

Dimensions of Time

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Introduction

The space of Iowa has been reinvented in the nineteenth century as a reflection of the modern rationality of capital production. Communities in Iowa continuously adapt to changes in the agricultural production processes. Since its start in the nineteenth century, this production process was led by family farmers – a form of farming in which labor is supplied primarily by family members. As an extension of this agricultural legacy, we chose our site of study based on it being a former experimental grass and grains parcel operated ca. 1891 by Iowa State University – a land grant university (Fig. 1). The portion of this experimental ground which remains is our site of study (Fig. 2). Our foundational studies consider its history and precedent as productive grounds as essential components of design education. It is our goal as educators to assist beginning design students in the cultivation of local knowledge specific to cultural memories and land use practices as an essential part of our studio culture. As pointed out by Gaston Bachelard:

“Among the most difficult memories, well beyond any geometry that can be drawn, we must recapture the quality of the light; then come the sweet smells that linger in the empty rooms, setting an aerial seal on each room in the house of memory.”¹

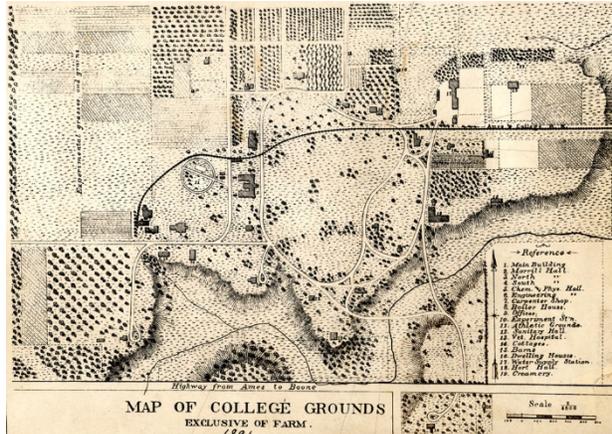


Figure 1. Map of University ca. 1891

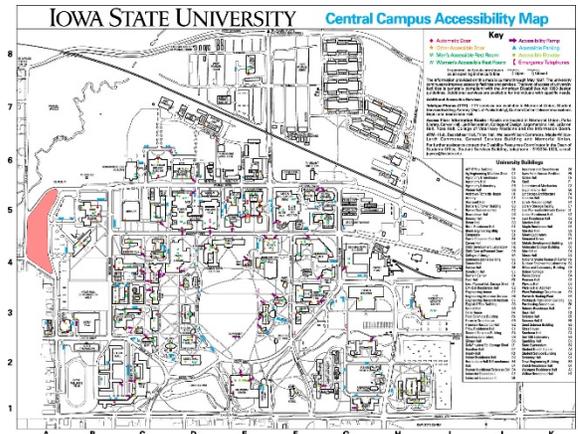


Figure 2. Locate map - site in pink

Hence, we might consider the parcel as a room of a dimensional nature as measured by our senses rather than any empirical method. And as such, a dimension of time with which we'd enter.

In this foundational exercise, students are asked to conduct an exploration of place through the creation of visual maps, environmental intervention, small-scale and detailed tangible embodiments, and creative presentation, all the while engaging the senses. Learning Outcomes include critical thinking, visual organization, visual translation, media, ethics, communication and critical evaluation. On

¹ Bachelard, Gaston. (1958). *The Poetic of Space*. (Translated by Maria Jones). Paris. Press Universitaires de France. 60.

the first day of the project, students spend time on site and consider aspects that trigger their immediate and non-immediate attention. The students are then asked to explore these aspects by spending additional time on site together and alone and bear witness to specific sensorial conditions. Through a series of iterative drawing methods, the students were asked to revise/finesse their subsequent drawing by conducting the following set of exercises (Design Studies 102, 2017).

Exercise 1

On the 1st day of the project, take notice of the outdoor environment that your instructor takes you to. Pick 1 thing that catches your eye, ear, breath, in that place ... This becomes your place. Explore it and document it by spending time there. Also, make several sketches. (When sketching, sketch in plan and section), taking pictures and recording sound. Your instructor will elaborate on what a plan and section are and how to produce them.

Exercise 2

Individually intervene in this place by bringing in an outside material. To intervene, you may use only one material, e.g., fabric, burlap, plastic, wood, ribbon, yarn, string, wire, paper. Thoroughly document your process of intervening by taking photographs, sketching (remember to sketch in plan, and section and indicate scale), writing descriptively (paying attention to descriptive words/TEXT), walking around etc. Be creative in this. Thereafter, document your process of removing the intervention. Do not leave traces of your intervention when you leave.

Exercise 3

Remember the path you took to the site and the path you took during the intervention. Create iterations of a site map and visual diagrams that represent your pathway and your process of intervening and removing the intervention. Use your writings (descriptive TEXT), sketches, photographs, recordings and integrate them into your site map and visual diagrams. Construct final section drawings to describe your intervention (using your sketches for reference). Pay attention to the TEXT you use- the meaning of the word, the font size, typeface and the placement of the text (Composition) in relation to the site map and visual diagram. Refer to your instructor's guidance on sections, typography, compositional strategies, and hybridization. You can use both digital and analogue means of production and integration.

Exercise 4

Translate your experience into a small-scale spatial and tangible embodiment that can be held in your hand/s, worn or touched to communicate your experience about your place/space. Use your intervention as inspiration." ²

Three student projects are detailed, following:

Drawing Study No. 1 – Visualizing Sound by Myah Dado [Fig. 3-5]

When walking around the assigned area, I initially heard the crunching sound of leaves with every step I took. This became my "place". Throughout my project I expanded on learning about the sound of the leaves and how outside materials can affect the sound. I later learned that tissue paper can absorb the sound of the crunching leaves. In my maps, I focused on how I could visualize sound and best interpret what I was hearing. This idea followed through when making my embodiment. I used a speaker at a certain frequency and water to create sound waves. To show how tissue paper absorbs sound, I used vegetable oil as my muffler with the water to create less defined sound waves. This helped me better

² Design Studies 102. (2017). *Project Handout*. Iowa State University, Ames, IA

understand what sound looks like. In my final map, I used the concept of my embodiment to accurately show my "place".³

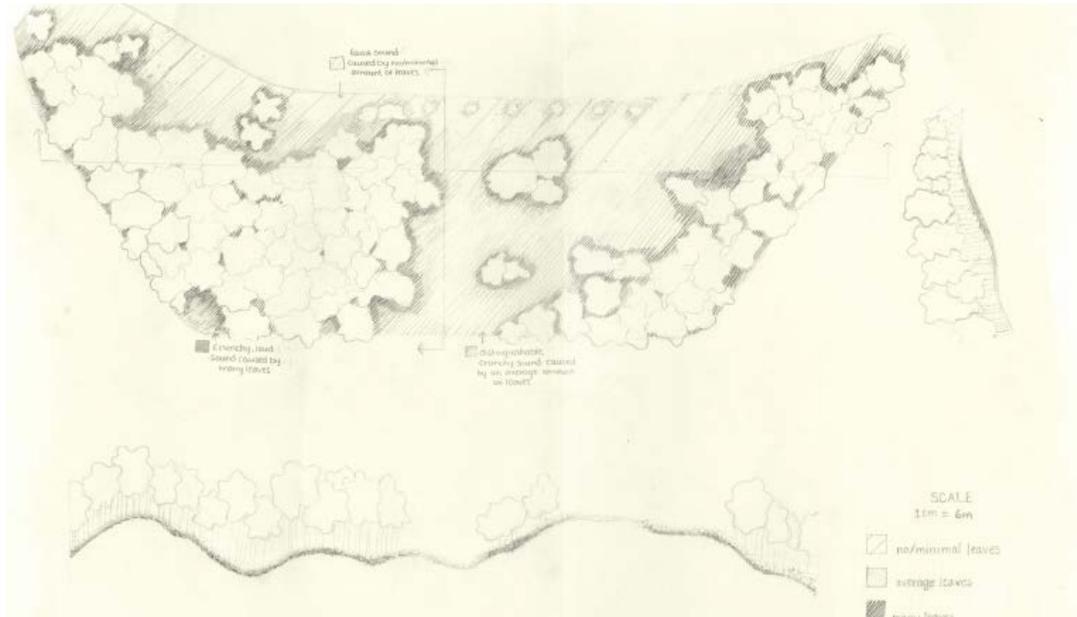


Figure 3. Iteration one by Myah Dado



Figure 4. Iteration two by Myah Dado

³ Dado, M. (2018). *Visualizing Sound*. [graphite and ink on paper]. Ames: Iowa State University.



Figure 5. Iteration three by Myah Dado

Drawing Study No. 2 – Synethete by Brandon Thomas [Fig. 6-8]

Sight is sound, and sound is sight. Using a FaceTime audio call, I sat down in the selected area and spoke with a synesthete I know personally. I had her listen to the space itself, all of the sound available, and then had her turn off the lights so she couldn't see anything in the room. I was only interested in the colors, lights, and shapes that she witnessed as the audio played out. Then, I asked her to describe the experience in the greatest detail possible.

Wind rustling through leaves, according to her, manifested as a gold shimmer raining down, like snowflakes or broken lights. Shoes crunching leaves is a burst of "prickly, pinkish purple", and a blue haze is always hovering in the middle distance, which is a manifestation of cars driving by the sight; this confirms some theories I had about what she might see, as the sight is surrounded by somewhat busy streets.

The coolest part is that the color of my voice dances around her eye and started spinning into cylinders when I told her what the trees were like. This proves a theory that I had, that her specific type of synesthesia is not entirely subconscious, and it can be influenced by new information

In order to continue experimenting with Synesthesia and how this neural connection between senses can be influenced, I took a dive into research about the ins and outs of sound design. In movies and TV shows, it's very rare that any sound effect you hear was taken on set. Usually, it's done in a sound

studio, or even someone's backyard or driveway or pool, and it's done by artificially recreating sounds that oddly sound more authentic than recording the real sound. Our brains are subconsciously wired to accept information as fact so we can minimize energy wasted on trying to intricately understand everything about current and particular stimuli. It's a part of our fight or flight instincts, and it's been ingrained in us since the beginning.

For the model portion of the project, I created 3 different "instruments" that I used to emulate the sounds heard in the sight. This essentially creates a connection between auditory and tactile information rather than auditory and visual, which is an effective study in its own right.

Now, while these fake sounds are pretty convincing, the subject's subconscious brain was not fooled. The shapes she saw became simpler, stiff, and less intense. She was really confused by this, as she was unaware that I had created these sounds using homemade instruments. However, perhaps more interestingly, once I explained how I did it, the color became more intense, especially the more she listened to the tape. It's almost like her brain created a visual cognitive map, and it's straight up fascinating.

The video I prepared was made in adobe after effects; I mixed the audio to create a pretty realistic auditory experience comparable to the actual space and use various visual effects to represent what the subject saw when exposed to the manufactured sound. I hope to continue this study over the next couple years and learning more and more about what makes her brain tick in such a captivating way. This could be the final way to get this experience to anyone who wants to see the world through brand new eyes.⁴

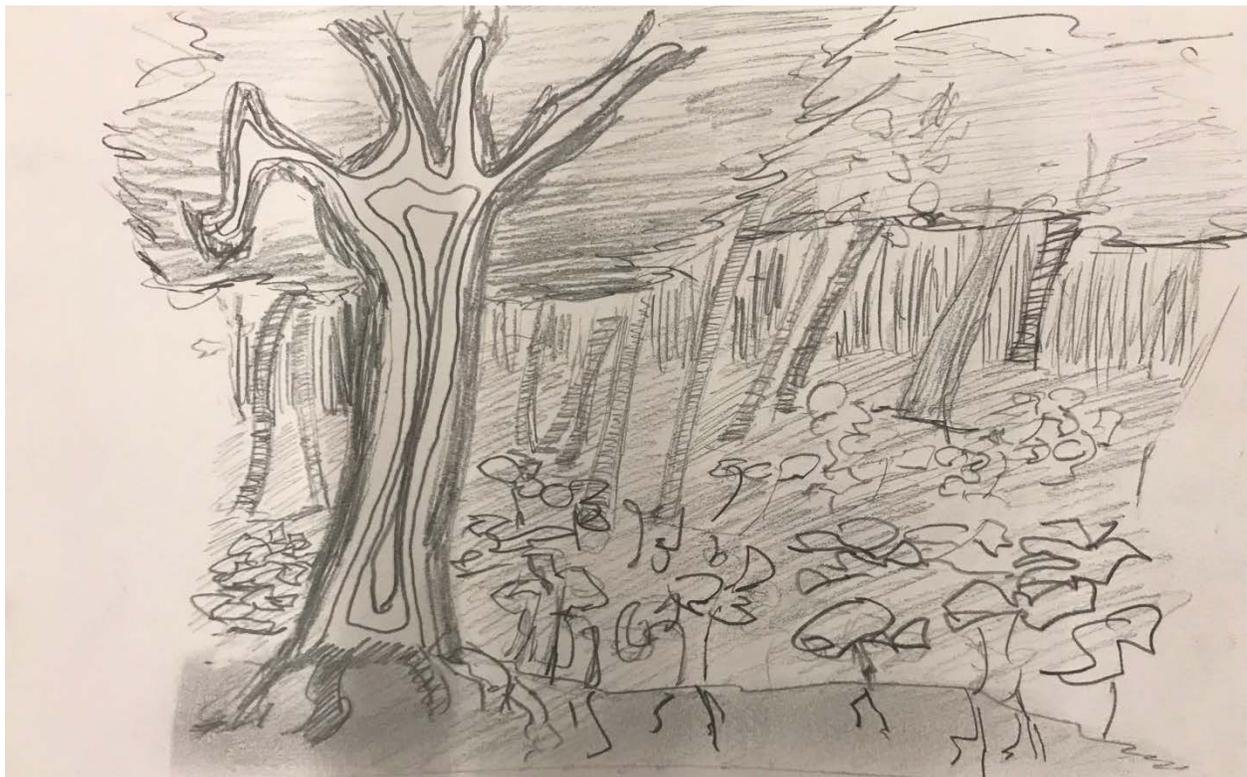


Figure 6. Iteration one by Brandon Thomas

⁴ Thomas, B. (2018). *Synethete*. [graphite/digital print on paper]. Ames: Iowa State University.

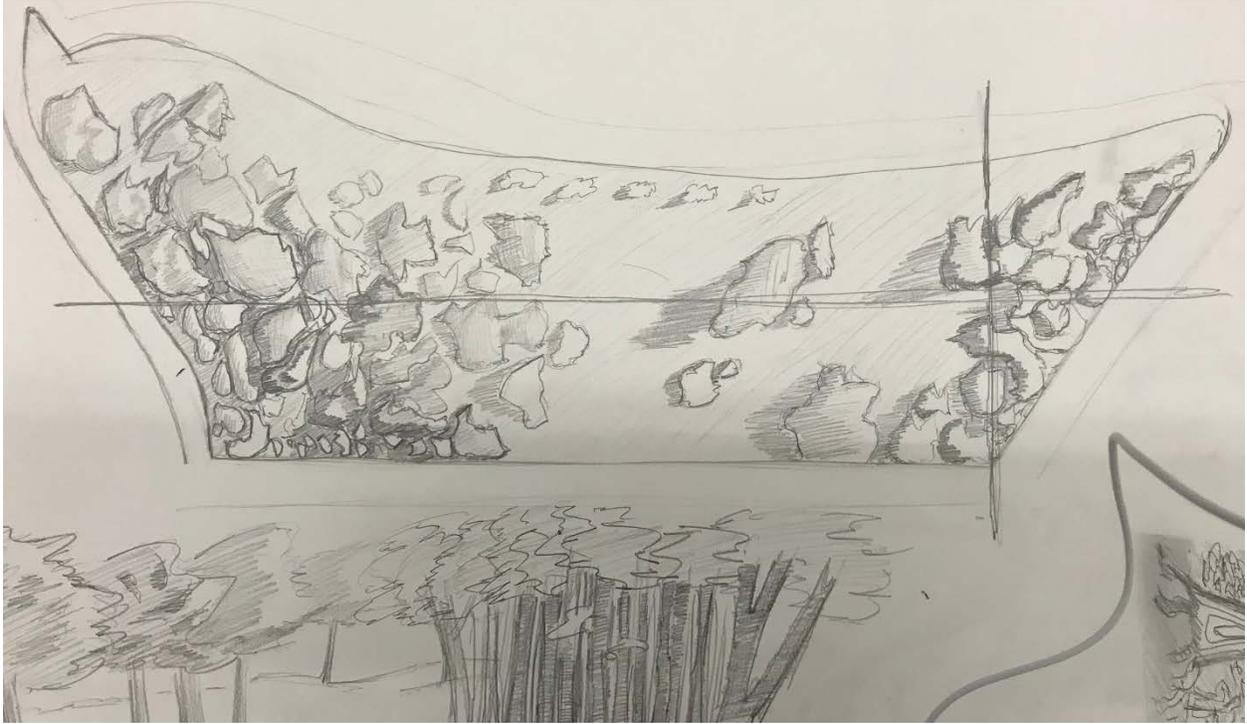


Figure 7. Iteration two by Brandon Thomas

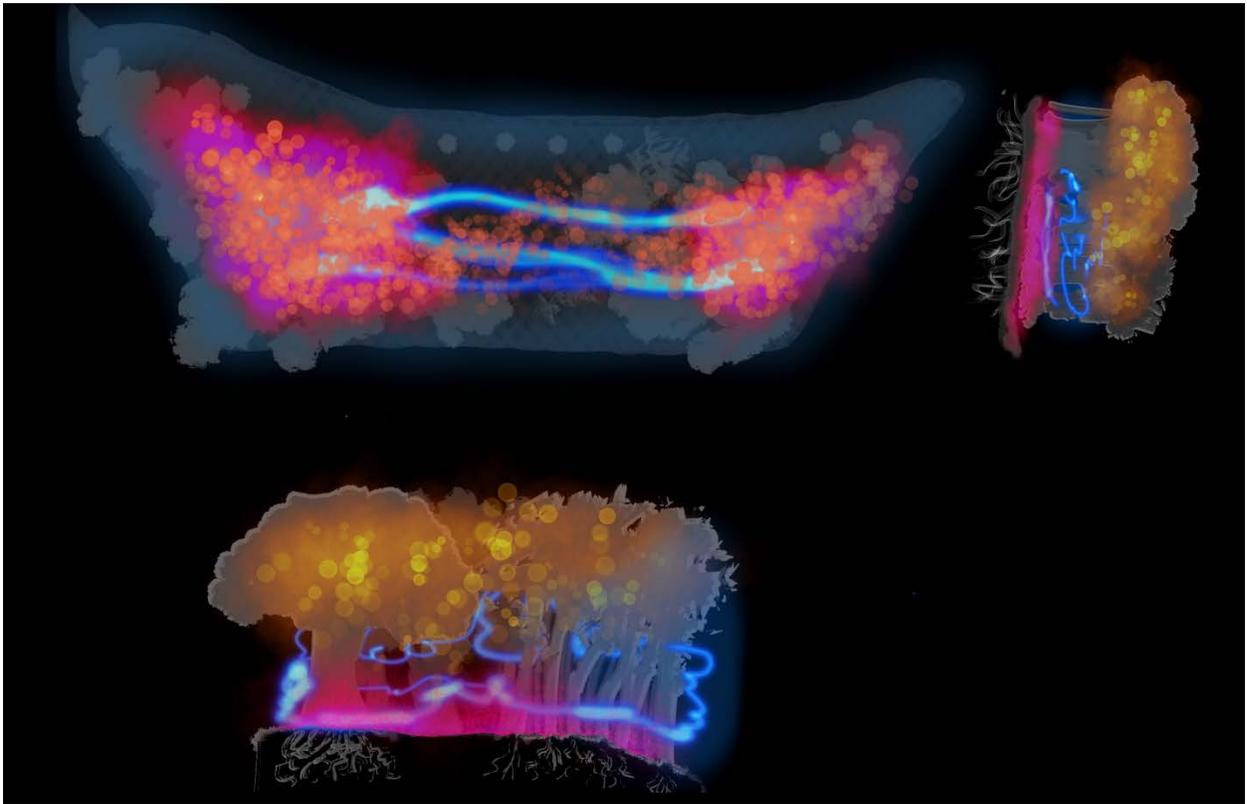


Figure 8. Iteration three by Brandon Thomas

Drawing Study No. 3 – Spatial Value by Malerie Reitzler [Fig. 9-11]

In starting the place project, I received inspiration from the precedents that I found online. The maps I found engaged me because they were both visually interesting and accurate representations of a certain area. Throughout my project, I wanted my sensorial focus to be on sight in the assigned location. In my first few maps I wasn't sure how to effectively incorporate sight and the feelings that are retained from the experience of the overall place. It wasn't until I started playing with the shadows casted from the trees and branches that I felt inspired in this project. For my installation, I took two different bedsheets out into the place to get a better sense of the shadows casted from the barren tree limbs. From the installation study, I was able to change the process of how I explored the place and my overall drawing study. I composed several maps using various medias such as charcoal, watercolor and watered down acrylic paint to best represent the effect of darkness. Throughout my studies, I felt engaged by my plan drawings because I experimented with many different ideas to fully capture the sense of dark vs light. For my embodiment I affixed sticks from the place together and then shined a flashlight over them to understand the shadows created from the branches. My embodiment furthered my study immensely because I finally grasped the layering concept behind the shadows casted from trees. The shadows from the sticks created faded lines under very sharp/intense lines. I was able to use this discovery and incorporate it into my next set of drawings. For my final drawing, I considered all of my maps as a whole set to receive the best outcome; I used the same effect of faded vs sharpened lines in my final map. I made my last map very dark because I wanted to represent the feelings of fear of the natural landscape. Darkness was a strong theme throughout my study. I feel like my final map best incorporated my strong points from all my previous drawing iterations. I wanted my place project to really represent my overall process.⁵



Figure 9. Iteration one by Malerie Reitzler

⁵ Reitzler, M. (2018). *Spatial Value*. [graphite and charcoal on paper]. Ames: Iowa State University.



Figure 10. Iteration two by Malerie Reitzler



Figure 11. Iteration three by Malerie Reitzler

Assessment

The course highly emphasizes 4 criteria, which are the basis for the creation of the project: a) Passion/Rigor- The rigor in which work is performed. The ability to translate ideas with fervor. Posture and perseverance; b) Process- research, iterations, experimentation with material and material quality. Failed ideas and how they were used to compliment the final. Reasons for doing and steps to get to a final; c) Product- The artifacts produced including process work. Final product, craft, quality, materiality. Answering the question as to why and how everything works together in relation to the project description and process, and; d) Presentation: Verbal and physical presentation exhibited through research consistency and application to final design, use of all products created to exhibit the aforementioned qualities (Design Studies 102, 2017). The 2 criteria that stand out are passion and process as they begin to envelope the need for rigorous discovery, unabashed inquiry through experimentation and multiple iterations, and finally methodological application. Thus, excellent criteria that shape the mindset of place.

The assessment of this project is based on the assessment that the student has of place. Very consciously thinking about what it means to be immersed in the time of place historically and to the intervene in the second by second changes of their place. The sensory and empathetic reality that students have of their environment in this foundation's program can be boiled down to the richness of the land that used to exist. Assessment therefore is a merging of the two - history and present. So, the project assessment and personal assessment of the student become particularly important to the full exhibition of place.

Conclusion

The passion to create is of an ancient and fundamental lineage. It is the embodiment of a compulsion to connect self with place. Our experience as occupants of a particular setting begins with the impulse to instantaneously scrutinize everything. This impulse is sustained through an often precisely choreographed route. Each inquiry is part of a process by which the humanity and sensual experience of a particular setting is revealed. Our efforts regarding foundational design education are directed toward elevating a student's sensory perception of a particular site through direct experience, experiment and the production of orthographic projection – plan and section drawings. This process of inquiry is the embodiment of an interdisciplinary agenda that has to do with engaging in drawing as a method of projection and perception through the assertion and embodiment of self in an effort to authenticate the bodily essence of lived space. To this end, the act of making observations assists in cultivating place-based knowledge.