



the land where  
waters reflect  
shores. The  
word Bdote me  
where two wa  
together. The  
the name  
physi  
of creat  
the  
Bdote is  
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(in Cines)  
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the Dakota alve  
human form. Seve

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arriving at the con  
the Minnesota and  
Rivers. Bdote pro  
potent example of a  
landscape overlaid w  
history, where sites of  
profound cultural impo  
tance are born near  
well-established sacred  
natural sites. The river  
confluence was the place of  
creation. Ceremonies were  
conducted at a flourishing fire-  
water spring and on a nearby hillside  
the land was taken away by colon  
Gedow's resistance and hanging  
de... military action  
for truth and i  
elder Dave Larsen de  
where everyma  
thing began

Come  
Home:  
might resp  
the phrase: G  
back to where you  
from. One: oh y  
in Minnesota. In  
each case, here I  
am. Two: Oh, you  
mean where I'm  
really" from. In  
which case, here I  
am. Three: If this  
reference to my  
people, then you're  
anna have to be a  
le bit more spe-  
ific. How about I  
y and go back to  
t. Paul or go bac  
to Fresno, go bac  
undy nine, go bac  
o longang, go bac  
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ny advice also realiz  
at you're not the first  
give the comman  
turn to pointness in  
opposite direction wi  
the career... pistol. Call me Hmo  
you call me American be  
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d I know to home. Four, do  
wonder where you come  
Do you find comfort in  
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pot did it take for you to arrive  
s conversation. Maybe you  
in the Mayflower. M  
al American. D  
if maybe th  
ce be

my gradu  
tion speech  
tato laviera  
i think in span  
ish  
i write in english  
want to go bac  
puerto rico,  
i wonder if  
y kink could li  
in ponce, maygü  
and carolina  
engo las venas ac  
ardas  
scribió en spanglish  
raham in español  
raham in english  
tato in spanish  
taro" in english  
tonto in both langu  
es  
how are you?  
¿cómo estás?  
i don't know if i'm  
coming  
or si me fui ya  
si me dicen barranqu  
tas, yo reply,  
"¿con qué se come  
eso?"  
si me dicen caviar, i  
digo,  
a new pair of convers  
neakers."  
ni supe que estory jodi  
ni supe que estamos  
podios  
english or spanish



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FOUND IN TRANSLATION: LANGUAGE AND THE BUILT REALITY

A Design Thesis Submitted to the  
Department of Architecture  
North Dakota State University

by  
Kiara Groth

In Partial Fulfillment of the Requirements  
for the Degree of  
Master of Architecture

Primary Thesis Advisor

Thesis Committee Chair

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May 2022  
Fargo, North Dakota



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# ABSTRACT

Language acts as the primary way humans understand themselves and the world, and through the learning of languages, we are able to mediate and enrich this exchange. As humans reach for understanding of the world they inhabit, how can language be used to influence the design and experience of architecture, and can it be used to bring together communities with cultural and linguistic differences? How do these parallel yet contrasting stories impact worldviews, imaginations, and behaviors?

Minnesota has over 300 languages woven into its history. The people who speak these languages use them to give life to their own art, music, and stories, but most language education focuses on a select few European languages, severely restricting the audience and interpretation of these works and cultures. This library and learning center acts as a convergence point for cultures, languages, and worldviews to overlap and intermingle at the confluence of the Minnesota and Mississippi rivers. Its design translates stories from spoken and written language to the language of architecture while encouraging the expansion of stories through further translations and the building of relationships through discourse, learning, and a connection to the physical world.



“What’s in a name? That which we call a rose  
By any other name would smell as sweet.”  
-William Shakespeare, *Romeo and Juliet*

The initial idea for this project was based on the idea of linguistic relativity. This theory states that the language a person speaks shapes the way they interpret reality. There are many studies that exist that illustrate how different languages define certain ideas like time, family, space, and the self in different ways. The amount of information that a word can encompass and convey changes the way we organize and categorize our experiences, memories, and senses.

The chosen site in West Saint Paul, Minnesota is at the intersection of several different school districts that have reported at least 30% of their students speaking a language other than English at home. There is a significant number of students in Ramsey County that speak Hmong, while in Dakota County, the predominant non-English language is Spanish. By building a library and cultural center, the people in this area will have a place to gather, communicate, and teach each other about their languages and cultures. The building will be focused on connections, bridging the barriers created by different methods of communication.

If the words we use to describe the world around us can change our perception of it, how do the words we use influence the world we build? While this project will primarily focus on the English language, what possibilities does this open up for other languages used in design?

This project aims to define, defy, and transcend the barriers and framework for design inevitably created by language. Several stories formed the base that this project was built on. One is a poem on the experience of a person of Hmong descent living in a country that did not speak his native language. Another, a poem written using a combination of English and Spanish. A third, the Dakota story of the creation of the world and how humans came to live on it.

---

“Come Home”

Kevin Yang

(transcript from YouTube)

Eight responses to the phrase: Go back to where you came from.

One: Oh, you mean Minnesota. In which case, here I am.

Two: Oh, you mean where I’m “really” from. In which case, here I am.

Three: If this is a reference to my people, then you’re gonna have to be a little bit more specific. How about I try and go back to St. Paul or go back to Fresno, go back to \_\_\_\_, go back to \_\_\_\_, go back to \_\_\_\_. Upon taking my advice also realize that you’re not the first to give the command return to pointness in the opposite direction with the barrel of a pistol. Call me Hmong before you call me American because Hmong is the closest word I know to home.

Four: do ever wonder where you come from. Do you find comfort in vague memories of Ellis Island. How many servings from the melting pot did it take for you to arrive at this conversation. Maybe you take pride in the Mayflower. Maybe you are an original American. Do you ever ask yourself if maybe the land we stand on today once belonged to someone else. Do you ever ask yourself if maybe the land had never belonged to any of us and if instead we belong to the land.

Five: When I was younger I took the journey back to Thailand hoping to find our villages still dotting the sides of mountains, hoping here could still hear \_\_\_\_ still echoing throughout the valleys. Upon entering the house of an elder he apologizes to me, embarrassed that his youngest son could not introduce himself to me in our language. Tells me that you’re all grown up to be anything other than our farmer or servant in this country, you must learn to leave your language behind. I want to tell this man that throughout my time here I’ve never felt so close to where I come from.

Six: My mother tells me that before I ever took in my first breath I was an invisible spirit floating around in the clouds waiting for a stomach that could paint me pink. My mother tells me that death is a slow journey back that if not done carefully, we will wander the earth cursing those still living, but under the watchful eyes of her loved ones we will always know our way home.

Seven: for the longest time I believed that the hummingbird did not possess a pair of feet instead always existing in a state of mid-flight. How sad I thought, to always be at the mercy of the wind to be so close to the earth yet own none of it. My time here has taught me how lucky the hummingbirds belong to the sky.

Eight: I’m going. I’m going.

---

“my graduation speech”  
tato laviera

i think in spanish  
i write in english  
i want to go back to puerto rico,  
but i wonder if my kink could live  
in ponce, maygüez and carolina  
tengo las venas aculturadas  
escribo en spanglish  
abraham in español  
abraham in english  
tato in spanish  
“taro” in english  
tonto in both languages  
how are you?  
¿cómo estás?  
i don’t know if i’m coming  
or si me fui ya  
si me dicen barranquitas, yo reply,  
“¿con qué se come eso?”  
si me dicen caviar, i digo,  
“a new pair of converse sneakers.”  
ahí supe que estory jodío  
ahí supe que estamos jodíos  
english or spanish  
spanish or english  
spanenglish  
now, dig this:  
hablo lo inglés matao  
hablo lo español matao  
no sé leer ninguno bien  
so it is, spanglish to matao  
what i digo  
¡ay, virgen, yo no sé hablar!

“Bdote in Mni Sota”  
Addie Wright  
(taken from sacredland.org)

“Minnesota, known as Mni Sota Makoce to the Dakota, is ‘the land where the waters reflect the skies.’ The Dakota word Bdote means ‘where two waters come together,’ representing the spiritual and physical place of creation for the Dakota people. Bdote is located at the confluence of the Mississippi and Minnesota Rivers (on the eastern edge of the Minneapolis–St. Paul airport, and south of the Twin Cities). This place of waters meeting is most often referred to as where the Dakota arrived in human form. Seven tribes of Dakota are said to have descended from the seven stars of Orion’s belt, arriving at the convergence of the Minnesota and Mississippi Rivers.

Bdote presents a potent example of a spiritual landscape overlaid with history, where sites of profound cultural importance are born near well-established sacred natural sites. The river confluence was the place of creation. Ceremonies were conducted at a flourishing freshwater spring and on a nearby hilltop. The land was taken away by colonizers, followed by resistance and hangings, as deceit, murder and military action sparked a long battle for truth and reconciliation. Dakota elder Dave Larsen describes the Bdote as ‘where everything began and where everything began changing’.”

---

## TYPOLGY

Library and Learning Center with a focus on multilingual collections, connections, and education.

## MAJOR PROJECT ELEMENTS

### Library Stacks:

A place to store written works and allow individuals to connect to the world around them through the words of other.

### Auditorium:

Space for stories to be performed orally to an audience. A more participatory experience of language.

### Classrooms and Collaborative Spaces:

These spaces facilitate immersive experiences of language between cultures and individuals.

# PRECEDENT STUDY

## MELVILLA: AN UNDERLINE READING NEW YORK, NEW YORK

Douglas Darden

A central precedent study for this project was Douglas Darden's "Melvilla" from his book *Condemned Building* (1993). Melvilla was an architectural interpretation of Herman Melville's *Moby-Dick*.

In this library, Darden provides contradictions, connections, and contrast in order to put the user, or "reader", into a space that is both fictional and real, natural and unnatural. It has two main paths that users can take with different plotlines that result in very different experiences of the building. In allowing people to interpret the building in a variety of ways, Darden creates a building that relies heavily on language and the way people use it.

Figure 3. Melvilla grade level plan



Figure 1. Melvilla

Figure 2. Melvilla Section

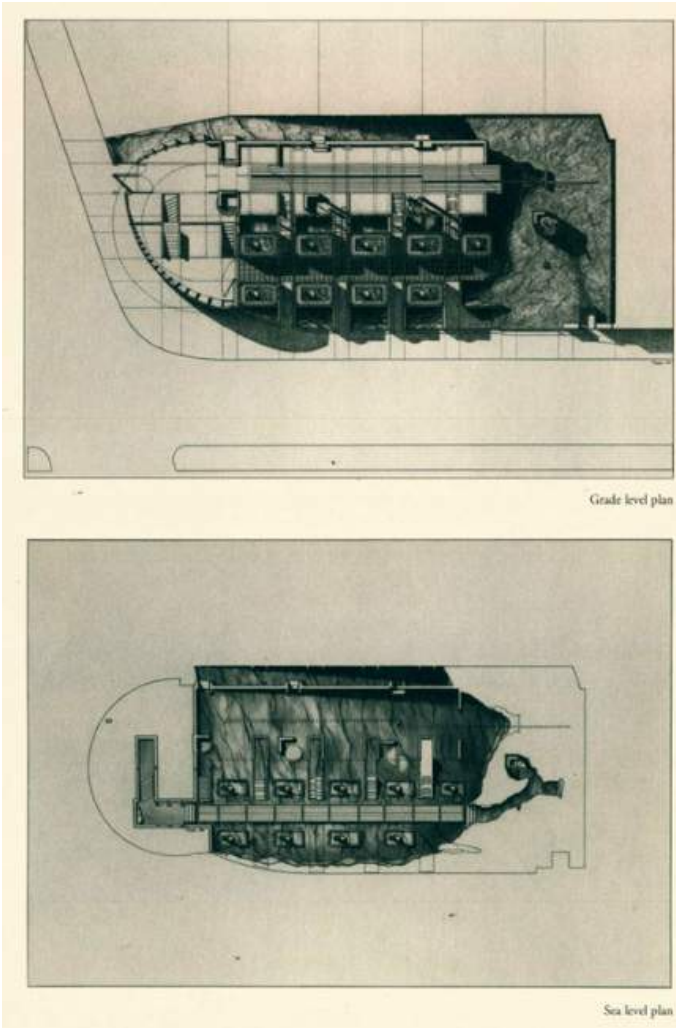
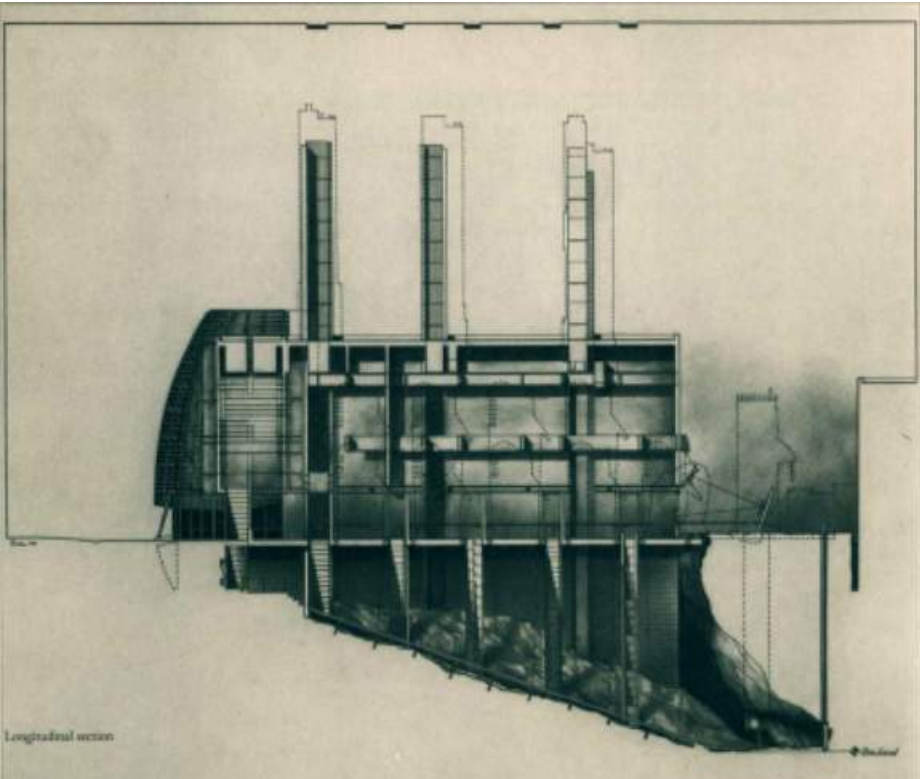


Figure 4. Melvilla sea level plan

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## PROJECT EMPHASIS

This project will have a particular focus on the relationships between people, cultures, and the environment, both natural and built. Spaces will encourage collaboration and storytelling in a variety of ways using both physical connections and the intangible connections built by stories and experiences.

## GOALS

To highlight the connection between architecture and language and the ways they follow similar frameworks that are fundamental pieces of people's interpretation of reality.

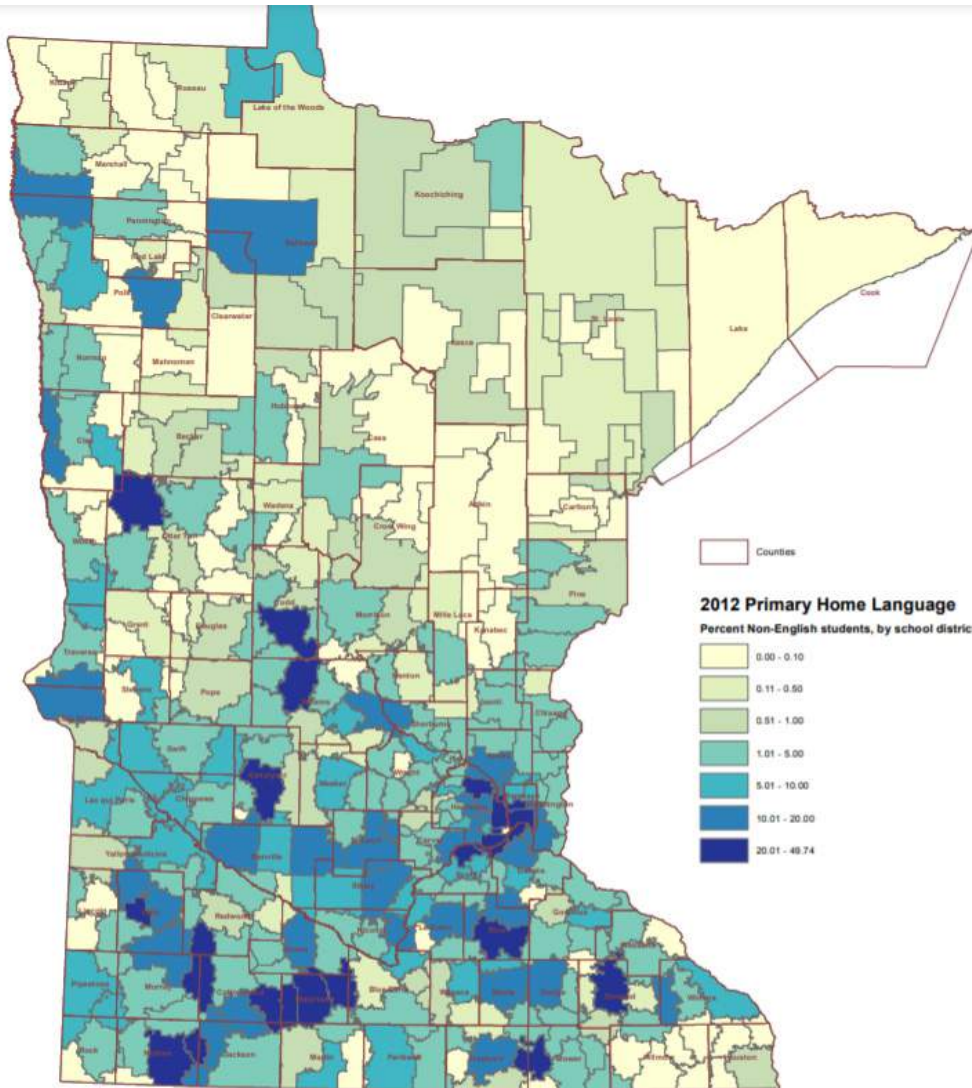
To echo and tell the story of humans' relationship between the natural environment, the built environment, and the ambiguous and intangible reality of the stars.

To leave a story for future generations of the celebration of differences, and how they can strengthen relationships.

To act as a connection between different people, cultures, and languages.

To build a center for education and celebration of language.

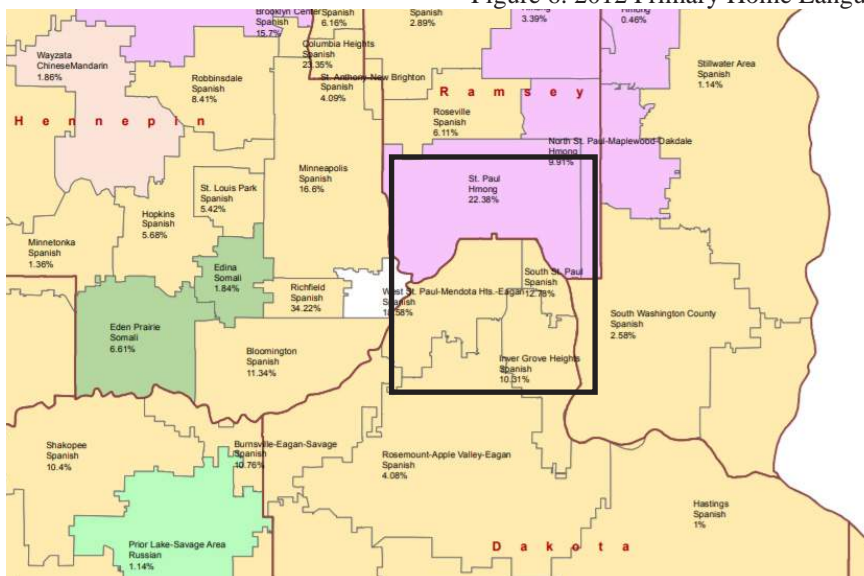
# THE SITE



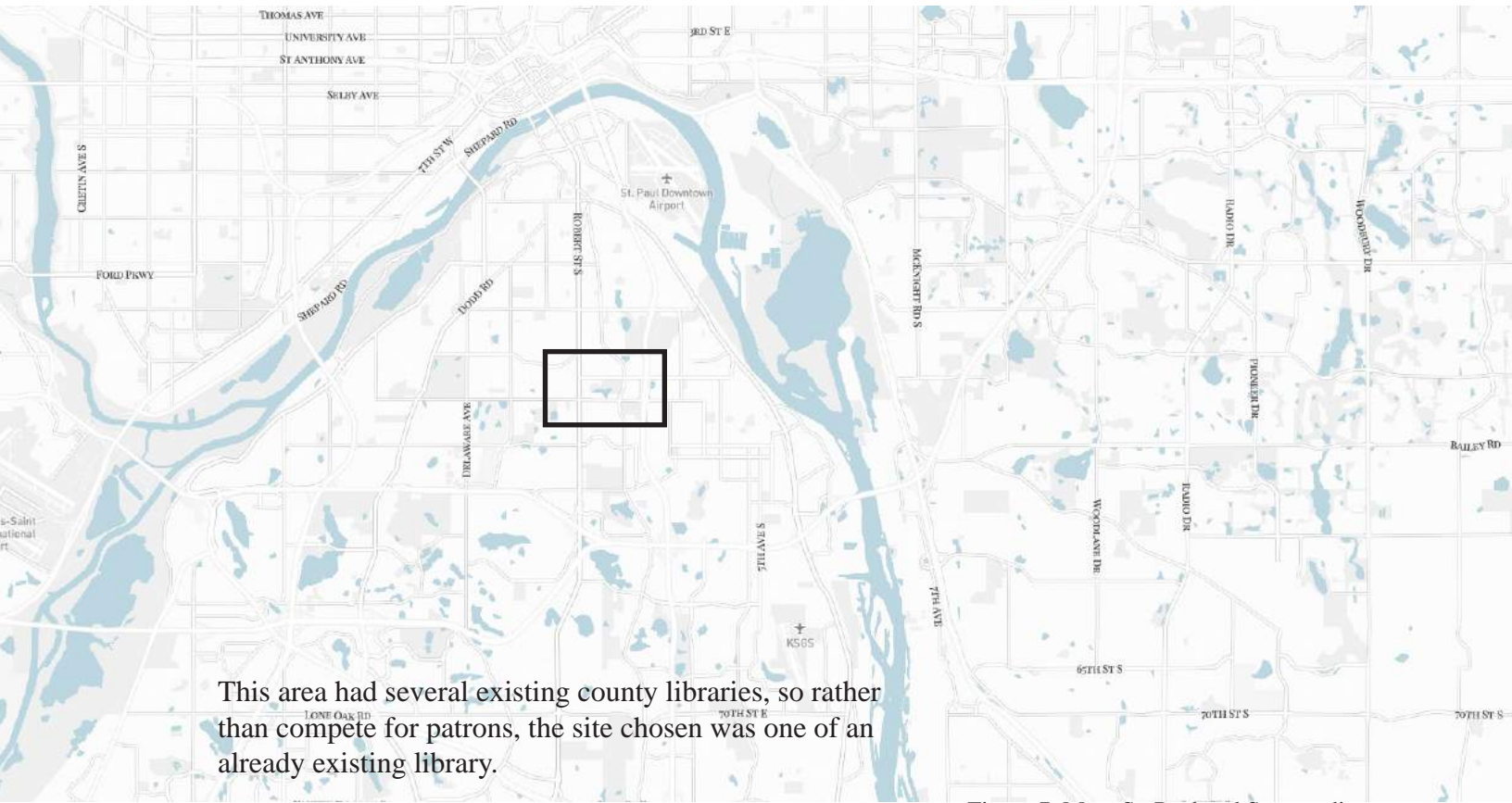
The highest density of students who speak a language other than English at home is in the Twin Cities area.

Figure 5. 2012 Primary Home Language

Figure 6. 2012 Primary Home Language

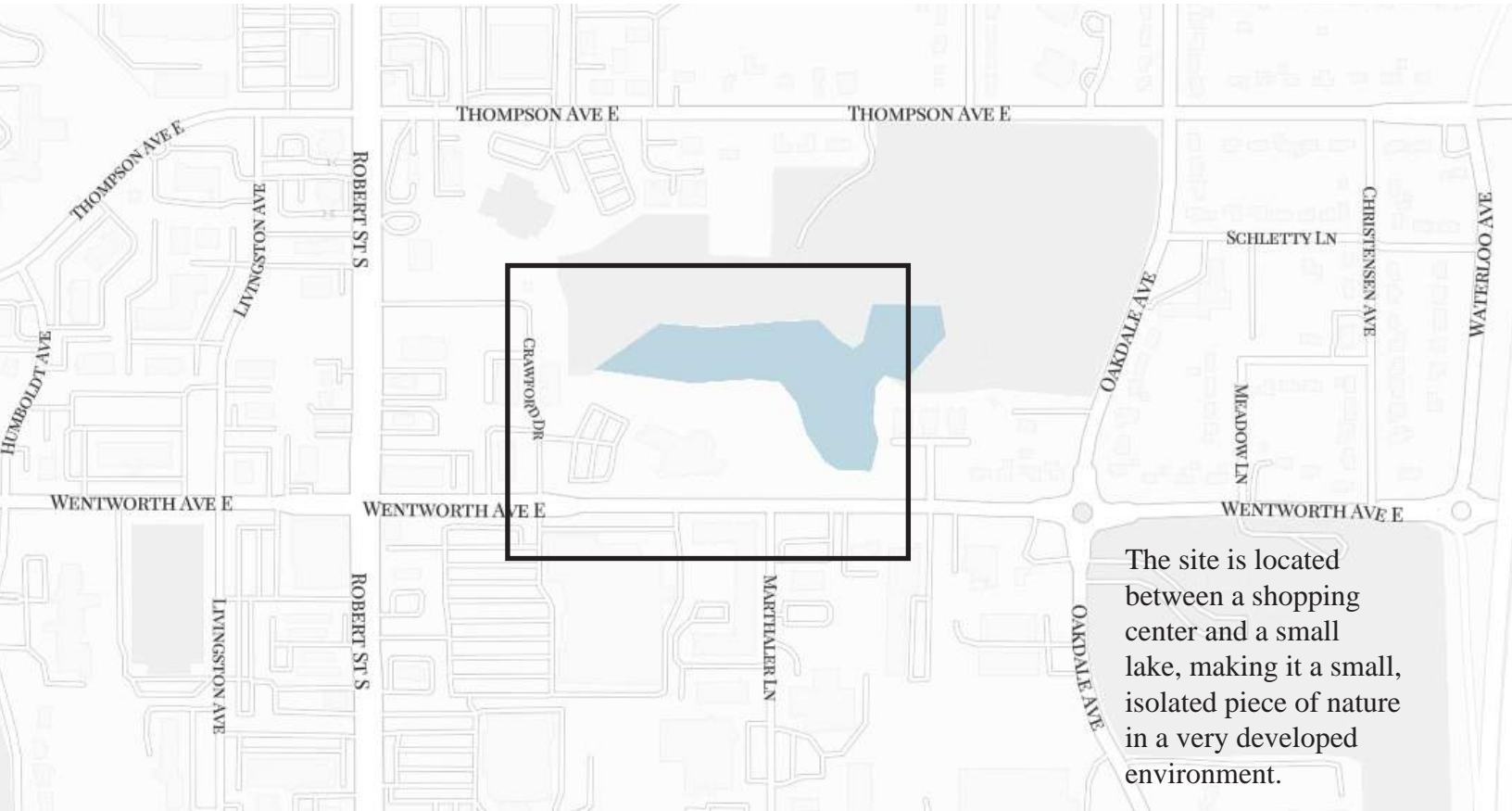


From there, the site was narrowed down to the West Saint Paul area due to the high concentration of both Spanish and Hmong speakers.



This area had several existing county libraries, so rather than compete for patrons, the site chosen was one of an already existing library.

Figure 7. Map: St. Paul and Surrounding area



The site is located between a shopping center and a small lake, making it a small, isolated piece of nature in a very developed environment.

Figure 8. Map: Site



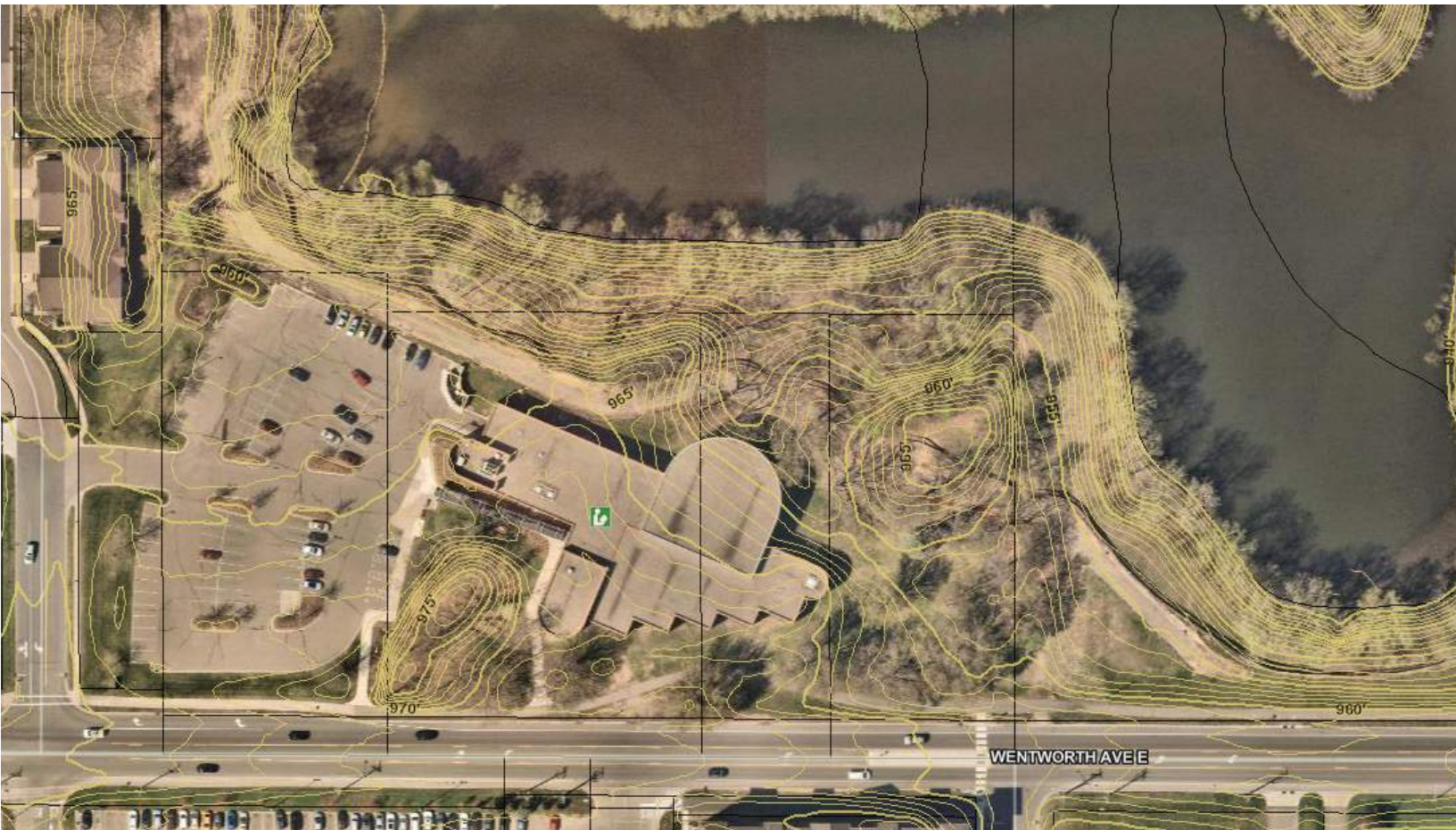


Figure 9. Site: Topography

### Current Site Topography

The topography of the site gets more extreme closer to the lake, but where the current building sits is relatively flat.

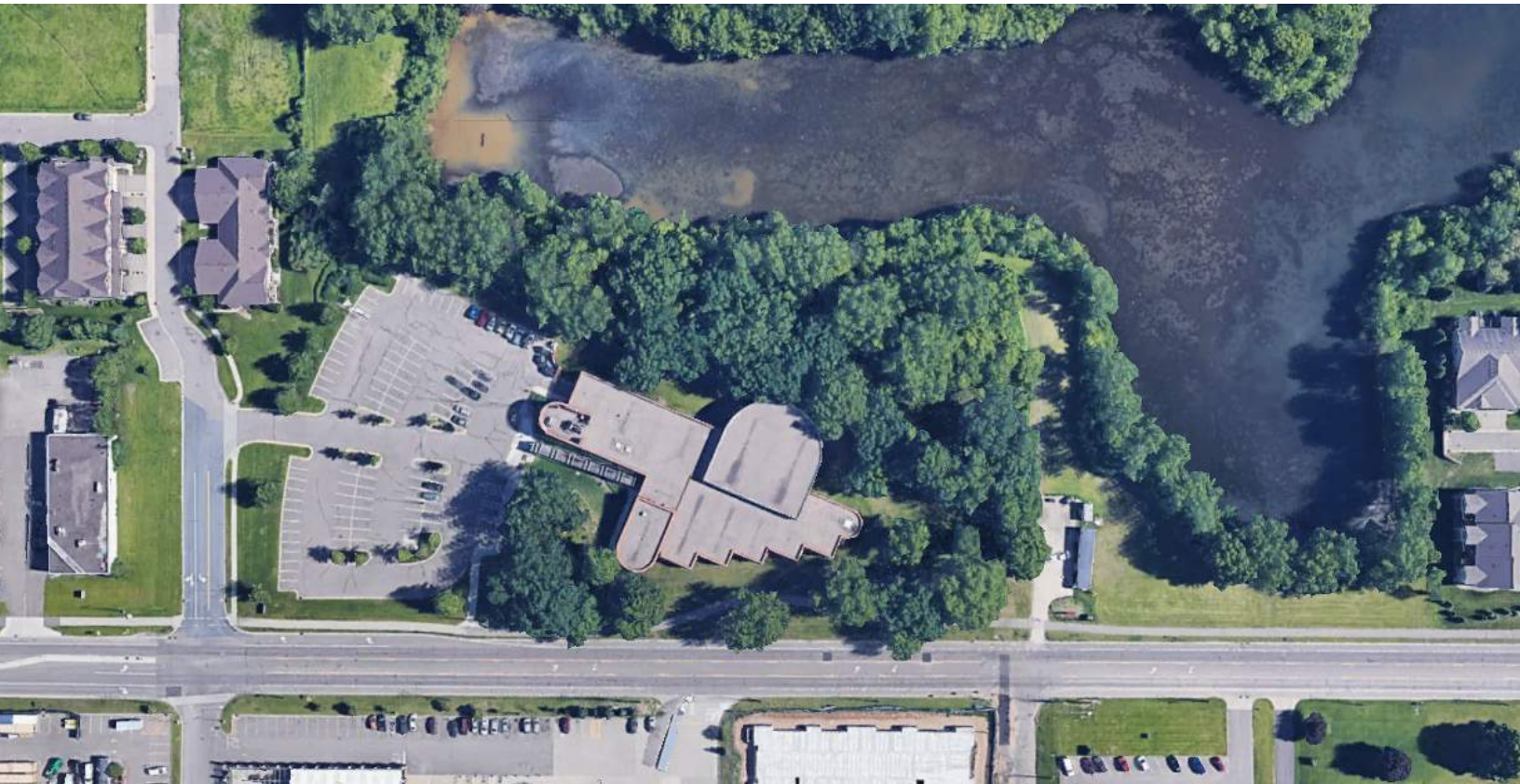


Figure 10. Site: Satellite Image

### Current Site - Satellite Imagery

The site currently holds a parking lot, the library, and many trees. The south and west are bordered by streets, houses, and commercial buildings. The north and east are bordered by the lake. Past the lake are more houses and a golf course.

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## PLAN FOR PROCEEDING

### Design Methodology

Phenomenological inquiry into the connection between language, reality, and architecture. Data will be collected from various sources throughout history and interpreted into a modern framework. Research will include interpreting literature on linguistic relativity research, architectural theory analyses, and philosophical ideas of creation through language. The final design will be built upon these foundations with the added component of current technology and cultural attitudes.

### Documentation of Design Process

The design process for this project will be very theoretically focused and based on linguistic principles previously researched. The process will be documented through a series of diagrams and sketches illustrating the connection between language, story, and physical space.

### Schedule/Work Plan

Week of:

Oct. 18 - gathering research materials (books, articles, videos, etc.)

Oct. 25 - reading/reviewing collected materials

Nov. 1 - gathering new materials to fill any gaps

Nov. 8 - Case studies

Nov. 15 - Case studies and any additional research

Nov. 22 - Site visit and research

Nov. 29 - Historical, social, cultural context, project justification

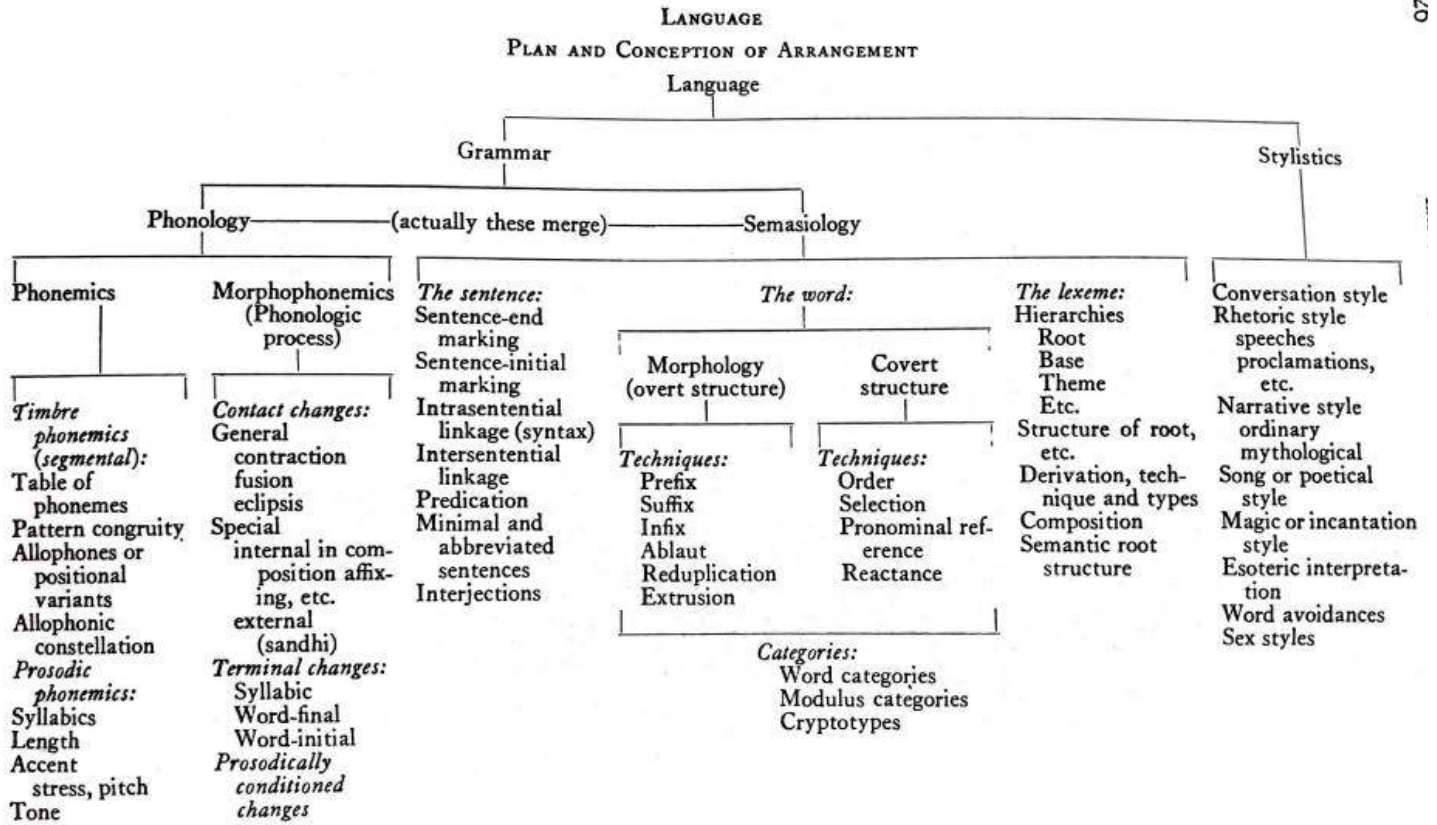
Dec. 6 - Performance Criteria and book assembly

Dec. 13 - Book organization/assembly



---

# RESEARCH



Whorf (1939).

Figure 11. Language: Plan and Conception of Arrangement

Benjamin Whorf gives a good visual of the organization and purpose of language. Different aspects of language and speech can have different effects on rhythm, meaning, logic, and understanding. The central idea of the Sapir-Whorf Hypothesis is that language functions, not simply as a device for reporting experience, but also, and more significantly, as a way of defining experience for its speakers.

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# LITERATURE REVIEW

## INTRODUCTION

This review looks at various sources that investigate how language shapes thought and reality, how language shapes architecture, and how architecture is interpreted through language. First to be reviewed are the more linguistic aspects through various writings by linguist Benjamin Whorf. Then, a review of a book on how language can, has been, and should be used in architectural design and critique. To conclude a summary will draw connections between the two and the implications the information could have on architecture and people's perception of it.

## LANGUAGE

Benjamin Lee Whorf was a prominent linguistic theorist. He is one of the two linguists behind the Sapir-Whorf hypothesis. He wrote numerous essays, many in the 1930's and 40's, on the impact that language has on a person's perception of reality. His studies of Native American languages, specifically Hopi, juxtaposes the experiences of cultures with very different communication systems.

“The Relation of Habitual Thought and Behavior to Language” by Benjamin Whorf

In “The Relation of Habitual Thought and Behavior to Language”, Whorf describes how the way a situation is described will change how people behave and interact with their surroundings. Oftentimes, the words used to describe a potentially hazardous situation were ambiguous or inadequate leading to behaviors that would not normally be appropriate for the surroundings.

I found this to be very important evidence showing the ways that language can influence a person's perception of their surroundings. A space described as “cavernous”, “bright”, or “crowded” will elicit different reactions from people based on what the word means to them and how they relate it to the space. In other words, how a space is described and advertised will change the way that people interact with and within it.

Whorf then uses the Hopi language and culture as a comparison to English and other European languages in regards to the concepts of time, matter, and space. One difference is the way imagined objects such as lengths of time are treated the same as physical objects in English, but in Hopi they cannot be referred to in the same terms. An expression such as “ten days” would not exist on its own, but could exist in terms of a relationship between two events that occur ten days apart.

This has more to do with the relationships between a person and their experience. Some of these relationships are physical, some are purely abstract, and many are a combination of both. In design, this can be seen as the difference between how a user interacts with a space and how a user experiences a space. The physical features of a room can be planned and more or less controlled, but an abstract relationship such as the one between a person and a space can only be predicted to an extent. The way a person experiences a space is heavily dependent on the language they use to define their experiences as well as more personal aspects like past experiences, knowledge, and mindset.

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Another significant aspect of language is ambiguity. Different languages, such as Hopi, have words with more specific meanings that do not require so much explanation as English, but also allow for more flexibility in meaning. For example, in Hopi, a noun refers to a particular object. “Water” would refer to a specific mass of water rather than the substance as a whole. In order to add specificity in English, one would give this water a shape such as “cup of water” or “body of water”.

Architecture and design often play with the space between abstract and detailed. Some spaces allow more room for flexibility, creativity, and interpretation while others have very specific uses. This is also seen and discussed in the chapter on Hopi architectural terms, but in some ways a room can be more or less than the four walls that define its physical boundaries.

One item of note that I found across many essays and articles was how often academics slip into French or Latin in order to describe certain phenomena that could have been described in English to a similar extent, but without the same meaning or intention. This goes to show how fluid the connection between words and meaning can be when words that could be considered direct translations or synonyms actually have different meanings when used in communication.

### “Linguistic Factors in the Terminology of Hopi Architecture”

The Hopi language has a number of terms used to describe architecture. The words that represent positive space, wall, foundation, door, window, to name a few, are all nouns that describe physically bounded objects. On the other hand, words that describe negative space are less common, if they exist at all. The word used to describe a room is not used in the same way other nouns are. One could not express ownership of something like a room like one could of a physical object like a door. The Hopi word for room behaves more like a ‘locator’ like “here”, “above”, or “north”. It contains a suffix that directly translates the word closer to “in an architectural interior” rather than simply a “room”.

I found this fascinating because it represents space not as a thing in and of itself, but rather as something used in conjunction with other things. The space is only something that holds other things. Much like the space between words, the space between walls allows for freedom of movement, interpretation, and expression. This play of positive and negative space creates many interesting design opportunities where they can play off of each other rather than simply existing next to one another.

The way building types are named in English is a combination of structural types and occupancy types; they either describe the way something was built or how it’s going to be used. Hopi, on the other hand, has a single word that means building or house. While it is considered a noun, it is used as a stem that is then connected to various suffixes to further denote location. It behaves more like a pronoun with the added feature of having a form that allows ownership.

This is a very interesting linguistic quirk. The idea that a noun in one language is used as a pronoun or a verb in another changes the way a user interacts with an object or experience. This has many implications in both design and psychology. It allows for different levels of flexibility in building uses and construction type and the extent in which a building affects the activities that can take place within it.

The Hopi do not use occupancy to describe building types. The occupants, such as “church” in reference to the institution or congregation, are distinct from the space that they occupy, such as the “church” building. In this way, a “church”, the physical building, would exist anywhere that the congregation gathers.

The lack of specific building terms in the Hopi language allows for more flexibility in building uses and locations, but doesn’t produce the same forms that appear in other buildings that have more standardized typologies. In English, the building typology of churches has very specific features that would not be found in a building designed as a restaurant. The named typology tows around an invisible stack of associated features, forms, and traditions that are not inherent in Hopi building types.



This essay focuses on language and linguistics as a process through which science, technology, and discovery are achieved. Language is comprised of layers that build upon each other in order to reach higher levels of detail and complexity. Much like how a math equation helps a physicist to understand how magnet and electricity will interact with one another. Whorf writes that reason cannot be achieved without language. Without a way to describe scientific processes, the laws of gravity would not exist, that would simply be the way the world works. He says that language functions in much the same way as science does. Without a way to understand it, humans tend to take for granted the subtle forces that control their communication and expression.

Languages are pattern-systems that are organized in different ways. Whorf (1941) writes, “And every language is a vast pattern-system, different from others, in which are culturally ordained the forms and categories by which the personality not only communicates, but also analyzes nature, notices or neglects types of relationship and phenomena, channels his reasoning, and builds the house of his consciousness” (p. 252). Language is used to break down experiences and ideas into pieces that can be expressed and understood.

Seeing language as a science rather than an art is an approach not often seen in creative disciplines like architecture. The technical sides of architecture are often discussed through math and numbers, while the artistic and poetic sides are discussed through language and storytelling. I think this can be an interesting way to organize architectural designs because as they are now, math and language do not often intersect. Using the same language to outline two different aspects of design could go a long way in bringing the two of them together in a more cohesive way.

It is important to note that language does not simply refer to languages spoken by people in different countries across the globe, but also the different languages spoken in the same country but a different community. For example, the word “space” has different meanings to architects, physicists, and psychologists. Using it in the way a physicist would interpret it while speaking to an architect would cause confusion and misunderstandings.

This intersection of different languages within the same grammatical language is an interesting way to understand the issue of linguistic relativity. It is an easier way to demonstrate the impact languages have on understanding without having to learn a completely new language. This also shows how a doctor and a teacher might experience an architectural space differently because they belong to different discourse communities.

The second part of this essay focuses less on the sentences and more on the words. The meanings of words and the connections that people draw between similar words has a strong influence on their meaning. One example given is a ‘wave’. Without a word to describe a wave as a separate entity, one would only be able to see the water as a plane of motion. The word ‘wave’ exists to separate one piece of the image from the rest of it. Other languages do not have this word as a noun, but rather as an event.

This goes back to what was mentioned in a previous essay of the use of words in different parts of speech. The use of a word as a verb, noun, or preposition changes the way it interacts with the rest of the sentence and how it interacts with the user. Connections between objects, places, and spaces are made by the observer, but are guided by language.

Whorf also begins to venture into the field of poetry and phonaesthetics. The psychological connections people make between seemingly meaningless sounds and meaning. The “music” of language, as Whorf calls it, is interpreted differently by different languages. What one might see as a soft sound, another might see as sharp.

While this research focused on the more technical and scientific aspects of language, there is also research suggesting a link between language and art. Namely, the effect that language patterns have on rhythm, flow, and metaphor. This would also be a very interesting approach to linguistic design in architecture, but beyond, I think, the scope of this particular project.

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## ARCHITECTURE

The Words Between the Spaces: Buildings and Language was written by architect and historian Thomas Markus and linguist Deborah Cameron. They study texts written about architecture and how these pieces relate to people and cultures.

Two of the main purposes for language, as outlined in this book are for communication and as an aid for thinking whether we communicate these thoughts or not. Part of the reason that architects are able to see things as they do and communicate their ideas is the development of a linguistic register. A linguistic register as described by Markus (2002) is a “term used by linguists to denote a set of conventions for language-use tailored to some particular situation or institution” (p. 2).

The most common connection between architecture and language is done through structuralism, the relationship between signifier and signified, image and concept. There is debate as to whether signifiers in architecture actually communicate or if they just hold certain meanings. For example, the contrast between light and dark in a Gothic cathedral is easily seen through image, the meaning of it is only understood through language.

Architecture is most often represented through a combination of images and texts. This leads to multiple questions as to where the most meaning is drawn from and how much these two aspects meld to create a cohesive experience or if they simply build off of each other and fill in some of the blanks that were left behind.

Architectural drawings help to understand a space visually, but they can't always convey the same sense of place as writings can. In an image, one only sees what is there, but a text or a story allows for interpretation and metaphor. It can be a more successful way to convey the feeling of a space rather than just the physicality of it.

The second chapter of this book provides a brief history of various architectural texts: what they tell and how they are used. Beginning with Vitruvius in the first century B.C., it goes through several different ideas of how people talked, wrote, and taught about architecture. When Vitruvius wrote about the importance of firmitas, utilitas, and venustas, these became the signs of good architecture. Other phrases have been popularized throughout history such as ‘form follows function’ which led to an ideology that focused on the more practical aspects of architecture as opposed to the aesthetic. Architecture is also viewed through different lenses taken on by writers. Some architecture is more informed by law; codes, regulations, and standards. This is a very different language than most people are used to interpreting architecture with.

Architecture is taught through language. This means that there is no architecture without it. Many of the linguistic properties of architecture are lost in translation from the client to the designer to the user. This chapter was mainly focused on the importance of the link between architecture and language throughout the design process.

A big part of people's perception of anything is through rhetoric. Nearly all texts are intended to convince the reader of something. Charles, Prince of Wales wrote many opinionated texts of the value, or lack thereof, of certain styles of architecture. He had a strong hand in influencing the public's opinion of architects and architecture. His use of metaphors pushed people into seeing architecture the way he saw it, for better or for worse.

Public discourse and opinion is easily moved by writings. In the field of architectural design, there is sometimes a disconnect between the client and the designer. Designers often think in abstract terms that they then turn into professional jargon when relaying ideas to other professionals. The connection between architecture and language can also strengthen the link between the architect and the user.

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## CONCLUSION

The writings of Benjamin Whorf give a fascinating insight into how different cultures can perceive the same images and events. The idea of using language as a scientific formula for understanding human behavior is not often talked about in other disciplines. Particularly in architecture, value is given more to the visual aspects of a space rather than the process behind the interpretation of said visuals.

The book *The Words Between the Spaces: Buildings and Language* uses language more as a rhetorical tool than scientific process, but it still uses language to shape thought processes in people. It illustrates the importance of language throughout the entire design process.

One common factor between these two texts was the importance of relationships and metaphors. Nothing exists in isolation, and the best way to understand things is in connection with better known things. Architecture is better understood through its site, materials, form, and progression of spaces. Language is used to categorize these experiences in ways that make sense and can be later shared with other people.

In the design process of my thesis, I will be using metaphors in a variety of ways to convey both function and meaning. Language can be used in architecture to guide the experience of the user in both a pragmatic and artistic way.

# TYOPOLOGICAL RESEARCH

## Charles Library at Temple University

Location: Philadelphia, Pennsylvania

Built: 2013-2019

220,000 sq ft

Architect: Snøhetta

Typology: University Library



Figure 12. Charles Library

This library combines space for books with spaces for student to learn, teach, and socialize.

It uses shapes and materials from the landscape and surrounding buildings to help it blend well with the site.



Figure 13. Charles Library Site Plan

Figure 14. Charles Library



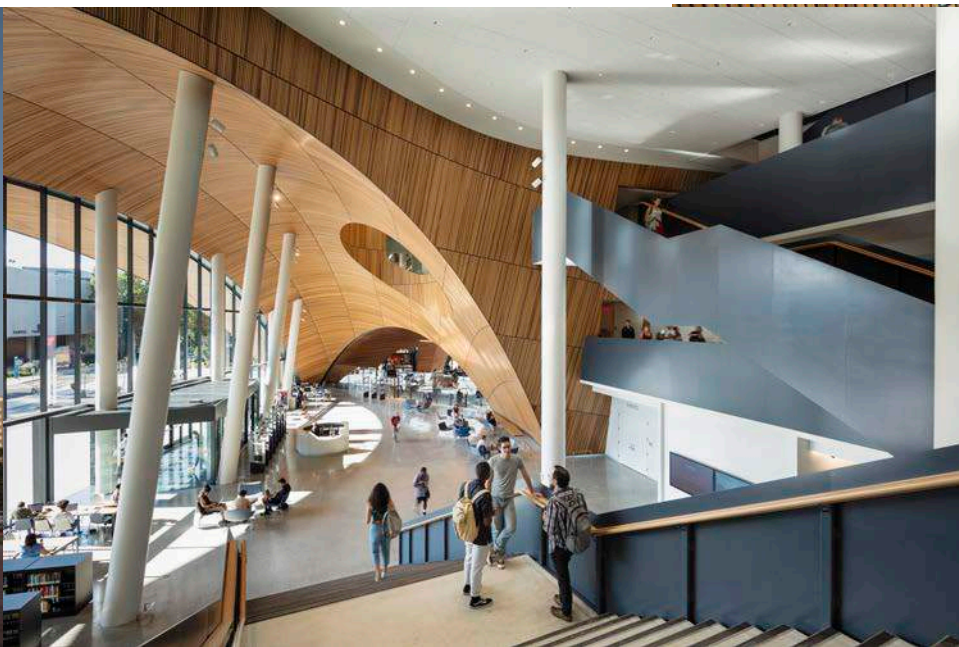


Figure 15. Charles Library Atrium

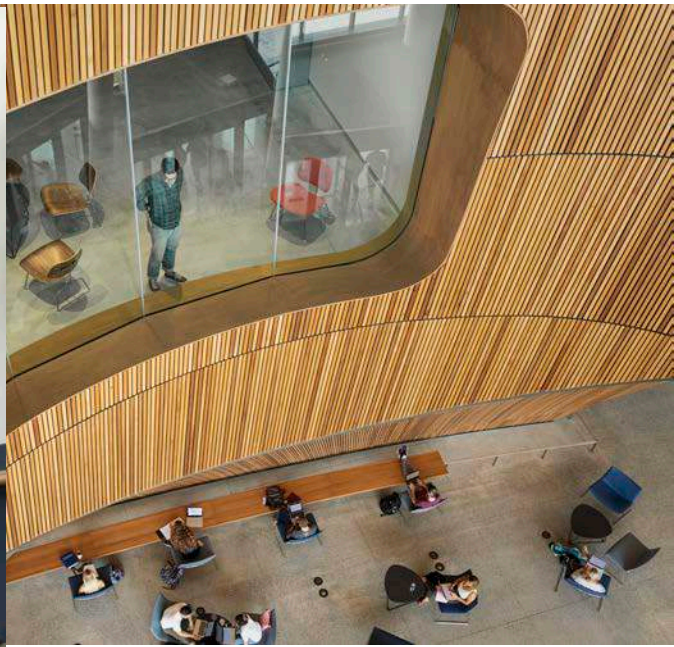


Figure 16. Charles Library Atrium

Dramatic structures and interior spaces make this an iconic addition to the university and an interesting space to use.



Figure 17. Charles Library Section

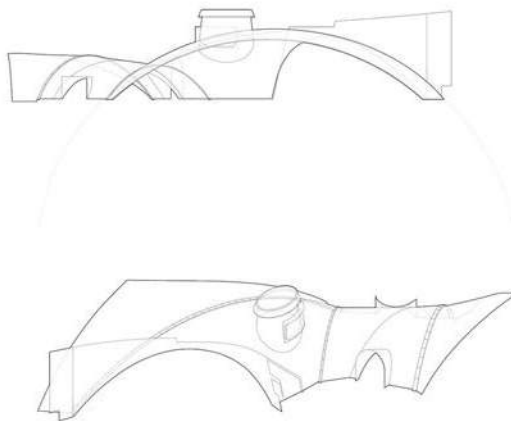


Figure 19. Charles Library Elevation

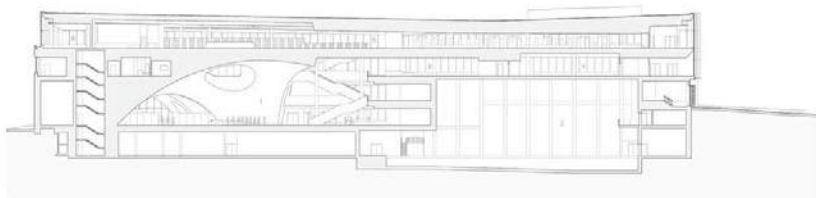


Figure 18. Charles Library Section

Level 1

- 1. Lobbies
- 2. 24/7 Study
- 3. Café
- 4. Event Space
- 5. Book Store
- 6. Study Room
- 7. Reading Room
- 8. Office
- 9. Book Box

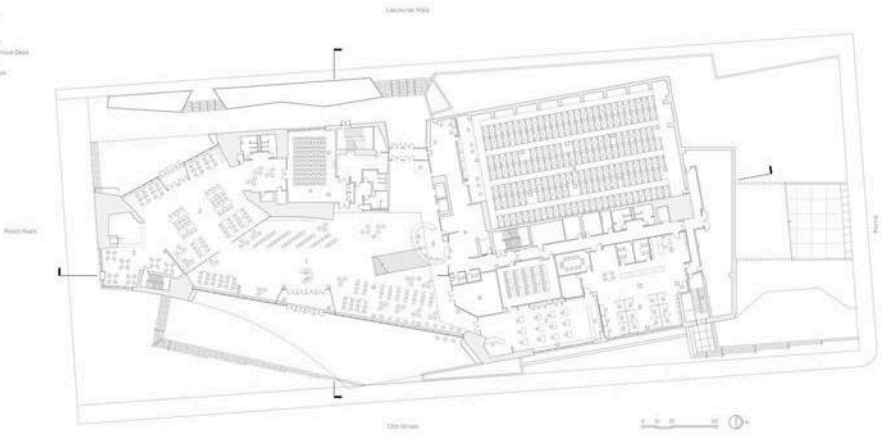


Figure 20. Charles Library Plan 1

Level 2

- 1. Instruction Room
- 2. Computer Lab
- 3. Writing Center
- 4. Office
- 5. Book Box

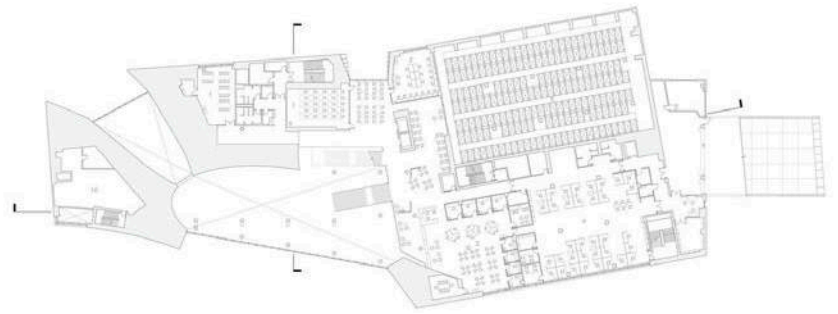


Figure 20. Charles Library Plan 2

Level 3

- 1. Student Studio
- 2. Student Success Center
- 3. Reading Room
- 4. Office
- 5. Staff Lounge

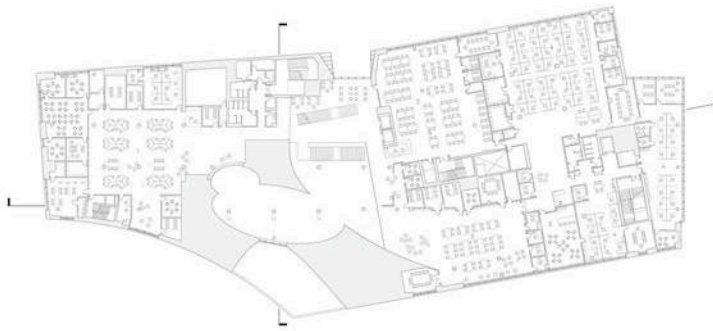


Figure 20. Charles Library Plan 3

Level 4

- 1. Reading Room
- 2. Bookstore Collection
- 3. Studio
- 4. Student and Faculty Study
- 5. Greenhouse

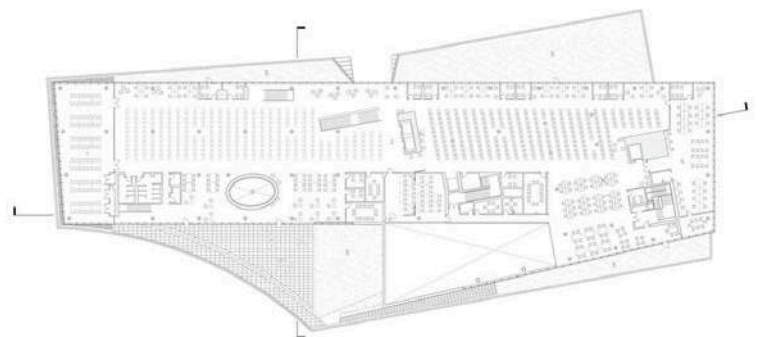


Figure 20. Charles Library Plan 4

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The Charles Library sits at the intersection of two major pedestrian paths and serves a large and diverse student body. It is also near a major city street, giving it an urban context as well as an academic one. The library's design minimizes the space needed for book storage in order to maximize study and collaborative spaces. Other features of this project include a large green roof, plaza spaces, and large windows that connect the interior to the exterior, and gives the users a connection to nature.

The design of the Charles Library is focused around the user's experience and interaction with both the space and other users. It encourages collaboration between students in an environment that is bright, open, and connected to nature through views and use of natural materials.

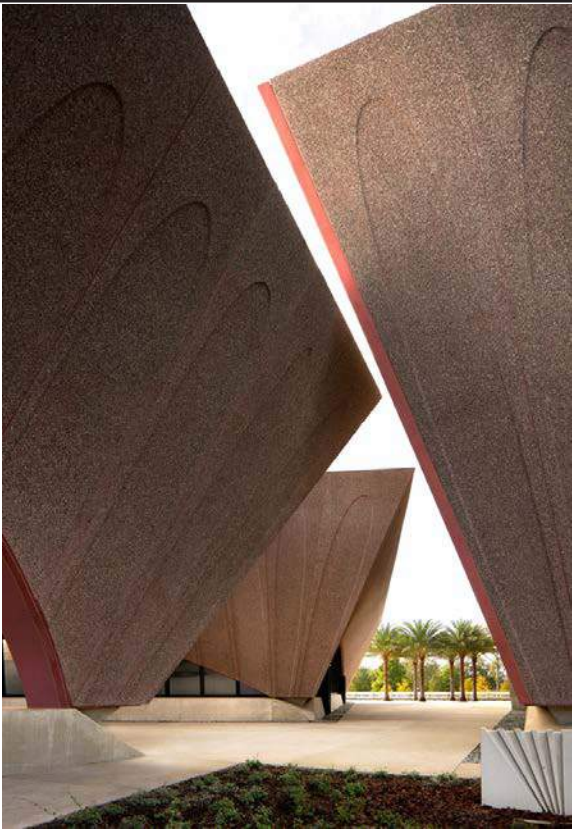


Figure 24. Winter Park Library

## Winter Park Library and Events Center

Location: Winter Park, Florida

Built: 2021

55,800 sq ft

Architect: Adjaye Associates

Typology: Library/Event venue

Figure 25. Winter Park Library



This project was done as a park of the revitalization of the area and park. Because of this, the site was very important in the design of the buildings.

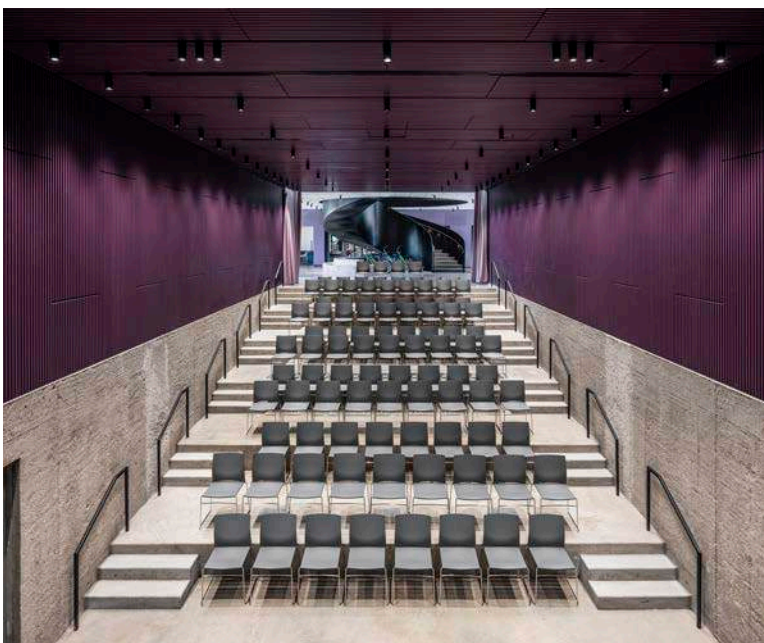
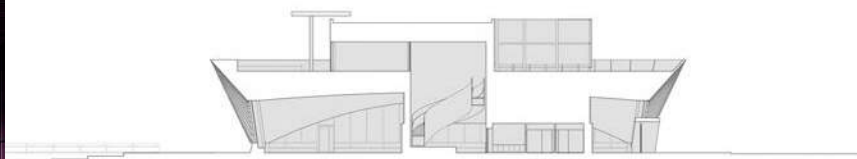
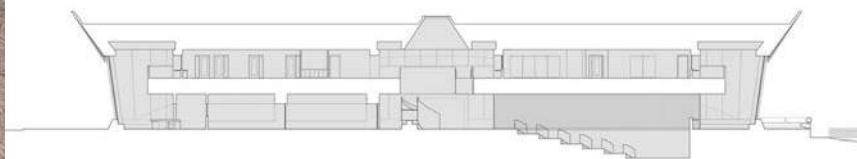


Figure 26. Winter Park Library



EVENTS CENTER SECTION  
SCALE: 1/8" = 1'-0"

Figure 27. Winter Park Library Section

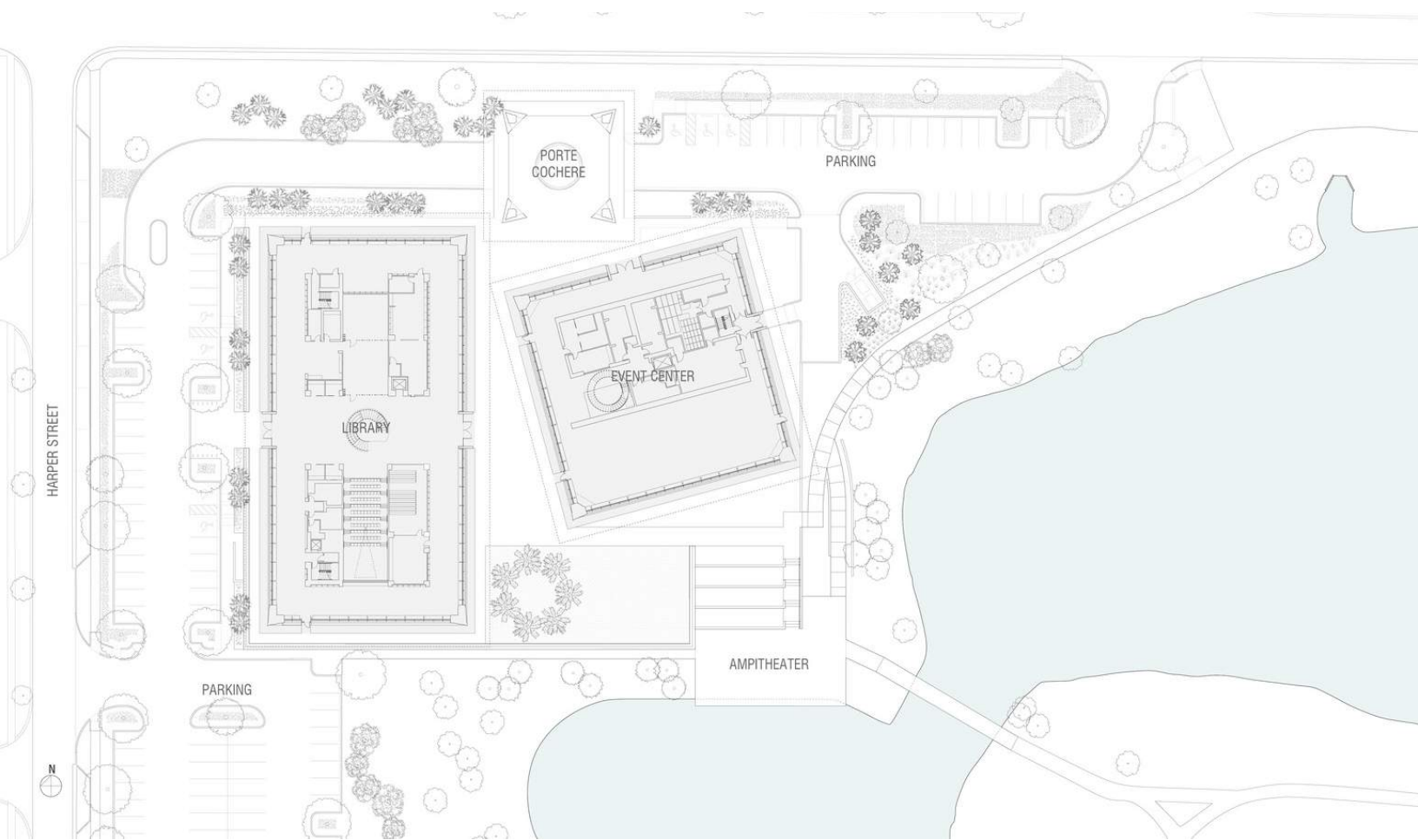


LIBRARY LONGITUDINAL SECTION  
SCALE: 1/8" = 1'-0"

Figure 28. Winter Park Library Section



Figure 29. Winter Park Library Site Plan



It functions both as a library and a place to learn and gather. Being located in Florida's warm climate allowed many of these spaces to be outdoors with stunning views of the surrounding park area.

GROUND FLOOR PLAN

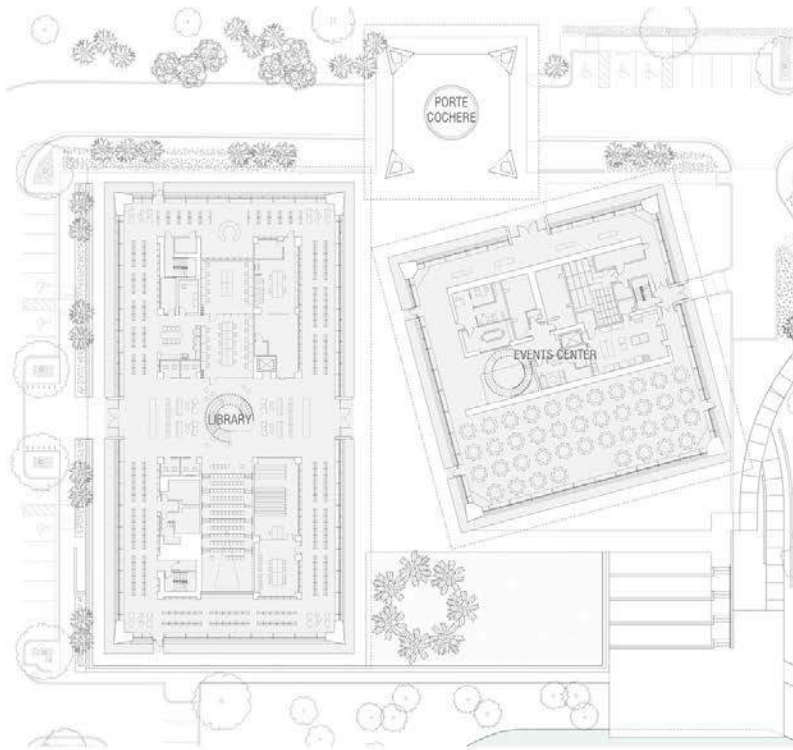


Figure 30. Winter Park Library ground floor plan

SECOND FLOOR PLAN

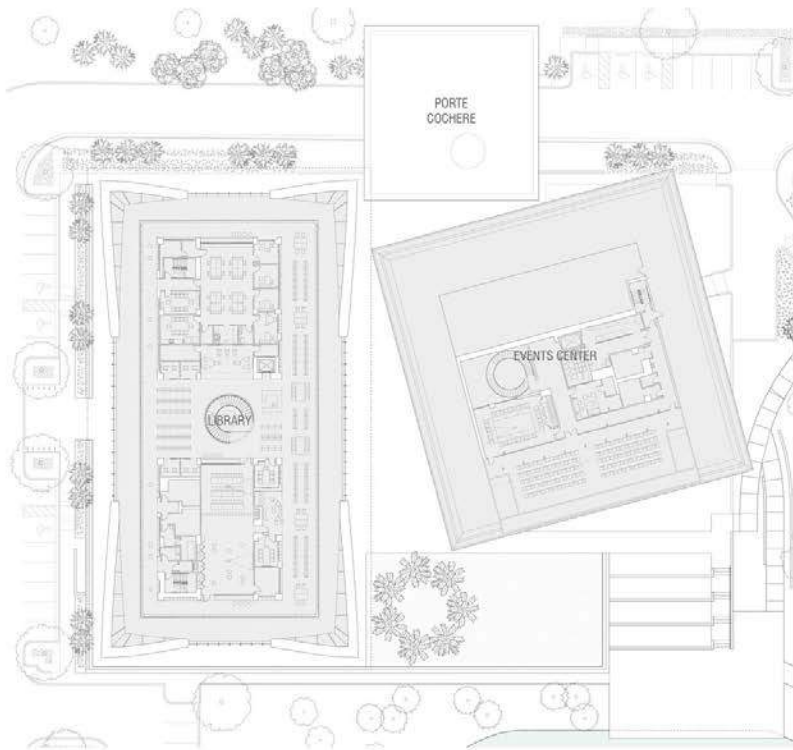


Figure 31. Winter Park Library second floor plan

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Winter Park Library was designed to be a space for community growth and empowerment. Situated in Martin Luther King, Jr. Park, this building and surrounding pavilions was meant to embody some of his messages. It was also very strongly inspired by the surrounding landscape. Many of the materials and design decisions were based on biophilic design as well as flexibility of use. This library was designed for the entire community to use and continue education. Some of the spaces in addition to the stacks include an auditorium, maker-spaces, an entrepreneurship center, and interactive spaces for children.

Key features of this design are the community involvement and the variety of uses. This building houses the education of not just kids or students but also adults and allows them to learn and grow together. The connection between the users and the environment makes this library a powerful educational experience.

## **Bibliotheca Alexandrina**

Location: Alexandria, Egypt

Built: 1989-2001

80,000 sq m

Architect: Snøhetta, Hamza Associates

Typology: Library



Figure 32. Bibliotheca Alexandrina



The stone exterior of the building was carved using local stone-cutting methods and features a variety of languages.

Figure 33. Bibliotheca Alexandrina

The Ancient Library of Alexandria was known worldwide for its extensive collections. This modern reinterpretation of an ancient wonder is massive in scale with a large portion of the building below grade in order to house knowledge and people from around the globe.

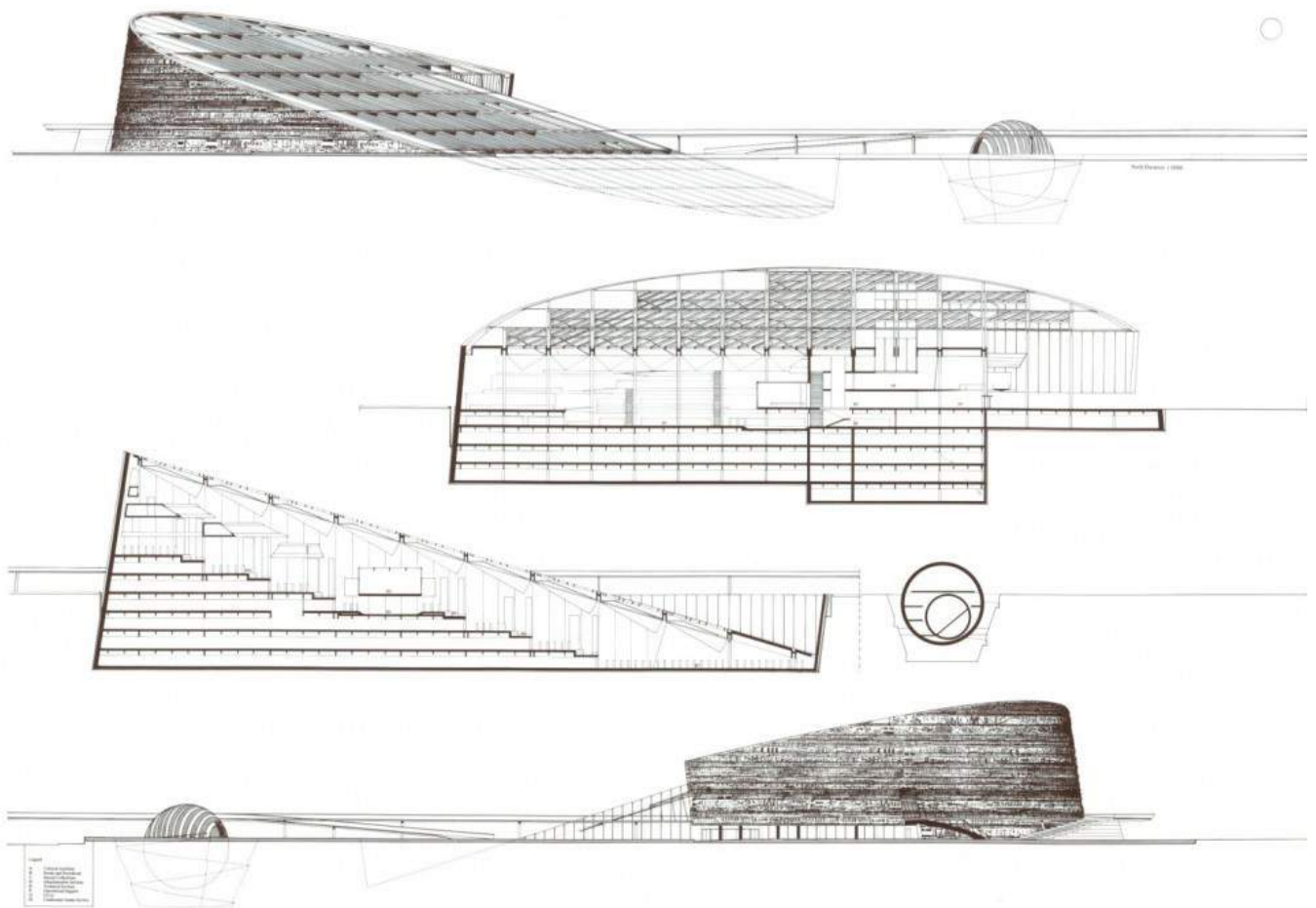


Figure 34. Bibliotheca Alexandrina sections and elevations



Figure 35. Bibliotheca Alexandrina



Figure 36. Bibliotheca Alexandrina

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The design of the new Library of Alexandria is a modern retelling of ancient stories and knowledge. The circular form is all-encompassing and cyclical and brings in light from above reminiscent of the ancient Alexandrian Lighthouse. It is a symbol of knowledge and culture for the city and the country.

Some of the unique features of the building are the openness of the design and the skylights. The openings bring in light without providing views, giving the interior a sort of placelessness. The nearly wall-less interior connects the user to the spaces and people around them into one collective experience.





## CONTEXT

Cultures across the world have myths telling of the scattering of people and the development of separate languages. Many begin with a Great Flood, after which, all the survivors speak one language. What happens after this to bring about the multitude of languages seen today varies. The bible tells the story of the Tower of Babel where men built too close to God's domain and were punished with the inability to understand each other causing them to scatter and develop their own languages. Many North American groups also have stories of a great flood that led to the separation of people and natural development of language or having languages gifted by various animals. In Greek mythology, the god Hermes gifted man with different languages in order to create chaos within Zeus' kingdom. A Western African group tells of a great famine that caused people to wander aimlessly and speak in ways that others could not understand.



Figure 37. *The Deluge* Gustave Doré (1866)

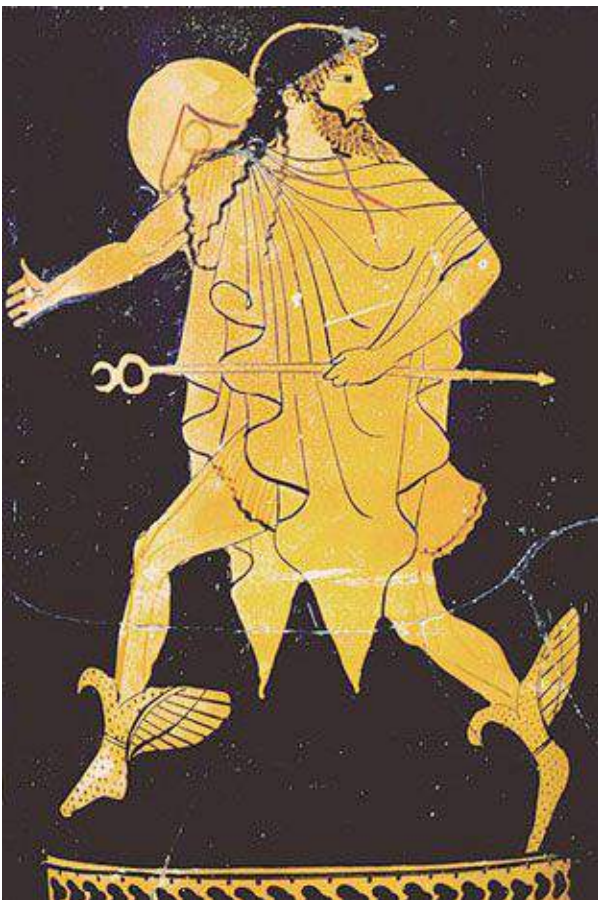


Figure 38.  
Hermes

Many of these stories have similar themes. They all begin from a point where everyone speaks the same language, and new languages are a gift, a punishment, or a natural result of external factors like a flood or famine. Origin stories exist in all cultures, but they differ based on cultural values and the language in which they are spoken. When they all revolve around a similar event like a great flood, it begs the question of how much of this was true and how much of it evolved purely through language, as much of it was spread through oral storytelling. Every one of these stories is a different translation of the same or similar events.

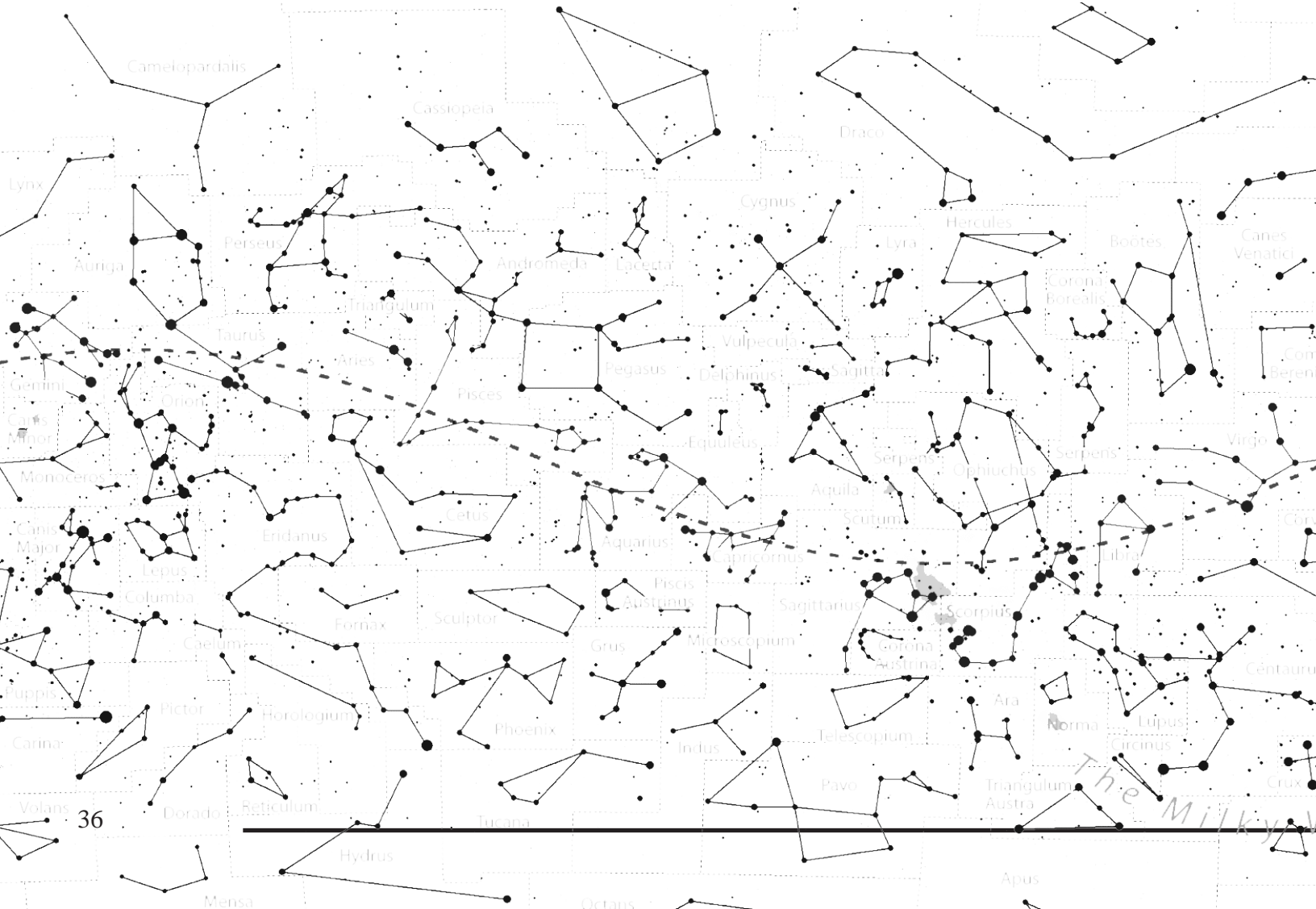


Figure 39. *The Tower of Babel*  
Pieter Bruegel the Elder (1563)

Other stories that are told by all cultures revolve around the stars. Humans have always looked to the stars for meaning. To make sense of the senseless and understand the unknown. Many myths and legends were created in order to explain natural phenomena and immortalized in the skies as constellations. The sky acts as a reflection of cultural values and worldviews told through stories and built by language. As there is no real, universal pattern to the arrangement of the stars, these stories are created purely through language. The stars and constellations defined today were built from the writings of a number of cultures and languages. Some of the more recognizable constellations have similar stories across different languages while others allow more room for interpretation.

Both in the skies and on the ground, interactions between languages has been becoming more and more common as travel and communication are aided by technology. Since the age of colonization and exploration, languages have met, mixed, and evolved in order to aid the understanding of others in worlds they were not familiar with. This meeting of realities resulted in conflict, compromise, companionship, and collaboration brought about from communication. In time, many languages were killed off, overtaken by others, or slowly forgotten. Bringing about the modern era of language studies.

Figure 40. Constellations



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Before understanding the stories being told, it is important to understand how they are told. Benjamin Whorf was an American Linguist who was known for his work with Uto-Aztec languages with particular emphasis on the Hopi language in the 1920's and 30's. Whorf is one of the co-creators behind the theory of linguistic relativity which centers around the idea that the structure of a language influences the speaker's perception and thought process. In his essays, he juxtaposes language systems that evolved completely separate from each other. He observed how people in different cultures lived in conjunction with the way they spoke.

Whorf's ideas can be summarized in two main points.

“First, that all higher levels of thinking are dependent on language.

Second, that the structure of the language one habitually uses influences the manner in which one understands his environment. The picture of the universe shifts from tongue to tongue,” (Whorf, 1939).

This is Whorf's most well known hypothesis, and his essays explore this in different cultures and aspects of life. In translating cultural traditions, he gives them different meanings and contexts that English speakers are able to understand to an extent, but without the effect that these traditions have for the people who live them. This gap in understanding highlights the effect that language has on our understanding of reality, and it is through the knowledge and comparison of languages that we are better able to understand others and ourselves within this space.



Figure 41. Benjamin Lee Whorf

Even without being fluent in other languages, we can still shape reality in different ways through the telling of stories and the use of metaphors. In his essay “Language and Architectural Meaning”, Alberto Pérez-Gómez writes about the importance of language in how we perceive our physical environment and how we use language to shape it. He writes, “Poetic - original, polysemic - language is central to the very possibility of retrieving cultural roots for architectural expression that may result in appropriate atmospheric qualities, responsive to preexisting places,” (Pérez-Gómez, 2018). Not only does what language we use to describe our environment have an impact on how we perceive it, but also how we use it. Is the language merely being used for communication and utility, or to convey feelings, aspirations, fears, values, and stories? These stories can tell so much about places, cultures, and people. In the past, the trend in architecture moved more towards functionalism and mathematics, and many of these stories fell to the side and buildings lost their meaning. Pérez-Gómez and many other architects, designers, and theorists believe that architecture needs to return to this linguistically-based design in order to bring back the soul of humanity in the worlds we create.



Figure 42. Confluence

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Much like how a painting is dependent on the colors used in the paints, stories are dependent on the language used to craft them. Language allows for connections to be made through metaphors and contextual meanings. This is easier in some languages than in others. Some have a higher propensity for rhythm while others allow for more specificity or ambiguity in meaning. Ambiguity in language can either aid or hinder creativity through the ways it can be used in relation to other words in metaphor. It leaves a space for the human imagination to fill with whatever it sees fit, and this is influenced by the language used to describe the space and ourselves within it. It can be vague like an impressionist painting or detailed like a photograph, but unlike two-dimensional imagery, architecture is better understood as a narrative or collection of narratives. It is an expression of humanity, our diverse and collective thoughts and cultures in time.

David Abram writes in his book *The Spell of the Sensuous* that both the natural world and the structure of language function as an “interdependent, web-like system of relations,” (Abram, 2017). Language is based on the sounds and shapes of the natural world but also affects our perception of it. This web also connects people in a multitude of ways. One person cannot be understood in isolation. They exist with the people around them, the culture they belong to, the environment they live in, the interests they have, and the stories they tell.

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## SITE CONTEXT



Figure 43. Bdote

Minnesota has many languages woven into its history, the first being the Dakota people. They tell stories of the Bdote, where two waters come together. It is said that the seven Dakota tribes came from the seven stars of Orion. They traveled down the Spirit Path and arrived on earth at the confluence of the Minnesota and Mississippi rivers. Their names and the stories they tell are very strongly connected to the land. They named the area Mni Sota Makoce or “the land where the waters reflect the skies”. An interesting parallel to this idea is the nearby Minneapolis-Saint Paul airport, a hub for sky-travelers right at the junction of the rivers.

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The next languages to pass through were the European settlers. They brought English, French, Spanish, German, and Scandinavian languages which all ended up mostly giving way to English as the most dominant one. English-speaking settlers either took the Native names for places and translated them or gave them completely new names. Rather than naming places for the physical aspects, many of these places are named after a person of importance.

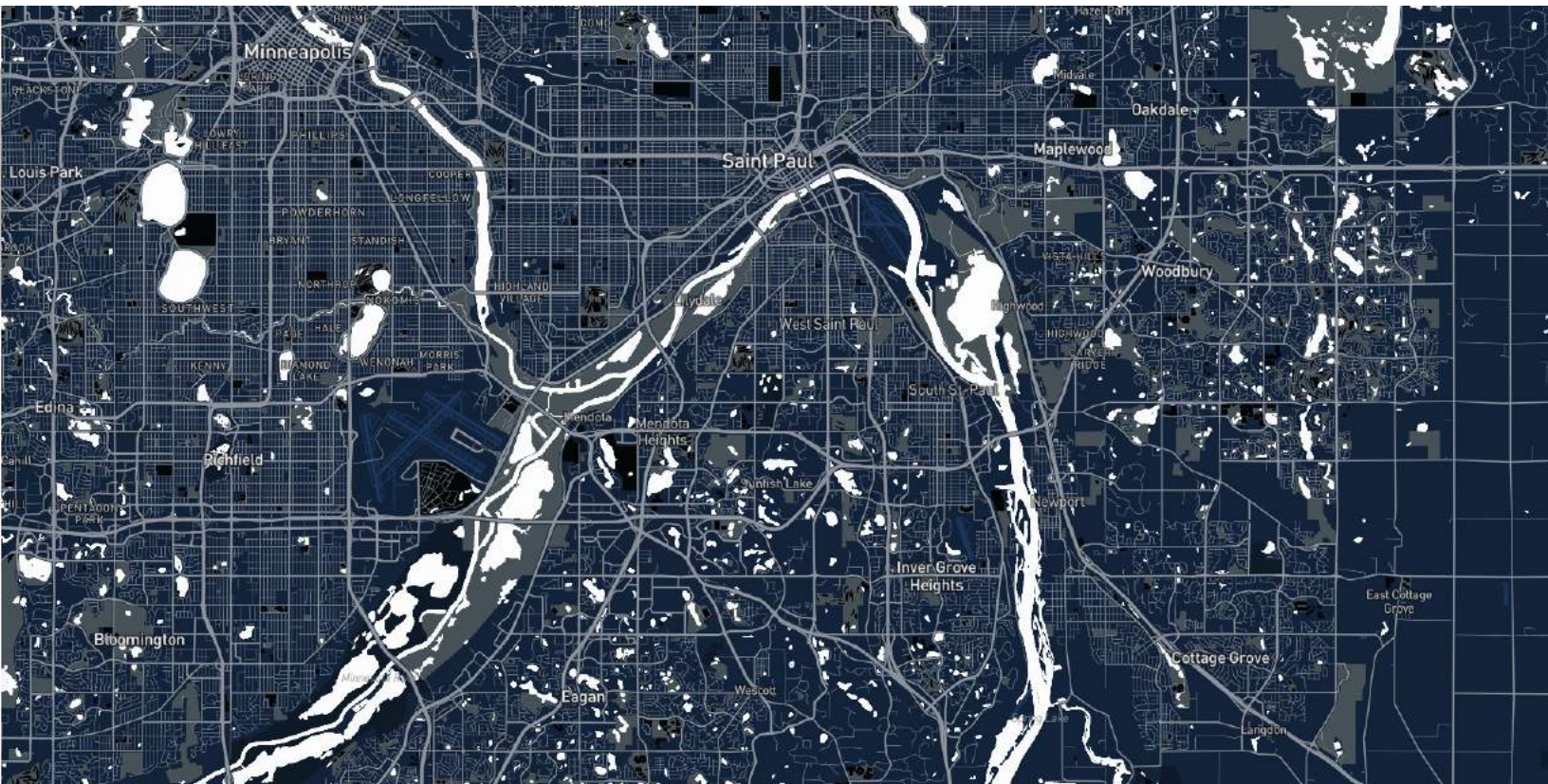


Figure 44. Map: St. Paul and surrounding area

In more recent history, immigrants have come to Minnesota from all over the globe. There was an increase in Latino immigrants following WWI, looking to escape their own wars and find jobs and opportunities. Many settled in Saint Paul in a small community on the West bank of the Mississippi. Today, this neighborhood is known as District del Sol and houses the center of Saint Paul's Latino culture, which claims nearly 10% of the city's total population.

Figure 45. District del Sol



Also among the immigrant population are the Hmong, most of whom fled southeast Asia during the Vietnam War. Many settled on the northern side of Saint Paul. These cultures and others with smaller populations often face prejudice and discrimination outside of their own communities, but some of their stories reach out for understanding and acceptance in the forms of art, music, and poetry. With English being as dominant as it is and the lack of diversity in language education in schools, many of these stories are lost before they can reach others.



Figure 46. Hmong Cultural Center



There are almost 300 languages spoken by students in the state of Minnesota alone. The percentage of students who speak a language other than English at home has been increasing and the collection of languages has become more diverse. This site lies between two school districts with significant populations that speak Spanish and Hmong. It is also near gathering places for several different cultural communities. It is the stories told in these spaces through language that make them sacred or meaningful.

Figure 47. Wabasha Street Retaining Wall

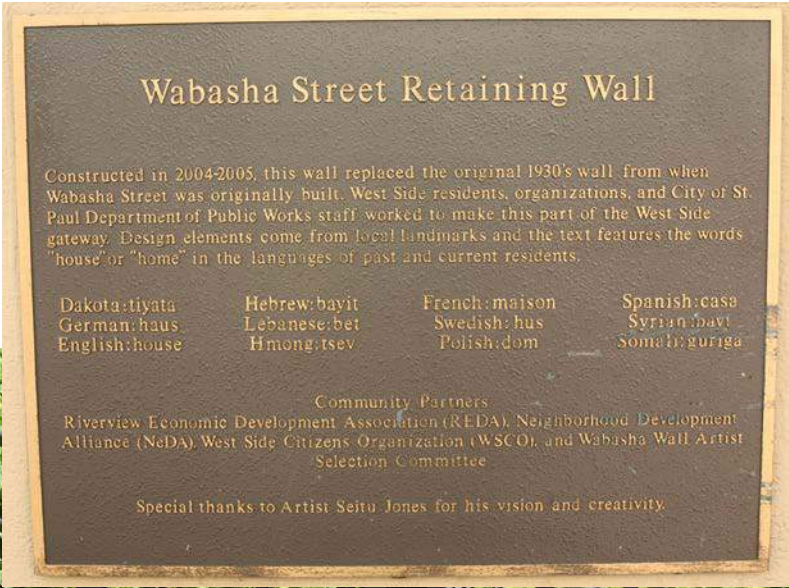
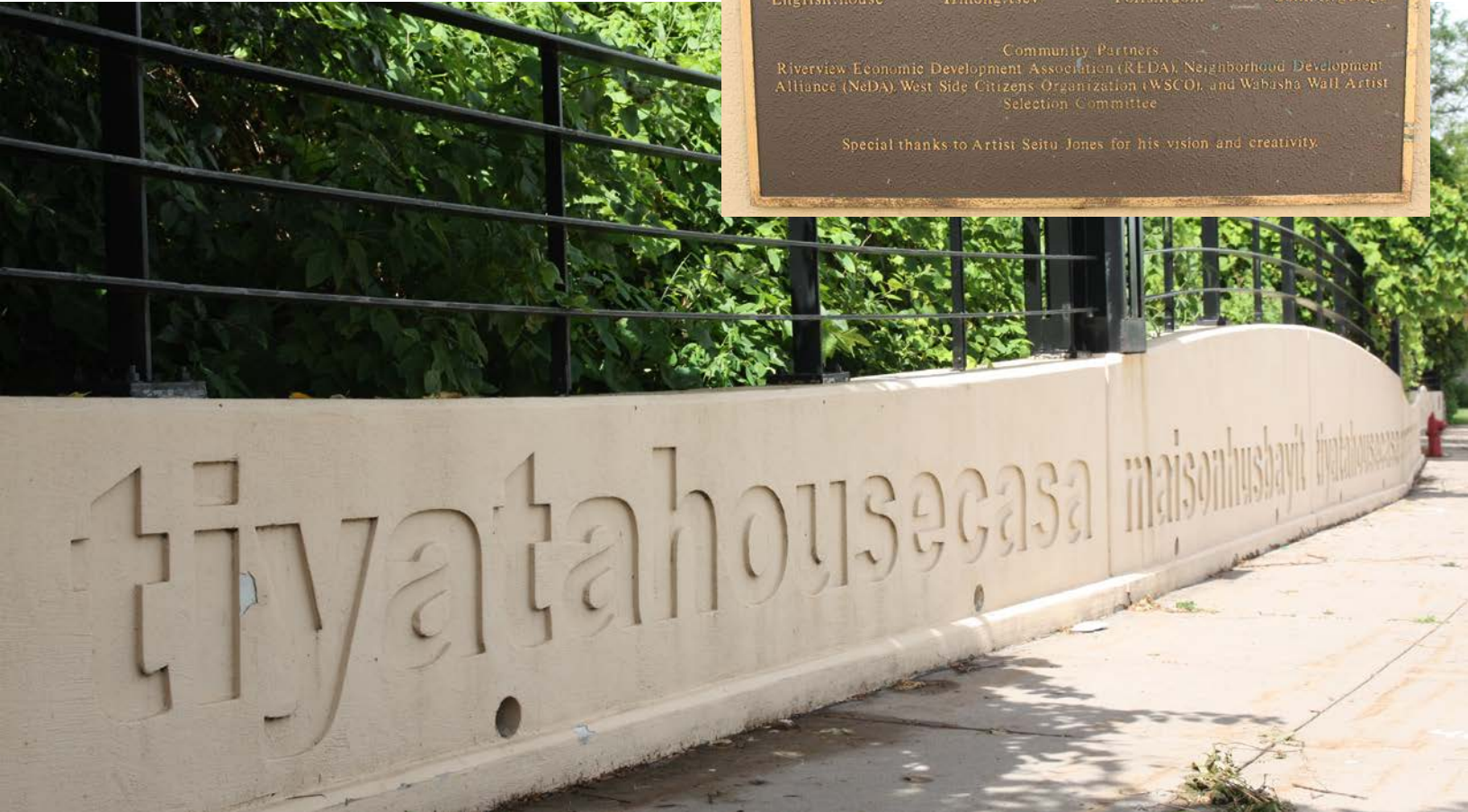


Figure 48. Wabasha Street Retaining Wall





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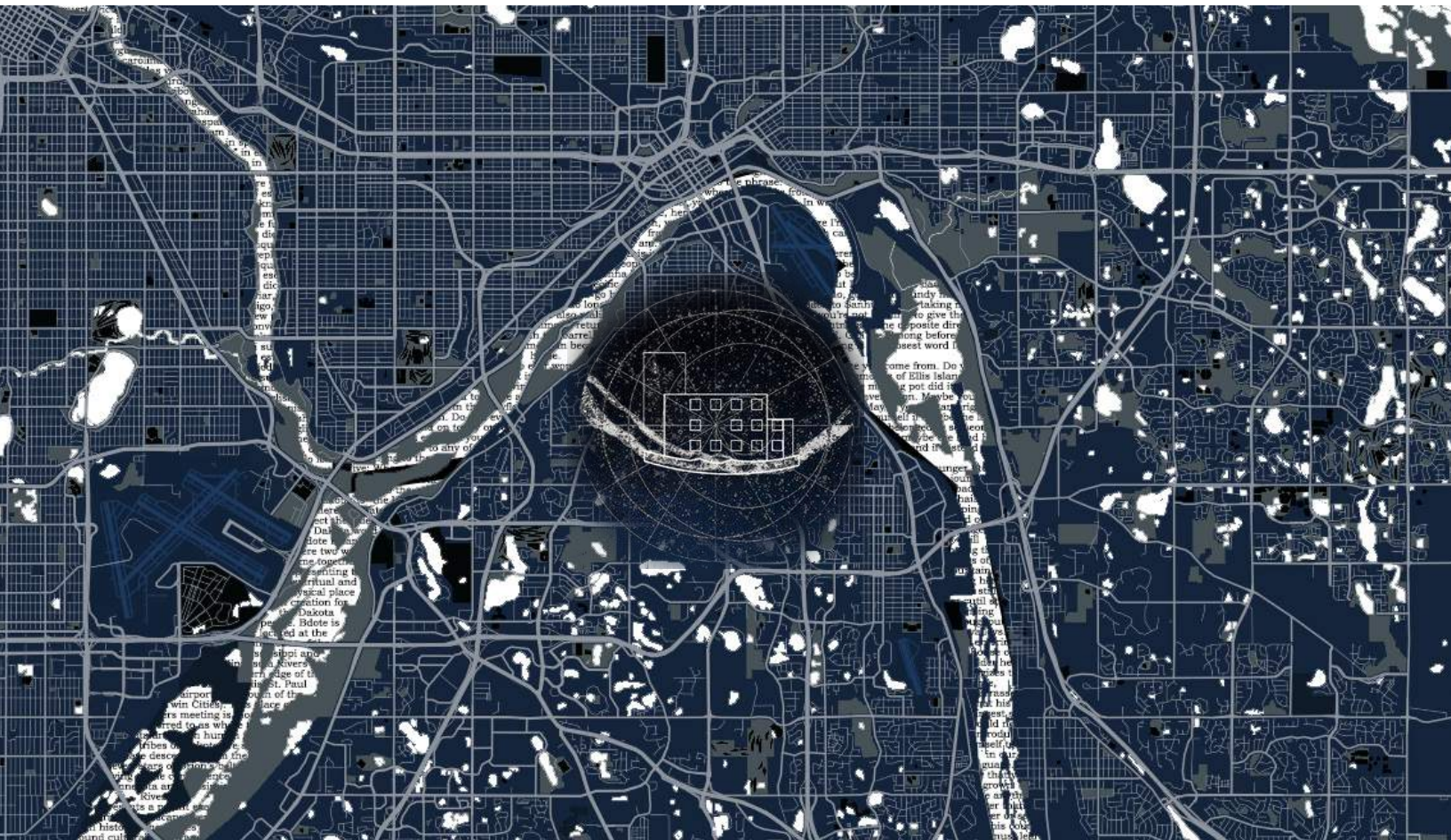
# DESIGN

Figure 49. Map: Site Context



The footprint of the building is an echo of the boundaries created by and around the constellations. The large curved form on the south side is a reflection of the Milky Way and the Minnesota and Mississippi rivers. The entrance to the building is in the center of this “river” and conveys the feeling of crossing a boundary or barrier in order to reach the other side. Rivers often act as a gathering place, and this one draws together languages, stories, and cultures from all over the world into one unified space.

Figure 50. Map: Site Context



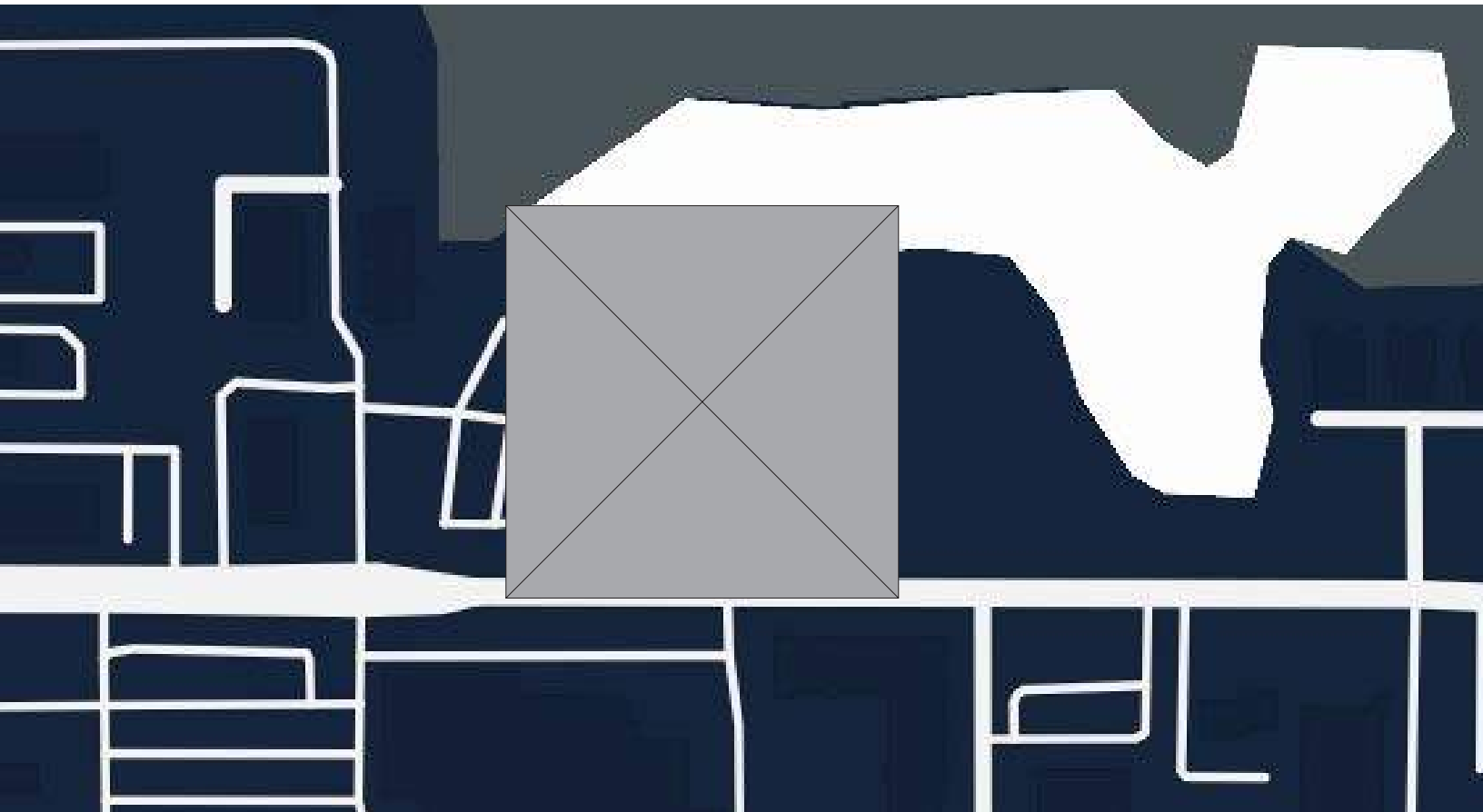


Figure 51. Site Plan

The Ground Floor has four main areas: the Entrance, the Open Space, the Auditorium, and the Collaborative Spaces. The functions of these spaces were inspired by the different uses of language and different interactions between cultures and languages.

The Open Space allows for the free movement of people and stories across the building in the same way that the land allows for stories and interpretations to spread and shape the way that people interact with it and each other and create new meaning.

The Auditorium is rooted in the tradition of oral storytelling. The Dakota tribes have long called this area home, but when others laid claim to the land they were forced to adopt customs that were not their own and hide what they could of their culture in their own homes. This space allows for the showing of language through the power of speech and listening.

A poem written in both Spanish and English titled “My Graduation Speech” by Tato Laviera shows how language can be more powerful in meaning but more difficult to understand when mixed, without the proper knowledge and understanding of multiple languages. The Collaborative Spaces are meant to facilitate this exchange through the action and experience of language learning between people and stories.

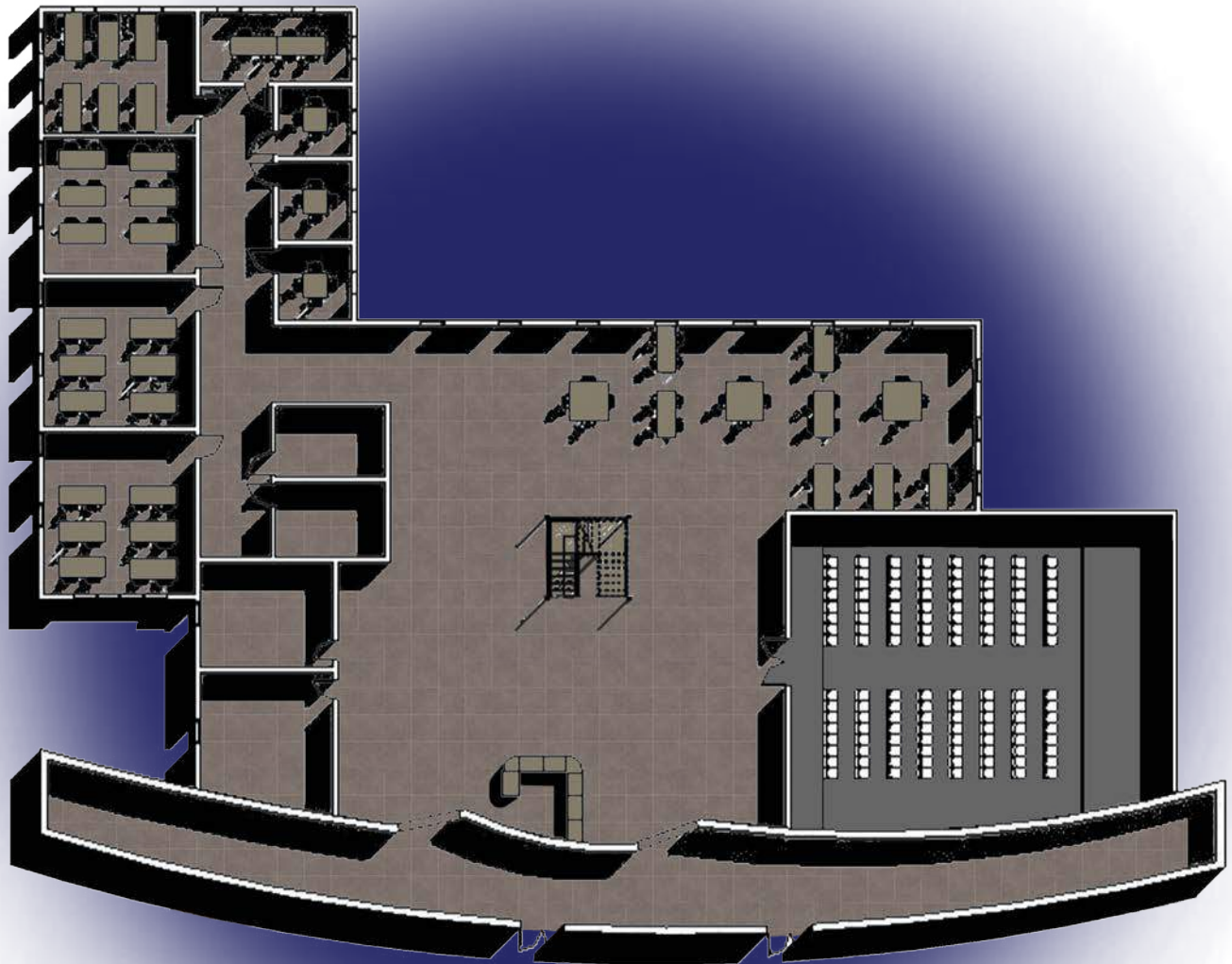


Figure 52. Ground floor plan

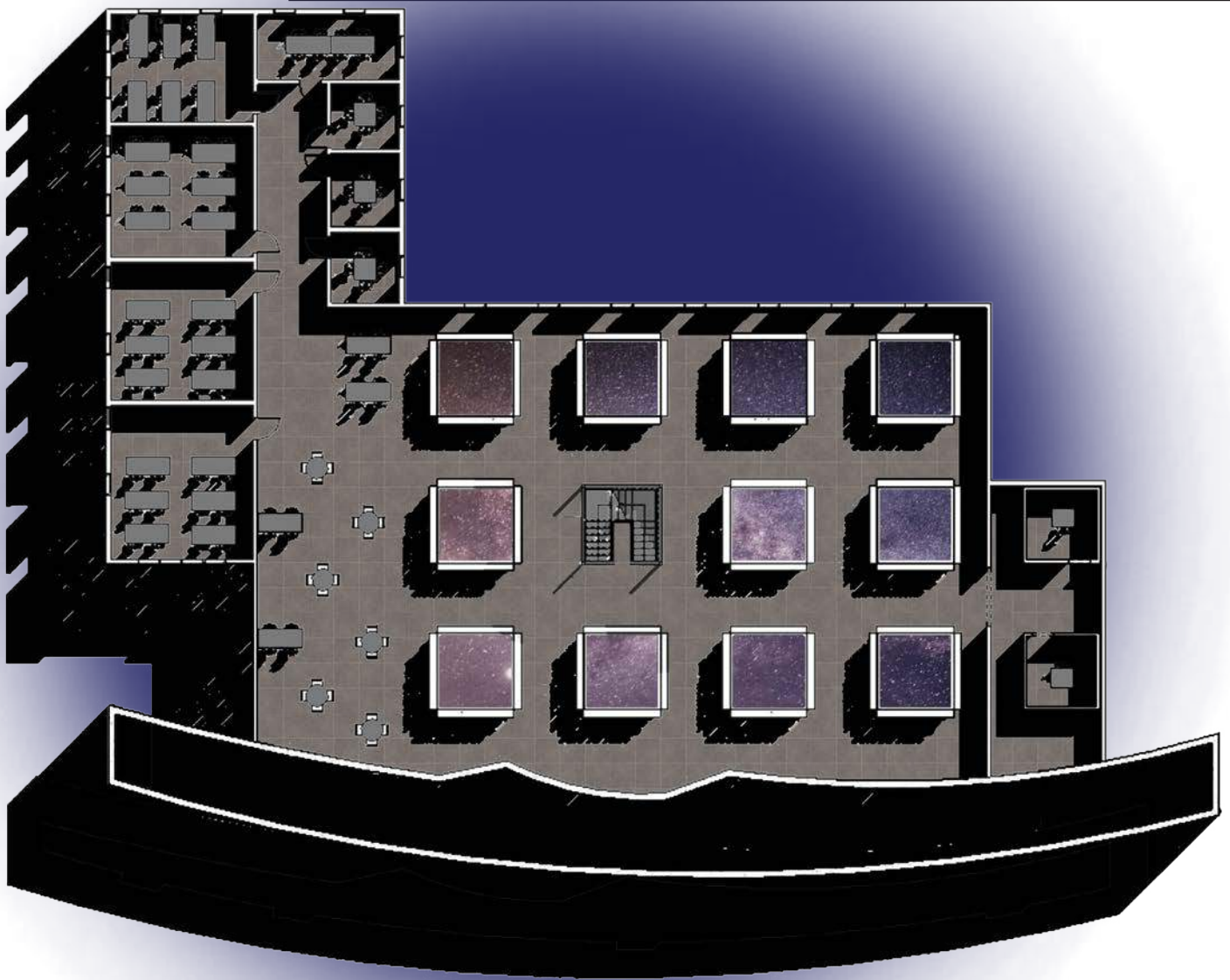


Figure 53. Second floor plan

The second floor holds more collaborative spaces as well as the stacks and creative spaces. The river remains a solid presence, but the interior is inaccessible. The shelves are arrayed in a grid pattern with the stairwell taking up one of these spaces.

In a poem by Kevin Yang, a Minnesotan of Hmong descent, titled “Come Home” is the story of a person who struggles to find home in a land that does not speak his native language. He mentions that when moving to a new country one often had to leave their language behind in order to succeed. The stacks are a reversal of this idea of forgetting in the act of preserving and remembering language in the form of writing.

The Creative space allows the user to enter into the worlds and fictions created by language. It exists on the same grid as the spaces created by existing stories, but separated and not as far-reaching. When someone uses this space, they are able to shape the world through their own language, art, music, and stories.

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The third floor is a continuation of the stacks and the solid presence of the river. It represents the extent of human knowledge and understanding in a world that holds infinite interpretations. It is impossible to climb any higher, but the skylights bring in light from above to connect the user to the greater world and the stars beyond.

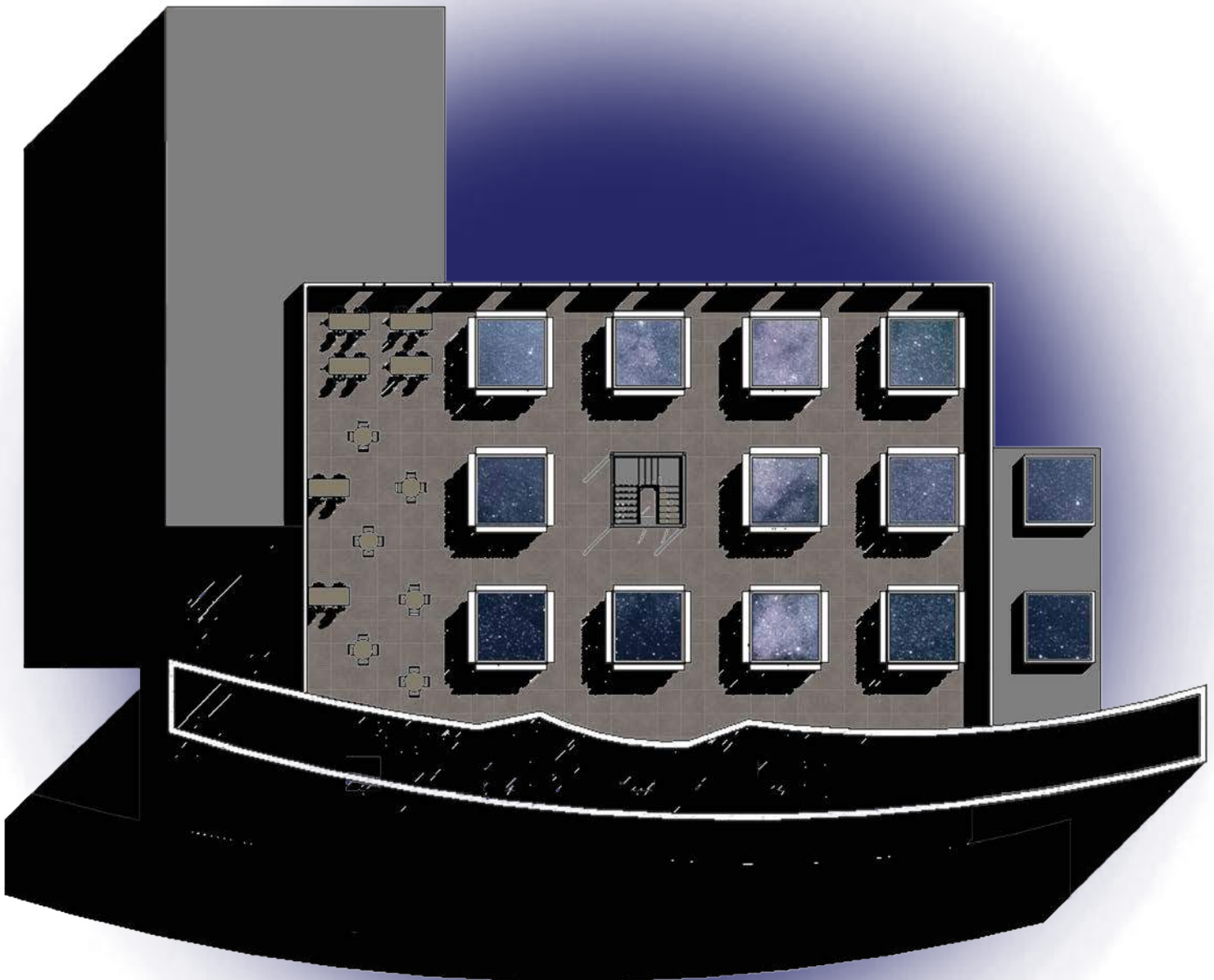


Figure 54. Third floor plan



In his essay “The Function of Fiction in Shaping Reality”, Paul Ricoeur writes, “Every metaphor, in bringing together two previously distant semantic fields, strikes against a prior categorization, which it shatters.” and “Predicative assimilation contains a new sort of tension, one no longer solely between subject and predicate, but between incompatibility and compatibility.” This building embodies the tension between earth and sky, material and immaterial, fiction and reality into one place where they exist together yet also apart. The heavy and textured walls of the river contrast with the light, clean lines of the skywells, but they parallel each other as voids of similar scale and position. The stairwell is an occupiable space that reaches all the way to the ground, while the lightwells cannot be entered, but reach beyond the roof of the building. This juxtaposition highlights the tension that exists between people and cultures but also the spaces in between where experiences are translated and new stories emerge.

Figure 55. Section 1



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The physical connections within the building enable interaction and participation between people and the environment. Abram writes that, “meaning sprouts in the very depths of the sensory world, in the heat of meeting, encounter, participation,”. Light, textures, views, and movement all encourage the emergence of interpretation and new meaning. Language and story provide new connections that aren’t necessarily physical, but perhaps even more meaningful. This variety in meaning makes every experience of the building unique and dynamic.



Figure 56. Section 2



Upon entering the building, the first space is the river. Many rivers act as boundaries, but no river exists in isolation, they connect things and interact with them. This river connects people, their stories and languages, the physical world, and the intangible reality of the stars. Upon entering, users can see the flow of time and stories carved into a physical form. The Mississippi and Minnesota rivers, like many rivers around the world, act as boundaries between people and cultures. This river is much the same. It stretches into the distance on either side while also reaching upwards in the same way that a normal river has depth. In this space, words have been carved into the landscape which in turn become the landscape which inspires new language and stories.

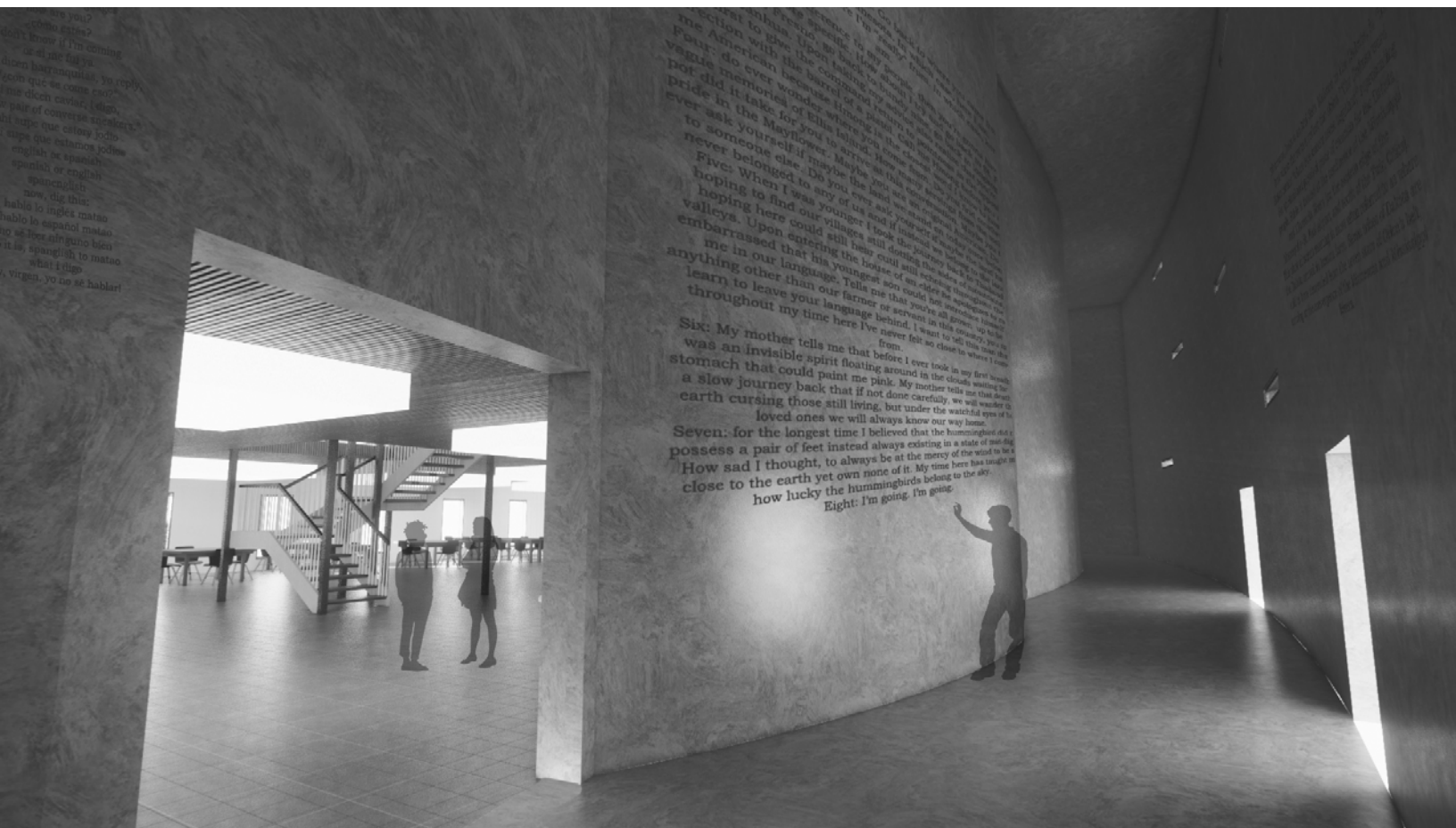


Figure 57. Interior rendering, entrance

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After crossing the boundary, a large space allows the mixing and mingling of people. An array of skylights bring down light from above like carefully organized constellations. Although unknown from below, these lights are physically framed by stories while also carrying stories and knowledge of their own that are often beyond simple understanding. On the right, the auditorium allows culture and language to be shown proudly, without hiding in a person's home or inner thoughts. Far to the left, the classrooms allow for collaboration and learning and promote the sharing of language in both directions rather than just one language being mixed with another to aid in comprehension. The last space is the library stacks which are only hinted at from the ground. A staircase in the center of the room provides access to the upper levels that house the stacks. It is on the same grid as the skylights, but reaches all the way down to the floor.



Figure 58. Interior rendering, ground floor



Figure 59. Interior rendering, second floor

The stacks are on an arranged grid of columns that reach past the floor and the ceiling. The books are framed by the shelves that hold them and the shelves also frame the light and allow it to escape through the stories. The act of removing a book from the shelves leaves behind a gap through which light can escape, providing a glimpse into an intangible reality.



Figure 60. Section cut, shelves



Figure 61. Interior rendering, third floor

The third floor is continuation of the second floor, but prevents people from getting any closer to the stars in a physical sense. The tension between the sky and the ground, fiction and reality, the past and the present puts the user on the edge of the known and the unknown in an ambiguous space ready to be filled with language. Shadowy impressions and clear glimpses of the sky exist side by side without ever providing a complete picture.

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This project translates stories from spoken and written language to the language of architecture while encouraging the expansion of stories through further translations and the building of relationships through discourse, learning, and a connection to nature. The Library and Learning Center brings people together and creates a space for meaning to emerge in the ambiguity and relationships framed by the physical environment. Many cultures and experiences are lost in translation. This project helps people to find them.



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# PROCESS MODELS

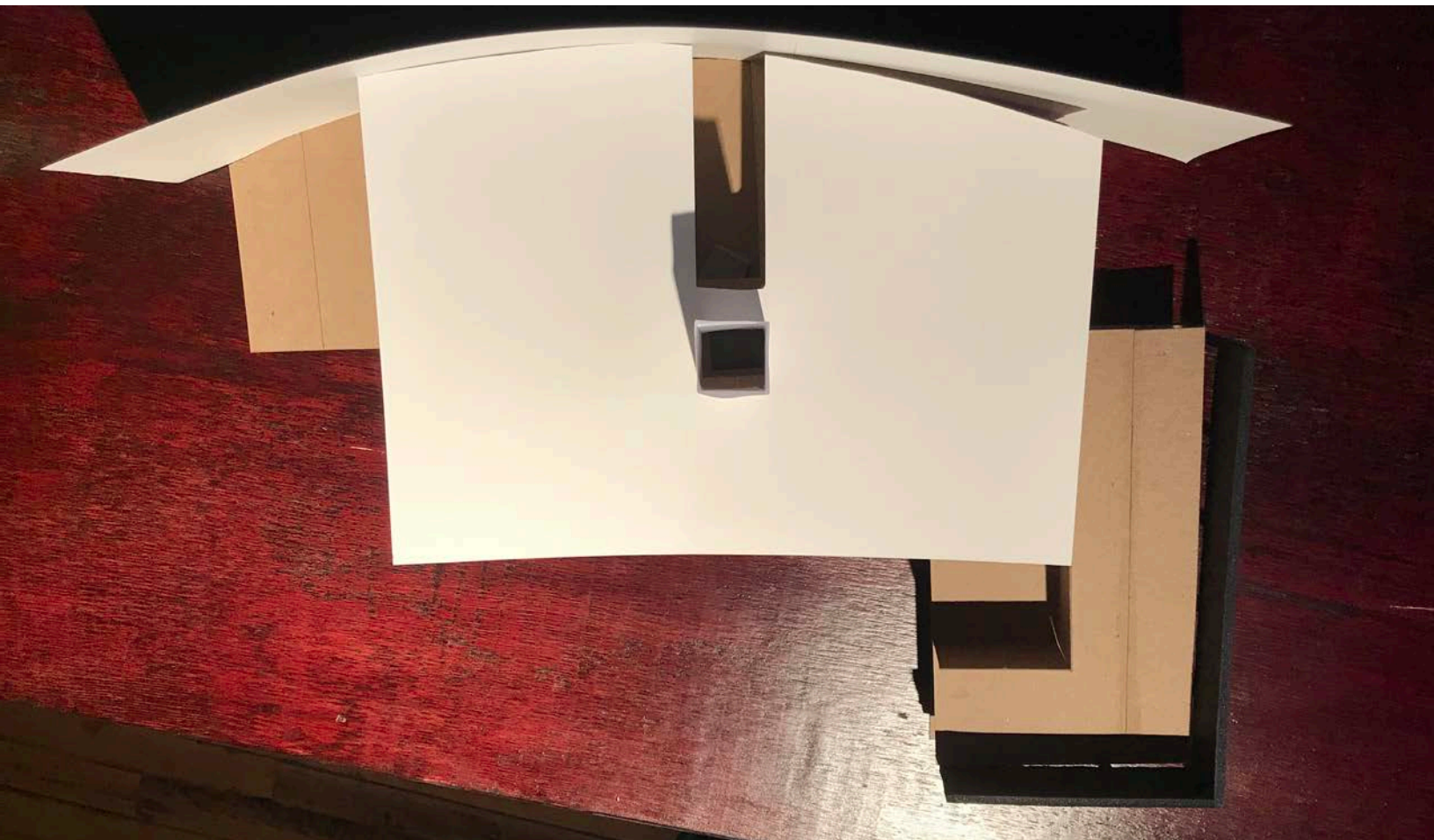


Figure 62. Process model 1



Figure 63. Process model 1

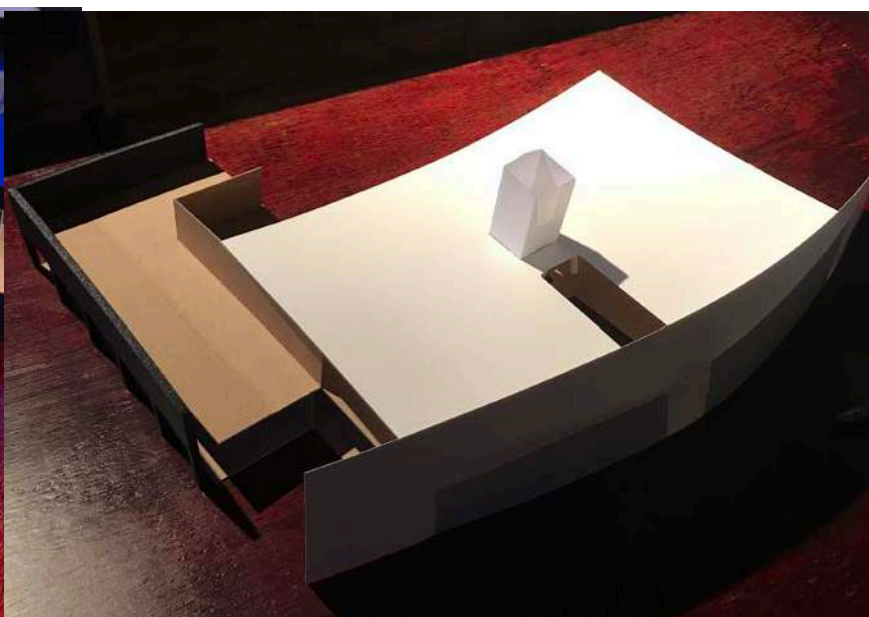


Figure 64. Process model 1



Figure 65. Process model 2

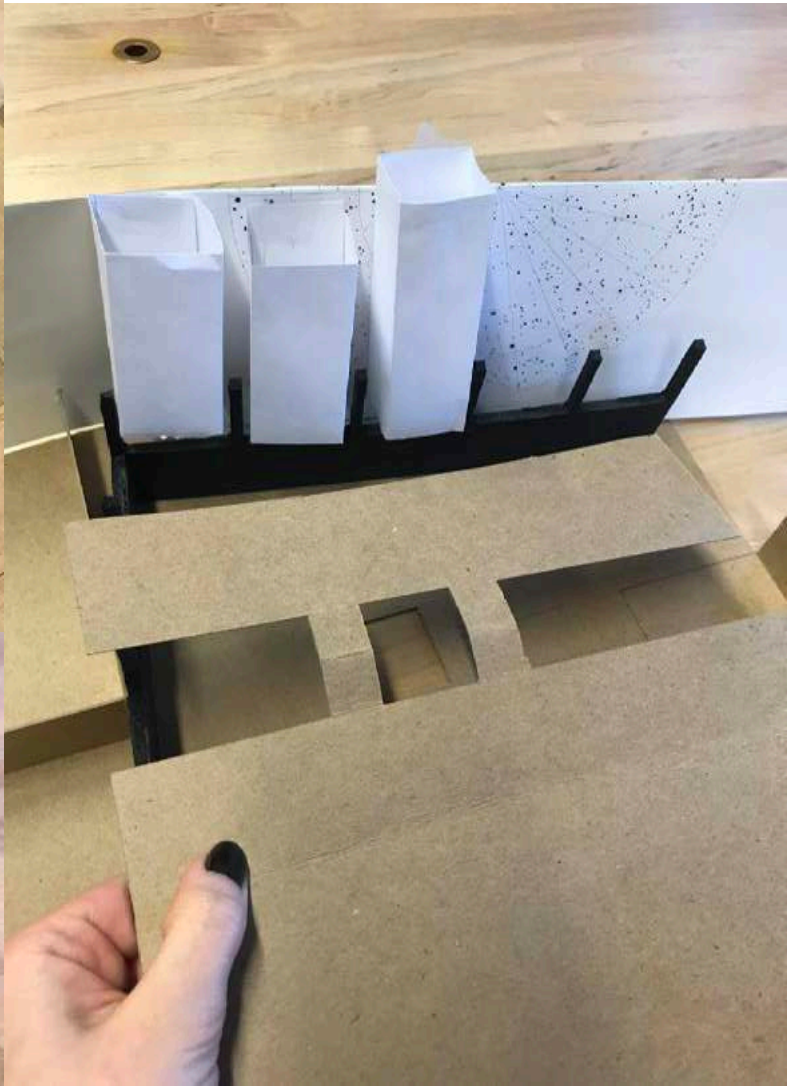


Figure 66. Process model 2

Figure 67. Process model 2

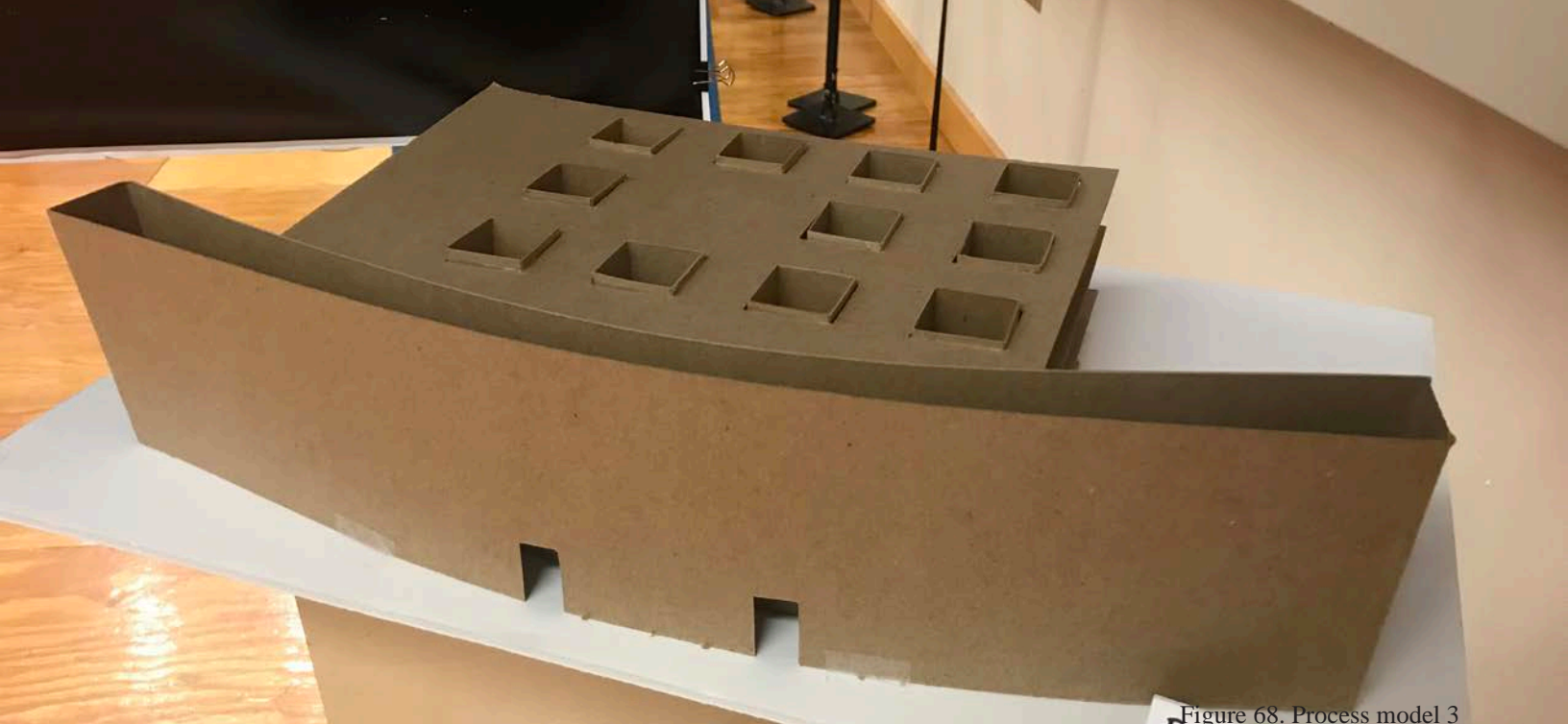


Figure 68. Process model 3

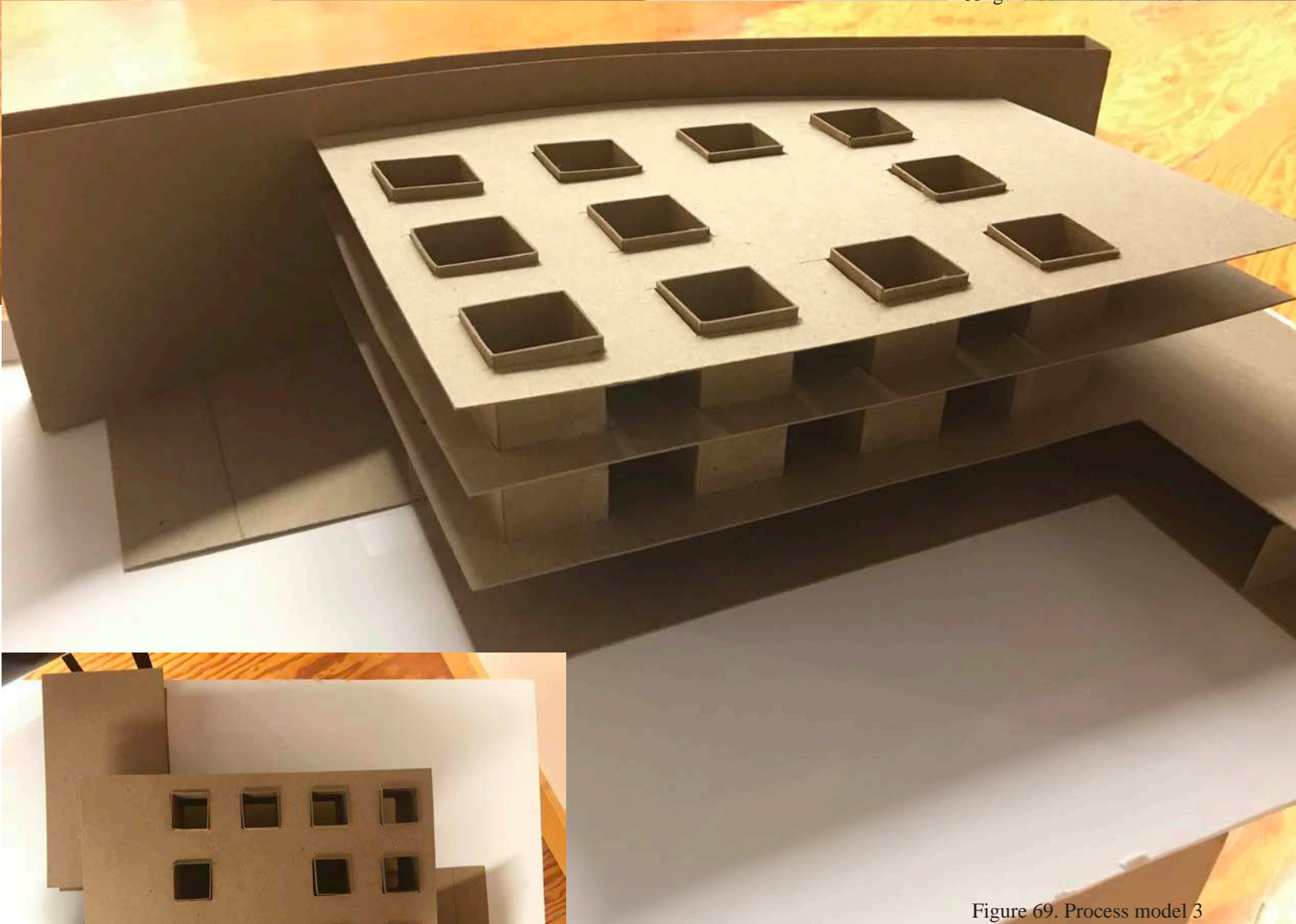


Figure 69. Process model 3

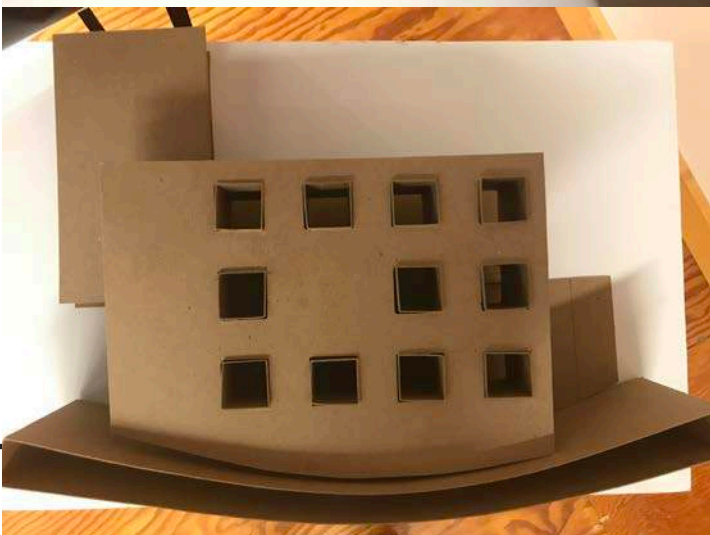


Figure 70. Process model 3

# DISPLAY

## Found in Translation: Language and the Built Reality

The display board is a vertical collage of architectural and linguistic content. At the top left, there are two photographs of interior spaces: one showing a long hallway with a palm tree and another showing a geometric structure. To the right of these is the title 'Found in Translation: Language and the Built Reality' in a serif font. Below the title is a block of text and a map of a city. In the center, a row of seven books of varying thicknesses is displayed. Below the books is a large, detailed architectural cross-section of a multi-story building, showing internal rooms, a staircase, and structural elements. At the bottom of the board, there are four diagrams: a circular diagram with a grid and a building footprint, and three rectangular floor plans of different building layouts. The entire board is held up by black metal stands.

Figure 71. Final Display

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# APPENDIX

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Kiara Groth  
ARCH 726  
21 January 2022

Poetic Structure in Fiction, Reality, and Philosophy

“On First Looking into Chapman’s Homer”

John Keats

Much have I travell’d in the realms of gold,  
And many goodly states and kingdoms seen;  
Round many western islands have I been  
Which bards in fealty to Apollo hold.  
Oft of one wide expanse had I been told  
That deep-brow’d Homer ruled as his demesne;  
Yet did I never breathe its pure serene  
Till I heard Chapman speak out loud and bold:  
Then felt I like some watcher of the skies  
When a new planet swims into his ken;  
Or like stout Cortez when with eagle eyes  
He star’d at the Pacific—and all his men  
Look’d at each other with a wild surmise—  
Silent, upon a peak in Darien.

“On First Looking into Chapman’s Homer” is a poem written by John Keats in 1816. Keats wrote this piece after reading George Chapman’s translation of Homer’s works from the original Greek. In the poem, he laments his inability to fully experience Homer’s “demesne” without being able to understand Greek and without translations that were able to recreate the world of the original works. According to Keats, Chapman allowed him to experience Homer’s world as if discovering something new and amazing. This poem is a great example of how writers are able to create worlds with words, but also highlights the struggles and dangers that come with translating works from different languages.

This poem follows the structure of a Petrarchan sonnet, meaning it uses both iambic pentameter and a set rhyme scheme. These create a rhythm to give the poem a more musical and otherworldly tone. It also uses metaphor to paint the reader as an explorer of new lands and a discoverer of wonders. More than simply fiction, Keats saw stories as worlds to visit, painted by the words of the author. Sonnets and other forms of structured poetry put constraints on the writer that forces them to select their words carefully and consider how every word relates to the ones that precede and follow it. Many sonnets cannot be easily translated because of their irregular sentence structure, rhyming patterns, and rhythm. This is a good demonstration of the difficulties many translators and readers face when trying to convey the same things in a language with different words and forms. It is a powerful example of how many worlds and realities are lost in translation.

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In an essay titled “Rhythm and Syntax in ‘On First Looking into Chapman’s Homer’”, the author Bruce Hayman elaborates on the artistic effects of language used by Keats. He writes, “By thus manipulating the syntax, Keats’s poem can be said to recreate in its reader the experience of awe, while simultaneously telling the reader about the awesome experience of reading Chapman,” (Hayman 24). Keats uses rhythm to guide his word choices. It allows his sentences to flow with the breathing patterns of the reader and mimics a release of breath as would occur during a moment of awe-struck wonder. In normal speech, sentences follow a subject-verb-modifier form, but Keats often puts the modifier first. He doesn’t use normal syntax until the line where he mentions his hearing the voice of Chapman. Afterwards, the pattern of inverted syntax is picked up again before fading out into compound sentences with standard syntax, bringing the poem and other-worldly experience of Chapman’s writing to an end.

The metaphors used by Keats liken the experience of reading to that of travelling. He describes the works of writers as other worlds that readers are able to visit. This goes back to what Paul Ricoeur wrote in his essay “The Function of Fiction in Shaping Reality”. Ricoeur said that words form images which present fictions that are realities in and of themselves. Keats was able to “travel” between these realms easily as a reader, but without the proper linguistic framework, he was not able to enter the world created by Homer. Keats uses language to build these images that show the way he sees Chapman’s writing. He sees works of literature as “realms of gold”, a “wide expanse”, “a new planet”, and the top of “a peak in Darien”. As this is a work of poetry, these images are brought forth with language alone, and are left to the reader to be perceived in their own way based on experience and imagination. The number of metaphors used by Keats create several different images of realities created through language.

Part of what makes this poem special is its representation of reading as an act of discovery. As Keats read the works of Homer and then wrote about it, he was able to become more than just a passive observer of another’s works. He turned his act of reading into one of further creativity and imagination. Literature becomes a gateway to freedom in which people see worlds through the frame created by the author, but allow for interpretation and meaning to be determined by the reader. Cyril and Liliane Welch write in their essay “Reading Poetry and Philosophy” that in reading, the role of language is to transform and transcend the human condition. The language used by Keats uses words to express the human drive for knowledge and discovery and how this is achieved through reading and writing. One does not have to agree with Keats’ particular opinion and enthusiasm for Chapman’s Homer, but it embodies the human desire for deeper experiences and the freedom in interpretation that they provide.

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Keats' poetry uses a structured form of language in order to give more meaning to his reaction to Chapman's Homer than a less structured form like free verse poetry might. He uses language thoughtfully and intentionally to convey both meaning and feeling. It takes one simple action that most people do without even thinking about it, the act of reading, and adds layers of depth, making it an act of awe, of wonder, of joy. Poetry, and this poem in particular, is a powerful example of the dangers of translation and how often worlds and experiences are lost when taken away from their original context.

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Kiara Groth

ARCH 726

10 February 2022

### Fiction as Linguistic Model: Melville and Moby-Dick

Douglas Darden was an architectural designer and writer. His book *Condemned Building* illustrates different ideals used in architecture by representing the opposite using narratives as a framework for design. Among his works is an unbuilt project called *Melville* which is an architectural interpretation of Herman Melville's *Moby-Dick* and a representative reversal of the notion that "Architecture is the reconciliation with nature".

The stories of the Whale, the characters it encounters, and the American mind are told through the procession of spaces and their relation to each other along different paths or plot-lines that readers move along when experiencing the building. These plots represent the journeys taken by the characters as they progress through the story; their motivations, principles, and development. The stories of the characters and the world they live in are retold in metaphors that create a world of their own. As the reader interacts with the space, they bring their own thoughts, intentions, and stories into their interpretation of this one.

Darden's work represents the story in a way that is not a literal translation, but a combination of symbols and metaphors. This creates a distance between *Melville* and its original literary inspiration in which the reader is allowed room to interpret and create new meanings based on the contrast between what exists and what doesn't. The symbolism of the forms represent the work, but the metaphors create their own meaning. While knowing the story of *Moby-Dick* might offer more insight into the design decisions made by Darden, the metaphors used can represent emotions and aspirations applicable to many different works of literature. This is where the absence of the original fiction makes Darden's fiction more powerful.

The reader is better able to connect to the architecture and the story it tells because of the multitude of meanings that can be interpreted from its metaphors. One such analogy is that between the land and the sea. As much of *Moby-Dick* takes place on the water, Darden was sure to include this in his architecture. The on-grade plan is called the Grade Level and the below-grade level is called Sea Level. To enter the Sea level, one must take a particular path that diverges at a staircase before descending to the reading vaults and a display case for a first-edition *Moby-Dick* carved out of natural stone. These metaphors are made with a combination of natural and manufactured elements that place the reader in a space that is neither on land or water, inside or outside, a character's journey or their own. The paths laid out by Darden for experiencing the space highlight different metaphors and experiences. One path, that of the "hunter" character, travels directly into the unknown areas of the building in a way similar to that of the railway systems in America, always pushing westward. Some readers may relate to this character, while others may feel a stronger connection to the "witness" who exists on the edge of the unknown. This path travels parallel to the other one, but crosses and weaves between different spaces. These metaphorical paths hold their own meanings while allowing the reader to interpret them in their own journeys.

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In his essay “The Function of Fiction in Shaping Reality”, Paul Ricoeur describes the problem of productive fiction as opposed to reproductive images in two points, the involvement of language as a framework for perception and the work involved in the process of world-building and imagination. As seen in Melvilla, first, the perception of the architecture is framed through language, more specifically the language of Melville as interpreted by Darden. Second is the work involved in the perception and contextual understanding of the architecture. Melvilla is not simply understood through images and analysis, but also through the experience of the space.

The experience of “reading” Melvilla is similar to how Cyril and Liliane Welch describe the reading of a book in their essay “Reading Poetry and Philosophy”. In it, readers are able to physically step into a world created by Melville and Darden while these works also turn on the reader in search of meaning. Melvilla represents the conflicts of purpose, thought, and action represented by the characters in Melville’s novel. The paths taken by the characters and readers tell the stories of different goals and the journeys taken to achieve them while allowing readers the freedom to interpret them in their own way and find their own meaning. Along this journey, the reader is encouraged to interact with the journeys of the characters, but as a participant, they also find themselves along the way. Through experiencing the journeys of others, the reader can draw comparisons between these paths and their own.

Melvilla is a translation of a story from one language to another. The words used to frame the story become architectural elements that frame spaces in which the reader feels the same emotions and experiences the same conflicts as the characters in the story. The spaces become characters, the hallways become plotlines, and the lines between viewer and participant intertwine. In this translation between languages, some meanings are lost while others are found. The cultural context plays a primary role in the interpretation of both pieces. A reader in 1851 would have a vastly different interpretation of the fictions presented by Melville or Darden than a reader from the 21st century. The metaphors used in the design of Melvilla allow for flexibility in meaning that anyone is able to relate to.

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## DESIGN STUDIO EXPERIENCE

<b>STUDIO</b>	<b>YEAR</b>	<b>INSTRUCTOR</b>	<b>PROJECTS</b>
ARCH 271	Fall 2018	Milt Yergens	Tea House Boathouse
ARCH 272	Spring 2019	Amar Hussein	Mixed Use Housing Birdhouse
ARCH 371	Fall 2019	Niloufar Alenjery	Steel Structure
ARCH 372	Spring 2020	Emily Guo	Underground Masonry Structure
ARCH 471	Fall 2020	Amar Hussein	Capstone Project
ARCH 472	Spring 2021	David Crutchfield	Marvin Widnows Housing Competition Fargo Urban Design South Fargo Library
ARCH 771	Fall 2021	Lance Josal	Downtown Train Station Revival
ARCH 772	Spring 2022	Stephen Wischer	Thesis

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