as a way of sharing the knowledge back with my community. All of the material outcomes including pedagogical resources, will be gifted to the participants, elders, and interested community members, made available at a local public library.

4.2 The Original Plan

When I first got to Laredo, I had made arrangements to run an amoxtli map-making workshop, as well as an optional hour-long one-on-one oral history interview. Amoxtli is the Nahuatl word for book or codex, which is a pictorial manuscript used to document civil data, maps, stories, histories, prayers, songs, and other knowledge (Farias, 2013). The workshop was designed to be the primary activity while the interview was optional.

Originally, I chose a visual method to help depict border residents' relationships with water of the Rio Grande/Rio Bravo (Powell, 2010), with the intention of literally mapping the traditional knowledge and people back onto the river landscape. I had prepared several examples of cultural mapping practices (including forest maps, star maps, nautical maps, etc.) and was ready to blend the storied compound images of

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77 For reference, see (A:shiwi A:wan Museum and Heritage Center, n.d; Araujo de Almeida, 2004)
amoxtli with map-making to create culturally-centric maps of the Rio Grande/Rio Bravo. The process of creating amoxtli in a group setting would allow participants to share stories and memories of the river through informal discussion, and simultaneously envision and enliven Indigenous knowledge of/with/in the local landscape. Figure 13: Codex Azcatitlan, Dated 1501-1600, depicts an example of an amoxtli that combines elements of narrative and geographic mapping.

I had a venue, an agenda, an assortment of well-chosen drawing supplies, and laminated examples ready to lead the workshop. However, in spite of my best recruitment efforts, participants politely declined to participate, almost unanimously citing lack of artistic skills as their reason, but were eager to meet for a one-on-one oral history interview. In response to their feedback, interviews became my primary focus.
Figure 13: Codex Azcatitlan, Dated 1501-1600

(Used by permission of the National Library of France)
4.3 The New Plan – Oral Histories

In June of 2014, I took my family with me to Laredo, prepared to stay for a few weeks of fieldwork. I did what we do in our community when we visit – I brought my family. Culturally, it would have been terribly awkward to arrive alone. One or both of my parents and my infant child came to pay respects and visit our community elders, usually in the home of the community participant, or a public space, such as the public library. Participants were provided the interview questions along with the consent forms at the time of recruitment so that they could use it to decide whether or not to participate. I brought all fieldwork provisions with me and agreed to meet community elders at their convenience. Materials included extra copies of all forms, a digital audio recorder, bottled water for the community participants, and a location with little background noise. In most cases, I met the community member in their home, and we were done in an hour.

The family dynamic led to some unexpected challenges, as decisions around logistics were reached by group discussion and consensus, rather than researcher being primary decision-maker. My father helped as the driver and interpreter on-call, while my mother, would help me with childcare for my infant. Sometimes, my parents would pay respects to the community member, and visit with the friends and family of the elder in another room. Sometimes, everyone in the house would sit around the kitchen table and listen to the interview as it was being shared. I made clear that I would arrange myself and the audio recorder to capture the best recording of the voices, but let each elder decide about whether to include a listening audience or not.
Although unconventional in the academic sense of being surrounded by my family for the research process, the moments of intergenerational sharing is at the heart of the project. My academic training taught me to feel tension, and try to more tightly control the interview process as a one-on-one interview, yet, my intuition and commitment to a non-hierarchical research process invited the community to guide the process. The presence of friends and family moving, talking, eating, listening created comfort as a non-formal platica78, and invited a wider variety of stories to be shared as conversations often included collective remembering. After the first few visits went well, every accommodation was made to encourage these types of culturally-based intergenerational learning moments. Consequently, each audio-recorded interview is peppered by the voices of my own child and my mother, and occasionally, other community members as well. In this case, the term intergenerational describes the emergent research process, as well as the resulting pedagogical practice.

4.4 Community Participants

I planned to invite 10-12 community elders to participate, specifically seeking people who self-identified as Indigenous and who had spent most of their lives in Laredo, and/or who were multiple generation Laredoan. I met with two knowledgeable community members who work for the Rio Grande International Study Center to get some feedback about the research design, and after preliminary conversations, had a list of 32 possible participants, with phone numbers, and permission to tell them who had referred me to them.

78 A platica is a casual talk, usually in a group setting, focused on a topic, but without a formal format
The first few interviews were with elders whom my family knew, but whom I did not have a close personal connection. These included the parents of a high school classmate of my parents, the first cousin of my grandmother, and a well-regarded journalist who published a local newspaper. I had never met a few of the community members before, and a few I had not seen since I was a child. Some participants suggested the names of other people who may be interested, and the sample began to snowball amongst interested community members. Below Figure 14: Summary of Community Participant Data, shows the number of community participants involved and or represented at each step of the process, while demographic details can be seen in Figure 15: Community Participants.

<table>
<thead>
<tr>
<th>Research Step</th>
<th># of Community Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial contacts, explaining the project</td>
<td>48</td>
</tr>
<tr>
<td>Testimonial/oral history interviews</td>
<td>28</td>
</tr>
<tr>
<td>Number of corrected, verified transcripts</td>
<td>25</td>
</tr>
<tr>
<td>Participants who fit criteria as Indigenous-identifying and intergenerational to Laredo/Nuevo Laredo</td>
<td>15</td>
</tr>
<tr>
<td>Participants who are life-long fronterizxs (40+ years) but would not/did not identify as Indigenous</td>
<td>8</td>
</tr>
</tbody>
</table>

Figure 14: Summary of Community Participant Data
<table>
<thead>
<tr>
<th>Identifier</th>
<th>Gender</th>
<th>Decade of birth</th>
<th>Approximately when was the last time they crossed the river?</th>
<th>Number of parents from Laredo/Nuevo Laredo?</th>
<th>Do they consider themselves Indigenous?</th>
<th>Have they ever swum in the water of the river?</th>
<th>Have they lived somewhere else?</th>
</tr>
</thead>
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<td>yes</td>
<td>did not say</td>
</tr>
<tr>
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<td>2005-2009</td>
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<td>yes</td>
<td>did not say</td>
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<td>2000-2004</td>
<td>2</td>
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<td>yes</td>
<td>did not say</td>
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<td>1960s</td>
<td>2015-2016</td>
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<td>no</td>
</tr>
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<td>2010-2014</td>
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<td>yes</td>
<td>yes</td>
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<tr>
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<td>1995-1999</td>
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<td>did not say</td>
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<tr>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>2000-2004</td>
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<tr>
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<td>2000-2004</td>
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<td>1940s</td>
<td>2000-2004</td>
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<td>2015-2016</td>
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</tr>
<tr>
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<td>2015-2016</td>
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<td>2000-2004</td>
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<tr>
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<td>1995-1999</td>
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<td>yes</td>
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<tr>
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<td>1920s</td>
<td>1990-1994</td>
<td>0</td>
<td>did not say</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>N. M.</td>
<td>Female</td>
<td>1940s</td>
<td>2005-2009</td>
<td>2</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>O. M.</td>
<td>Male</td>
<td>1950s</td>
<td>2010-2014</td>
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<td>yes</td>
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<td>Female</td>
<td>1950s</td>
<td>2000-2004</td>
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<td>no</td>
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<tr>
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<td>1940s</td>
<td>2015-2016</td>
<td>0</td>
<td>no</td>
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<td>yes</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Y. T.</td>
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Figure 15: Community Participants
4.5 Site Selection

The Rio Grande/Rio Bravo directly shapes the landscape of frontera communities across Texas. Choosing a community was easy. Laredo, Texas, was a significant part of my childhood, is the hometown of each of my parents, and lifelong place of residence for all of my grandparents. Family roots include ancestral ties to the founding families of the city and deeper roots include Indigenous peoples that predated colonization, connected to this river. Working with my own home community drew on my strengths, allowing me access to community members, places, and stories that are not often shared with outsiders. My childhood in Laredo could be considered pre-engagement, preparing for the research project with the local understanding of how complex life is when the river is also the international border.

4.6 Instrumentation

Similar in importance to the Coast Salish cultural practice of witnessing\textsuperscript{79} (Gaudry, 2011; Qwul'sih'yah'maht, 2005), the practice of dando testimonio\textsuperscript{80} (Pearlman, 2010) is giving a first-hand account of what one has experienced or seen in their own lifetime. Thus, while a testimonio is one single lived account, the practice of collecting testimonios can give shape to the collective memory of a community and serve as the basis of storying history and storying relationships. The process of collecting testimonios is similar to oral history interview approaches but shifts, based on the

\textsuperscript{79} Witnesses and the process of witnessing are considered a sacred community role, vital to oral traditions and recognizing the honorable and important work of fellow community members. This is one of my Canadian teachings.

\textsuperscript{80} “To give truthful witness” (Pearlman, 2010, p. 5) While I appreciate and acknowledge the extensive scholarship about testimonio in Central and South America in the areas of literature, rhetoric, and human rights studies, I use it here, more casually, the way the word is used in the community.
questions asked of the interviewee. While testimonios often center specific events, attesting to a particular moment or era of time, and the events that were impactful to oneself, oral histories tend to collect the life stories, narrated first-hand by the individual person, including their thoughts and actions. The issue of representation is vital in the use of testimonios. When testimonios are retold by a different storyteller to a new audience, as when a researcher uses testimonio to support a research project, these personal accounts can convey a different meaning than originally intended. For this reason, the process of collecting testimonios must also include a strategy of verification to ensure accuracy and consent.

I created a set of interview questions that borrowed from oral history and testimonio practices, with the goal of hearing life stories that give witness to life in/with/near/at the Rio Grande/Rio Bravo. The first few interview questions were designed, to help participants feel comfortable with the interview process while collecting some basic information including name, birthdate, birthplace, name of parents. All of the other questions were open-ended so that participants could share as much or as little as they were comfortable. A few questions invited family histories and earliest memories of place. Then, questions became a bit more specific with the goal of encouraging participants to give testimonios about the river. The process of developing these questions was somewhat intuitive, based on the three major themes, depicted in Error! Reference source not found..

I provided the graphic organizer to the community members both in their Letter of Invitation as well as their copy of the Oral History Interview Questions to invite stories that may also relate to one of the other themes. The second half of the interview asked
questions to elicit information about the overlapping areas in the figure below, in Figure 16: Elements of a Relational Ecology, inviting details about the importance of land to the community, water in the landscape, and role of the river in the community. This way, the focus shifted toward the relationships between the elements, with multiple entry points into the conversation.

It was important to honor the lifetime relationships participants have within our community and listen to the wealth of historical information that is often overlooked. The first few interviews were conducted with an earlier draft but the wording in two questions did not translate into Spanish very well. The concept of relationship with the land and river was lost in translation, and the answers clearly indicated the need to edit for clarity. The version seen in Figure 17: Oral History Interview Questions was used for 22 of the 28 interviews.
Pedagogies of the Rio Grande - Oral History Interview Questions

1. Please state your name.
2. What do you do for a living?
3. Where and when were you born?
4. Tell me about your parents and/or your family background.
5. Where did you grow up? How long have you and your family lived along the border, near the Rio Grande?
6. What do you know about your family origins? How did they come to the Laredo area?
7. Do you have family or relatives in Nuevo Laredo? How often do you visit them or they visit you?
8. What stories do you remember from your grandparents or community elders in relation to the Rio Grande or to water in general?
9. What are your earliest memories of the Rio Grande? What is your fondest memory of the Rio Grande?
10. How has the river changed in your lifetime?
11. Does your family or community have any special traditions in relation to the Rio Grande? Why or why not?
12. Does your family have a ranch? In your opinion, what is the significance of the land and the river to the local families?
13. How do you think the Rio Grande influences life in Laredo?
14. What are some of the major challenges posed by the Rio Grande being an international border?
15. What are your thoughts on the following graphic? How does this relate to life in Laredo?
16. What do future generations of people living in Laredo need to know about life with the Rio Grande?
As with other memory work methods, the information is assumed to be true, and understood as a whole, making space for the occasional fuzzy detail or mistake in retelling. The process of collecting multiple interviews allows for us to assemble different perspectives in which various stories confirm and uphold what we can come to understand as the collective memory, specific to how Laredoans/Nuevo Laredoans know and understand the Rio Grande/Rio Bravo. While it is a bit difficult to measure the statistical validity of such an open-ended process, the interview was effective in bringing forward many first-hand accounts and metaphors for understanding the river. Each testimonio can be understood as a different puzzle piece depicting a part of the larger story, restorying the Rio Grande/Rio Bravo back onto the land, and our community. Collectively, I consider this body of stories to be foundational knowledge from which other parts of the research process, such as findings and new knowledge, grow.

A process of triangulation helped to fill in some of the additional puzzle pieces. During the research process, I visited several archives, both in Texas and in Mexico, in search of information documenting the traditional knowledge of water specific to the Rio Grande/Rio Bravo. Most of the archival material exists in colonial collections but I tried to read against the grain to note what was and was not present and find representations of the river through time. My research strategy was to search for photos and maps that depicted the Rio Grande/Rio Bravo. Of interest were the explicit reminders that the landscape was dramatically different for previous generations of fronterizxs. I'd also search for documents containing details such as how locals named themselves, traditional plant knowledge, and first-hand accounts of the mining towns that no longer exist. Many of these details are absent from the historical documents, and not available
to the public. In this way, the archival work was not particularly helpful, but it did explicitly point to the importance of documenting the lived/living archival knowledge of community elders, as the content they remember is often what colonial archives fail (and intentionally refuse) to document.

4.7 Field Test

Ten interviews were conducted in June of 2014. The opportunity to conduct them came quickly, unexpectedly, during a non-research trip to visit family in Laredo, Texas. I had ethics approval and was finalizing my technology when some of my elder family members became available for the interview. I wanted to take advantage of their excitement so moved forward with the interviews.

I used these as a field test and opportunity to refine the interview process. In these first interviews, community participants were able to answer each question, and stay (relatively) on topic in their answers. There was one question that I had to consistently rework each time it was translated into Spanish during the interview, and two questions that were too open-ended, resulting in responses that were too wide-ranging. Most of the responses seemed to be off-topic, distracting the flow from one question to the next, from one story to the next. These two questions were edited in a second version of the interview questions. Also, it was during these interviews that I was able to translate the interview into Spanish in a way that accurately reflects the Laredo-specific way of thinking and ways of speaking, moving between the two languages, which is different than formal, academic Spanish.

At the end of each hour-long interview, I'd thank the participant, timestamp the end of the recording, turn off the recorder, and spend a few minutes with the community.
member. I'd ask how they felt about the interview, ask for any suggestions, and get a general sense of other improvements I might make to the process. Most participants did not have suggestions for me but expressed gratitude for my interest in the river and the importance in teaching the next generation.

During one of the first interviews, a community member was telling a story about a place near my grandmother's house. When she said, "Your grandma will tell you all about it," I had a moment of deep personal reflection. I was taking advantage of the network nurtured by my family over many years, yet excluding my own family from the interviews, in spite of the fact that my eldest relatives are my personal sources of collective memory and ancestral knowledge of the Rio Grande/Rio Bravo. It felt disrespectful to exclude my own relatives. At that point, I made the decision to invite a few family members who fulfilled the participant criteria, careful to abide by free, informed, and prior consent guidelines, and include their voices in the project.

4.8 Oral History/Testimonio Collection Procedures

I was on academic leave from August 2014 until May of 2015. In June of 2015, I returned to Laredo to continue the interviews. The process for each interview was to make initial contact, usually by phone or in person and to casually explain the purpose and educational goals of the research process. I'd schedule the interview at the participant's convenience, usually with the arrangement that I would travel to meet them. At the time of the appointment, I'd arrive with my family, find a quiet place to conduct the interview, and casually converse with the community member. I provided each participant with their own copies of consent forms and the interview questions and
talked them through each section of the forms to ensure full understanding with no pressure to participate.

If the community member agreed to participate, they'd sign one copy and keep the other for their files. I'd turn on the audio recorder, check for sound levels, and begin with question 1. The questions were just a guide but participants were welcomed to let the conversation go in different directions. Sometimes I would ask clarifying questions not on the list but related to our topic. Usually, interviews lasted close to an hour. At the end of the interview, I'd offer words of thanks and a small gift to reciprocate for the knowledge shared. The gift included a handmade thank you card, a $10 gift card, as well as a packet of milkweed seeds specific to our south Texas ecology.

Milkweed is the sole food source for Monarch butterflies, which migrate across the US to winter in central Mexico. There are many stories regarding Monarch butterflies in this region, often associated to Dia de los Muertos, celebrated on November 1-2 each year. Monarch butterflies are said to be spirits of loved ones who have crossed over into the spirit realm, returning to visit their families. I also chose milkweed seeds to support the beautiful creatures on their annual migrations, which defy colonial borders.

August through December of 2015, I worked on transcription and translation of interviews. In the last two months of 2015, I decided to hire the help of a transcription service. Once the transcript documents were returned to me, I had to listen to the audio files again and correct the transcripts, as the use of local slang and mix of Spanglish required careful attention\textsuperscript{81}. In January of 2016, I sent an email and/or called each

\textsuperscript{81} The transcription mistakes were fascinating and sometimes hilarious, and could easily be used for a linguistic analysis.
participant with a follow up report of the progress of the project, explaining the verification process. At the end of February, 2016, I mailed two copies of each transcript to each participant, one for their records, and one for them to return to me in the postage paid envelope. Participants could mark their edits on the paper document itself, or add comments to a Microsoft Word file.

The instructions were to check for accuracy of names, dates, and places, and to strike any parts of the transcript that they did not want included in the project. I reminded participants not to edit the conversational aspects, or grammatical errors. At the end of March, I called each participant to remind them to either return the corrected transcript or to consent to use the transcript as is. By mid-April of 2016, I had heard back from all but three persons. There are 25 transcribed, corrected, verified transcripts that I used as my main sources of collective memory.

4.9 Summary

In this chapter, I detailed the Fronterawork Methodology that I created that responds to the many nuances of conducting research with frontera communities with the goal of revitalizing the traditional and relational ecological knowledge related to the river in my community of Laredo/Nuevo Laredo. Then, in the second half of the chapter I shifted from the conceptual to the practical, explaining how my research method had to shift to accommodate the feedback and energy of my community participants. The goals, framing, and possible outcomes of the project remained as planned, in spite of the data collection process changing from a visual and creative process to an oral storying process.
Chapter 5: Preparing Our Teachings

At the beginning of the day the water was warm, and it was flowing smoothly, slowly. You know, you could bathe in it, and just walk into the water, and stay there. But once the sun started going down, you could see even the flow of the water was coming more rapidly, and the water was becoming mas fria, getting colder. And tambien del current and... la marea. The tide would start to get high, you know, during the day, you would stand in the middle of the water, and the water level would be just under your knees. And by maybe 6 o'clock or so, ya, it was up to about mid-thighs, aquí, más o menos. You would get out, because you could feel the current getting stronger.

You already knew, because our parents would tell you “Te tienes que salir, porque el río es un traidor.” Tú lo ves and it's flowing smoothly, tranquilito y todo, pero, you get in and get to a certain area, and it has undercurrents, and it pulls you. There is no way to stop from going with the current. So we knew, we were aware, and we took care of what we did. Y decían los adultos también: “¡Hey salte, salte!” “Aye, no, I'm having a good time.” There were a lot of kids at that time. Estábamos todos chiquitos so you know that not everybody would mind. Nosotros oíamos: “No se quiere salir Norma del río!” Y allá van - the grown ups would go and get you outta there, because they knew.

They had been young kids at one time, doing that, and more than that. They would go and bathe in the river almost on a daily basis. No había showers, ni baños, ni nada, like we used to have, so they would go into the river on the daily basis. They knew more about the river than we did. (J. Ramirez, oral communication, February 2, 2016)

The above story was shared by my great auntie, my Tia Cheffie, as four generations of women and girls from our family sat around the kitchen table, listening, laughing, and taking turns caring for my infant, Ofelia. It provides a beautiful example of how community members think and talk about the river, how the process of remembering calls forward other stories, and how concepts flow into each other within one

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82 colder
83 up to here, more or less
84 “You have to get out, because the river is a traitor.” And you see it and it's flowing smoothly, peacefully and everything,
85 And the adults would also say "Hey, jump out, jump out."
86 We were all little kids
87 We would hear; "Norma doesn't want to get out of the river!" And there they go,
88 There were not showers, nor bathrooms, nor anything
conversation. My Tia Cheffie was sharing her memories of the river, deeply embedded within the familial context, speaking to me as great-niece rather than researcher. It is these personal connections that allow the conversation to be so rich and nuanced, and also why the process of analysis requires such respect and care. In this chapter, I will share my educator response-abilities for the teachings found in the testimonios of community elders, and offer suggestions for how to use the teachings as part of a pedagogical practice.

5.1 Response-Ability: Pedagogy-Making as Methodology

Rather than deferring to the academic literature (as the authority) for a tool to apply to the interviews (as passive data), I found myself reflecting on my own positionality and responsibilities as a community member, friend, relative, and educator. I wanted to intentionally disrupt the power dynamics of the research process and engage the collective memory of the community as the foundational knowledge out of which both findings and new knowledge could grow. Analysis, in this case, centered on the third research question, which originally asked, "How might these relationships inform a culturally-relevant and intergenerational pedagogy that shares Indigenous intellectual traditions of the Rio Grande/Rio Bravo? How might this pedagogy be shaped of/by/with/through the traditional knowledge of water?" The intention remained the same as the question guiding my next steps shifted into: "What are the steps to building a pedagogy from the river stories of my community?"

The most appropriate response seemed to emanate from within, requiring that I enact my responsibilities and response-abilities as a deeply embedded participant in this system of intergenerational knowledge. My dual roles in the research process as
learner (as I was listening to the stories of my own elders) and as teacher (as I hope to pass these teachings to the next generation) constitute the two fundamental aspects of building and nurturing responsive pedagogy. The process of pedagogy-making was largely shaped by my experience as a middle school teacher, such that I was able to intuitively think through implementation based on an audience of sixth grade learners. Clarifying my response-ability helped to shape steps of pedagogy-making.

As seen in Figure 18: Intergenerational Pedagogy of Indigenous Knowledge, I have come to understand the first half of the research project, including the travel home, inviting community members, visiting, listening, and facilitating the interviews to be the Learning Phase of my pedagogy-making process. The second part, the Teaching Phase, included selecting the teachings, building context, representing knowledge, and connecting with learners. While each phase is distinct in terms of whether information is being received or relayed, learning and teaching are mutually-constituted, shaped by context in a responsive and reflective pedagogical practice.

Often, land-based, place-based, and culturally-specific ways of knowing are passed this way, including both explicit and implicit ways of learning. The embedded, non-hierarchical role of teacher as co-learner shares the responsibility for the continuance of intergenerational knowledge such that the whole community participates. Consequently, my research process moved toward the generative metaphors of growing, nurturing, and building a pedagogy of the Rio Grande/Rio Bravo based on the teachings found within the collective memories of our community elders. Much like the other aspects of the project, the process of consideration is intuitive and flowing, mindful to practice and embody the traditional knowledge practices of my community.
5.2 Learning Phase: Thinking Through a Fronterawork Practice

The methodological framework mirrors the theoretical framework of the project by focusing primarily on the first-hand lived experiences of Indigenous fronterizxs,
connected to the Rio Grande/Rio Bravo through multiple generations. In examining what the river means to an Indigenous frontera community, it was crucial to be inclusive, flexible, and sensitive to the ways in which ongoing occupation influences how and where the community feel safe to openly discuss the river. The intention was to critically unsettle the typical academic model of research in favor of respectful, non-hierarchical, and relevant research elements that give back rather than take from my own home community. The process was fluid, allowing for various iterations to unfold, producing outcomes that were meaningful and/or useful to the community residents.

Conversations invited a holistic approach to co-learning through community engagement, drawing loosely on Indigenous methodologies, community-based research, and culturally-relevant oral practices. In this way, the oral histories are not referred to as data, but are instead experiences of collective memory, creative resistance, and demonstrations of emplaced and embodied Indigenous knowledge. Community elders are living archives. Our stories are healing.

In describing the development of Red Pedagogy, Grande (2008) elaborates, “The social engagement of ideas is my method...ideas as they come alive within and through people(s), communities, events, texts, practices, policies, institutions, artistic expression, ceremonies, and rituals“ (p. 233). Similarly, traditional knowledge of water is brought to life through the pedagogical practices that connect people within relational ecologies, embedding communities within particular moments in time. Yet, in order to

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89 The roles of researcher and subject are built upon a hierarchy of power. In contrast, co-learners (in my own experience) suggest mutual and shared growth for understanding. In practice, the educator curates an open-ended teachable/learning moment, but is not tied to a particular learning path or rigid outcome. Learning is allowed to happen organically and holistically.
create meaningful borderland pedagogies of water, the pedagogical practice must do more than simply talk about water – it must also embody and enliven water as living knowledge.

In the Statement on Water and Indigenous Peoples, presented to the 10th Session of the United Nations Permanent Forum on Indigenous Issues, the Global Indigenous Peoples Caucus (2011) articulates, "Our Mother Earth nurtures, shelters, and nourishes us, and we are spiritually connected through her waterways - veins and arteries to the plants, animals, places…. Water is sacred, water is life." In other words, water makes life possible, not as a process that animates individual humans, but as a spirit that connects us to all beings in creation, in which humans are small elements in the dynamic system of life. Water does not bring us to life; the water in us is life.

To enliven a pedagogical practice that centers water in my community is to recognize that the water of the Rio Grande/ Rio Bravo is life, connecting us to our ancestors and to our grandchildren yet to come. Teaching and learning these forms of traditional knowledge require all modalities of learning, including intellectual, emotional, physical, and spiritual aspects. Wilson (2008) explains, "Research by and for Indigenous peoples is a ceremony that brings relationships together" (p. 8). Thus, when the research takes the form of pedagogy, the intra-related processes of teaching and learning are the ceremonies that bring our community relationships together. The development of culturally-specific methodologies in/of/for the borderlands moves to Indigenize/decolonize\textsuperscript{90} the research process, prioritizing embodied and emplaced

\textsuperscript{90} Decolonization suggests a deconstruction or intervention in the process of colonization, while Indigenization prioritizes the Indigenous intellectual traditions. This project does both.
traditional and Indigenous knowledges. In so doing, this project raises critical awareness *with* and *within* borderland communities, *in the service of* borderland communities by enlivening the intergenerational conversation about the Rio Grande/Rio Bravo that connects all life in our community, including the non-human life of our relational ecologies. From this central idea, pedagogy emerges through sharing, *inspiring* of intergenerational knowledge, allowing us to be response-able in the processes of teaching and learning in the places we call home.

5.3 Learning Phase: Dando Luz\(^{91}\) to a Fronterawork Method

Inspiration for this research process borrows from oral histories, testimonios, emplaced witnessing, Indigenous storying, and Indigenous cartography, to revitalize the ancestral knowledge of the frontera community based on life stories of community elders and knowledge keepers. In weaving these stories into the foundation of an intergenerational pedagogy, we (as a community) can work to collaboratively generate holistic understandings that map ancestral knowledge (Herman, 2008) and re-inscribe culturally-specific meaning to the places in which we live (Armstrong, 1998), while mobilizing traditional ecological knowledge for the protection of the community.

At the beginning of this project, I had a clear vision of what the work would entail. However, as with most community-focused research, unexpected challenges and ongoing feedback from community participants changed the process at each step. Or, to use the river metaphor, once I jumped in, the currents took me in unexpected directions. In the following section, I will focus on all aspects of the research process

\(^{91}\) giving light to, a phrase used to describe the process of childbirth
including the parts that worked, those ideas that didn't work, with some discussion around improvements and future work.

5.4 Examining the Teachings in Our Basket

In their entirety, collective memory is valuable to my community for documentary reasons, recognizing our elders as living archives, able to share stories and details that are not conveyed in the photos, text or realia. There is urgency to document their stories before the elders cross over. However, for the purpose of this project, there are specific teachings about our Rio Grande/Rio Bravo that need to be passed along to the future generations, as well as specific criteria for determining which aspects are the intergenerational Indigenous knowledges, and which aspects offer valuable non-Indigenous support. While the general history is important, I am specifically in search of our river knowledge and water stories that connect us to our ancestral territories. I turned to modern technology to help me discern which teachings to use for the next phase, the Teaching Phase of my pedagogy-making.

Once the transcripts of the interviews were corrected and verified, I used an online software tool called Dedoose, to organize, read, and code the 25 transcript documents. The process was iterative, adjusting the codes with each new reading. I read all of the transcripts several times, working in different orders (alphabetically, chronologically by birth year, by length) adding a few new codes each time.
Figure 19: Codes Created During the Reading Process
By the fourth pass, I had 45 different codes, as depicted in the word cloud in Figure 19: Codes Created During the Reading Process. After coding, I encountered technical difficulties with the software, and stopped using Dedoose. In addition to applying codes, I compiled a list of the specific geographic locations shared in the stories, in order to map our stories onto the landscape. Some of these places were large areas, such as various states in both Mexico and the United States, while others were specific addresses and landmarks where the stories happened. All locations were compiled into a spreadsheet for mapping.

Finally, I highlighted the excerpts from each transcript when the community member was speaking literally or figuratively about the river and/or water. For most of these, I also made notes of my own thoughts and connections to the bigger context. Excerpts and notes were exported from Dedoose for further analysis.

After all of the transcripts were coded and mapped, then I referred to the criteria for determining which of the testimonios were examples of Indigenous Fronterizxs: self-identification and an intergenerational relationship with the Rio Grande/Río Bravo, as seen in Figure 20: Testimonio Transcripts According to the Criteria.
Looking at the table, it appears that only 15 of the transcripts clearly fit the criteria. However, I was not comfortable with simply throwing out 10 of the 25 testimonios of community elders and knowledge keepers. It felt disrespectful. I considered the fact that for Indigenous identity is still a fraught aspect of identity to claim, especially for the particular individuals in question. I decided to use 19 of the oral histories/testimonios as the main body of the knowledge from which to develop the pedagogy, representing knowledge keepers who are both intergenerational, and have lived in Laredo/Nuevo Laredo for over 40 years, and who either do identify as Indigenous or refuse to answer the question. The remaining 6 elders and knowledge keepers are either Indigenous to
the greater south Texas area (not Laredo specific), or are not Indigenous, but considered river experts with over 40 years of embodied and emplaced knowledge or the Rio Grande/Rio Bravo specific to Laredo/Nuevo Laredo. These 6 testimonios were not used to build the pedagogy, but were used to offer explanations of embodied and emplaced witnessing, woven in as part of the discussion that supports the pedagogy. In this way, the Indigenous knowledge is prioritized, upheld by the testimonios of community elders and knowledge keepers, inclusive of the way they identify.

5.5 **Teaching Phase: Laying the Groundwork with Maps**

The original design of the project, and therefore, the interview questions, were centered on three interrelated topics: water, land, and people. However, the landscape encoded in the local knowledge and collective memory is not the landscape we see today. "It's like telling a new-comer “Go down Sambe and take a left where the old Dairy Queen used to be." Any local will understand that, but it doesn't make any sense to an outsider" (O. Muñoz, oral communication, May 10, 2015). He's right. Sambe is the local nickname for San Bernardo Avenue, and the Dairy Queen is no longer there, but the place it used to stand is still used as a landmark for locals. Only a local would understand the hyperlocal historical landmarks commonly used to navigate the city.

Or consider the following conversation between Mr. and Mrs. Bernal, when I asked the address of his childhood home,

*Mr. Bernal:* 1712 y 16 Lincoln.

*Mrs. Bernal:* No 1712 Lincoln.
Mr. Bernal:  
_Si, 1712. Pero cuando vienes en el frente, es 1716_. [laughter]

Mrs. Bernal:  
[laughter] I'm sorry. I didn't know that.

To the folks who know the family and location, the house number is 1712, but to the person who lived there, the home had two different addresses, both 1712 and 1716. The difference may be subtle, but the embodied and emplaced details give a different nuance to life in the particular places. The challenge for me, as a local who knows only some of these oral landmarks and memoryscapes, is to try to teach the stories held in the land and river to learners without any prior knowledge of the landmarks or memoryscapes. To work around this dilemma, I've mapped the places where the stories live. Using a free mapping software available through Google called My Maps, I created a series of maps, including the example seen in Figure 21: Geographical Locations Mentioned in the Oral Histories. The process required some fine-tuning, as many of the smaller towns were plotted incorrectly by the software. I had to cross-reference each location, and manually correct one-third of the places mentioned.

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92 Yes, 1712, but when you come from the front, it is 1716,
Figure 21: Geographical Locations Mentioned in the Oral Histories
As I began to populate the map, it immediately became obvious that the collective list of places gave no indication of different eras of time. To understand the interplay of place over time more accurately would require movement of these place-markers as stories moved over time\textsuperscript{93}. Furthermore, there were many locations in the stories that no longer appear on current maps, most likely because they are no longer populated, or represent landmarks that have been erased from the landscape (i.e., the Dairy Queen that is no longer there), but remain significant in our collective memory.\textsuperscript{94}

Another consideration in the mapping process relates to the aesthetic details of how the land, river, and border are all depicted. Intentionally, I chose a color scheme that did not differentiate the US from Mexico by color, in order to visually show the continuity of the landscape on both sides of the river. Within the Google My Maps user interface, I could not find a way to depict the river without the black or white line of the border. In these maps, the river is not indicated unless the map is zoomed in quite close, or is switched to a composite satellite image, as seen Figure 22: Terrain Versus Satellite Mapping #1: US Mexico Border and Figure 23: Terrain Versus Satellite Mapping #2: South Texas/Northeast Mexico. These limitations are due strictly to the map sources used in the software. For the purpose of this project, they serve to create a point of reference, connected to the life stories of the community members. The stories shift from placeless generalizations to material reality, so that we may understand life in specific places along the Rio Grande/Rio Bravo.

\textsuperscript{93} Animating the maps through time is beyond the scope of this project, but may be taken up later.
\textsuperscript{94} The methods and process of visualizing collective memory through Indigenous map-making could be a separate investigation.
Figure 22: Terrain Versus Satellite Mapping #1: US Mexico Border
Figure 23: Terrain Versus Satellite Mapping #2: South Texas/Northeast Mexico
Once I had a sense of the geography, I went back to the interviews and began to notice how the different stories suggested different visual representations of the Rio Grande/Rio Bravo. There were no visual references such as photos or maps used during the interview process, however, the storytellers gave many landmarks and visual clues to indicate scope, place, and context for each story\(^{95}\). Conventional mapping tools use a default perspective that looks down from above, suggesting an omniscient perspective, however this visually does not match the embodied and emplaced form of storying methodology of the project. Memory work requires a more personal approach, depicting and navigating the world from an eye-level perspective\(^{96}\). However, for the sake of showing how our interconnected Indigenous fronterizxs are to both sides of the river, overhead mapping quickly conveys lives lived across the greater region.

### 5.6 Teaching Phase: Discerning the Streams of Thought

*The whole of Laredo culture is about the river. Our culture is distinct from any other border town. The way the river separates the cities is a friendly separation.... There are parts of it through ranches that you could walk across. There are parts of the Rio Bravo that cattle walk across, they become international cattle, and that nobody likes that. [laughing] but you can't control that. But how are we different from the other sister cities? I think we're different in what we we’re called. Look at what this border did. We are Laredo and Nuevo Laredo. It's a same name. We are not Matamoros/Brownsville, and we are not Reynosa/McAllen, and we’re not Piedras Negras/Eagle Pass. We are Laredo/Nuevo Laredo, and it's symbolic that we were one community.*  
(M. E. Calderón Porter, oral communication, June 13, 2014)

For people who do not live in frontera communities, it is easy to conflate the river and the border because on a map, these two places appear to be inseparable. For

\(^{95}\) Future work would include a mapping and visual component to the process, inviting the community to take up issues of representing where we live, and where our collective memories live on the land.

\(^{96}\) Future work may explore visuals from multiple simultaneous perspectives, suggesting visual arts practices such as cubism.
community residents who live along the Rio Grande/Rio Bravo, the river is distinct from the border, and each serves a different function, as is made clear in the quote above. In just a few sentences, Mrs. Calderón Porter explains, what for her is common knowledge, that the river and communities preceded the border. The formation of the border split communities into halves, which we now call sister cities, but for the people living in the communities, it is one big community. In using the sister cities metaphor, we can understand the interdependence of the communities on each side of the river, related by blood, genealogy, history, and ecology.

The river, understood as a life source, is what brings community on each side together, while the border works to separate and divide. Although both may exist in the same relative location across the landscape, we can start to understand the juxtaposition of irreconcilable demands that make life in/on/along/between the two challenging. The difference between River Thinking and Border Thinking is an essential distinction that gets at the heart of what the Rio Grande/Rio Bravo means in the lives of the Laredo/Nuevo Laredo community members, and how these concepts have shifted within one lifetime.

5.7 Summary

In this chapter, I activated our response-ability by discussing the process of pedagogy-making as a synthesis of the community testimonios of life with the Rio Grande/Rio Bravo. I developed some context by mapping the place-names from our stories, and detailed the process of reading and coding for patterns in the transcripts. As I examined the teachings, two distinct streams of thought emerged, Water Thinking and Border Thinking, which will be further discussed in the next chapter.
Chapter 6: Our Teachings as Streams of Thought

In this chapter, I will use a waterway metaphor to organize and discuss the teachings drawn from the archives of our collective memories. I will also discuss Water Thinking and Border Thinking, while drawing on the words of our community elders and knowledge keepers. The discussion will often take on the characteristics of water itself, most notably in the flow of one concept into the next, intuitively mapping our community understandings of water and the Rio Grande/Rio Bravo. While in English, there is a tendency to suggest Water Thinking and Border Thinking are oppositional to each other, however, I will highlight examples from the testimonios of community members to demonstrate the ways that River-as-Water Thinking and River-as-Border Thinking are not mutually exclusive for fronterizxs. Often, meaning can be found in the inherent complexity and seemingly incompatibility that speaks directly our life experiences as fronterizos making a life on/of/with/along the river border.

As I worked to group related stories of our rio, I began to visualize the connections and conversations between the testimonios of community members. What emerged can be seen in Figure 24: Metacognitive Map of our Understandings, which depicts one main waterway, into which all smaller waterways join. In this case, the river is not a map of the physical waterway across land, but instead a metacognitive map of the many ways that community members and knowledge keepers understand the Rio Grande/Rio Bravo. The image is an iterative line drawing, intentionally simplified, to make space for the complex, intersecting, interrelated ideas to develop.
Figure 24: Metacognitive Map of our Understandings

Looking closer, we can discern the two distinct streams of thought, River thinking and Border thinking, and the smaller tributaries that feed each stream. In some contexts, these are somewhat exclusive, while in other contexts, the two streams of thought come together in confluence, which we can understand as dynamic and turbulent, in the waterway metaphor. This metacognitive map is iterative, and evolved as different aspects of community testimonios were examined. In the next section, we will examine both major streams of thought, as well as each tributary, building understanding through direct quotes, contexts, and examples.
WATER THINKING: River-as-Water concepts (paraphrased)

River as LIFE
- Water as universal to all life.
- Water is life. No water is death.
- No river, no water, no Laredo.
- The river is alive.
- River is life, our source of life.
- River as relief from the arid environment.
- River as a wild animal that has never been tamed.
- River a baptismal font (literally), a sacred place.

River as IDENTITY
- The river is a big part of us, as part of our identity.
- The damage we do to the river, we do to ourselves.
- No water would be our death physically, and also culturally. Culture lives here.
- River as coded language for locals, as a reflection of the social conditions. For example, "Que mugrero trajo el rio!" [The river has brought such trash here!]
- El rio es lo que une a las comunidades. [The river is what unites the communities.] River as the uniting factor between the sister cities, unites each side as one community.
- River as family member. "We speak of the river as we speak of a mutual relative or mutual friend."
- "El rio es un traidor." [The river is a traitor.]

River as LAND/PLACE
- If there was no river here, the border would have no meaning- It is just another dusty town. The river has the meaning.
- River is a conduit that connects all life, conduit for information, and conduit for culture.
- The river is a map to the medicine, lengthwise. The Rio Grande/Rio Bravo is the basis of our relationship with our medecina, peyote.
- Places holding history and memories - you have to go there to hear the story to understand.
- River sounds are the soundtrack for home, relaxing.
- The river as recreational place, entertainment, adventure, as a playground, belonging to the locals.
- River as fishing resource.

Figure 25: Summary of Water Thinking
6.1 Water Thinking: River-As-Water

The River-as-Water stream of thought includes all of the stories in which the Rio Grande/Rio Bravo was referred to as the source of water. Similar story excerpts were grouped, then paraphrased and organized according to theme, as seen in Figure 25: Summary of Water Thinking. Three major tributaries emerged from the stories with relation to River as Life, River as Identity, and River as Land/Place. The three were ordered this way to indicate the growing distance between frontera residents and their Rio Grande/Rio Bravo, loosely corresponding to the shifting role of the river over time: the river is the life inside of me, the river is a part of me, and finally, the river is external to my body.

6.1.1 River as Life

One of the most repeated phrases in the interviews was some form of the idea that water is life, with the focus remaining on water, as a general concept, rather than the river, as a specific place, or ecology. Interestingly, the word life was also used with reference to one's individual life, as well as the collective concepts of community life, cultural life, and spiritual life. When considered from this inclusive perspective, the meaning of the phrase water is life shifts our thinking to understanding that life encompasses a very broad, multi-layered reference to all of creation throughout time.

Community participants shared a diverse array of stories, recounting their memories of their own grandparents, some of which reached back in time to life before the river was a border. In the US, systemic Eurocentrism ignores the history of the land previous to colonization in spite of the fact that traditional knowledge survives in the oral traditions of the elders. When Indigenous peoples remember the local relational
ecologies, they/we remember a different ontology of their/our to the land and river.

These memories map a different landscape than what current maps show.

_The Rio Grande River is a conduit of life, lifestyle and culture. It connects; it’s just not something you cross over. The entire length of [the river] is a conduit of information like it used to be a hundreds of years ago, where people traveled up and down and traded. So, it’s not the dividing line created specifically for the North American Free Trade Agreement. It’s the conduit of life and the ebb and flow of people traveling back and forth and telling stories and trading things and learning about different cultures and different ways, and intermarrying, tribes and other gentes. Not this way [motioning across], but this way [motioning lengthwise]. (G. Perez, oral communication, June 5, 2015)_

Mr. Perez’s story completely reorients how we often think of the river, how we understand the people. Rather than the contemporary fixation with crossing the river as the primary way of knowing and interacting with the river, he reminds us that in the past, people knew it by travelling the length of it and as a route for trade and community relations. I suspect this to also be a generational difference in that many elders know the river and have been physically in the water, orienting to the length of the flow, whereas younger generations who have not experienced the water tend to think in terms of crossing over the water.

Family histories include details of daily community life on both sides of the river, when Laredo was one single town.

_The river was not a division back then. It was more of a place where everyone could come together for the use of the water. Different animals had to drink the water, too, which also brought people together. That is how life was for a long time for many people living on both sides of the river.... Water was crucial to every aspect of daily life and everyone was dependent on the river. (N. Muñoz, oral communication, December 4, 2014)_

Speaking about stories shared by her grandmother in her youth, Mrs. Muñoz reminds us of the most important function of the river as the source of water, and how a few generations ago, daily life was shaped by daily interactions with the Rio Grande/Rio
Bravo. Visits to the river are not just a historical detail. In their lifetimes, our elders experienced the water flow quite differently than we do today.

I remember also when we were little, we would go, Daddy would take us in a wagon to the edge of the river and he would just... he would go like this [gesturing with her hands] with the wagon, it was a carreta, a two-wheel, not a four-wheel wagon... And we used to go like this and make it lean back, and then he would wash my hair, wash my hair right into the river. (Z. de Llano, oral communication, June 14, 2014)

In Mrs. de Llano's account, in her childhood, the water was so clean that her family would bathe in the water. Later in her testimonio, she mentioned what a momentous milestone it was to eventually move into a home with plumbing, but until then, they would visit the river, and also have water delivered. Home water delivery continues to this day to support those community members who live outside of the municipal water district, Through time, as developments such as indoor plumbing and municipal water services grew, community members visited the river less often, causing the relationship between the people, the landscape, and the river to shift.

6.1.2 River as Identity

Similarly, there were many ways that people spoke of water, or of the river, as a fundamental part of who they/we are. In some cases, the pronoun we referred to immediate company, but usually, we meant frontera community members from both Laredo and Nuevo Laredo. In this case, the concept of identity is used broadly to include the many different ways frontera residents may identify, inclusive of the different contexts that inform identity on both sides of the river. Considered from an Indigenous land-based perspective, identity refers to a layered, holistic, embodied and emplaced

97 The water is no longer delivered by horse or donkey, but is instead delivered by trucks.
way of understanding how the river can refer to the people, as a reflection, as a relative, and as part of fronterizx identity.

In spite of changing contexts, the Rio Grande/Rio Bravo still remains the only major source of freshwater for the community. Several community members explicitly made the connection between lack of water and death, not using hyperbole, but based in the reality of the very arid, scrubby climate of the land in which drought is seemingly everpresent. In her oral history, Ms. Ramirez draws the connection between the health of the river and health of the people:

_Pero, la gente antes, they respected the river, and took care of the river... Do you remember any sick people from that time, ¿Viejitos? Do you remember any older people, sick? Si había gente viejita, Doña Panchita--usaba un bastón - a lo maximo, pero, you never heard of anyone getting cancer or something like that. They were still alli con el azadón, working, y todo eso. Because the water was clean. Y ahora, nowadays? Todo el mundo enfermo del estómago.... [Antes] La gente viejita. They’d live to an old ripe age. Entonces...the water makes a lot of difference in your system. Sometimes they even tell us not to drink the water!_ (J. Ramirez, oral communication, May 15, 2015)

Unlike other forms of archival information, Ms. Ramirez’s memories hold rich nuanced details, including some of the seemingly mundane details of daily life that help to elaborate the specific ways that the health of the river is directly tied to the health of the people. Unlike a research perspective of public health, Ms. Ramirez remembers that when she was young, the communities’ ailments were different and the general health of elders was different than current times. While there may be other factors for these long-term differences (such as changes in diet, pollution, or access to medical care), she connects health of the people to health of the water as a direct, reciprocal relationship. When the people took care of the river, the river took care of the people. Conversely, when people stopped taking care of the river, the river could not take care of the people, evidenced in a decline in the health of community elders.
In 21 of the 25 oral histories, memories of the river include a time when the community spent time in and around the water for fishing, swimming, and other recreation. Ms. Guerra, a journalist, historian, and founder/owner/editor of the alternative Laredo-area newspaper *LareDos*, shares,

*I remember seeing gray healthy catfish. But by the time I was about 13, the river was already polluted because when he was fishing out - he would show us fishes and say “this is not a healthy fish, you can’t eat this, and you can’t give it to anybody.” And he’d throw them back in there and say although they had miserable lives because they were deformed, we should not kill them. It was sad, that we lost the river as a source of healthy edible food and it became a river for just the sport of fishing. Although... it really could not be a source of great entertainment because the water started getting smelly. The city of Laredo had a huge sewage plant and it would dump raw sewage into the river water right around the area of Guatemotzin. (M. Guerra, oral communication, June 13, 2014)*

Many of the local fishing stories revolve around alligator gar, as fierce, enormous, and prehistoric, and each fisherperson has their own stories to share. While there are still gar in the river, fisherpersons are much less common today than in the past. These stories point not only to a changing local ecology due to development but also indicate that a few decades ago, community members could easily access the river and enjoy the river, the flora and fauna, as river people. In this example, the relative decline in the health and vitality of the other living beings in our relational ecology is a reflection of our own relative (un)health. Today, the relationship between the community and the river is strained, unhealthy, and colonized, and as we can see in the example of our fish relatives, all life in our relational ecology is affected by our neglect. If we continue to neglect our Rio Grande/Rio Bravo, our young people may never understand it as the sacred source of life in our community, which for many generations, has been a central to our collective identity as Indigenous peoples.
Knowledge of water specific to the local landscape has survived through the generations, but the sudden changes in the local ecology have also shifted how land-based knowledge is valued and passed along to our youth. Mr. Montoya, an avid outdoorsman and nature photographer, whose family owns a 90 acre ranch outside of Laredo, elaborates,

*I remember my dad used to tell me...'Where there is water, there is life.' I always kept that in my mind. So, being hunters that we were, when I was growing up, we knew that a good place to hunt would be close to the water. I always knew that, but I kind of took it for granted. I wouldn't know to tell my kids that, because I would think that they would [already] know, but there is a lot of things that we do need to teach them."* (J. Montoya, oral communication, May 22, 2015)

Mr. Montoya goes on to describe how he learned about the land from following in his father's footsteps, literally, walking through the monte\(^98\) and by doing work to care for the family ranch. Reflecting on his own children, he knows that the experiential learning that was part of his childhood is not the same for his children. Not only do they not know the land, they do not know, through *being-in-relation* to the land, that they are people of this land. He shared that because most of the community no longer has access to the river, knowledge of the river must be made explicit or it will be lost. Similarly, it is important to document the stories of community elders, before the knowledge is lost.

Mr. Montoya also shared that the river has also been the subject of his photography hobby, documenting important community events, such as the flood of 1995. He spoke of photographing the land and river much the same way people snap family photos- some record particular memories, while others are more candid, everyday images. Mr. Montoya’s deep appreciation for the land and river is obvious in

\(^{98}\) A natural landscape of scrubby, thorny flora.
how he speaks of them. His stories are affectionate and personal when he speaks of his relations.

6.1.3 River as Land/Place

The third tributary of Water Thinking connects to land and place. Many of the memories in this group share metaphors for understanding the land as the life-giving context, i.e., the river brings the land to life, the river maps a sacred journey across the land, and the river holds memory of the land. Whereas the first two tributaries, related to life and Identity, are more general and could possibly speak to many different river communities, the ideas related to land and place are more specific in tying together the connections between the Rio Grande/Rio Bravo, the land, and residents of Laredo/Nuevo Laredo, in particular.

Embedded within each conversation is traditional land-based knowledge, connecting many generations of Mr. Montoya’s family to the land and to the river. And yet, like many elders, he was humble and somewhat reluctant to share by repeatedly saying, "I don't know anything, I'm not an expert." Interestingly, Mrs. Montoya, his wife of 40 years, spoke to Mr. Montoya’s habit of downplaying his knowledge. She shared that he is so deeply knowledgeable of the family land that, following the 2011 earthquake in Japan (Buis, 2011; Voigt, 2011), he noticed a difference in the horizon on his regular walk around the ranch. The 8.9-magnitude earthquake was calculated to have shifted the planet on its axis by nearly 4 inches (Voigt, 2011). At the time, Mr. Montoya did not know the cause of the difference, only that he knew it, both through observations and also in his experience of being on the land, he felt the difference. Mrs. Montoya shared how her husband observed the details in the light in the sunset
(palatte, reflective qualities), and the location of sunset (topographical and geographical referencing), and was surprised that she didn't notice the changes as well. Mr. Montoya did not mention his observations in his own oral history, perhaps assuming it to be implicit common knowledge, or unrelated to my questions about the Rio Grande/Rio Bravo. However, where and how the sun sets are essential details in orientation that indicate a fluency in/with/through his family's land, demonstrating a holistic knowing by being in-relation. For Mr. Montoya, the deep relationship to his family's land is subconscious, a default orientation of Indigenous fronterizx embodied and emplaced knowledge.

The conversation was a good example of how traditional knowledge can be overlooked by individuals for a variety of reasons, but as a conversation, community members may able to recognize and find the words for ideas or events or experiences. Participants remember in-relation to each other in ways that are reaffirming and legitimating. As the listener/witness, I recognize to the importance of collective memory in recovering traditional knowledge, specifically, how we remember together as a community.

Many of the stories centered on recreation seemed to take place during a particular time period, from the 1950s to the 1980s, after which the daily use of the River-as-Water shifted dramatically. Many participants talked about not having gone back to the river to enjoy it for many years for a variety of reasons. Mr. Muñoz explains,

You don't hear about the good news, you don't hear of how students helped clean certain areas. You don't hear about the bird watchers that love doing that. You

__________________________

99 Future work may include small discussion groups, using historic photos to collectively remember.
100 In future work, I'd find photos and first hand documentation to support the stories and build a timeline.
don’t hear about some other kayakers that like to go out there. There are activities that are positive happening, but I don’t believe that sells papers. What sells papers is drug lords and how many illegal immigrants cross. (O. Muñoz, oral communication, May 10, 2015)

Negative press is only one of the many complex reasons that recreational interest has decreased dramatically in the last few years. For many residents, how we understand River-as-Water has shifted due to physical, logistical, and rhetorical forces, changing how frontera community members interact with the water, the river, and the land they/we call home. In his words, we can also observe the ability to engage River-as-Water thinking and River-as-Border thinking simultaneously. For many locals, Water thinking is related to stewardship, birding, kayaking, being in/near/on/with the water as response-able fronterizxs, while the issues of drug cartels and refugee and immigrant crossings are examples of River-as-Border thinking, which I will discuss shortly.

In spite of these changes, many memories shared a profound connection to the land and river. In remembering the words of his father, Dr. Garza shares,

A saying that he would always say was "Donde quiera es camposanto." At that time, I interpreted it wrong. I was interpreting ‘camposanto’ as cemetery, but he was saying holy ground. That the ground was sacred. That the ground was hallow. Later on, I knew that that's what he meant. (Dr. M. Garza, oral communication, June 1, 2015)

In this excerpt, we can see that even for folks who are fluent in both English and Spanish (colonial languages), there is nuance to the saying that is not obvious in a literal translation\textsuperscript{101}. The land, inclusive of the river, is sacred. For some, the land is made sacred by the sacred water of the Rio Grande/Rio Bravo.

So, one of the guys in the Native American Church, [his] name was Jasper. He

\textsuperscript{101} Future work may include linguistic studies examining the predominance of traditional knowledge coded in Spanish that is not easily translated to English.
was [from] Taos Pueblo. They have a sacred lake up in the mountains, and it's snow-fed. You know that lake? ... That water comes all the way down off the lake and into the Rio Grande... So, they maintain their relationship with the peyote [sacred medicine], through the river, through the Rio Grande. (G. Perez, oral communication, June 5, 2015)

He explained that since time immemorial, the river has been a map, guiding many Indigenous relatives from upriver on their ceremonial journeys south to their ceremonial plant medicines. From its home in south Texas, wherever the peyote medicine has travelled, it carries Carrizo and Coahuilteco\(^{102}\), two of the ancestral languages of Texas with it, in the form of song and ceremony. Peyote songs call the spirits of Yanaguana, honouring the land called Here, Where I Rest, and the sacred springs of Central Texas. Hikuri\(^{103}\) is also a sacred plant medicine for our relatives from the south, the Wixairika peoples, and interestingly, the plants there speak Wixairika, the language that emerged from Wirikuta, the place of creation (Elder Matsuva, oral communication, 2006). In each place, the land and river tell the stories of emergence, connecting the people, language, and knowledge within the respective relational ecologies.

For other community members who may not be affiliated with the Native American Church or the hikuri ceremonies, reverence for the Rio Grande/Rio Bravo comes from a sense of responsibility. Grandmother Muñoz is an elder and living archive of the recipes of traditional foods and teas for wellness. Although her interview was relatively concise, once the digital recorder was turned off, the conversation flourished. Consider the words shared by Grandmother Muñoz, when asked if there were any final thoughts around what we need to teach the young people:

\[\text{\ldots}\]

102 Coahuilteco is believed to be a pidgin language, borrowing from many other local languages
103 North of the river, we call it peyote, south of the river, it is often called hikuri.
The water is the future. The water is our future. We must take care of the water to ensure the well being of our collective future. Grandmother Muñoz illuminates a powerful metaphor that is foundational to an intergenerational pedagogy of water, reminding us that when we consider River-As-Water, water is not just an object or place. The waters of the Rio Grande/Rio Bravo are our collective future. So it’s a place, as a locational and phenomenological referent (in this case not as a physical entity or materiality).

The process of remembering seems particularly salient as the meaning of the Rio Grande/Rio Bravo has shifted over time from River-as-Water to River-as-Border. In the next section, we turn to the specific instances when community elders and participants spoke of River-as-Border. We will start with a general overview of Border Thinking and examine the corresponding tributaries, and follow up with excerpts from the interviews.

6.2 Border Thinking: River-As-Border

When the focus of the interview questions shifted to River-As-Border, the language and manner of almost all of the interviews also changed. Stories were recent (rather than historical) and charged with different emotions and opinions. The term river was used to refer to both the water source and the border functions; however the term border only referred to the dividing line with no reference to the presence of the

104 “Well, [they should] be careful how they use the river, because many people use it as a lost thing and [we] must take care of the water, because it is the future. We must take care of the water for the well being of everyone”
waterway. Similarly, some conversations drifted from River-as-Water to River-as-Border thinking, but it never happened in reverse. In this project, the phrase River-as-Border is used to emphasize the comparison however, the orientation is more precisely named Border Thinking. Figure 26: Border Thinking, shows the four tributaries that emerged from the oral histories and testimonios, including some direct excerpts, some paraphrased responses, each addressing the border-related functions of the Rio Grande/Rio Bravo. Although interviewees were from both Laredo and Nuevo Laredo and every participant was familiar with both halves of the community, the following discussion is specific to the Texas side of the border. Positionality and location matter. The following concepts may have been completely different had the interviews taken place in Nuevo Laredo.

There were four major tributaries that emerged in how people spoke of the River as a border: border as a thing, border as a space, border as a marker of power, and border as arbitrary. These tributaries are interrelated, and excerpts often supported more than one. Noticeably missing are references that personify or signify to the river as alive, referencing its own life, or the life the river supports. Moreso, River-as-Border moves away from ecological conceptions that include humans as part of the environment, or the interdependence of the sister cities, and more toward anthropocentric concepts of economy. In this way, the Rio Grande/Rio Bravo is simultaneously a resource of commodities; the border is a place of exchange, and marker of those who can afford access. I now turn to examine specific examples of each tributary that comprises River-as-Border thinking, in which attention is focused on the line, wall, and structures that divide, often ignoring the presence of the river.
BORDER THINKING: River-as-Border concepts (paraphrased)

Border as a THING
- The river/border is an obstacle, a hurdle to overcome.
- The bridge is a trap that catches cars in traffic. Walking is faster.
- The river/border belongs to the Border Patrol and government interests.
- River/border is one-way barrier

Border as a SPACE
- The river/border as a transition- you don't spend time there, you go through it.
- River/border as a place where people change. You have to switch your thinking to the other side before you leave.
- River as untouchable. It is just a place for objects to pass over via bridge.
- River/border as boundary to keep people in or out.
- River as protection, a buffer zone.

Border as a MARKER OF POWER
- Oppositional binaries, i.e. first-world versus third-world, legal versus illegal crossing, visible wealth versus visible poverty, good versus bad, Europeans versus Indigenous.
- As an unequal, unfair relationship.
- River/border as source of income due to the boundary.
- The river as protected by armed security, but this makes it unsafe for people to go there or be there.
- River/border as a place of one-way communication, one-way policy.

Border as ARBITRARY
- Border as the wall that divides two rooms of a house- it's still the same house.
- Border as unremarkable, trivial or commonplace - crossing the river/border was like crossing the street.
- The river itself as neutral ground for the nurses of the Cruz Blanca during the Mexican Revolution.
- The river brings families from both sides together; the border is what tries to keep families and people apart. People will always find a way.

Figure 26: Border Thinking
6.2.1 Border as a Thing

In this tributary, the border was discussed as an object, often using metaphors to describe what it does. For community members who commuted across the river, it was a trap, a hurdle, a daily waste of time, all of which are unpleasant associations. Some folks referred to the river as an object belonging to the Border Patrol or US government and notably, no longer belonging to the people in the community. Common to these phrases is the implication that the river had become inanimate, disconnected from ecology, and existing solely in the service of the border.

In this excerpt, Mrs. Calderón Porter describes her experience having a home on one side, and private school for her three children and job on the other, and having to commute for many years over the bridge:

*I don’t even see the river. Occasionally, I’ll go to La Posada, and I’ll see the river and I’ll remember [it is there, but] it’s like a past lifetime. It has nothing to do with me today. Future generations? I don’t know. If I think ‘How are my children attached to the river? Did I attach them to the river?’ No, I didn’t. They were attached in frustration [by commuting in traffic every day].” (M. E. Calderón Porter, oral communication, June 13, 2014)*

Mrs. Calderón Porter shares how one of the easiest identifiers of Border Thinking is whether or not the river is present in the conversation. For her, the river was present in a past lifetime, implying that River-as-Water used to be significant to her, but no longer carries the same meaning in her current daily life.105 While we can understand how people who are not from the community may tend to forget the Rio Grande/Rio Bravo when they speak of our Texas/Mexico border, locals also come in and out of Border

105 Future work may examine the relationships between water and time. There are many uses of figurative language, both in English and Spanish, that suggest a deep connection in how Indigenous fronterizxs understand time. See (van’t Hooft, 2006).
Thinking. To be clear, it seems Water Thinking and Border Thinking are not mutually exclusive. Sometimes we can find one or the other, sometimes they are both present, creating tension, as in Mrs. Calderón Porter's stories. As Laredoans continue to experience a loss of public access to the river, we might expect the general thinking to shift away from River-as-Water, and more toward Border Thinking, especially as young people may not ever experience the water or water ways of knowing. We come to understand how Mrs. Calderón Porter's own personal sentiments with the border traffic influenced how she raised her children, feeling so frustrated that she chose not to associate with the river/border at all, and therefore, chose not to connect her children to it. The border became a thing to avoid, instead of a place to be.

Five of the community participants mentioned no longer having access to the river due to the sale of riverfront property that includes areas that were previously public points of water access. Lack of physical access to the riverbanks is only one aspect of how the River-as-Border creates distance from the community. In the past, the riverbanks were places of shared access to swimming, recreation, and fishing. Today, these activities are no longer available to community residents as the river is considered private property, understood as an object owned by individuals.

6.2.2 Border as a Space

The ideas of the Border as Space tributary all seem to mark a location where events do and do not happen. Whereas the term place implies a location connected to the land and informed by the context of landscape, space is a much more generalized understanding of location that is not particularly informed by the landscape, but is the location where things happen. Specifically, activities that happen in this space include
movement over the bridges with separate lines for pedestrian traffic, car traffic, and 18-wheeler traffic. Transitions occur on/at the bridge, shifting between English and Spanish thinking, and between Mexican and US social norms. Several community members mentioned that Laredo is the largest inland port in the country, describing commerce as the primary function of the River-as-Border, in which all border crossing, including the people commuting, are understood in terms of economic metaphors. The River-as-Border is not a site for lingering, for sightseeing, or for recreation, including both the riverbanks, and the bridges, and several community members discuss what they are no longer allowed to do in these particular spaces.

The nature of our riverside neighborhood and community spaces have changed, due to increased violence, militarization and security.

Now it is being secured by Homeland Security and the Border Patrol, that area (pointing). Where before it was just free, [public-access] land you know, people used to come from across and walk over to our streets and then go back. They would come and go, and the people from Laredo would do the same thing." (P. Bernal Flores, oral communication, June 8, 2014)

Mrs. Bernal Flores goes on to talk about her childhood home one block away from the river, and her neighbors, including families on both sides of the river. As she described the families that lived and worked on both sides, her voice sounded nostalgic, as walking across the river was a normal part of life in her neighborhood. However, on the day of our interview, the three patrol cars had blocked off part of the residential street two blocks away from her parents' home. She explained that they had likely apprehended someone and pointed to a tall wall of hedges. From our position, we could see a patrol car parked, hidden from view to those on the riverbanks. Mrs. Bernal Flores described how the neighborhood had changed from one with a strong sense of community identity in a safe, familiar, friendly network of families, to a closed, private,
unfamiliar, highly scrutinized place where people live close to each other, but not in-
relation to each other. Mrs. Bernal Flores' experience is one example of many that
describe the specific ways that recent increased security measures to protect the border
have actually eroded and damaged some of our oldest frontera communities. The
neighborhood was now simply a space, disconnected from the river and land, and is no
longer a community of supportive and interrelated families.

Similarly, in his oral history witnessing the river for the last 30 or so years, Dr.
Vaughan, a professor of biology, and co-founder of the Rio Grande International Study
Center, has monitored the health of the river by visiting it every week for the last 25
years. In his time surveying the river, the river banks have changed dramatically, partly
due to natural phenomena, such as flooding, and partly due to human intervention, such
as vegetation-clearing. In this excerpt, he describes the way that the river is often
treated as an inanimate and ahistorical place, much like a game board. He shared,

*I think it is 1998... that the Border Patrol had built a road. Well, we tried to stop
them from building the road and we told them, "you've built this road here it's going
to wash away." They finished the road I think in March. In August it washed away
just like we told them it would.

Well, ten years later they came back and said they are going to build the road
again. Well, we went to the city, [because] it's city property. We went to the city
council, we talked to the Border Patrol people, and we said, “Look, we told you 10
years ago what was going to happen to your road. All right? [If] you put the road
here again, guess what? It's going to wash out.” ...And they said “Oh no we got
new engineers, we got it all figured out.” The floods of 2010 washed away not only
the road but all of their millions of dollars of clearing and re-vegetation. (Dr. T.
Vaughan, oral communication, June 13, 2014)

In this example, we can understand that for some people, the bend in the river is just
empty space, and that to developers, it may seem like the perfect spot to build. For the
community members who know the history of this particular bend along the river, this
area is crucial to the health of the river and to the protection of the communities
downstream. In the natural relational ecology of the river, the bend acts as a valve along the dynamic waterway to hold waters during periodic flooding. In this case, the river bend is simply considered empty space that is neither inherently good nor bad, devoid of significance. In a next tributary, we can understand the various ways in which some areas along the river border are used as spaces that indicate power.

6.2.3 Border as a Marker of Power

In this tributary, testimonios focused on the comparison of life in the US versus Mexico, from each side of the border looking to the other side, including such areas as wealth, job opportunities, public safety, and access to resources. In other testimonies, the border itself is the marker of power, described through instances in which locals on both sides of the border are impacted by non-local interests and opinions. Conversations around immigration, framed as homeland security, bear a striking resemblance to colonization in which local peoples, ideas, relationships, and landmarks are erased or submerged beneath the power structure. Interestingly, for much of south Texas, the places where the river runs are physically different locations from the spaces where the infrastructure of the international border are located, as though to suggest that the border exists in the air space rather than on land. To cross the border is often to be on a bridge, or in an airplane, disconnected from the land or river below. The border is also the space where racial profiling is unapologetically in full effect: some people become illegal, some people fit the profile and become suspect, and power is flaunted as military-grade weaponry.

Positionality determines power. In general, the border implies binary thinking: first-world versus third-world, visible wealth versus visible poverty, violence versus
safety. Yet, power is not exclusive to one side or the other. Power is held by whoever controls the border at any given moment, exercised by the armed patrols that may include governmental agencies, criminal elements, and/or armed local residents. In the next two interview excerpts, we can see how oftentimes, the decisions made through River-as-Border Thinking and exercised by those in positions of power whom may lack both historical understanding and a bigger picture perspective. With each major flooding, the river banks are transformed by two invasive species, the carrizo (cane) and salt cedar trees, which grow aggressively, and densely line the river banks. Both are tall enough to disrupt the line of sight for border agents looking for people in the water column. Carrizo grow by rhizome, deep beneath the surface and are particularly difficult to remove mechanically (much like bamboo).

*If Homeland Security had their way, they would just buy millions of gallons of herbicide and aerially spray it. They actually attempted to do that in Laredo. We got them stopped. I mean, they still use the herbicides, but they didn’t use helicopters or the airplanes to spray it… I don’t know how much money was spent, but there was a 1.1-mile stretch of the river, right at the bend of the river, that they did their “pilot” [using herbicides to clear the vegetation.] Well they chose the absolute worst place to do that, absolutely the worst place!* (Dr. T. Vaughan, oral communication, June 13, 2014).

We can hear the exasperation in Dr. Vaughan’s account as he explains the inherent nature of river bends, all river bends, is that they are prone to flooding. Although the US Department of Homeland Security tested the viability of a defoliant called Imazapyr in 2009, one of the major victories for Dr. Vaughan was the intervention of the widespread aerial application of the herbicide (see Rio Grande International Study Center, 2009). Every victory counts, as many of these chemicals are proprietary cocktails of undisclosed ingredients, creating unknown hazards singly and in combination in the river ecosystem. With sickening regularity, chemical defoliants are considered the best
way to spend the generous homeland security budget for the sole purpose of increasing visibility, regardless of the fact that the river is a sacred living system that locals depend on for drinking water.

Yet, most community residents learned of the issue after the fact, through the media, including photos of the riverbanks, and comparisons to the use of Agent Orange during the Vietnam War (Frontera NorteSur, 2010; XicanoPwr, 2009)\textsuperscript{106}. Figure 27: Imazapyr Test Application at Zachary Ranch, 2008, shows a test patch. In the color version of the photo, the viewer can see the stark difference between the lush, deep green of dense foliage on the far shore, compared to the brown, dead, sparse foliage of the foreground.

\textsuperscript{106} The dangers of Imazapyr were also discussed in mainstream media. See (McLaughlin, 2009).
Figure 27: Imazapyr Test Application at Zachary Ranch, 2008

(Photographer: Dr. Jim Earhart. Used with permission.)
Mr. Muñoz shares his perspective

_I saw this picture of the river, and heard that the government in Laredo... sprayed all of the riverside with Roundup to dry up all the vegetation and all the carrizo that was there- just so they could have a cleaner view of people that might be crossing illegally. Nobody was asked; they just did it. (O. Muñoz, oral communication, May 10, 2015)_

While some of the details are fuzzy, such as herbicide name, Mr. Muñoz is describing his perception of the event, what he heard and saw on the land after the de-foliation. We can clearly hear the frustration in his testimony. He faults decision-makers for not consulting the community, for spraying chemicals that are damaging to the river and community, and finally, for a reason that locals may not consider a grave problem. Later in the conversation, Oscar explains that it’s not a neutral event that happened in a random place. He explains that people in power chose to poison us, inclusive of the land and community of Nuevo Laredo, because our counties are economically depressed, and easy targets for ongoing environmental injustice. In this way, we can understand how the River-as-Border is a conspicuous marker of power, not solely differentiating the US from Mexico, but instead demonstrating how powerful outside interests impose decisions against the will of the local fronterizxs on both sides of the river. The people who wield power are not locals, do not think the ways that locals think, and do not make decisions that are in the locals’ best interests.

107 Later in his testimonio, Mr. Muñoz discusses what locals know to be true: Almost all of the drugs come by vehicle, most often the big 18-wheelers that pass through corrupt officials. The river banks are so polluted, that no crops are grown here, not even illegal ones. The only reason for such severe defoliation is to improve visibility and capture undocumented river crossers.
6.2.4 Border as Arbitrary

In this tributary, community members demonstrate a familiarity with River-as-Border Thinking, but find ways to resist, question, and challenge aspects of Border thinking. Excerpts in this section demonstrate the way that fronterizxs navigate River-as-Water and River-as-Border simultaneously in the places where meaning is layered and complex. The subtext of many of these conversations is that no matter what the colonizers attempt to do or build or erase, locals will find a way to challenge, trouble, or overcome the effects of the border, and will never leave their land.

Regardless of the identity and positionality of our community participants, all of the oral histories spoke to the increased danger due to narco-trafficking. Both the violence and the threat of violence have become normal aspects of border life that fronterizxs navigate.

_The drug cartels that had moved in were living all along the border, so we were very discouraged about taking a trip over. My husband and I have gone to Mexico numerous times, but we would always bypass Nuevo Laredo. Then there was the rare occasion when we would go for something that we absolutely needed from Nuevo Laredo, but we would go for the purpose of buying that one item and then very quickly head back to the Texas side._ (N. Muñoz, oral communication, Dec 4, 2014)

Some community members, such as Mrs. Muñoz, are able to mitigate the influence of danger by changing their lives to include or exclude particular places. Notice that she has built her life in ways that allow for border violence, and does not speak of leaving. Many of the businesses and markets that used to draw folks to Nuevo Laredo have migrated into the U.S. to avoid the violence. Not everyone is free to move across the border or to find safety.

For other community members, dangerous places, such as the riverbanks where they draw water, or particular intersections, are unavoidable.
Al cruzar hay mucha migración, pero de aquel lado no, pues pura gente mala. Nosotros ya sabemos. Casi todo la gente que vive ahí en México, en Nuevo Laredo, ya sabemos que no nos podemos acercar al río. Y la gente que viene de fuera, ya de lejos, se acercan al río y los asaltan, los matan, los secuestran, pero son gente que no sabe. Nostros que vivimos ahí ya sabemos que no tenemos que acercar\textsuperscript{106}. (C. Muñoz, oral communication, June 14, 2014)

In describing her daily commute from home on the Nuevo Laredo riverbanks, Ms. Muñoz describes how locals know, suggesting that there is a fluency related to places.

Locals know which places are safe, as well as the cultural norms that offer safety in dangerous places. Outsiders, such as migrants from Central America, become targets when they do not understand the specifics of the bordered, rivered places.

Further complicating matters is the relative silence around the issue of narco-traffic and gang-related violence. Speaking about her career as a journalist and publisher of a newspaper entitled LareDos, Ms. Guerra shares,

\textit{And, of course, it’s dangerous to write about it. We don’t write about it at all. But there it is. And anybody who thinks it’s just over there is not living in the real world. It’s here. It’s everywhere. The bodies are showing up here. They don’t just show up in Nuevo Laredo.} (M. Guerra, oral communication, June 13, 2014)

In truth, every fronterizx is touched by violence related to the border. Some examples shared during the interview process include the unexploded grenade found at the end of the residential block, the classmate who was kidnapped for ransom and never recovered, and the relative whose house in Nuevo Laredo has bullet holes from a shootout between narcos and the army. The daily soundscape carried by the wind to nearby neighborhoods includes helicopters, gunshots, and sirens, which do not happen

\textsuperscript{106} “When crossing there is a lot of migration, but on that side, there are many bad people. We already know. Almost all the people who live there in Mexico, in Nuevo Laredo, we already know that we cannot get close to the river. And the people who come from far away, come to the river and they assault them, kill them, kidnap them, but they are people who do not know. We who live there already know that we cannot approach the river”
all day, but do happen each day. Violence has become part of the mundane daily reality for many fronterizxs, and also part of the border spectacle for the non-fronterizx audience. Incidences of violence are recited every evening on the local news stations, and reenacted with famous actors in action plots, creating an all too familiar trope that eclipses all other meanings of the Rio Grande/Rio Bravo and life as a fronterizx.

Yeah, the Rio Grande will continue to be a political border. The riverboats wake me up on the morning. They use a very powerful Chrysler engines to propel their boats. Helicopters are always hovering overhead, sign of the times. Border Patrol, DPS helicopters carrying M-16 fully automatic weapons. Yeah, atrocities do happen, accidental and otherwise. I do not know when the crime situation will be rectified. I am very concerned about that. I hope I am still around when it happens. (Dr. C. Valle, oral communication, June 14, 2014)

In his interview, Dr. Valle is very casual about the increased militarization, drawing connections between the history of colonization and current contexts. He spoke of his deep pride for Laredo as a community and place nourished by the Rio Grande, and spoke candidly about the dangerous elements associated with the border as the latest unpleasant developments of life here. (His manner reminded me of how someone might speak of a dear family member who is in trouble, i.e,”She is a wonderful person, but is caught up with a bad crowd and having a hard time.”) The conversation circled back to the bigger picture, portraying the wealth of culture, relationship between the sister cities, and rugged beauty of the river winding through the landscape. It seems important to note that although Dr. Valle is deeply connected to the community, and possesses a rich archive of local land-based knowledge, he exercises his influence by teaching and writing letters to the editor of the local newspaper. Interestingly, in spite of these dynamics, Dr. Valle is hopeful to see a de-escalation in the dangers associated with Border Thinking.
6.3 Summary

In this chapter, I detailed the foundational knowledge shared by the community elders and knowledge-keepers about our community relationship to the Rio Grande/Rio Bravo. When considered in conversation with each other, the testimonios split into two major streams of thought: River-as-Water Thinking and River-as-Border Thinking.

Figure 28: Major Streams and Tributaries of Understanding
Within each stream, I discussed and provided examples of the smaller tributaries that correspond and contribute to how local community members understand the streams. I provided excerpts from the testimonios to help illustrate the ways that community members used Water Thinking and Border Thinking in particular ways, demonstrating a relative ease with shifting one's frames of reference from one to the other. A summary of these findings can be seen in Figure 28: Major Streams and Tributaries of Understanding, which we can understand as a snapshot of the current ways that our community elders think and talk about the Rio Grande/Rio Bravo. In the next chapter, I will focus on the ways that our community understandings of the river have shifted over time, to coincide with the social, political, and (infra)structural developments in/alongside/over the Rio Grande/Rio Bravo.
Chapter 7: Our Teachings Informed by Changes over Time

When I was young, we would park in the outdoor parking at Riverdrive Mall, and walk across the bridge to Nuevo Laredo. It was only a few blocks to the Mercado with all of the little shops and restaurants. Some folks would go every weekend, some would commute over the bridge everyday for work and school, and some had a home on each side of the river. In our sister cities, it was common. Within the span of a decade (2000-2010), everything changed. Riverdrive Mall went out of business. Laredo locals stopped walking across the bridge to run their weekend errands in Nuevo Laredo. Many of the families with homes on both sides of the river stopped commuting, and businesses either closed or relocated in response to the community. As the relationship between our sister cities became restricted, our communities lost the distinctive characteristic that would draw tourists from all over the world.

One of the goals of this research project was to document how my community, bisected by the river, has changed over time, told from the perspective of community elders, who have a much longer perspective than my own. Whereas the previous chapter helped to convey a snapshot of the current state of our community members thing and talk about the Rio Grande/Rio Bravo, this chapter provides an understanding of the changes over time that have shaped our current contexts.

7.1 What has Changed in Our Thinking?

In thinking about the metacognitive river metaphor, streams and tributaries move water into the major waterway of a river system. In contrast, branches indicate where water is diverted from the major waterway into a different path. In thinking about what has changed over time, I will use the term branches to describe the distinct concepts
that move away from embodied and emplaced ways of understanding our Rio Grande/Rio Bravo.

When I asked the community residents to describe the changes in the river, as well as changes in how we interact with the Rio Grande/Rio Bravo, their answers seemed to align into the following four branches, each of which move away from an Indigenous epistemology: the River as Unknown, River as Dangerous, River as a Commodity, and River as Dirty, as seen in Figure 29: Understanding the Shift from Water Thinking to Border Thinking.
What has Changed in Our Thinking? (paraphrased)

River as UNKNOWN
- River as untouchable, as there no longer public access to the water.
- Most Laredoans under the age of 50 has never been in the water.
- Border is a place for illegal activity.
- River as external, not a part of us, not us.
- We are disconnected from the ecology.

River as DANGEROUS
- Drowning happens daily.
- Where dangerous people are/go to do dangerous things.
- The Flood of 1954, in which the river was like a thief.
- River is an ever-present danger.
- River is in ever-present danger.
- River used to be for everybody, now it is owned by very few.
- Every body is suspect, some more than others.

River as COMMODITY
- River as place of commerce and industry.
- As ranching has become more mechanized, there are less people on the land and on/in the river in the US.
- The river as powerful political tool - power over the water is the power over lives.
- Water is a commodity, not a human right.

River as DIRTY
- River washes and cleans away chemical hazards of maquiladoras.
- River as a dumping grounds for garbage.
- River as cesspool of unknown combinations of chemicals.
- Raw sewage dumped from both sides.
- River as a morgue, place for dead bodies.

Figure 29: Understanding the Shift from Water Thinking to Border Thinking

7.1.1 River as Unknown

The first marked change away from Water Thinking seems to be generational.
Locals cannot visit, play, fish, swim, or spend the day on the riverbanks the way that our
grandparents did. This also suggests that the local Indigenous fronterizxs can no longer access the beings of their relational ecologies, such as flora, fauna, and other phenomena in places of significance to the local culture(s). A few community elders/knowledge keepers mention that all interaction between the people and river is mediated by border structures such as bridges over the water, or chain link fences that structure our experiences. As community members have lost public access to the Rio Grande/Rio Bravo, they/we have lost the learning experiences that shape how they/we know the river.

*I think that the people of Laredo have become indifferent to the river. They see the water we obtain from our river as their right. We take the water flowing from our faucets for granted; not thinking through, how or how not, or in what condition it is flowing from upstream to us. Somehow I believe they think it is an innate commodity of our infrastructure as an urban location. And I don’t think too many Laredoans go to the river anymore. On the Mexican side they are still witnessing the river and its changes; you can still see homes on the riverbanks. The smaller homes depend on the river water for irrigating their gardens, their pets drink water from the river, and the more humble homes use the river water to boil and wash their clothes and so their partnership with the river is a very important one, especially to the under-served the persons that don’t have running water in their homes (M. E. Calderón Porter, oral communication, June 13, 2014)*

Mrs. Calderón Porter shares some of the details of how people have become disconnected from the river over time through a comparison of the daily life of fronterizxs in the US and Mexico. In much of her testimony, she uses personification to describe the river, attributing moods and emotions to the interplay between people, land, and river. She also spoke of how her father could read the river, suggesting that he was fluent in understanding the current, temperature, and turbidity as a gauge for the environment. In this excerpt, Mrs. Calderón Porter reflects on the relative privilege of the average Laredoan, for whom the Rio Grande/Rio Bravo is unknown, unfamiliar, and disconnected from our urban lives. Laredo residents no longer know, understand, or
respond to the Rio Grande/Rio Bravo because widespread municipal services have rendered these knowledges non-vital. Which is not to say the knowledge of the river is not important; it has simply become a matter that is out of sight and out of mind. Yet, fluency in understanding the river is still practiced in Nuevo Laredo, where life depends on direct interaction with the Rio Grande/ Rio Bravo.

Similar sentiments were shared by Dr. Vaughan, whose research projects often involve monitoring ecologies and water conditions from the water in a canoe or kayak.

*People in Laredo don’t have a very close association with the river. There is much more association with the river on the Mexican side of the river by far. I mean you can put a canoe in the river and come … 10 or 15 miles down the river and see zero people on the US side except maybe a Border Patrol agent or two. You might see 50 or 100 people on the Mexican side.* (Dr. T. Vaughan, oral communication, June 13, 2014)

So while Mrs. Calderón Porter was speaking of the humble homes of the colonias or under-served neighborhoods built by families experiencing poverty, Dr. Vaughan’s observations offer insight across a wider range of socio-economic conditions along his 15-mile canoe trips, navigating the permitted length of the Rio Grande/Rio Bravo through the Laredo/Nuevo Laredo interface. Folks on the Mexican side of the river visit and use the river much more often than the folks on the U.S. side.

There is also a sense that the Rio Grande/Rio Bravo was once known by the community, but has become unknown, similar to the sentiment of when dear friends or loved ones slowly drift apart. For some, going to the river was a recreational activity of a bygone era, while for others, going to the river is associated with living in poverty and having to haul water. Of the 25 interviews, four cited the increased private ownership of the land, and subsequent loss of public access as the reason for shifting understandings with the river.
To us, the Rio Grande was always a place to be careful because of the risk of drowning, but if you really think about it, we didn’t have much access to the river because most of the land was privately owned. So, the only time we saw the river was when we crossed the bridge to go to Nuevo Laredo. Later in life, I was fortunate enough to know people that owned land along the banks of the river. So, I did have access to walk to the banks, but before then, it was hard to get there. (J. Montoya, oral communication, May 22, 2015)

With this testimony, it is easy to understand how access is a barrier to knowing the river. The Rio Grande/Rio Bravo has become unknown to the average Laredoan because there is no longer public access to the riverbanks or the water. Mr. Montoya goes on to explain that, for many, the only way to see the river is from the bridge, therefore the water is untouchable. This is a dramatic, generational difference, as almost all of the community elders in the 70 + age range spoke of swimming and visiting the river in their youth; very few interviewees discuss entering the water in the last ten years. If one has never had the experience of going to, wading in, sitting near, or understanding the Rio Grande/Rio Bravo as water nurturing the land, River-as-Water thinking is limited to conceptual understandings rather than embodied and emplaced knowledge. In this way, lack of public access has caused a generational displacement in how community members relate to the river, moving away from River-as-Water thinking, toward River-as-Border thinking.

7.1.2 River as Dangerous

The second change from River-as-Water Thinking is that the river has become more dangerous in the last 30 or so years. Depending on the identity/positionality/location of the person, the source(s) and nature of the danger varies. Some of the danger is from the river itself as a dynamic and natural landscape, evidenced in the regularity of drownings. Some danger arises from the dynamic of the river being a semi-permeable international border, and the forces that push/pull people
to cross the border. Some danger arises from the nature of the security forces charged with protecting the border in river-shaped landscapes and communities. Over time, the danger associated to the river has changed.

When speaking about their Childhoods, when swimming was a common recreation, nearly all of the community members spoke of the danger of drowning. Some recounted the safety precautions of family outings, some recalled neighborhood tragedies, some spoke of the recognition and praise won by fearless and strong swimmers. Daily life included the danger of drowning, and locals regarded the Rio Grande/Rio Bravo with caution. In Spanish, it is called el Rio Bravo del Norte, the translation of which means "fierce river of the north" warning of its powerful nature.

Later in her interview, Ms. Ramirez shared the following:

[Do we have] Access to the river? Well, we’re about seven blocks away from the river if you go toward the west side, pero, we don't go anymore. We don't have a reason to go because of what is happening nowadays. Pura violence y todo eso.... There's a whole bunch of Border Patrol men patrolling the area, policemen, y todo. Asi es que you cannot get close to the river banks without law enforcement officers coming and asking you "what are you doing here?" You are not free to go and say "I want to go fishing or have a little barbeque party here" or anything, you cannot do any of that anymore. Ya no hay. You are not free anymore. And if you do go, you are risking your life, really...The rio used to be used for drinking water and survival .... for taking the horses to drink water and to grow crops along the riverbanks, to go bathing, and wash your clothes y todo. Y ahora it's used for something else, like smuggling people. (J. Ramirez, oral communication, May 15, 2015)

In this passage, we can hear Ms. Ramirez’s frustration with the abundance of agents patrolling the few remaining parks and green spaces along the river banks, shifting the community's cultural practices. Ms. Ramirez points to a difference of perception between herself and the agents about what, exactly, is the dangerous element. The heavily armed, non-local law enforcement may not have any history or context to understand the ancestral importance of the river. They think the river itself is dangerous.
For locals such as Ms. Ramirez, the river is as it always has been; the danger is the high numbers of armed government agents, officers, and troops. Ms. Ramirez suggests that border personnel could protect locals who are enjoying community cultural practices along the riverbanks. Instead, they actively interrupt, disrupt, and remove local community members from the riverbank area. She is no longer free, in spite of her lifelong relationship with the river, the Border Patrol have occupied the landscape with imposed their specific understanding of the river as a no-people-zone.

Dr. Valle shares a similar comparison, sharing the danger of his youth, and the dangers of current contexts.

_I grew up fishing, and when I was a teenager, that's where I would hide [to go] beer drinking, you know. We'd go, and nobody would bother us on the riverbanks....And so the river represents a lot of adventures and stuff, but now it's dangerous as heck. Heavily patrolled, highly militarized. There are riverboats with machine guns on them. The Border Patrol and the DPS have fitted 30 caliber, fully automatic weapons on their boats. Fighting narco-trafficking and human trafficking, the river represents a border._ (Dr. C. Valle, oral communication, June 14, 2014)

His testimony differs from Ms. Ramirez in how he suggests Border Thinking cultivates a sense of danger. In his youth, the Rio Grande/Rio Bravo was a river enjoyed by the community. Then danger came to these places in the forms of narco-trafficking, drug cartels, human smuggling, and (in response) military-grade weaponry, all of which transformed this river place into a border space. In the presence of military-grade weaponry, everything starts to look like danger related to warfare. Metaphors invoking relational ecologies or friendly binational sister cities no longer fit the material reality of life in the shadow of machine guns and carceral walls.

For the fronterizxs who have lived on and with the river, the border itself is somewhat arbitrary; its meaning and manifestation are evolving according to political will, whereas River-as-Water has particular unshakeable, deeply rooted implications.
Dr. Valle shares his opinion of the series of federal laws created for the building of a border wall, which was begun in 2006, during the President George W. Bush administration. Each subsequent federal administration has added to the policies and budgets of border security, and "Build the wall!" was also a major campaign promise and catchphrase during the 2016 election of Donald Trump.

_"I don’t understand by any means the building of a physical wall on this otherwise pristine river that runs down our countryside here. It is a source of life."_ (Dr. C. Valle, oral communication, June 14, 2014)

For fronterizxs who live here, know the land, know the relationship to our sister city Nuevo Laredo, a physical barricade built on top of the river is beyond comprehension when one is physically situated in this rivered border home. It doesn’t make sense in our frontera community for two seemingly oppositional reasons: a physical wall threatens the life-giving ecologies of the Rio Grande/Rio Bravo in its role as the sole source of potable water for the greater area (Harris, 2017), which is to say, the effects of the wall are not localized to one single side, but will be borne by relational ecologies, including human and non-human life, on both sides of the frontera community (Border wall a disaster, 2018; Harris, 2017; Owens, 2016). Secondly, no wall can sever the relationships that have developed over centuries between the people, the land, and the waters. Locals will simply adapt around the structure. In both instances, we see the limitations of Border Thinking in the ways that such streams of thought underestimate the importance and interdependence of the rivered sister city communities.

What Dr. Valle’s excerpt also points to is that although fronterizxs can intellectually engage with Border Thinking, a River-as-Water orientation remains the primary framework for understanding, as it is inclusive of the physical landscape, material realities, the histories and collective memories of life in these particular places.
along the Rio Grande/Rio Bravo. Thus, in spite of the border, and in spite of the increased military presence, we are still interrelated sister cities. We still share the water and responsibilities for protecting our common environmental health.

7.1.3 River as Commodity

The third noticeable branch away from holistic Water Thinking is the framing of the river as a resource or commodity. In this collection of excerpts, community members speak of the ways in which water can be objectified, bought, sold, disposed of, but also the way that the very river itself is also framed as a consumer item. Community members have come to rely on the municipal water supply to deliver drinking water to their homes, therefore, they no longer have a reason to go to, or be fluent in the health of the river. Whereas many of the older generations know that the municipal supply comes from the river, younger generations do no think past the faucet. Consumer thinking also amplifies issues of disparate access, playing into dynamics of wealth, class, and social status.

The most noticeable shift in how locals talk about the Rio Grande/Rio Bravo has to do with economic terms and concepts that commodify the river and water. All reference to life, living, or ecological characteristics are dimmed, while concepts such as water rights (indicating ownership), acre-feet of debt, and fugitive resources have increased in the last few years.

In our conversation around water laws in Texas, Dr. Vaughan’s language and demeanor shifted as he explained the antiquated system of water rights:

*I’m convinced that the wars of the future will be fought over water. The Rio Grande [supports]... several millions of people, and the population is expanding all the time. Today somewhere between 85 and 90% of the water in the Rio Grande belongs to agriculture. Irrigation districts mainly downstream of Laredo are the*
owners of the water. So... the Rio Grande is over allocated. That is, there is more ownership of water than there is actual water. (Dr. T. Vaughan, oral communication, June 13, 2014) wow...!

As a community member who has dedicated a significant part of his career teaching, investigating, protecting, monitoring, advocating and loving the Rio Grande/Rio Bravo, the topic of water rights is exasperating. It is an old system, created to serve the needs of ranchers a few hundred years ago, preserved in law. People bid on a certain number of water rights that they predict they may need in the future, leaving the water in the river until they need it. When they need it, they can draw up to the allotted quantity each calendar year. Falling to use your water rights, or leaving the water in the river, may result in losing one’s rights to the water. Rights of future use and rights of ownership are oversold based on the assumption that most users will not draw on their entire allotment of rights. Such conceptions of water impose a capitalist market system on a somewhat unpredictable and finite element of nature, imposing expectations that are counterintuitive to the embodied and emplaced nature of water.

Consider the comparison of capitalist framing versus of relational ecologies: one is based on owning future rights, while the other relies on the present, responds to what is, and attends to the inherent right to exist, rather than owning the rights of future use. The difference in understandings is striking. While there are a few examples of rivers that have recently gained protected rights to exist in their communities, such as the Ganga and Yamuna Rivers in India, the Atrato River in Columbia, and the Whanganui River in
New Zealand (Ainge, 2017; Morris & Ruru, 2012; O'Donnell, 2018), similar cases in the US have not (yet) been considered by the courts\textsuperscript{109}.

If rivers have the right to exist, what will we use as the markers of quality existence? Mr. Perez recalls the Rio Grande/Rio Bravo before the two major dams were built, drawing our attention to the ways that river management has dramatically shifted the nature (read as: characteristics) and Nature (read as: ecology) of rivers, lands, and the life they support.

\textit{I remember it being grander but dirty, and now it's almost just a trickle, and a controlled trickle at that! It really isn't a river anymore. It's just a waterway. To me it's not the Rio Grande it used to be. A lot of the problem is because of the dams that they built all the way up in Big Bend, like the one in Del Rio. If you look at what the dams have held back since the dams were built 20 to 30 miles upriver on the Rio Grande. The silt has come up 80 feet. That sand is being held back and not sent down the river through the Rio Grande and into the Gulf of Mexico to rejuvenate the land. It just looks like it's a river going down a desert now. It's an impoverished riparian system, for sure. Not just because of the lack of the rain, but also because of encroachment. (G. Perez, oral communication, June 5, 2015)}

In this testimonio, we can understand how the constructions of the Amistad Dam upriver and Falcon Dam downriver of Laredo have dramatically changed the characteristics of both the river and land. When Mr. Perez describes the tight control of water and silt that prevents rejuvenation, we can understand how human management interferes with the natural cycles of life in and of the Rio Grande/ Rio Bravo. We get the sense that human activity has impoverished, encroached, and seemingly choked the living qualities out of the river, transforming it into a tame waterway for consumers, not unlike the concrete drainage ditches that are built in cities.

\textsuperscript{109}Future work will more thoroughly explore the right of the Rio Grande/Rio Bravo to exist, and the implications and outcomes of legal status and protection.
Part of the reason for such tight control of the water has to do with the antiquated water laws that govern water sources shared by the two countries. In 1945, both the US and Mexico agreed to the Treaty for the Utilization of the Waters of the Colorado and Tijuana Rivers and of the Rio Grande, now often called the Treaty of 1944. The Treaty created a complex system of accounting for what the U.S. and Mexico are entitled to, as well as a regulating body called the International Boundary and Water Commission (Umoff, 2009). As the river moves along in each country, the Treaty allows quantities to be drawn from one area in the river, with the expectation that the same quantity be reciprocated in other areas of the river, and/or shared out of another river. In good years, when the water cycle provides enough rainfall, the system is balanced, and riverside communities along the US Mexico border have what is needed. In this federal treaty, The Colorado River and Rio Grande each have their particular formulas for calculating rights versus use versus debt (see Umoff, 2008). Most years are drought years, and drought is borne dissimilarly by the diverse ecological systems connected along the border. In drought years, water debt may accumulate for one country or the other, between states, or between overall rivers, exacerbating tensions both between the neighbors, as well as along the length of the river. between agriculture and industrial interests that hold water rights, and those thirsty communities along the river who need potable water. Since the original treaty, additional policies to calculate and regulate water have been added to supplement the Treaty, as the population growth has long ago broken the limits of what the agreement intended to serve. Thinking in terms of systems of accounting, in which water is a commodity, ignores the nature of the river in which harm is cumulative, compounded in the bodies and in the landscape near the
mouth of the river, where the Rio Grande/Rio Bravo meets the Gulf of Mexico. Gains and losses are calculated with little regard for the quality of water reaching the end of the river, in Brownsville/Matamoros.

Much of the policy regarding management of the Rio Grande/Rio Bravo, both in its function as a source of water as well as in its function as a border, employs River as Commodity thinking. These conversations are inherently political and implicate parties in power, often triggering both fear and scorn, which the above excerpts seem to capture. In our conversations, community residents did not speak of the river in this way very often. So although it is familiar and worth mentioning, the interview questions focused our attention on the life stories related to the river and the land.

We now turn to the most common answer when asked, “How has the river changed in your lifetime?” All of the community residents spoke of danger. The dangers of the past are not the same dangers of the present, and danger is a thread that runs through both River-as-Water thinking as well as River-as-Border thinking. Danger, as it relates to the Rio Grande/Rio Bravo, could be an in-depth topic of investigation, but for our purposes, we will only focus on how it comes up in relation to the river.

7.1.4 River as Dirty

The fourth branch that splits from River-as-Water Thinking seems to be a lack of relational awareness about the nature of water and rivers. Some participants commented on the use of water to clean or fix problems, noting the general lack of general public awareness of where water goes afterwards. The river is only important as it is useful to people, but once it stops being useful or becomes dirty, it is best out of
sight and out of mind. This thinking demonstrates linear thinking, rather than cyclical or relational understandings, between the people, the land, and the river.

None of the elders and knowledge keepers mentioned pollution in their earliest memories, but did increasingly talk about it in more recent stories about life on/with/near the Rio Grande/Rio Bravo. Every community member seemed aware of the dangers of pollution including the multiple sources of river contamination; however, some were much more aware of specific details than others.

Ahora, ya se nos están diciendo que el agua de las embotelladas que compramos, que hasta esa es ácida, y que nuestra alimentación en Estados Unidos es muy ácida, y que necesitábamos un poco alcalinizar nuestro cuerpo. Entonces, compramos un filtro nosotros que alcalinice el agua hacia otros niveles. 7.0 es la que todos podemos tomar, esa tiene 8, hasta 9.5 que es la maxima. Nosotras la tomamos para cuidarnos mejor, porque dicen que el cáncer es una de las enfermedades que prolifera en un ambiente ácido. Entonces, en aquellos años, la gente no se preocupaba por eso, porque el agua del río brincaba aquí, pegaba en las piedras, y toda estaba oxigenada. Tal vez estaba alcalinizada, tenía los metales adecuados para que la gente sobreviviera bien. Porque no estaba poluída, nadie le echaba mugre ni nada. Pero ahora, le hechan tanta cosa que está ¡ácida! Si tú la tomas de ahí ahora y está contaminada, pues... Entonces, la diferencia entre la antigüedad a ahora, es que falta cultura y educación. Aunque uno les diga, no lo hacen. "Ah está bien, yo la aviento". En aquellos años no, nosotros les hacíamos caso a los abuelos, a los papás y ahora todo eso ha cambiado.¹¹⁰ (M. Campos, oral communication, May 15, 2015)

Ms. Campos makes the direct connection between the health of the river and the health of the community. As the water has been mistreated, polluted, and become acidic, so

¹¹⁰ "Now, we are being told that the bottled water we buy, that even that is acidic, and that our food in the United States is very acidic, and that we need to alkalize our bodies. So, we bought a filter that alkalizes the water to other levels. 7.0 is the one we can all drink, this one has 8, up to 9.5, which is the maximum. We drink it to take better care of ourselves, because they say that cancer is one of the diseases that proliferates in an acidic environment. Back then, in those years, the people did not worry about that, because the water of the river jumped here, hit the stones, and everything was oxygenated. Perhaps it was also alkalized, and had the right metals to help people survive well. It was not polluted, and no one was throwing garbage or anything. But now they do so much that it is acidic! If you drink from there now, you are contaminated... So the difference between those times and now, is that young people lack culture and education even if you tell them, they do not care. "Ah, okay, I've got it." In those years, we paid attention to the grandparents, our parents, and now, all that has changed." (M. Campos, oral communication, May 15, 2015)
has the health of the general population, resulting in specific illnesses and dis-eases. Her example of contamination works both metaphorically, as youth are no longer nourished by traditional knowledge of water, and literally, as our physical bodies are no longer nourished by neutral clean water, to communicate the danger of pollution. As a career educator, she also shifts our attention to the detachment of our young people, who are not being taught the cultural, land-based and Indigenous teachings that connect them (us) to the river. Later in the interview, she warned that if we do not find a way to record our cultural river knowledge, it would be lost. While she did not specify what it refers to, we can imagine that both knowledge, and our river, and possibly our youth would be lost.

It was not surprising that many of the community members use water filters for drinking water. Many Laredoans do. What was surprising was how the answer would change, depending on whether or not the audio recorder was on or off. On the record, participants would admit “I don’t like the taste of tap water,” while off the record I heard many reasons related to what might be in the water, usually pointing to the perceived conditions of the water and river. As a child, I remember hearing classmates say “Don’t drink from the tap, it has dead bodies in it.” At the time, I didn’t make the connection between the almost-daily reports of someone having drowned in our primary source of drinking water. Four of the 25 oral histories included a personal connection to someone who drowned in the Rio Grande/Rio Bravo. While the municipal water treatment facility is quite adept at drawing water from the river and cleaning biological contaminants, there is still a stigma related to drinking from the tap.
Of greater concern is the dumping of industrial chemical waste into the natural water system. There is a direct connection between the passage of NAFTA in 1994, the subsequent development of hundreds of maquiladoras\textsuperscript{111} along the border, and the sharp rise in illegal chemical dumping directly into the river. Ms. Guerra shares,

\textit{When we started our paper in ‘94, the river was where you dumped those barriles that you didn’t know what to do with. So the river has become in many ways a toxic stew. It’s probably a little bit cleaner than it used to be. But when we started writing about it in the ‘90s, it was a pretty bad thing. I mean, cement trucks would back up to the river to dump. The river was a cesspool, and it’s why people got sick in Rio Bravo and El Cenizo, trying to clean that filthy water. (M. Guerra, oral communication, June 13, 2014)}

Similar to Ms. Campos, Ms. Guerra makes the direct connection between health of the water and public health. Treating chemical pollution is an involved process, as the list of toxic chemicals is generally unknown, may be detectable in particular parts of the water stream or sediment, and not others, and may or may not visibly impact the ecological system\textsuperscript{112}. Further complications arise from the mix of chemicals that may be reactive in the natural environment, and the many possibilities of public exposure.

Biological and chemical pollution is often localized to rural areas where underserved communities are exposed, causing dramatic increases in the spread of communicable and water-borne illnesses along the river. While modern medicine has come a long way to develop vaccines and prevention techniques, rural communities face the challenges of increased risk of exposure coupled with lack of access to medical

\textsuperscript{111} Maquiladoras are the US-owned factories that take advantage of inexpensive labor and lax environmental and human rights laws on the Mexican side of the river (Muñoz, 2010). Environmental racism due to industrialization was part of my Master’s thesis.
\textsuperscript{112} In 1997, I spent the summer in a toxicology lab at Texas A&M International doing exactly this process, in search of heavy metals near El Cenizo.
services. Some community elders shared their childhood experiences growing up along the river,

*Ms. Gonzalez:* *Me dieron enfermedades muy feas como el tétanos, la tos ferina, la viruela, el sarampión... Todo de lo que ahora vacunan, antes yo lo tuve. Todo lo tuve. Porque en el '53 sacaron la vacuna del sarampión, pero ya a mí me había dado*

*Marissa:* ¿Y es de vivir cerca del río?

*Mrs. Gonzalez:* Sí.  

[V. Gonzalez, oral communication, May 22, 2015]

Mrs. Gonzalez reminds us that statistics and data do not relay the lived stories of lifelong fronterizxs. While the data may show a higher than normal infection rate of each of the illnesses, Mrs. Gonzalez knew that because of her proximity to the water in the river, she had contracted *every* childhood illness, and had survived. Other family members did not. There are nuances in the details that connect the health of the water and Rio Grande/Rio Bravo to the health of the communities. River-as-Water Thinking helps us understand more holistically, to see connections and long-term patterns, while Border Thinking may miss the contexts for understanding.

### 7.2 Summary

To summarize, in this chapter, I examined the teachings we collected in the soft braided basket of the Indigenous Fronterizx Cosmography, collecting those stories and testimonios that spoke to holistic, embodied and emplaced ways of understanding the river. I used my educator-mind to clarify the teachings in the form of interview excerpts

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113Ms. Gonzalez: I had all the very awful diseases such as tetanus, whooping cough, smallpox, measles ... All the diseases they now vaccinate for, before, I had it. I had it all. Because in '53 they developed the measles vaccine, but I had already had it.  
Marissa: And is it all from living near the river?  
Mrs. Gonzalez: Yes.
that speak specifically to water and the Rio Grande/Rio Bravo. Then, I organized the teachings by sorting them into two major streams of thought: River-as-Water and River-as-Border. Within each stream, I further examined the words of our community knowledge keepers to draw out tributaries that demonstrate specific concepts that capture each way of thinking. I used direct quotes and narrated the context so that knowledge could be situated as embodied and emplaced understandings.

I also examined the responses to the question “What has changed?” Community participants spoke about four branches that move away from holistic ways of knowing the river, as seen in Figure 30: Metacognitive Mapping of What has Changed in Fronterizx Thinking. In this figure, we return to our metacognitive map. We can see the flow of ideas, moving from River Thinking and Border Thinking into the main waterway. As the water moves along, we can see a fork in the river, in which smaller branches are diverted away from the main water flow and begin to carve a different path. As each of the changes to relationship between the community and the river are significant, resulting in dramatic changes in how we understand the river, there is no way to predict what may result in our collective futures. The only certainty is that River-as-Water knowledge will be increasingly more difficult to recover as time goes on.
While much of this chapter focused on the metacognitive process of noticing our thinking, as summarized by

Figure 30: Metacognitive Mapping of What has Changed in Fronterizx Thinking
Figure 31: Concept Mapping Changes to Fronterizx Thinking, each of the testimonios cited also speaks to a physical, geographical, and cultural change in the daily life of Laredo over time. In this way, we can see the
complexities of how deeply embedded the Rio Grande/Rio Bravo is in all aspects of fronterizx life.

This chapter provided highlights of the embodied and emplaced testimonios witnessing the Rio Grande/Rio Bravo, which cumulatively represent a fundamentally distinct way of understanding of the confluence of River-as-Water and River-as-Border. Community elders and knowledge keepers have shared collective stories and accounts that unearth the ancestral intellectual traditions of our Indigenous Fronterizx community, restore the relationships between the land, river, and people, not only across the landscape, but also through time. In the next chapter, I will draw from this foundation of knowledge to create a Pedagogy of Water that honors the Rio Grande/Rio Bravo as our ancestral waters.
Chapter 8: An Indigenous Fronterizx Pedagogy of Water

To get to know the Rio Grande/Rio Bravo, we traced the path of the waters through time, over diverse landscapes, and through the specific cultural confluences of my frontera community in Laredo, Texas. Each oral history interview with community elders uncovered the intricate and nuanced ways that fronterizxs were deeply connected with our river, demonstrating the deeply personal implications that accompanied the meanings of the river over time. In the simplest terms, the elders' life stories demonstrated that what we do to the Rio, we do to ourselves.

Much like the water cycle that creates movement through endless transformations, the relational and traditional ecological knowledges generate movement through endless manifestations in the testimonios people tell. This research journey focused on tracing these paths and honoring the teachings of the elders as a pedagogy that could nourish the community. The generation of new knowledge, which I have named an Indigenous Fronterizx Pedagogy of Water, is one more iteration of the intergenerational knowledge that has nourished my community for generations.

In this chapter, I will detail a pedagogy that honors the Indigenous intellectual traditions of the Rio Grande/Rio Bravo, as shared by community elders and knowledge keepers, with the intention of restorying how community members think of and understand our river. As seen in Figure 32: Restorying the Rio Grande/Rio Bravo, the process of restorying (depicted as the dotted lines) works to engage multiple meanings simultaneously, such that the changes in our community are not understood as exclusively positive or (mostly) negative associations (two distinct streams), but are instead understood in the complicated messiness as Indigenous Fronterizx Thinking.
Figure 32: Restorying the Rio Grande/Rio Bravo
In doing so, the pedagogy moves to Indigenize our thinking about water, engaging holistic, multimodal ways of knowing and understanding water that reflect the complex, inclusive, polyvocal nature of the frontera itself. Within the metacognitive map, as we understand water to take the path of least resistance, we can also start to understand how traditional knowledges of water have survived colonization in the Indigenous Fronterizx communities along the Rio Grande/Rio Bravo. In the first half of the chapter, I will detail the four specific elements that comprise an Indigenous Fronterizx Pedagogy of Water, and in the second half, I will expand specific teaching themes drawn from the words of community elders.

8.1 River-as-Water Pedagogical Elements

Throughout history, systems of education were created to shape generations of learners to become functioning members of society. Understood through a critical lens, young people are trained to maintain the status quo, reproducing social structures and norms, including colonialism, capitalism, and imperialism (Serrano Nájera, 2014) for the purpose of social control (Kincheloe, 2008). Many students struggle to find relevance and/or success in mandated educational systems (Kirkness & Barnhardt, 2001; Little Bear, 2009; Romero, Arce, & Cammarota, 2009). When the learners, community, and schooling system are aligned within a common epistemology and united by similar values, schools have been places that nurture the transformative potential within the community of learners (Brown, 2004; Cajete, 2000; Delgado Bernal, 2002). This research project moves toward such a transformative potential by building a pedagogy of water from the banks of the Rio Grande/Rio Bravo that connects our community elders to our young people with ancestral knowledge. The process of restorying revives
ancestral knowledge, while also creating new knowledge in response to the new contexts and social issues.

As I thought about the steps of building a pedagogy of water, or more specifically, a teaching practice shaped of/by/with/through the traditional knowledge of water, I worked largely from my own instinct as a sixth grade science teacher and intuition as a cultural practitioner. I began to hand-draw the concepts and keywords collected in the course of the research project, rearranging relationships to represent what a pedagogy of water might look like in a way that would be useful to other teachers. Pedagogy, understood in the practical sense, is comprised of four foundational elements that shape learning: the learners, the educators, curricula, and learning communities. For a pedagogy to be successful, all elements must complement each other to honor the epistemological values of the community. I wrote these four elements on index cards. When I superimposed the index cards naming each of the three themes that emerged from the Water-Thinking (Identity, Land, and Life) with the four main elements of pedagogy (Learners, Educators, Curricula, and Learning Communities), the Indigenous Fronterizx Pedagogy of Water began to take shape. Figure 33: Finding an Alignment between Pedagogical Elements and River Teachings, depicts how closely Water Teachings (inner ring) aligned with the Elements of Pedagogy (outer ring).
Specifically, it made sense that *Identity* (Water Teaching) fall into alignment with both *Learners* and *Educators* (Pedagogical Elements), as a successful pedagogical praxis would make room for multiple, diverse identities (Romero, Arce, & Cammarota, 2009; Serrano Nájera, 2015; Urrieta, 2003), inclusive of importance of the Rio Grande/Rio Bravo in the identities of both *Learners* and *Educators*. Similarly, there is quite a lot of precedent in Indigenous education regarding the centrality of *Land* (Water Teaching) in the process of *Curriculum*-making (Pedagogical Element) (Cajete, 2000; Simpson, 2014; Tuck & Yang, 2012). It would be quite simple to shift the focus from the land to the water of the Rio Grande/Rio Bravo, which brings our land to life. Completing
the circle, there is also a natural affinity between the Pedagogical Element of *Learning Community* and the Water Teaching of *Life*. The alignment, in this case, moves toward understanding *Life* as the relational ecology, in which the *Learning Community* reflects the non-anthropocentric understanding of humans embedded in the systems of nature in the places we live. Figure 34: Evolution of the Concept Map Depicting the Pedagogy of Water, seen below, simplifies the concept map by combining the Pedagogical Elements and River Teachings into one image.

![Figure 34: Evolution of the Concept Map Depicting the Pedagogy of Water](image-url)
As the graphic organizer evolved, so too, did my own understandings of the specific contours of an Indigenous Fronterizx Pedagogy of Water. Indigenizing our pedagogical approaches requires that we treat water as an active entity, engaging it holistically, encouraging understandings to emerge from *being-in-relation* to the Rio Grande/Rio Bravo, both for educators and students. Therefore, the Pedagogy of Water must include more than just the conceptual approach (which would only address intellectual ways of understanding water). The practice of *being-in-relation* suggests that we practice an embodied approach to water, making space for the emotional, physical, and spiritual approaches of knowing as the basis of a praxis. The terms around the perimeter of Figure 35: Developing a Praxis for the Pedagogy of Water are intended to guide our teaching practice with approaches that embody characteristics of water. In other words, to enliven the relational and traditional knowledge within the Pedagogy of Water, we must also consider the ways in which the water *in us* may be activated and enlivened. In the next section, I will discuss each quadrant of the figure, elaborating upon the four elements of the Indigenous Fronterizx Pedagogy of Water, in greater detail.
Figure 35: Developing a Praxis for the Pedagogy of Water
8.1.1 Pedagogical Element 1: Identity of Learners

Indigenous fronterizx pedagogies originate from the understanding that each learner is a cultural being, within a complex network of relationships, always simultaneously acting as an individual and community member. Identity in the frontera is fluid, shifting depending on the particular context, and inclusive of the Mexican, Indigenous, American and other ways of knowing and being. Learners are encouraged to develop their own sense of identity within a supportive community, navigating through self-guided discovery, making meaning through self-reflection and rich learning opportunities as a holistic self. For this reason, the terms fluid, inclusive, and self-guided are characteristics of water that also suggest the approach to enlivening the Pedagogy of Water for and with Learners. Here, I use the phrase enlivening of traditional knowledges as a reminder that learning is not the (passive) study of inert, inanimate objects, but a dynamic process that engages with life as dynamic, complicated, and being-in-relation.

Student-centered learning is an approach that meets students where they are, working to attend to their own unique learning path, rather than administering a one-size-fits-all approach to teaching. The identity of the learners is central to framing learning opportunities such that each learner feels valued, capable of success, supported, and respected. Furthermore, the learning objectives of the Pedagogy of Water are not simply to teach water-related content, but instead to encourage our learners to internalize the notion that they are each capable change-makers contributing to their/our community.
8.1.2 Pedagogical Element 2: Identity of Educators

Educator responsibilities such as cultivating relationships, ongoing self-reflection, and researching community-specific resources are vital foundations of a student-centered teaching practice. The characteristics of water that can support the Identity of Educators in a Pedagogy of Water include confluence, and approaches that are holistic and responsive.

In the Euro-centric conception of education, based on the factory metaphor, educators are an extension of the school system, often treated as a replaceable cog in the machinery. Educators are expected to lead the learners in their own footsteps to the exactly correct teacher-directed outcome, finding success measured by standardized exams.

By contrast, in the Pedagogy of Water, educators are honored as holistic beings including their personal strengths, experiences, and perspectives, living in-relation to a dynamic ecology and diverse student community. Their/Our primary response-ability is to encourage students to grow in ways that are mutually respectful and inclusive of the necessary knowledge and skills for life in their community and relational ecology. Educators are expected to be responsive to the needs of the students and the community, recognizing the many inherent learning opportunities and room for growth. Confluence speaks to the alignment of different aspects, finding a mutual, coordinated direction, but not requiring a specific-teacher directed outcome or measure of success.

Pedagogies of Water shift the role of educators toward a process of co-learning and collaborative meaning-making. Learning becomes responsive for both educator- and student-learners, engaging land, water, and relationships as the teachings from
which “knowledge is experienced with the whole of our being” (Gonzales, 2012, p. xvii).

In this way, learning emerges through our relationships in a connected universe, stimulating the physical, emotional, spiritual, and intellectual aspects as beings-in-relation.

8.1.3 Pedagogical Element 3: Land- and Water-based Curricula

Colonial frameworks of education often misrecognize difference as deficit. One-size approaches to curriculum-building do not fit all communities, as they often overlook the wealth of local land/water knowledge as well as the specific cultural practices that are relevant within each community. Resistance can be simple as prioritizing the distinctness of the actual places we live, incorporating the local landforms and waters into the teaching practice, and building on ancestral place-based knowledges as strengths. Land- and water-based curricula starts from the land, building culturally-relevant learning experiences to and through the places we live, teaching what it means to be a good relation in/to the relational ecology and community where we live. To do so, the three characteristics that help enact a land-based curriculum are the duality of land/water, survivance, and memory.

Curricula that emerge from the relational land- and water- scapes of the community, offer relevant teachings that shape life in particular places to serve the specific needs for learning in emplaced relational ecologies. Students, families, and communities are valued and respected as knowledge-producing, which, in turn, builds support for all learners in the community. A land/water based approach is particularly valuable as it allows for multiple intersecting complexities, inclusive of the cultural confluences and dynamics created by the river/border, building on understanding the
river/border frontera as a home. Land/water based curricula protects Indigenous knowledges based on specific cultural protocols, which are considered fundamental, and grow out of a specific deep-time community relationship with the land- and waterscapes. In this way, land/water based curricula work to resist the erasure of Indigenous people and knowledge in the frontera by transforming classrooms into sites of survivance\textsuperscript{114} (Vizenor, 2008, 2009) and reflective consciousness-raising.

Focusing on land- and water-based curricula shifts how a learner may understand themselves to be situated, such that they are not a passive part of a class, a grade-level, and a neighborhood, but instead are engaged as active and contributing members of their community. Considered in this way, the embodied and emplaced knowledges, the practices of co-learning, and the frames for understanding pedagogies of water are already within the people who live in-relation to the Rio Grande/Rio Bravo in their borderland homes. To revive traditional knowledge, part of our work is to quiet our colonized frames-of-mind and simply be beings-in-relation. The land and waters have always been here. We must rely on the collective memories of our elders to remember and re-member ourselves back onto the land.

\textbf{8.1.4 Pedagogical Element 4: Life-based Learning Communities}

The three characteristics of water that support this approach are the concepts that knowledge is \textit{emplaced, culturally-centric}, and understood within a \textit{relational ecology}. When teaching and learning is grounded as embodied and \textit{emplaced} within

\begin{footnotesize}
\textsuperscript{114} Vizenor (2008, 2009), developed the concept of survivance to depict the “union of active survival and resistance to cultural dominance ...an obvious spirit of native sovereignty” (p. 24, 2009). It resists victimhood, absence, and static cultural representations of Native peoples in literature, through an active, dynamic presence and sense of futurity. Vizenor writes, "Native survivance is a continuance of stories" (2009, p. 1). I borrow the concept here to indicate a refusal to forget ancestral knowledges.
\end{footnotesize}
the community, learning does not only happen for a test or a distant future. Knowledge that is *emplaced* is immediately impactful in their/our daily lives because it addresses the timeliness and geographical contexts of current events. For fronterizxs, this means including discussions of increased military presence, (possible) construction of a border wall through our communities, and increased violence in Nuevo Laredo. Difficult and contentious topics cannot be ignored to protect students from impolite social conversations. This is the reality we all live in, and we must find a way to transform these dynamics for the better, and imagine a different future. In this way, *emplaced* life-based learning communities are foundational in the resistance against ongoing colonial occupation.

In the frontera, learning opportunities emerge inclusive of all of the complexities of life with/in/alongside/over/of the Rio Grande/Rio Bravo. *Culturally-centric* approaches allow us to recognize the nuanced, teachable moments that are relevant to our students. Historically, schools were institutions of assimilation into the dominant culture, erasing the home-culture of the learners. By building *culturally-centric* learning communities, we can repurpose schools to function in the service of the community, toward positive transformation of the relationships between people, their cultures, and their *relational ecologies*.

Furthermore, the life-based learning community of an Indigenous Fronterizx Pedagogy of Water challenges the dominant conceptions of water as an infinitely consumable resource. Water is life. Water is the life that connects us within our *relational ecologies*. Teaching water holistically encourages students learning opportunities that repair our collective relationships with water, focusing on our
responsibilities and response-abilities in the dynamic and intradependent *relational ecologies*.

To review, in this section, I drew from the oral histories of the local elders to consider how the water teachings of Identity, Land, and Life can inform a pedagogy that enlivens the traditional knowledge of water in my community. I elaborated each Pedagogical Element (Learner, Educator, Curriculum, and Learning Community) that together comprise an Indigenous Fronterizx Pedagogy of Water, incorporating the characteristics of water that support an embodied approach. Next, I revisit the testimonios of the elders, and offer teaching themes that may guide learners back toward Water Thinking. The next piece in assembling the Indigenous Fronterizx Pedagogy of Water was to figure out specific teaching themes that educators could use to develop curriculum.

### 8.2 River-as-Water Thinking: Teaching Themes

At the beginning of this research journey, my goal was to explore how the frontera community understands the Rio Grande/Rio Bravo. Through the stories of community elders and knowledge keepers, community members expressed the need for the community to return to Water Thinking. Thus, the purpose of our creative pedagogical response was to explicitly teach our future generations of fronterizxs how to understand our Rio Grande/Rio Bravo as sacred, ancestral, life-nourishing water. The challenge was to reinvigorate what a few of the elders called the "old ways of thinking," which I understand to refer to tacit, unspoken traditional knowledges of water, in ways that are relevant to today's reality of a river border context.
When asked, "What has changed?" community elders shared stories that aligned into four specific themes (River as Unknown, River as a Commodity, River as Dangerous, River as Dirty), each addressing a specific shift in the relationships between the community, the land, and the river. Their observations have occurred over a lifetime, accumulated over 60, 70, 80, or 90 years of experience, living alongside the river. In response, I developed direct interventions based on the Teachings of the elders, as seen in Figure 36: Collective Observations Inform Our Teachings. The goal was not to shift our collective understandings to Water Thinking to the exclusion of Border Thinking, but to be able to navigate the multiple, seemingly irreconcilable juxtapositions of confluence inherent in Indigenous fronterizx realities. We have survived in the confluence of multiple ways of knowing, and multiple ways of being, as a survival strategy. We remember that our Rio Grande/Rio Bravo is sacred. The development of an Indigenous Fronterizx Pedagogy of Water engages both decolonization and Indigenization (Absolon, 2010; Simpson, 2014; Louie, Pratt, Hanson, & Ottmann, 2017), in which the local ancestral traditional knowledges of water are revitalized and practiced by the families who have remained intergenerationally connected to their Rio Grande/Rio Bravo, making space for Indigenous fronterizx futurities to emerge from our collective memories. In the next section, I will detail each of the Teaching Themes that revitalize the relational, traditional, and ancestral ecological knowledges through an Indigenous Fronterizx Pedagogy of Water.
8.2.1 Teaching Theme 1: River as Known

When the elders were asked to describe the changes they have witnessed over their lifetimes, 17 of the 25 community participants mentioned that the community no longer spends time on the riverbanks or in the waters of the river, the way that they did in their youth. In the past, families could access the river and would visit regularly, but today, access is restricted, and community members have lost the sense of fluency with
the land- and water-scapes. I collected these stories into a divergent branch called *River as Unknown.*

The corresponding Teaching Theme, *River as Known,* works to reframe the Rio Grande/Rio Bravo, such that the river *becomes known* by the community once again. Learners can engage this teaching theme through a wide variety of embodied and emplaced learning opportunities, such as trail visits, water studies, stewardship, emplaced story telling/listening, restorying histories based on collective memory, mapping, and community-centered inquiry. An interdisciplinary approach is important in creating multiple, related, inclusive entry points into the process of coming to know the Rio Grande/Rio Bravo, such that river teachings are not confined to one or two subject areas. Teaching and learning opportunities are dynamic, and the skills of multiple subjects can be used to engage the landscape and waterscape in which communities are situated. For older or more advanced learners, the River as Known Teaching Theme can push students to examine the specific dynamics that have disrupted the intergenerational sharing of water knowledge, as well as inspire their own approaches to recovering and protecting River Knowledge.

Some local institutions, such as the Rio Grande International Study Center and the Laredo Water Museum, have established precedent in gaining appropriate permisos\(^\text{115}\) to host educational activities near/at/in the water of Rio Grande/Rio Bravo. Although these programs may not be culturally-centric with regard to Indigenous Knowledge, strategically, it would seem important for the entire community to gain access first, and Indigenize on-location and in discussions afterwards. In the River as

\(^{115}\) permissions
Known Teaching Theme, the goal is to use all available content, experiences, and teachable moments to reacquaint ourselves with the river. It moves us, as individual learners and as a community, to re-learn the language of the river and landscape, so that we can read it, understand its characteristics, patterns, and health as our elders did. The only way to do so is to spend time with/in/near the waters of the Rio Grande/Rio Bravo.

8.2.2 Teaching Theme 2: River as Respected

The second theme that emerged from the elders' testimonios was mentioned in every single interview. The River as Dangerous branch included a long list of dangers and perceived dangers associated with the Rio Grande/Rio Bravo. Whereas there are some aspects of danger that cannot be changed, such as the danger of undercurrents, or danger associated to illegal activity and militarized patrols, the corresponding Teaching Theme, River as Respected, suggests a different response for how the community interacts with the river. Rather than abandoning the places that are associated with danger, the River as Respected Teaching Theme invites attention to, care of, familiarity with, and healthy boundaries that recognize the importance of the Rio Grande/Rio Bravo within the community and ecosystem. The revitalization of public green spaces and public programming around recreation would serve to reclaim some of the public access that the community has lost over time. It could also be argued that increased visitation and visibility in/alongside/around public access points would deter illegal activity, as well as help to build a local, culturally-centric dialog with law enforcement and homeland security forces around rights and ownership of the lands and water.
The perception of danger or safety can dramatically affect our time spent in particular places. When we believe we are in danger, our body reacts automatically by becoming tense, alert, and preoccupied to notice the danger from all around us. By contrast, when we know we are relatively safe, and/or when we know where the danger lies, we can relax, yet remain watchful, and come to understand the dynamics of the landscape. Focusing on embodied and emplaced ways of knowing allows learners to familiarize themselves with the roles and dynamics as beings within a relational ecology, because in Nature, there is always danger. It is inherent in being alive, inherent in being in/with/near any body of water, and inherent in the waters of the Rio Grande/Rio Bravo. Community knowledge-keepers spoke of the Rio Grande/Rio Bravo as a fellow community member, and as we would show respect to another human being, we are moved to show respect and make space for the river in all of its complexity.

In the second Teaching Theme, River as Respected, we will learn how to respect the Rio as a vital entity in our relational ecology, inclusive of the danger, nurturance, animate and inanimate beings, increasing our awareness of the effects that the land has on our bodies, but also how our bodies interact and affect the landscape as beings-in-relation. Learning how to respect the river encourages learners to reawaken the ancestral knowledge of the Rio Grande/Rio Bravo in/of/within themselves, and revitalize the relationship between the river and our frontera community as part of our relational ecology.
8.2.3 Teaching Theme 3: River (Water) as Spirit

The third divergent branch, *River as Commodity*, discussed by community elders is the idea that both the river and the water have become commodities, understood within economic models as objects to be bought, sold, replaced, and discarded at will. In response, within a Pedagogy of Water, the waters of the Rio Grande/Rio Bravo would be reframed as *Spirit (i.e., River as Spirit)*, prioritizing the metaphors of life, spirit, growth, and healing. To be clear, learning opportunities will not focus on any particular religious teaching, but will instead invite an open and inclusive conversation about how all life is connected, and is also connected through time. These conversations consider water from a holistic perspective, including where it goes and what it does within a relational ecology.

Like the other Teaching Themes, there is no single right way to guide learning. Spiritual ways of knowing can be tricky in the learning environment. Some students may be resistant because they do not understand the difference between spirituality (as an inherent part of our humanity) and religion (as a learned doctrine and institution). I offer the following two examples of spiritual ways of learning to guide learners in the classroom. Sometimes, the process is passive, such as when we listen to a live performance of music and are deeply moved. As a witness, we are fully engaged at that moment, stirred to feel deep connection with those around us, and are often reminded of our own deep values, such as life, love, and family. Other times, spiritual learning is an active process, such as what artists, musicians, and inventors call flow. In these moments, our context, skills, and vision are aligned and we become so engaged in the process of creation that we lose track of time, lose track of our own bodily needs. Both
types of experience remind us that life, and being alive, is exquisite, and we are reminded to make time to appreciate these inspiring moments.

At the core of the River (Water) as Spirit Teaching Theme, educators and learners are invited to explore the ways that our Rio Grande/Rio Bravo might inspire and instill our learning. By focusing on the deep resonance and intra-dependence of life within the relational ecology, we engage thinking that is not anthropocentric (in which we humans are the sole focal point). Instead, our attention moves to the intricate movement of water that connects us simultaneously within macro and micro systems of life. Further, Spirit honors the beautiful, dynamic, fleeting temporal aspects of life, strengthening our connections as a community, and through time, to our ancestors as well as our future descendants. Restoring water and the Rio as Spirit asks learners to consider What will we leave our grandchildren when it is our turn to be elders?

8.2.4 Teaching Theme 4: River (Water) as our Response-ability

Finally, the fourth branch, River (Water) as Dirty, summarizes a commonly held belief in Laredo/Nuevo Laredo, addressing how the River (Water) has become Dirty, as though a permanent and irreparable condition. This idea speaks not only to the sensory experiences along the river banks, but also points to common knowledge of industrial waste, municipal dumping, and other local public health concerns. While there is certainly some truth behind this perception, the Rio Grande/Rio Bravo is still our only source of drinking water, and should not be discarded as easily as a disposable consumer good. When we consider something disposable, we have little emotional connection to it, and pay little to no attention to where it came from or where it goes when we are done using it. Several elders described that this is the attitude of many
young people towards the Rio Grande/Rio Bravo, having lost their sense of responsibility to the community, land, and river.

The corresponding Teaching Theme within the Pedagogy of Water would be to understand the River (Water) as our Response-ability, as people living within the relational ecology. This teaching theme would focus on the idea that, as good relations, we learn that what we do to the river, we do to ourselves. As a direct intervention, emotional ways of knowing centered around empathy encourages learners to come to know the river in meaningful and personal ways. Much the same way that we explicitly teach children empathy by listening to others with "their eyes, their ears, and their hearts," we could develop an empathy toward the river with the same advice. By listening to the land- and water-scapes with empathy, learners may come to know their rivered home community in new ways. Such a practice does not impose human characteristics onto the river but cultivates an orientation by which we become sensitive and aware of how our emotions are reflected and reflective of our relational ecologies.

The goal of the fourth Teaching Theme: River (Water) as our Response-ability, is for community members become more sensitive to the Rio Grande/Rio Bravo, and develop a sense of responsibility and response-ability. Our river is not disposable. Our water is not meaningless. In revitalizing our response-ability in the care and protection of our ancestral waters, we simultaneously attend to the care and protection of our community, our relational ecology, and future.

8.3 Summary

In this chapter, I described the process for building the Indigenous Fronterizx Pedagogy of Water from the testimonios of our community elders. I described the
purpose of restorying the river, drawing on the idea of a confluence, as an invitation to keep multiple, simultaneous meanings of the river in conversation with each other. I gave shape to the Pedagogy of Water by elaborating the four Elements of Pedagogy, including the Identity of the Students, Identity of the Educators, Land/Water-based Curriculum, and Life-based Learning Communities. I described the characteristics of embodying and inspiring the Pedagogy as a praxis, so that water is not simply content, but also informs a holistic and culturally-centric teaching praxis.

In the last part of the chapter, I developed four major Teaching Themes that will explicitly revitalize Water Thinking for future generations: River as Known, River as Respected, River (Water) as Spirit, and River (Water) as our Response-ability. In creating an Indigenous Fronterizx Pedagogy of Water, I have demonstrated my own learning process and synthesized new knowledge in the form of a creative intervention, in response to my community's needs. In the last chapter, the Conclusion chapter, I will offer some reflections and closing thoughts.
Chapter 9: Conclusion

Most of us were still very much attached to the river. They even have a saying that goes 'if you ever drink water from the Rio Grande, you will have to come back to take another drink'. But that’s what the old people said... like grandparents, great-grandparents, your tias and everybody else. We all go back to Laredo. For some, it’s something that’s within us, something that makes you say ‘I belong there.’ (J. A. Treviño, oral communication Nov. 21, 2014)

Mr. Treviño’s words echo what many of the community knowledge keepers shared throughout the research process. As an intergenerational local, I understand that when we drink from the river, it reinvigorates a deep part of us, and draws us back to the place where we belong. This is a most appropriate metaphor for a conclusion. In this chapter, I circle back to the beginning of the project and offer a synopsis of its major concepts and approaches. I then discuss how the project’s major findings coalesced into a direct intervention, recovering the traditional ecological knowledge of my Indigenous frontera community that is deeply rooted to each side of the Rio Grande/Rio Bravo.

9.1 Overview of the Problem

Water is life. On a global scale, more and more communities face crises related to access to healthy clean drinking water. In response, there has been increased rhetoric around water, including discussions in areas such as policy, drought-management, human rights, corporate ownership, fracking/extraction, climate change, and humanitarian aid. Each context offers different ways of understanding the complex, multilayered challenges of providing water for the people. The only hope for a global solution will require multiple simultaneous interventions to dramatically change how we understand our collective dependence on water and shift to more sustainable approaches.
The Rio Grande/Rio Bravo is the major water source for millions of people who live along the US Mexico border. In the last 40 years, the meaning of the river has shifted dramatically as the functions of the international border have eclipsed the functions of the river as the sole source of water for frontera communities. For many in the US, the river marks the division between us versus them, American versus Mexican, first-world versus third-world, without any reference to the dynamic confluence that is fundamental to life on/in/with/of borderland communities. In response, this project worked to uncover the meanings of water on/in/with/of the Rio Grande/Rio Bravo from the specific perspective and positionality of life-long fronterizxs living in Laredo/Nuevo Laredo.

My inquiry was specific: what does the river mean to the community in their/our own words, from our frontera perspectives, framed by the contradictory contexts of surviving traditional ecological knowledge and ongoing military occupation? To understand the complexity of life along the Rio Grande/Rio Bravo, I approached the river holistically in order to recognize the traditional knowledge that emerges from relationships between beings in particular places and at particular times. Indigenous cultural traditions based in knowledge of the land and river have survived through many generations of colonization. Stories, practices, songs, testimonies, and languages connect to the collective memories of land-based cultures that predate settler occupation and colonial borders.

9.2 Purpose Statement

The purpose of the project was to document the life stories of community elders, through oral history and testimonios, focusing on their understandings of the Rio Grande/Rio Bravo and how the river has changed in their lifetimes. The very act of
listening resists the multiple and ongoing sites of colonial displacement and erasure of
the original Indigenous peoples from the borderland/frontera of the US and Mexico. I
listened, facilitated, and translated these river teachings and traditional ecological
knowledges into a pedagogical framework for both educators and scholars that
recognizes Mesoamerican intellectual traditions as Indigenous pedagogies.

Furthermore, the timeliness of the project attended to community needs as our
elders, our archives, are advancing in age, and as new regulations centered around
homeland security continue to restrict access to our river. Within one more generation of
normalized military occupation and carceral wall structures, our community may not fully
remember when our Rio Grande/Rio Bravo held Laredo and Nuevo Laredo together as
deply connected and interdependent sister cities. Future generations may never swim,
fish, play, or enjoy the public spaces along the banks of their own ancestral waters
because of the normalization of Border Thinking. In response, this project creates an
intervention by refusing to forget Water Thinking, restoring and restorying the
relationship between the community and Rio Grande/Rio Bravo.

The purpose of the project was to remember, revitalize, and restory the
relationships and response-abilities as a community to the river, so that our youth may
understand what our elders have always known: that water is life. Our Rio Grande/Rio
Bravo is our collective lives. Looking forward, I hope that this work will seed many
future iterations of co-learning, as Indigenous Fronterizx Pedagogies of Water are
shared, replicated, and grown in neighboring communities up and down river from
Laredo/Nuevo Laredo, in the service of frontera communities.
9.3 Review of Methodology

Before we could understand the teachings from community knowledge keepers, I had to create a space for the Indigenous, holistic, poly-vocal, and culturally-centric ways of knowing and being that reflect life in my frontera community. Our stories and collective memory cannot be understood with Eurocentric ears, or frames of reference, so I created the appropriate frames and research approaches for understanding.

The theoretical framework, called Indigenous Fronterizx Cosmographies, outlines a specific perspective and positionality, mindful of the many layers and confluences of culture that shape life in/on/of/with life along the river-as-border. This framework included Indigenous Ways of Knowing, Xicanx Ways of Being, and Borderland Positionalities to provide the contexts and history impacting Indigenous peoples of Mexican American descent who live along the Rio Grande/Rio Bravo. When aligned with the Fronterawork methodological approach, this research project was able to respond to the multi-level systemic erasure of frontera perspective, voice, and agency. The community-centric research process created different entry points for the various voices found in the communities along the river, making space for nuance and difference, practicing research as a non-dominating conversation that can respond to the needs of the community.

Similarly, the specific method of oral histories, testimonios, and holistic listening was designed to be inclusive and responsive, moving according to the engagement of the community knowledge keepers. Although I had originally made preparations for a map-making workshop and series of interviews, and after much discussion, I found the oral history interviews to be a much more effective and inclusive approach to restorying
the river and land. In retrospect, rather than make visual maps of our community represented through drawings, I now recognize our storying process to be oral maps, following the precedent of our Indigenous oral intellectual traditions. Each testimonio revives ancestral knowledges and makes meaning to/with/through the river landscape through emplaced and embodied accounts. This shift in method provided an important learning moment for me as a researcher, disrupting my own ocular-centric expectations that maps should be visual.

Once I began interviewing community elders, the snowball approach to recruitment more than doubled the number of expected participants. In exchange for their willingness to share their stories, community elders were gifted small gifts, as a token of appreciation and respectful cultural protocol. I listened to the oral histories and testimonios of 28 local knowledge keepers and elders, transcribed and verified their stories, and produced 25 transcripts that speak to the emplaced and embodied river and water teachings of life in our community. In practice, the testimonios of our community elders and knowledge-keepers formed the foundational sources of knowledge, restorying the relationships between the people, the river, and the land, out of which the rest of the project could emerge and unfold.

As a practice of my own response-ability, I chose to synthesize what I learned from the teachings of collective memory into an Indigenous Fronterizx Pedagogy of Water to teach our youth the relational and ancestral knowledges of the Rio Grande/ Rio Bravo. In doing so, I demonstrated my understanding of Indigenous research practices that repurpose education for the regeneration of ancestral knowledges. The effectiveness of holistic storytelling and holistic storylistening reminded me of the vital skills necessary to
the successful implementation of intergenerational pedagogies. I had to remember how to listen and be receptive to the Water Teachings, as my own default orientations tend to be the teacher-centric models of Eurocentric classrooms. Thus, foundational to the Pedagogy of Water is the gentle reminder that we are holistic learning beings, capable of many modes of teaching, of learning, and communicating what we know. Our youth need the Water Teachings content, but also need the skills to listen holistically and be receptive to, and understand the value of community knowledge. In effect, the Indigenous Fronterizx Pedagogy of Water reconceptualizes the purpose and practices of education based on our shared ancestral knowledges of the Rio Grande/Rio Bravo toward community revitalization and healing in the face of ongoing colonization.

The completed project will presented to a Council of Grandmothers as a step to ensure that I upheld my responsibilities to protect sacred knowledge, and will also presented to my south Texas community at a public presentation. Whereas the original plan included the compilation of an anthology of maps and firsthand accounts to serve as curricular materials, the outcome evolved into an intergenerational Indigenous Fronterizx Pedagogy of Water, in the service of my community on the frontera. The anthology of stories and oral histories is forthcoming, and will (hopefully) serve as a foundation in support of future Mexican American Studies curricula projects.

9.4 Fronterizx Understandings of the Rio Grande/Rio Bravo

In listening to 25 oral histories shared by community elders and knowledge-keepers that offered first-hand accounts of life-long relationships in/of/near/in/with the Rio Grande/Rio Bravo, two specific themes emerged: River-as-Water Thinking, and River-as-Border Thinking. Many of the life-long fronterizxs seemed quite comfortable
switching between the two very different understandings, depending on topic, audience, and context. A conceptual map of my findings is summarized by Figure 37: Conceptual Map of Findings. While some conversations moved from River-as-Water into River-as-Border, which is similar to the chronological reality of life with/near/of/in/alongside the Rio Grande/Rio Bravo, the reverse was not observed.

Within the stream of Water Thinking, community elders’ stories tended to address more than one tributary; they spoke of Life, the Land, and/or Identity. In contrast, stories that were characterized as the Border Thinking included River as a Marker of Power, Place, Thing, and as Arbitrary. Interestingly, it was not just the content that shifted, but also the different ways in which elders conveyed their emotions within each tributary. Stories tended to be warm, personal, and somewhat nostalgic when referencing the River-as-Water; whereas, when referring to the River-as-Border, the languaging tended to be less personal and more distant. Another difference between the two streams is how Water Thinking stories tended to include events experienced on both sides of the river, moving back and forth geographically, as well as linguistically between English and Spanish. When the river was discussed as the border (Border Thinking), the perspective was often bound by the border to the U.S. side, narrating events from a US perspective. In other words, Border Thinking often limited how we related to our relatives on the other side of the river, both physically and conceptually, reinforcing the divide, and privileging the U.S. side.
Figure 37: Conceptual Map of Findings
I drew the findings as an metacognitive conceptual map, seen in Figure 37: Conceptual Map of Findings, to illustrate the nature of confluence and privilege water ways-of-understanding the research process. Doing so made space for multiple perspectives and the co-existence of difficult contradictions, which accurately captures the nature of life on/of/with/in the frontera, and life on/of/with/in the Rio Grande/Rio Bravo. Figure 38: Two Major Areas of Thought, offers a different arrangement of the same ideas, but also allowed me to represent the chronological directionality that illustrates the way that our community historically understood the River-as-Water as the primary mode for understanding the river. Over time, as represented by the arrow, Border Thinking has taken prominence over Water Thinking. To be clear, both coexist in a turbulent confluence, such that Water Thinking is still present, but has become hidden from our daily awareness.

When community members were asked to describe the changes over the course of their lifetimes, many of their stories pointed to the relationship between the river and the community as responsive to each other. Specifically, as the river became more militarized, functioning more as a border than as a water supply, the understandings of the people with regard to the river also shifted. As depicted in Figure 39: Changes to the River, Changes to our Thinking, elders described the changes in the way we think of the river in four ways: River as Unknown, River as Dangerous, River (Water) as a commodity, and River (Water) as Dirty.
Figure 38: Two Major Areas of Thought

River-as-Water
- Life
- Land
- Identity

River-as-Border
- Marker of Power
  - Place
  - Thing
  - Arbitrary

Figure 39: Changes to the River, Changes to our Thinking

Changes:
- River as Unknown
- River as Dangerous
- River (water) as Commodity
- River (water) as Dirty
Some community elders spoke directly to the changes in the Rio Grande/Rio Bravo, while others described changes in how we regard the river, describing the changes in the culture of the community. All of the stories indicated the predominance of Border Thinking over time, indicating a clear directionality in how fronterizxs think of the Rio Grande/Rio Bravo. I understand the silencing of Water Thinking by Border Thinking to reflect the ongoing active silencing of the Indigenous fronterizxs, the ancestral river, and the cultural traditions that unite them. Which is to say: that the same colonial mechanisms that have historically been used to declare the territory empty and unused is also being used to displace Indigenous fronterizxs from their ancestral territories in the name of national security today.

When I asked elders, "What do future generations of Laredoans need to know about life with the river?," most elders urged me, personally, to teach young people about the ways things used to be, back when we could cross freely, when everyone respected the river both as our relative and primary source of water, and as a sacred place. Some hoped that political conditions would shift so that someday, young people might be allowed to experience the river as a recreational area, as a community meeting space, and as a unifying force in the Laredo/Nuevo Laredo communities, while others were content to merely share their stories so that the cultural aspects of who we were and who we are would not be lost. The synthesis of teachings can be seen in Figure 40: Water Teachings.
9.5 Discussion of Findings

The concept of serpentine conocimiento (Lara, 2014), suggests that all life is connected to both earthly and spiritual realms, in which wisdom is characterized by dualities, intuition, and fluidity. There were many moments during data collection when I had to practice being more intuitive, more responsive, and more fluid about role and expectations as an academic researcher. As the testimonios were shared, many of the teachings of my community elders reassured me that I was on a good path. In this section, I will discuss a few of the indicators that reaffirmed the project as relevant and
aligned with the perspectives of my community. In each of the following discussion sections, I describe some of the teachings, some of what I have learned along the way, as well as the future work.

9.5.1 On collective remembering

In the oral history interview, Mr. Montoya revealed that he did not know when to be explicit in teaching his own children about the land and the river, because he just assumed they must know what he knows. I couldn't help but wonder if there were other details of the land and river that Mr. Montoya assumed I must know as well as he does. The whole conversation seemed to point to the importance of collective memory in recovering traditional knowledge, specifically, how we remember together, and value our collective knowledge as a community\textsuperscript{116}.

When I conducted the interview with Mr. Montoya, his wife of over 35 years, Mrs. Montoya, was in the room, still undecided about whether or not she would like to participate in the project. She listened as we conducted his interview, careful not to participate or influence his answers by sitting out of his view. As we were wrapping up, Mrs. Montoya came to join us, and asked if she could also do an interview. Before we formally began her oral history, she shared that hearing his stories reminded her of details she wanted me to record, both in her own life story, and also in his. Indeed, there were details about stories her husband shared that she thought were important to build upon and clarify in a constructive, finish-each-other's-sentences kind of way. Although not a formal question of our interview process, Mrs. Montoya was speaking to

\textsuperscript{116} Future work may include small discussion groups, using historic photos or other realia to collectively remember.
the importance of remembering together\textsuperscript{117}, helping each other fill in the details for a more accurate depiction of how we remember.

From my own researcher perspective, it was interesting to notice that each time we conducted the interview process, the very process of story-sharing and focused story-listening seemed to invite others to do so also. Perhaps this is similar to the cohesive nature of water, in which we are deeply drawn to participate in particular cultural practices as a collective community. The location dictated who the additional listeners were. In personal homes, family members would often move closer, so as to listen in without disrupting the process. In public spaces, such as the public library, we had a library patron, whom neither of us knew, linger and eavesdrop through the stacks of books. Similarly, one interview, conducted in the breakfast nook of a hotel, piqued the interest of a hotel guest who wrote a page-long letter of appreciation to the elder I was interviewing, in response to some of his stories.

Each time was a reminder of the power of stories to bring people to together, and the intrinsic practice of listening when our elders speak. When other listeners did add details, or ask questions, the process of collective remembering became a process of fine-tuning, some details calling forward other details. While much of the academic literature suggests interviewing only a single person for the purpose of accuracy and also ease of transcription, future work will include adjusting the interview process to invite families to share stories. I recognize my own purposes would be better served by developing a process of inclusive and respectful collective remembering.

\textsuperscript{117} Future work will plan to explore this suggestion of collective testimonio, as a way of engaging conversations about specific events.
9.5.2 Language considerations

Most fronterizxs are bicultural and bilingual, able to move freely between English and Spanish. Each language encodes different metaphors and ways of thinking. To demonstrate how important it is to recognize the influence of language, consider the following exchange:

*Maybe it's because I learned the river with my father as a child, and it was in Spanish. But I see that the river con cariño*. In Spanish. And in English, it was just a body of water. It's just the river as an international boundary, there's an International Water Boundary Commission and it's all... yada yada yada. But the affection for the river comes from my native tongue. English is my second language, so, the affection to the river comes from my Native tongue of Spanish. You know, it is startling. I don't have any affection in English. I can't say I'm endeared to the river in English. I don't even think of it in those terms, in this language, as in the other language. It's tied to my father, tied in my childhood, but it's also tied to the rituals of seeing the river as an important part of our entertainment, our life, in Spanish. (M. E. Calderón Porter, oral communication, June 13, 2014)

Mrs. Calderón Porter was thinking as she was speaking, meta-cognitively sorting which language carried which particular meanings. For her, River Thinking happens in Spanish and is tied to her youth with her father on the banks of the river. Border Thinking and, by extension, Border Speaking, tends to happen in English.

Personally, I had similar challenges around language. Conducting the interviews in Spanish was challenging for me, as a few key concepts do not translate (word to word) or transliterate (concept to concept) very well. I thought all parts of the project in English, and translated it to Spanish, whereas, if I had originally thought the project in Spanish, and tried to translate it to English, it would not be the same project we have today. Some ideas simply do not translate.

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\footnote{118 with tenderness}
For example, in English, the research questions asked about the relationship of the community to the river. In a direct translation, the word relación implies a sexual intimacy, which is not what I wanted to communicate. The nearest best transliteration is conexión, which directly translates to connection, but implies a flat, less complex, less reciprocal association. While some words and concepts could be worked around to still convey the accurate intention, there were a few questions that were rendered nonsensical in Spanish. Some turned into a discussion in order to clarify the meaning of the question, and a few times, if the question did not make sense, the community member exercised their right to pass, so that we’d skip to the next question.

Four of the community participants spoke to the ways that they personally used each language, explaining that Spanish was their first language, or home language, while English was what they spoke away from home, in the workplace and world. A few times, participants indicated with which language they were thinking while being interviewed. Interestingly, for folks who are fluent in both languages, the language that they thought in was not necessarily the same language that they spoke in on any given subject\textsuperscript{119}. This points to the cultural and metacognitive awareness of code switching\textsuperscript{120} that happens in the frontera community, depending on context, speaker, timing, content, and/or audience. One participant discussed at length about how he could tell when someone was from Laredo based on how they crisscrossed between the languages. In jest, he used the phrase "their Laredo is showing," recognizing communication nuances

\textsuperscript{119} Future work may consider asking questions to double check that the findings related to language specify thinking language versus spoken language.

\textsuperscript{120} In this case, the phrase "code switching" being used to indicate how participants respond to particular contexts with the appropriate language and patterns of speech.
that are culturally tied to this particular community. In that similar line of reasoning, I wonder if my own Laredo has worn off, as I have lived away from my community long enough that my habits of speech no longer reflect the particularities of my hometown. I wonder what difference could be understood if the project had been imagined, written, and conducted in Spanish. The interview questions would have been very different, as would the thematic and metaphorical implications. It would reason that the themes and results would also be quite different if the language was switched from English to Spanish, even if all other factors were to stay the same.

Metacognitively, I can describe some of the nuances of frontera code-switching, while other details may be invisible and normalized within my own frame of reference. Within the bigger project of establishing an Indigenous Fronterx Cosmography that maps our collective memories onto the rivered landscape, frontera code-switching serves as a compass to help orient oneself to the local ways of thinking and knowing, to the local landmarks, local metaphors, and longitudinal river orientations.\textsuperscript{121}

9.5.3 \textbf{Fraught contexts of self-Identification}

Although none of the questions directly addressed the topic of the increased security and scrutiny of the border, one of the community participants spoke at length about what \textit{they} had "destroyed our communities." Rather than focus on the changes to the river, she described the changes to her neighborhood, located on the river's edge, and how it changed from a safe, familiar, friendly network of families, to a closed, private, unfamiliar, highly scrutinized place where people live. The neighborhood was simply a place, seemingly devoid of relationships between the people, the land, and the

\textsuperscript{121} Future work will further develop this particular metaphor of frontera code-switching as compass.
waters, and no longer a community of supportive and interrelated families. Her stories pointed to the possibility of a parallel project focused on the same research questions, but from the perspective of a single neighborhood community, and how it has changed over time\textsuperscript{122}. This shift in scale would speak to collective concepts of identity.

Similarly, the reality of our frontera is that our youth may never fully connect to the river as our source of drinking water, much less understand the Rio Grande/Rio Bravo as ancestral creation waters. As security increases and apartheid walls are erected, River-as-Water Thinking may become limited to conceptual understandings, rather than embodied and emplaced knowledge. In such dangerous contexts, and without a sense of our ancestral intellectual traditions and collective memories, how is our sense of identity evolving? How do Indigenous fronterizxs \textit{self-actualize} without the pressure of being reactionary to the colonial apparatus of imposed identities? Who do we revitalize our intra-dependence on the sacred waters and ancestral landscape?

In many ways, the ongoing, current colonization has caused a generational disruption in how community members relate to the river, and understand individual and collective identity. As Border Thinking has become normalized, so, too are the Hispanicized aspects of identity that are considered safe and assimilated within the frontera consciousness. However, this project demonstrates that there is still interest to collectively remember the traditional knowledge of the frontera, and that our identities and future(s) do not have to be predetermined by settler colonialisms.

\textsuperscript{122} Future work could include community members visualizing these changes, using photos or making maps to illustrate how their community has changed over time.
Although fronterizxs can intellectually engage with Border Thinking, a Water Thinking orientation remains the primary framework for almost all of our community elders. Border Thinking tends to exist solely as an intellectual understanding of the river, whereas Water Thinking tends to incorporate holistic understandings including intellectual, emotional, physical, and spiritual ways of knowing the river. Furthermore, Frontera Positionality is embodied, and emplaced, inclusive of the physical landscape, material realities, and collective memories of life connected through deep-time relationships to the banks of the Rio Grande/Rio Bravo. Thus, in spite of the border, and in spite of the increased military presence, community elders still read the landscape as sister cities held together by an ancient, life-giving river.

An Indigenous Fronterizx Pedagogy of Water approaches identity collectively, through the revitalization of ancestral knowledge and community relationships through time. I understand this as a proleptic understanding of self-identification, in which we simultaneously reflect our ancestors and our children yet to come, connected through the waters of the Rio Grande/Rio Bravo.

9.6 Contributions

After many generations of the assimilation model of education, many Indigenous communities have begun to reconceptualize culturally-relevant and culturally-centric educational practices “to support learners on their journey to the discovery or reclamation of their learning spirits.” (Anuik, Battiste, & George, 2010, p. 65). Over time, these practices have evolved to reflect current contexts, current languaging, and current

\[123\text{ Prolepsis describes an understanding of time in which past, present, and future are collapsed into every a single moment, existing simultaneously.} \]
pedagogies of traditional Indigenous Knowledge, recognizing learners as cultural beings engaged in a constant negotiation of multiple epistemologies. There are no easy solutions for recovering cultural traditions, yet education offers hope for healing learners and communities through the revitalization of Indigenous Knowledges.

As discussed in earlier chapters, in the frontera, the Original Peoples of Texas have survived multiple and ongoing eras of colonial occupation, multiple and ongoing violent displacements/erasures, and multiple and ongoing assimilation models of Whitestream education. The Indigenous Fronterizx Pedagogy of Water contributes to the conversation in a few significant ways. Figure 41: Frontera Displacements (Castillo & Tabuenca-Córdoba, 2002), Reviewed, provides a framework for discussing the contributions of this study.
I used these four concentric circles of context, but reformatted them as a chart, as seen in Figure 42: Interventions Created by the Indigenous Fronterizx Pedagogy of Water. In the center column, we see the same contexts addressing each site of violent displacement/erasure: historical, place-based, material reality, and identity. On the left side of the chart, we can see the specific ways that frontera communities and knowledges are displaced at each site of erasure (paraphrased from Castillo & Tabuenca Cordoba, 2002). On the right, is a column called Restor(y)ing, in which I describe the specific interventions created by the Indigenous Fronterizx Pedagogy of Water at each level of erasure. In this next section, I will elaborate how each of the four
sites including Historical, Place-Based, Material Reality, and Identity, can be restored and restoried as sites of transformation.

<table>
<thead>
<tr>
<th>Colonial mechanism</th>
<th>Displacement</th>
<th>Restor(y)ing Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous peoples were displaced and forcibly removed from their ancestral territories</td>
<td>HISTORICAL</td>
<td>Honors elders as our living archives, practices collective remembering</td>
</tr>
<tr>
<td>Place-specific knowledges are replaced by non-local &quot;expert&quot; knowledges</td>
<td>PLACE BASED</td>
<td>Frontera-centric perspectives revitalizes, restores, and stories an Indigenous Fronterizx Cosmography</td>
</tr>
<tr>
<td>Material reality of life on the frontera is displaced by abstract concepts</td>
<td>MATERIAL REALITY</td>
<td>Oral histories, testimonios, and witnessing revitalize embodied and emplaced knowledges</td>
</tr>
<tr>
<td>Categories of identity are imposed to erase, police, and assimilate Indigenous identities</td>
<td>IDENTITY</td>
<td>Diverse Indigenous identities are revitalized through traditional knowledges, cultural practices, and collective memory</td>
</tr>
</tbody>
</table>

**Figure 42: Interventions Created by the Indigenous Fronterizx Pedagogy of Water**

(Adapted from Castillo & Tabuenca-Córdoba, 2002)
9.6.1 Restorying Histories/Cosmographies

Indigenous peoples and knowledges have survived each successive wave of violence by survivance: adapting, using silence, and relying on oral intellectual traditions. Elders are our living archives. The land remains as it always has, and it is the peoples who have to remember and re-member themselves/ourselves back into the relational ecologies of the land- and water-scapes where we live, drawing from our ancestral and collective memories to do so. Thus, remembering is an act of survival.

The Indigenous Fronterizx Pedagogy of Water accomplishes this by honoring the oral histories and testimonios of our community elders as the archives from which to recover our traditional relationships, heal, and grow. The processes of storytelling and storylistening disrupt the colonial narratives of our frontera community, prioritizing first-hand accounts of the specific places and experiences of our community, for the benefit of our community. Revitalization of our Indigenous, land-based, deep-time knowledge restores and restories our history, our land, our river, and ultimately, reclaims our historical relationships of our ancestral territories.

9.6.2 Restorying Local Place-Based Knowledges

Everything starts with, and returns to, the land/water. The Indigenous Fronterizx Pedagogy of Water drew from Indigenous Ways of Knowing, Xicanx Ways of Being, and Frontera Positionalities as a specific framework for understanding the Laredo/Nuevo Laredo community. This foundation was then used to create a research process that honored local cultural protocols, frontera ethics, and oral traditions to respond to the needs of the community. My own personal belonging in/with/to the community of Laredo, Texas, invited a particular insider perspective, ensuring that stories are not
misrepresented with regard to local linguistic quirks, cultural dynamics, or specific landmarks that may or may not exist any longer. Themes were generated from the testimonios of our elders to design a pedagogy that teaches community members from the collective memory of life of/with/near/in the Rio Grande/Rio Bravo specific to our sister cities of Laredo/Nuevo Laredo as communities-in-relation. In this way, the Indigenous Fronterizx Pedagogy of Water captures a specific local, land/water-based Indigenous knowledge, through a diverse cacophony of frontera voices for the survival, healing, and revitalization of our community.

9.6.3 Restorying Material Realities

Border Thinking is a colonial construction, a recent arrival to the landscape. Beneath every rhetorical cliché emphasizing the River-as-Border exists the undeniable material reality of the multi-generational fronterizx families who make a life in the frontera communities. In this project, the frontera was reconceptualized based on the oral histories and testimonios of the community elders who have lived their whole lives in/with/crossing our river/border. Each story demonstrates how deeply connected community residents are to the land and Rio Grande/Rio Bravo, often reaching back through several generations, to roots that span both sides of the river.

Indigenous Fronterizx Pedagogy of Water grows out of our collective material realities to revitalize land-based traditions, such as river fluency and plant knowledges, as a way to better adapt and heal from the damage caused by ongoing occupation of the land, water, and community. The research process was organic, open-ended, intuitive, and emerged by being-in-relation to my community, grown out of the material realities of life in/near/with the Rio Grande/Rio Bravo. The project not only serves to
witness frontera histories as embodied and emplaced experiences, but also engages community in a process of imagining frontera futurities based on what it is to make a life here.

In terms of decolonization/Indigenization, a Pedagogy of Water moves to revitalize Indigenous knowledge and peoples in spite of, and in the face of, Border Thinking. The purpose of our pedagogy-making is not to operate within colonial frameworks to convince the colonizers not to occupy, displace, and disappear us. Our purpose is to imagine a future that is self-determined, inspired by Water Thinking, free of walls and occupying military forces. What kind of community could we be if we were free, if our river was recognized as sacred ancestral waters, and if our landscape was not occupied by settler colonial entities?

9.6.4 Restoring Identity

This project intentionally sidestepped the colonial frames, categories, and definitions of Indigenous Identity by focusing on how traditional ecological knowledge roots us to our Rio Grande/Rio Bravo. The criteria for participation was not a tribal identity, but a deep-time relationship to our community and to our river. The research project was designed this way to be inclusive of the many ways that people self-identify, aware of the history of segregation, detribalization, generations of Indian removal, lynching by the Texas Rangers and white settlers, and assimilation by school and religious institutions. The long tradition of anti-Mexican racism in the US and anti-Indigenous racism in Mexico further complicates the historical/genealogical research to recover our Mexican Indigenous ancestry, as often records were destroyed or altered to frame a particular narrative.
In this project, Indigenous identity is understood to grow from the ancestral knowledge of the land nurtured through deep-time relationships with the ecologies of the Rio Grande/Rio Bravo. In this way, Indigeneity is understanding the Indigenous knowledge that has survived in the stories, cultural practices, and collective memories of our community. It digs deeper than the shame of uncertainty that haunts Indigenous peoples lacking federal status, and recognizes Indigeneity by the knowing of one’s ancestral ties to the land and river. I’ve heard a local elder\textsuperscript{124} say it this way: "My DNA is in this soil." In other words, federal recognition/non-recognition will never change the deep truth of my belonging to this land nourished by this river. Furthermore, Indigeneity is an understanding of prolepsis, namely, that I am/we are simultaneously my/our ancestors and descendants yet to come. Knowing this, we are moved to heal ourselves and our relationships with the land and water of our ancestral territories.

9.6.5 Restorying Water

Globally, there is a growing awareness that water is life. Yet, not much has been written around critical Indigenous and decolonizing understandings of the Rio Grande/Rio Bravo. In response, the Indigenous Fronterizx Pedagogy of Water models a process of land-based pedagogy that explicitly reorients our relationship to/with water, by embodying the characteristics of water so that we recognize how connected we are to/by/with the waters in the relational ecologies where we live. Similarly, by approaching water relationally, we remember that we are also response-able and responsible to/for the care of water, not as an inanimate substance, but as the most

\textsuperscript{124} I do not know this person by name, but I wish to attribute what I learned from him. The words are not mine.
precious life of which we are a part. Restorying water also restores life, challenging
capitalistic values in favor of life values. In this way, education can drive community-led
transformation, toward a protection of water as life, addressing the global crisis through
many simultaneous and diverse local interventions.

9.6.6 Restoring Border Politics

Over the last few years, the changes to our US Mexico borderlands have been
profound. Politicians and other powerful decision-makers seem to only focus on their
own (profit-motivated) intentions, rather than understand the dramatic outcomes of their
policies in the lives of the people who make a life in the frontera. The American Civil
Liberties Union describes the 100 mile radius reaching into the US a "Constitution-free
zone", not by law that governs but based on how the border territory functions for those
folks who live within that wide path (American Civil Liberties Union; n.d). While there
are many scholars who think about, write about, publish work establishing their
expertise in/on the borderlands, relatively few folks ask fronterizxs for their opinions and
perspectives. Fronterizxs are also erased by some of the organizations working to
oppose the construction of the border wall, who cite wildlife as their primary concern.
Such ideological stances further displace, erase, and dehumanize frontera residents,
who aren't worth discussion with the same intense preservation mindset as the wild
ocelot. The Indigenous Fronterizx Pedagogy of Water models resistance to these forms
of intellectual colonization of borderland rhetorics by reframing the conversation to
prioritize fronterizx voices, sharing fronterizx experiences, ideas, and perspectives.
9.6.7 Restorying Education

While many studies in the United States are framed as either Indigenous Studies or Mexican American Studies, the examination of Mesoamerican intellectual traditions using Indigenous methodologies unsettles established academic territories. The Indigenous Fronterizx Pedagogy of Water connects a specific constellation of existing Indigenous scholarship (Anzaldúa, 1999; Cajete, 2000; Calderón, 2014; Grande, 2004; Kovach, 2009; Maestas, 2003) to focus a decolonizing and Indigenizing gaze on the literal and rhetorical field of Border Studies, and transforms the findings into a land- and river-based pedagogy in support of intergenerational fronterizxs. This particular perspective is crucial to the field of education, as the legal battles over what we call ethnic studies (but which specifically debates the implementation of Mexican American studies) have gained both national and international attention. As the state of Texas considers texts to adopt, which in turn, establishes a precedent for the entire country, it is important also to create our own strategies and teaching materials that honor our community strengths. The Indigenous Fronterizx Pedagogy of Water demonstrates the ways that the stories of our living archives, our community elders and knowledge keepers, can help shape our collective futures, in the service of our communities.

The design of an intergenerational Pedagogy of Water is also a radical departure from dominant Eurocentric educational models, as it values community elders for what they have witnessed in their lifetimes, as well as trusts our youth for what they dare to imagine as our collective future. As a land-based educational praxis, the Indigenous Fronterizx Pedagogy of Water supports learners and enriches the community by cultivating pride in the richness of our local ancestral knowledge. Education reimagined
this way moves away from institutional models of youth development intended to control and assimilate young minds. To survive as a healthy community, we need creative, socially aware, response-able community members who can draw on their ancestral knowledge to respond to the new contexts that they will encounter.

9.7 Limitations

This project was community-centered and moved forward according to the needs of the participating community members. The process did not go according to the original plan, but emerged authentically as I began to make contact with interested participants. Rather than considering limitations as a shortcoming or detriment to the project, I understand the following factors to have considerable influence over the shape of the project, the same way that a treeline changes the shape and scope of the horizon. As such, there were several limitations to the method that are worth discussing.

One aspect worth discussion is the inherent bias of my positionality in relation to members of my own community as both the interviewer and tool for analysis. While quite useful in helping to access an insider's perspective and guard against uninformed misrepresentation, bias can be seen in the selection of participants. I began with participants that included family, friends, and close relations, and asked for suggestions from community members who work closely with the Rio Grande International Study Center, which is primarily an education and stewardship organization. In the original design of the project, I had intended to host a map-making workshop on the campus where they often host educational workshops and projects. This led to a variety of participants who were largely oriented toward the preservation and care of the river. Had recruitment been based on other networks of knowledge, such as the Villa San
Agustin de Laredo Genealogical Society, the Webb County Heritage Foundation, or the Laredo Development Foundation, the resulting themes may have indicated their particular interest, such as genealogical aspects of identity, colonial histories, or business interests.

A second limitation rests in the very nature of oral history and testimonio, including selective memory, omission, and exaggeration. When asked about the balance between fantastic stories and true stories, one of my community participants called it sabor, the flavor of how we share stories with loved ones. There are unavoidable inconsistencies in any kind of memory work, but underneath are some verifiable truths, valuable to a holistic approach.

The last notable limitation was that of language. For most fronterizxs, bilingualism in English and Spanish is a daily fact of life. To accomplish the project, all communication had to move fluidly between the two languages. This was not as straightforward as it would seem for the issues of translation, transliteration, and how to recognize when someone was thinking in a language different than they were speaking. I am English-thinking and functionally fluent in Spanish, but one of my own limitations is not always catching the second meanings and/or metaphors in Spanish. I would have to be a Spanish thinker to increase my comprehension. I was forthcoming about this limitation in my conversations, which in turn, may have influenced how participants shared stories with me, perceiving me to be well-schooled, but a little bit pocha or
tonta\textsuperscript{125}, which is a common dilemma for community members of my generation for whom English is a first language, and Spanish was taught in school as an elective.

While discussion around limitations typically focuses on aspects that influenced the outcome of the project, our orientation was process-oriented, rather than outcome-oriented. The process unfolded as we began to work in the community. None of the limitations undermine the overall findings of the project, and instead accurately represent daily challenges of life in the frontera, and the complexity of multiple voices, positionalities, and ways of knowing along the Rio Grande/Rio Bravo.

9.8 Future work

As the research process unfolded in response to my home community of Laredo, Texas, I wondered what would change by simply travelling up- or down- river. I am interested in modifying the Fronterawork Methodology to be able to collect river stories from many different border communities along the length of the Rio Grande/Rio Bravo great plan. While all of the communities bisected by the Texas Mexico border face a similar threat in terms of encroachment of the oncoming border wall with little regard to human rights, land titles, free, prior, and informed consent, the specifics of the occupation and displacement of local peoples, ecologies, and knowledges is unique to local landscape. The timing is critical. We (I) must document the embodied and emplaced collective memories before the community loses access to the waters of the river and our water thinking is forgotten. Doing so would create an intervention by documenting the variety of voices, perspectives, and place-based nuances that capture

\textsuperscript{125} Pocha means not fluent, tonta is a gentle way of saying dumb, marked by my lack of complete fluency in both languages. This is a generational difference, and source of shame for many in my generation and younger.
how fronterizxs describe themselves (ourselves), including who we have been, who we are now, and who we will be. Each of the ideas for new areas of inquiry seemed to fall into three main fields: fronterizx visual representation and aesthetics, the process of collective remembering, and finally, how to map time.

The first area for new work would be to examine a Xicanx decolonial aesthetic in mapping practices. While there is an abundance of Xicanx art history and aesthetics to draw from, I am interested in how these concepts can be used to restory the land via decolonial mapping and visual representations. This idea marks a return to the original plan for the research process of exploring the tradition of amoxtli-making, in which complex, compound images are used to depict both geographic places as well as stories. Future work could include a mapping and visual component to the remembering process, inviting the community to take up issues of representing where we live, and where our collective memories live on the land. Similarly, I am interested in exploring how to represent multiple simultaneous perspectives, suggesting visual arts practices such as cubism, decolonized.

The second area of future exploration is playing with the process of how we remember. I am curious if we remember differently individualistically versus collectively in small groups, and how the introduction of realia, such as historical photos, influences how we collectively remember. Furthermore, in a group of fully-fluent community members, do we remember the same if our small group is facilitated in English versus Spanish? I am interested in examining the specific details of how our Indigenous Fronterizx intellectual traditions may have been lost in the process of translating/transliterating concepts from Native languages to Spanish, and Spanish to
English. Similarly, I am interested in understanding how the findings of this dissertation project do or do not translate into Spanish, not just in the direct translation of words, but also in how concepts and metaphors are encoded differently.

The third area of future work involves how we map and understand time in relation to the land. In future projects, I'd like to explore the possibility of using testimonio and realia to build a timeline. While this particular project focused on the Rio Grande/Rio Bravo, I am curious in how collective remembering can also be used to engage conversations about specific events. For example, one event that 17 of the 25 elders/knowledge keepers spoke of was the flood of 1954. I had no knowledge of the flood prior to the testimonios, but it was intriguing to listen to the many perspectives of a significant event in our community. Again, it would be interesting to invite the community members to visually represent how a particular event changed the community, using photo collage, drawings, or making maps to illustrate differences over time. Digging a little deeper, I would also like to explore how members of fronterizx communities understand time in relation to themselves and the land.

9.9 Concluding remarks

The intention of this project was to disrupt the US national narratives of borderlands that work to displace the sacred geographies, Indigenous peoples, and knowledges that have survived successive and ongoing waves of colonization along the banks of the Rio Grande/Rio Bravo. To prepare ourselves with the appropriate background knowledge, I traced specific lines of violence and displacement through time. I briefly examined the specific colonial history of Texas, and the dynamics of Mexican Indigenous displacement that have contributed to "intellectual colonialism"
(Castillo & Tabuenca-Córdoba 2002) of the frontera. In the section called "Unsettling the Borderlands," I discussed a few of the major academic concepts and theorists (Anzaldúa, 1999; Grande, 2004; Tabuenca-Cordoba, 2005; Maestas, 2003) whose work provided a foundation for understanding life in/of/with/on the frontera, standing on the U.S side. In spite of all of these factors, the Indigenous peoples and knowledges have survived on the land, in/on our bodies, and in the daily cultural practices (Riaño-Alcalá & Baines, 2011) of our river community.

I elaborated a theoretical framework called an Indigenous Fronterizx Cosmography for understanding our specific Indigenous worldview, moving from Indigenous Epistemologies, to Xicanx Ontologies, to Borderland Positionalities. From this framework emerged an intuitive, culturally-centric, and community-driven process of inquiry called Fronterawork, that honors the particular perspectives from/of the frontera.

Moving forward with the method, I conducted oral history and testimonio interviews with 28 community elders and knowledge keepers, and produced 25 corrected, verified transcripts from which to work. Elders spoke of what they witnessed in their lifetimes, and shared stories of the Rio Grande/Rio Bravo, offering insight into what has changed in the last 40 or 50 years. I used the teachings embedded in the embodied and emplaced accounts to build an Indigenous Fronterizx Pedagogy of Water that mobilizes an intergenerational practice of traditional ecological knowledge, focusing on water and ecologies of and with the Rio Grande/Rio Bravo;

In the local context, the Rio Grande/Rio Bravo presents many juxtapositions as learning moments: on one hand, it is one of the most biodiverse natural river habitats in the world, and on the other, it also exists under permanent military occupation and
unending human rights violations in the name of homeland security. By focusing on relational ecologies and traditional knowledge of the Rio Grande/Rio Bravo, this project witnesses the survival and strength of fronterizxs as an act of self-actualization and remembrance as healing. This project reinvigorates the Mesoamerican intellectual traditions using collective memory as the foundation for teaching future generations about the Rio, aware that they may never know the river the way we do, due to ongoing military occupation and apartheid structures. As we recover and restore our Indigenous knowledge of the river, we also recover and restore ourselves as Indigenous peoples, displaced in our own ancestral territories. This shifts our consciousness away from colonial impositions of identity, such that we are no longer a community of Indigenous-descended peoples, passive and assimilated in the face of colonization. We are Indigenous peoples, actively participating in the revitalization of Indigenous knowledge specific to our community, our land, and our ancestral waters.

Restorying our histories, our land, our river, and ourselves, works to protect our future generations from ethnocide, and teach them that the carceral state of our community is not normal, nor is it their inevitable inheritance. Indigenous fronterizxs are not squatting on government-seized property in the "Constitution-free" zone of the border. Indigenous fronterizxs are living in the landscape of our creation story waters, surviving as we have for centuries, resisting the latest wave of colonial violence.

Specifically, restorying our Rio Grande/Rio Bravo also makes explicit the active engagement necessary to protect future generations from ecocide. Water is not a commodity. It is the life in us, the life in the land, and the life of our future generations, sacred, vital, and irreplaceable. Our river is not a generic place called Border where we
go to find inanimate resources for the market, but the path of Creation within a sacred
landscape traversed for centuries by our relatives. Reclaiming Indigenous knowledge of
water unsettles the colonial frames of reference by moving away from thinking about
water toward feeling, perceiving, and being-in-relation to water, connecting us to our
ancestors and future generations. The work allowed me to model the Ethics of
Fronterawork (Muñoz & Muñoz, forthcoming) as a respectful methodological approach
to working with border, rural, and other vulnerable communities, in the service of our
communities. Collectively, we are so much stronger and richer than we recognize. It is
a great honor to reflect the love, support, and teachings of my community of south
Texas in this Indigenous Fronterizx Pedagogy of Water.

Personally, the project also allowed me to reciprocate the gift of knowledge with
my home community, elevating the voices of my fellow fronterizxs who are so humble
and often do not recognize the power of the traditional knowledge that they live every
day. Having moved away from Laredo/Nuevo Laredo for so long, I often felt estranged
from my hometown. I'd return to loved ones and familiar landmarks, but marvel at how
the community had changed since my last visit, and marvel at how much has remained
untouched. In many ways, this research project has been a passion project, a love letter
to my ancestral lands, river, and community. Deep healing has come from reclaiming it,
and being able to honor the knowledge of my community and elders.

In closing, I offer the untitled story of one of our community knowledge keepers
named Mr. Jose Guerrero, who crossed over last year, far from home. Rather than
participate in an oral history, he shared the following story, which captures the struggle
of many fronterizxs around finding our place with the river, and role that the river has as a refuge for our weary hearts.

Por todas mis relaciones.
Back when there were no countries and borders in the world,
there lived a young Mexican Indian boy who came upon a rio grande.

He was in awe of the many bugs and butterflies
that whipped around the many short and tall grasses,
and he came to love this place.

He came to the big river every day after his chores were done
to explore
and one day he found a small inlet that had such peaceful waters,
that he could count the hair on his head.

As he did so one day, a big fish came swimming by alone.

The fish was also exploring the arrival of the young Indian boy.

The fish swam around softly,
not disturbing the water
or the young boy who seemed to be looking deep into the soft undercurrents.

The Indian boy felt so happy in this his new secret watery garden.

The fish, knowing the water to be safe and clear,
was looking at the boy one day,
and she came up near the surface as if to catch a fly on the surface of the water.

The boy saw her but did not try to catch the fish.

And so, the fish came up a little more and looked into the boy’s eyes.
She surprised the boy when she said,” Hola niño!”

The little Indian boy fell back into the water
and he splashed water all over making the plants wet like a quick rain.

“Fish!” the boy called out! You speak!”

The fish: “Yes I do, and so do you!”:

The boy: “But how can a fish speak? I have never heard a fish talk!”

The fish: “Well niño, I have never heard a man talk!”

This was the start of a long friendship that would last for many years.
The fish was a she as the Indian man found out.

One day when the fish came to visit at the usual time, when the sun was at its highest peak. But this time she brought with her three young fish to meet with her best of all friends.

Indian man: “But who are these little fish?”

The fish: “Well, they are my children and I brought them here to meet you, my best friend in all the kingdom of earth.”

Indian man: “But I could never hurt or eat your children fish. You are my best friend in all of the rio! You know all of me. And did you share with your children who I am?”

Fish: “No, they only know what they see today, right now. Your secrets are only for my eyes to see.”

Indian man: “You are always there to hear my thoughts and to see my crying. I have come to love you as my partner in this life, Fish.”

Fish: “Yes, I too have given you my love. For there is no one else who would talk to a fish.”

Indian man: “I am going to take you with me then. I will fill a jar with river water and take you to my home. Then we can talk all the time when we want to. Si?”

Fish: “You can take me with you if you want to. I love you as much as my children. But you will only kill me if you do. I must swim the waters and be free to explore all that is here for me to enjoy.”

Indian man: “But I must have you with me fish! I don’t want to share you with anyone! You belong with me!”

Fish: “Then take me where you wish, I only want to make you happy because I love you too.”

Indian Man: “But I cannot live without you near me fish, how can I keep you with me?”

Fish: “If you love me as you say you do, then you must leave me in my waters. This is my home and my purpose and my world.”

Indian man: “But I love you so much my fish, I don’t know what to do”. The Indian man began to cry like a little boy again. The fish came close again and rubbed her lips on the Indian man’s hand, like many kisses.
Then the boy stopped crying
and he sat in the water up to his neck,
holding fish close to his chest and warmly stroking it with deep love.

After a long time he stood up
and looking down into the clear water he said:
“Fish, I will not take you with me.
I will not bring you harm, or kill you by robbing you of your world.
I will come and visit you as always,
and I will be content to know that you are here, waiting for me.
I give you back to this rio grande
so that you may make more fish children
and I will not let anyone come fish from this inlet.
This will be your home forever.
When I die,
I will tell them to bury me here,
by the lush green banks of this river
where I will be close to you."

But the Indian man could not stand.
He sank into the mud until his head was under water.
But he was not afraid.

Fish was there
touching him as always, softly,
like butterfly kisses
and he felt warm and safe with her.

Soon his eyes closed
and a tiny tadpole appeared on the back of fish.

Fish knew it was the Indian man that had come to stay with her forever.

So, she swam away with her children,
laughing and singing.

They would be together forever.

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