



**PRYTANEION  
REDISCOVERED**

# Prytaneion Rediscovered:

The Contiguity of  
Cultural Fragments in  
St Paul, Minnesota

A design thesis submitted to the  
Department of Architecture and Landscape  
Architecture  
of North Dakota State University

By  
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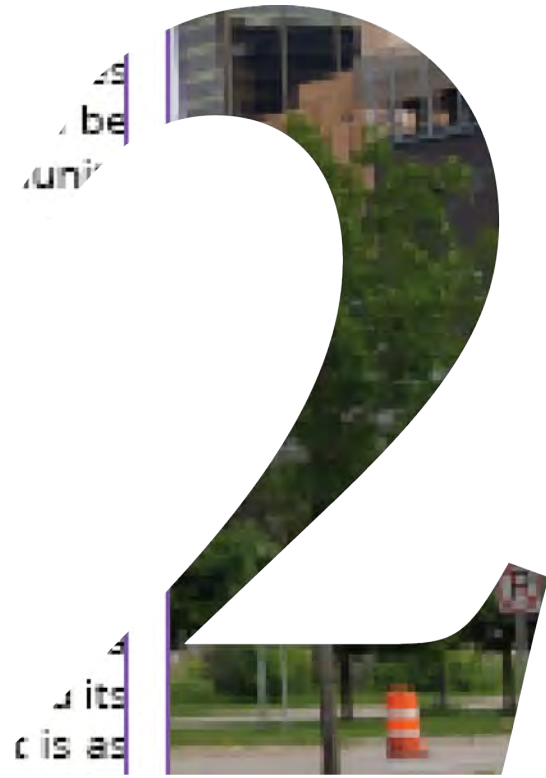
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This thesis intends to set a new path for civic architecture through the public library. The public library is a critical building in communities because it is one of the last remaining services dedicated to the pursuit of knowledge and expression. By reexamining the role architecture plays in how we view and create works of art and research, communities can benefit from stronger, more evocative civic buildings. We can discover the way forward to a future of stronger, more intelligent communities through the analysis, reassessment, and reapplication of architectural precedents from throughout history.



Our capacity for communication is the reflection of ourselves. Our architecture, according to Alberto Perez-Gomez, has been a facilitator for that communication for as long as we have been together to communicate. His writings are merely the beginning of that discussion in the context of this project, which seeks to reunite communities to the roots of civic architecture in order to help them recall the power of dialogue. Communities will benefit from a reminder of their place in relation to the ideas before them; they are the ones who come together to create works of art, from literature to sculpture, to discuss the most personal and the most civic ideas.

### **Justification**

The public library is perhaps the most prominent building afforded to communities today for the purpose of scholarship and expression. The resources now provided in public libraries across the country far exceed the scope of literature. As our communities continue to grow, and even establish themselves in new places, these resources become even more important. This project will provide a model for this growth by looking out from literature to other arts in order to create spaces that continue to promote rich, diverse communication from and for every community member willing to engage.

### Typology

Public Library outfitted with artistic and research utilities in addition to the literary collections and standard lounge and study spaces.

### Project Emphasis

Event spaces

Event spaces in a new public library include a black box theater, conference and presentation rooms, and gallery spaces connecting work spaces and collections.

Work spaces

These spaces include areas with just the essentials (tables, chairs, lights), areas with more extensive services (art studios, cleaning stations, durable work surfaces throughout), computer and multimedia labs, and maker stations equipped with digital manufacturing tools.

Collections

Collections include robust literary stacks in addition to regional, national, and international artifacts and works of art. An emphasis is placed on regional and national art to strengthen communal and shared experiences within the library.

### User Description

Librarians

The organizers, technicians, and curators of the library. The project multiple librarians for each major function, providing guidance to users. The librarians gauge the community's opinion on curation and give them a voice when the head librarian creates the program for the library.

Head Librarian

The head librarian is the overall curator. This librarian has final say over exhibits, performances, and technical direction, and provides the vision for the library.

Instructors

Hired instructors provide community members with education and direction in a variety of subjects, teaching visitors how to use the many services provided in the building as well as classes in practice and theory of art and research.

Visitors

Members of the community who visit the library. Visitors are the artists, buyers, readers, and performers.

### Project Goals

This project is ultimately one that seeks to unite a community through the experience of seeing and creating works of art, research, and other expression as part of a discussion with fellow citizens.

As this project is heavily community-oriented, the second major goal is to design a durable, flexible building that exceeds expectations in those categories. To design a building to last for centuries beyond the designer's lifespan would be to design an artifact of that community in much the same way that citizens are invited to create artifacts within the building.

The third major goal of this project is to connect the architecture to the circulation of the city. The sites adjacency to the river and to the dense downtown area provides an opportunity for the idea of civic architecture to expand beyond its direct function into something that is as public as possible.



Figure 1

**Design Methodology**

This project can utilize research in many forms. Three have been identified as particularly pertinent to the scope and direction of this project: design research, evaluative research, and interpretive research.

**Design**

Design research is most directly applicable to the work required of this thesis. The nature of the design studio offers a natural means for design as an investigative strategy, but in order to produce significant work I will have to transition into a disciplined means for design outside of a problem-solving capacity (as has been utilized in a majority of past projects) in order to address the specific research questions the thesis outlines.

**Evaluative**

Evaluative research will be an important methodology in the next semester as this thesis is meant to be a critique of the public library typology. History is full of examples of architecture that evokes the experiences this project seeks to appropriate into the typology. A thorough comparison between those examples and modern standards will introduce new directions for the public library.

**Interpretive**

Interpretive research lends itself well to the ideas of the public library that this project seeks to convey. The ability to produce new knowledge by referring to and interpreting significant objects and works from the past will help to produce both a critique of the current state of civic architecture as well as probe the inspirations behind it and guide it going forward.

**Documentation**

The coming semester will require a process of documenting the work produced that is both rigorous and representative of the complexity of that work.

Perhaps the most important step for documentation will be to incorporate many media into the work, digital and physical, as well as in the documentation. This includes a physical archive, scans, photographs, and videos of produced work. Work will be collected on a weekly basis, with the digital productions backed up at that time. Once every two weeks, the work will be reviewed and reorganized as necessary.

The digital archival processes also allow for a public display of this work. Weekly blog posts will be made to display work as it happens.

**Project Schedule**

The semester is split into three parts: Program, Form, and Representation. The building's program is the first major element because of the nature of the library and of civic architecture. In this case, the program of the building is the draw because of how it intertwines disparate functions that would otherwise require their own buildings. Once this is established, the form can be designed. The form is still an important aspect, as an attractive building is a point of pride for the city, however, the actual function of the building is still the most important aspect of this project. Finally, the semester ends with Representation and presentations. At this point, the program and form will have been established, and the success of the project will rest on the success of the representation. It will be important to go beyond visualization by incorporating artefacts, audio-visual devices, and other tools.





### **(Re)integrating the Arts:**

Evolving the Library Typology in the 21st Century

The library is currently at a point of significant change. The proliferation of digital technologies has created an effective and inexpensive means of cataloging literature, which is working its way to public libraries. Going forward into the 21st century, the public must look at the library as more than a housing for books and instead see it as a place for creativity in many forms. A typical definition of creativity is the generation of ideas that are both novel and useful. To adopt the creativity model, libraries must embrace three underlying ideas. The first is that media create messages unique to each medium, so uniting media in one building will provide the most creative opportunity for community members. Conversely, separating activities and enforcing strict labels of spaces (e.g. art galleries, reading rooms) limits the usefulness of the space by defining what cannot be done there. Finally, art is critical in the development of individuals as well as groups of people, and should be supported publicly for the benefit of communities. Integrating all arts, includ-

ing literature, into the library typology will foster communities with far better ability to create and communicate ideas than current communities.

The project is a library in downtown St Paul, Minnesota that utilizes the selected research as a model for transforming the basic definition of a library to best suit the needs of the community it is serving. This definition has similarities to STEAM libraries (Science, Technology, Engineering, Art, and Mathematics), as both include much more than literature (Coffey, 2016). The model will augment a basic libraries function, providing both physical stacks and infrastructure for digital catalogs and databases. This infrastructure will connect to the digital tools provided for creating other works; these computers will feature the Adobe Creative Suite, 3D modeling software, and other tools useful for digital work and physical processes. The library will feature a maker space housing 3D printers, laser cutters, and power tools, as well as open studio spaces to allow patrons to work in-house on those projects. The space will also facilitate fine arts work, and fabrication work. The library will also feature a black box theater. The theater will allow com-

munity members to perform individually and in groups, providing a space for community members to perform new works or adapt old, as well as traditional cultural performances. Another major space in the library is a space dedicated to children, which is absent from other libraries in the area.

The downtown area of St Paul is currently seeing growth, with young families comprising much of the incoming residents. This, along with a concentration of small charter schools in downtown make the area a good candidate for this type of project. These charter schools are scattered across the downtown area, and would be one group that would see large benefits from a public space with these facilities. Downtown St Paul features a robust public transportation system, with bus routes throughout and a light rail system connecting it to the rest of the metropolitan area, including Minneapolis, the airport, and outlying suburbs. Within the immediate region is a large group of theaters and museums. Downtown St Paul is home to the Science Museum of Minnesota, the Ordway Center, and the Xcel Energy Center, among many others. A library placed in this area would

bring in community members that would not normally have access to these resources and strengthen the cultural core of St Paul. The site currently identified for the project is 50 West Kellogg Boulevard, which is less than a block East of the Science Museum of Minnesota, and on the block South of the main library at the JJ Hill Center. The building is currently being renovated as a housing development. This project will appropriate some of that space, and will connect to the housing development.

#### Media

Media make a strong case for being the ultimate decider of the messages we make for each other. As stated above, media create messages unique to each medium. To integrate media in one building will provide the most creative opportunity for community members. In many settings, the medium sets the stage for what can be said, and what we can say with it (e.g. the prices of cameras and film, the static nature of a painting versus the movement of music). For the new typology of a library to function successfully, we must invest in spaces that allow

members of our community to work as best they can with as much as they can. In some cases, that will mean providing tables and chairs for discussion, in other cases a theater for a presentation or performance, whether it is a new work or an adaptation of a classic. The decider of the spaces use being the user will be critical in the development of the buildings program over many years. The ultimate goal of the new definition of the facility will be to foster the connection between people and art (e.g. literature, performance art, fine arts) for the development of the community.

The development of the building begins with the variety of media, and why there should in fact be a variety. One of the most notable examples of differences between media is the transition from feature films in theaters to the home. The size and aspect ratios of the screens used in homes, defined as the relation between width and height of the presented image, has varied greatly until recent years. With home television sets featuring a 4:3 aspect ratio, and theatrical showings as wide as 2.39:1. In the documentary Letterboxing, director Curtis Hanson describes the technique "pan

and scan” as the process of cropping films to the 4:3 aspect ratio for home consumption by moving a view port over the film and showing only what is within the viewport to the home audience. Hanson goes on to say that:

There are many things that go into the making of a movie. One of those things is the shape of the movie, how wide is the screen, and how does that impact the shots that make up the movie? Every shot in a movie is thoughtfully composed. And the composition of that shot is approached the same way that a painter approaches the composition of a painting. And when a technician takes a completed movie and pans and scans, he’s moving the camera defensively rather than artistically, and violating all the creativity that went into composing that shot (Turner Classic Movies, 2009)

The process of panning and scanning is, according to Hanson and many other cinematic authorities, a reinvention of what the film director and producers meant to say with their film. When a film is brought into a new medium (theater to home television) a new film is made. This is one of the most direct examples of

media creating messages unique to each medium, but it is not the only example. Hanson goes on, using the Leonardo da Vinci painting *The Last Supper* as another example of why cropping images is a reimagining of the art by illustrating how 6 disciples are lost in the cropping process, three from each side (Turner Classic Movies, 2009). The cropping of any medium is always a reimagining of the original, and it is in this reimagining that a new interpretation and a new message is made.

The same reinvention occurs when adapting a book for film, as well as when one adapts ideas from one form to another, be it from notes to painting or sketches to sculpture. The choice of the individual community member in the creative process is what will affect the community as a whole (Yazon, Mayer-Smith, & Redfield, 2002). Providing a space in which individuals can create, adapt, and present their ideas, and giving the public the position to interact and critique those ideas, is what defines the direction of the library going forward.

Typology

The library typology is seeing a tremendous shift in the early 21st century (Rainie, Zickuhr, Purcell, Madden, & Brenner, 2012). Funding for public endeavors is at increasing risk, and the demands of the public are shifting to different areas of the libraries program. The evolution of the typology will in part be dictated by those demands, and must include the foresight of the public to make a truly effective building for the rest of the 21st century. That definition must have a certain degree of openness and flexibility, as the limitations of building typology and strict definitions of spaces limit the usefulness of the space. With that degree of openness, the architecture of the 21st century library can empower communities to develop themselves creatively.

The architecture of the new library must both reflect and embrace the activities of the library without restricting the creativity of its community members (Dwyer & Davies, 2010). In this area, it is important to remember that the experience and benefits of art are not isolated to artistic or political endeavors. Research has shown that the presence of metaphor, especially in the embodiment of metaphor, has a profound impact on idea making.

Those researchers, defining creativity as a process of creating something novel and useful, have found a positive link between the embodiment of metaphor and creative problem solving. Researchers at New York University created a scenario in which subjects would live out a physical manifestation of the “think outside the box” metaphor, creating a cardboard box that comfortably holds one participant, and asking them to think of as many words corresponding to a set of given keywords (Leung et al., 2012). Some participants were asked to perform the task inside the box, others outside. Participants who completed the test outside of the box came up with more answers than the participants inside. According to their findings:

...participants who completed the RAT while physically outside of the box generated more correct answers ( $M=6.73$ ,  $SD=0.50$ ) than both inside-the-box ( $M=5.08$ ,  $SD=0.51$ ) and control participants ( $M=5.43$ ,  $SD=0.35$ ),  $F(1,99)=3.93$ ,  $p<.05$ ,  $\eta^2 p=.06$ ; planned contrast,  $t(99)=2.52$ ,  $p<.05$ ,  $\eta^2 p=.06$ . Including measures of feeling and claustrophobia as covariates did not alter the results,  $F(1,47)=8.04$ ,  $p<.01$ ,  $\eta^2 p=.15$ , and the

covariates were not significant,  $F < 3.68$ . Because the mean RAT scores did not differ between inside-the-box and control participants, this suggests that “thinking outside the box” contributes unique explanatory variance in fostering creativity (vs. “thinking inside the box” hampering creativity) (Leung et al., 2012).

The physical manifestation in the NYU study created an environment in which study participants were able to generate a significantly larger number of ideas than those in a less metaphorically relevant environment. While the architecture of a 21st century does not need to have physical manifestations of this specific metaphor to be successful, it should be mindful of the common metaphors of its community to create a visual grammar for working within the spaces it provides.

The NYU paper (Leung et al., 2012) included multiple other studies with different physical manifestations. One study identified the effects of walking patterns on participants, showing that freedom of movement around the study room fostered more creative generations than restricted movement around a strict course. The study shows that:

Planned contrasts revealed that the originality scores of participants in the free-walking condition were significantly higher than those of participants in the rectangular-walking and sitting conditions... Likewise, in the Lego task, free-walking participants listed more-original ideas ( $M = 7.36$ ,  $SD = 2.84$ ) than did participants in the rectangular-walking ( $M = 9.32$ ,  $SD = 3.49$ ) and sitting ( $M = 8.36$ ,  $SD = 2.98$ ) conditions... ideas generated by rectangular-walking and sitting participants did not differ in their originality ( $F < 1.63$ ) (Leung et al., 2012).

In the context of walking, freedom, as opposed to the given rectangular track, was the manifestation that fostered a higher amount of generations by subjects. This begins to justify programmatic demands on the library, which call for spaces that were not typically designed for in the 19th and early 20th centuries.

The shift of the library typology has been noted by those at the forefront of the library. The American Library Association, in their State of Libraries document, they address several statistics highlighting

notable changes in public demands. “In 2012, there were 92.6 million attendees at the 4 million programs offered by public libraries. This represents a 10-year increase of 54.4% in program attendance” (Carmichael, 2016). The utilization of public library programs has seen a massive increase in the past ten years. This identifies the desire of communities for significant, publicly funded offerings. When discussing the state of academic libraries, the ALA states that “in the past three years, 62.6% of academic libraries reported repurposing space for group study, student success areas (writing/tutoring centers), quiet study space, technology learning spaces, and additional seating” (Carmichael, 2016). Students at post-secondary schools are expressing desire for a variety of spaces that are not associated with the libraries typical functionality as a book depository. One can expect this trend to continue into their post-education lives. It is also reasonable to assume that this type of space would be popular among younger students as well. The lesson learned from these statistics is that libraries must be flexible to flow with the needs of communities, whether that involves a little more space for quiet work or more freedom for alter-

native undertakings.

Arts

Art is a language that all speak, and while messages may seem ambiguous, its goals are inclusive. When looked at as an educational tool, the incorporation of art in education allows for an indirect approach in areas that tend to be comprised of dry information (Kraljic & Samuel, 2011). On an individual level, it helps improve critical thinking skills. Outside of the classroom, it can function as an excellent supplement to our formal educational systems.

The role of art in the development of our societies begins in education. Its benefits have been felt for years, but funding for creative endeavors in schools seems to be in decline. Recent studies have shown evidence that integrating arts into education has a pronounced impact on critical thinking skills in students. A study of 24,552 K-12 students was conducted at the Crystal Bridges Museum of American Art in Arkansas showing an increase in critical thinking performance after the visit than students who did not visit. The

conclusions drawn in the study are as follows:

For the entire sample, students who went on a school visit to an art museum perform 9% of a standard deviation higher on the critical thinking measure ( $p$  value = 0.03). The impacts are greater for students who were in groups that are more disadvantaged and may have been less likely to have had such an experience absent the treatment. Specifically, when estimating effects for students at schools where a majority of the students are FRLeligible, the impact of the treatment is 18% of a standard deviation relative to similar students in the control group ( $p$  value < 0.01). The benefit of a school tour for non-White students in the treatment group is 18% of a standard deviation ( $p$  value < 0.01). Rural students, who we identify as those living in towns with fewer than 10,000 people, receive the biggest impact of the treatment. These rural students are 33% of a standard deviation better in their critical thinking skills than rural students who did not win the lottery to go to the Museum ( $p$  value < 0.01). (Bowen, Greene, & Kisida, 2013)

The effects of the visit to the art muse-

um are noticeable when the students are then asked to perform a follow-up critical thinking exercise, the highest impact being on those students from rural areas. From this, the conclusion can be made that support for arts will improve our communities' abilities to parse ideas and to communicate. This notion has been evident for many in educational settings, but not necessarily outside of that realm. The relationship between the public and art is contentious. While interest in art from cultural geographers has only recently become prominent, there has been tremendous interest from educationalists. "Art and other cultural practices are considered to initiate learning processes which differ fundamentally from those generated in the context of formal schooling" (Schuermans, Loopmans, & Vandenabeele, 2012). The ways in which art supports learning are vastly different from the typical educational system methods. This allows for communities to support the education of members outside of a formal setting in ways that are more related to the individuals. A facility in which the exploration and presentation of art, supported by and for the public, will create an extra-scholastic system in which community members can learn

and grow. In the area of public pedagogy, the role of art is discussed as requiring personal reaction from individuals (Coffee, 2016). Schuermans, Loopmans, and Vandenabeele state in their paper that:

Public pedagogy emphasizes how educators (e.g. artists) cannot merely impose meaning or singular answers upon their educational subjects. Instead, public pedagogy through art is about creating 'transitional spaces' where individuals are challenged to face the ambivalences that result from encounters with diversity (Schuermans et al., 2012).

The relationship between instructor, in this case the artist, and the individual cannot be as direct as most are used to in a typical educational setting. This relationship, requiring more of the individual to replace the direct input lost from the instructor, is perfect for a space in which the instructor and subject are typically never physically together.

#### (Re)integration

The direction of the library is in a position of tremendous influence. It will de-

fine how the public sees its relationship with media, either embracing its influence or ignoring it. It will reflect how we see ourselves in our world, both in private working areas and public spaces. It will also describe our position on the arts by showing how much space and effort we are willing to dedicate to them. The library can adopt a tech store model, laying out a few computers and eBook readers and giving a little space for reading. It could also embrace a model that gives the community options and benefits. A model that integrates arts into a space for creativity, growth, and connection for its members. The choice will tell us if our communities are willing to shrink, or if they are ready to reintegrate arts into themselves and ready to grow.

**Annotated Bibliography**

Bowen, D. H., Greene, J. P., & Kisida, B. (2013). Learning to Think Critically A Visual Art Experiment. Educational Researcher, 0013189X13512675. <https://doi.org/10.3102/0013189X13512675>

The study involves a large group of students from varying backgrounds, exposes them to art at the Crystal Bridges Museum of American Art, and then tests their critical thinking abilities after that exposure. The study also features a control group of students who did not visit the museum, and were given the same critical thinking examination. The results show that students who were exposed to art, in this case in the form of the tours through the museum, showed stronger critical thinking skills when analyzing a new painting than students who were not exposed to art beforehand. The study has significant impact, showing how beneficial art can be in educational models. The most interesting result is the difference in who was most effected; the study shows that students from rural settings saw the most improvement in critical thinking strength. This significantly strengthens the argument for a public

model of art support.

Carmichael, J. (2016, March 28). State of America's Libraries Report 2016. Retrieved from <http://www.ala.org/news/state-americas-libraries-report-2016>

The American Library Association produces a "State of Libraries" document, describing recent changes in how our communities are using libraries, and how libraries are responding to those communities. It also discusses common themes and observations from libraries across the country; one section in particular discusses challenging material, citing the most censored books across the country. The document details specific demands on libraries, particularly in the areas of future library construction in relation to public demands, and how the utilization of library programs has flourished in recent years. The ALA is of course a pro-library entity, and the document reflects that, but they were not afraid to cite critical statistics and recognize areas of improvement. The document is intended to be both a critical approach to their improvement and a positive outlook for their growth.

Coffey, C. (2016). No Ordinary Place. Retrieved September 16, 2016, from [http://www.iasc-culture.org/THR/THR\\_article\\_2016\\_Summer\\_Coffey.php](http://www.iasc-culture.org/THR/THR_article_2016_Summer_Coffey.php)

In her review of the state of the public library, Clare Coffey discusses the relationship between catalogs and offerings and the relationship between the library as a cultural center and the library as a logistical mechanism. She describes the nature of digital cataloguing, and identifies that it prompts some to attempt a streamlining process of the library. She goes on to discuss the library as an entity within a community outside of its economical dimension, and encourages a discussion of the library as a cultural element critical to communities.

Dwyer, C., & Davies, G. (2010). Qualitative methods III: animating archives, artful interventions and online environments. *Progress in Human Geography*, 34(1), 88-97. <https://doi.org/10.1177/0309132508105005>

The report discusses contemporary geographical work. The report focuses on three areas: "the archive, artistic

collaborations and online engagements." The first piece is a discussion of archival methodology and purpose, critiquing the assembled accounts from geographers and current handling of them. The second aspect of the report discusses artistic collaboration. It looks at the ability for art to be a reciprocal event, engaging groups outside of the artists, and relating that to geographic documentation and research. The third part of the paper investigates online environments, viewing them as a facilitator of research, collaboration, and documentation that had not been seen prior to the advent of the information age. The paper is optimistic in tone, and discusses a breadth of topics within one neat overarching theme (geography). The report is qualitative in nature, and the method of the researchers lends itself well to the reputable quality of the report.

Kraljic, T., & Samuel, A. G. (2011). Perceptual learning evidence for contextually-specific representations. *Cognition*, 121(3), 459-465. <https://doi.org/10.1016/j.cognition.2011.08.015>

The research paper analyses the

relationship between language, the unique pronunciation of speakers, and the reception of that language in the listener. The paper details how listeners perceive those messages, and encode and organize the pronunciations from the speaker into relevant phonemic categories to aid the perceptions following. They discuss how the initial presumptions leading to the document are not necessarily the case. Those presumptions stated the opposite of this paper, saying that if pronunciations are ambiguous in relation to the speaker, that learning is blocked. Their three studies imitate the blocking process, and how that can be eliminated with certain visual stimuli are present. The qualitative nature of the paper is helpful when discussing perception, which is typically more of a semantic or qualitative discussion.

Leung, A. K. -, Kim, S., Polman, E., Ong, L. S., Qiu, L., Goncalo, J. A., & Sanchez-Burks, J. (2012). Embodied Metaphors and Creative "Acts." *Psychological Science*, 23(5), 502-509. <https://doi.org/10.1177/0956797611429801>

This research documents draws a

connection between physical manifestations of metaphors and creative output in subjects. The studies show a connection between an embodied metaphor (thinking outside the box) and how many creative ideas regarding an unrelated object (a cluster of Legos, a doodle) the subject can think of while the metaphor is embodied physically. The paper discusses four studies along these lines, all testing and measuring creative responses from participants, with different metaphors. The studies were quite thorough, with well-crafted recording of the events. The "out of the box" metaphor is particularly relevant to architectural design, with all of the selected metaphors having interesting parallels to what is expected to occur in buildings that facilitate creative activities. The researchers could, as always, have gone further in their exploration, attempting to create even more physical embodiments of metaphors.

Rainie, L., Zickuhr, K., Purcell, K., Madden, M., & Brenner, J. (2012, April 4). The rise of e-reading. Retrieved from <http://libraries.pewinternet.org/2012/04/04/the-rise-of-e-reading/>

This report discusses the rising

popularity of eBook reading. It identifies usage statistics and trends, noting growth in the amount of American adults who are considered eBook readers, and analyzes trends within that group. They find that a large group of adults who read e- say that they read more than before, citing digital reading means as a cause for that. The surveys show that e-reading is seeing a dramatic rise, but that print media are still significantly more prevalent. They note that the variety of devices available for e-reading is part of what has created this rise, noting that e-reading occurs on personal computers, laptops, cell phones, tablets, etc. The report is robust in the questions it is asking, and transparent in the representation of the data. One criticism would be that it is quickly becoming out of date with the state of digital technology developing much faster than the researchers could update.

Schuermans, N., Loopmans, M. P. J., & Vandenabeele, J. (2012). Public space, public art and public pedagogy. *Social & Cultural Geography*, 13(7), 675-682. <https://doi.org/10.1080/14649365.2012.728007>

This paper discusses the relationship between art, the communities in which it is formed, and how the geographers researching the area see that art, and art as a method of public pedagogy. They discuss the economics briefly, showing that some communities fund for monetary gain but that many are funding public art projects as a renewal effort. The discussion moves to public pedagogy, and describes how art can function as an educational tool that works outside of a formal educational system; the conclusion being that it works in a less direct way to challenge out of students a response to the work. The paper is comprised of built assumptions, following a break-down of four other papers and how they relate to art as a pedagogical object. The paper succeeds in reframing others' findings to create a model for public pedagogy.

Turner Classic Movies. (2009). *Turner Classic Movies: Letterbox*. Retrieved from <https://www.youtube.com/watch?v=5m1-pP1-5K8>

This documentary discusses the processes of translating a film to a format

available to home viewers, featuring letterboxing techniques and pan and scan techniques. The documentary features several popular film directors, including Martin Scorsese and Curtis Hanson, who discuss their position of the method of panning and scanning film; the process of selecting what area of the frame will be shown in the home video. The format does create a feeling that their positions as director are influencing their opinions on the manipulations of works outside of the hands of the initial film makers. Their positions at the top of the cinematic world lends credence to their position as experts and their positions as artists who are responding to adaptations of their productions.

Yazon, J. M. O., Mayer-Smith, J. A., & Redfield, R. J. (2002). Does the medium change the message? The impact of a web-based genetics course on university students' perspectives on learning and teaching. *Computers & Education*, 38(1-3), 267-285. [https://doi.org/10.1016/S0360-1315\(01\)00081-1](https://doi.org/10.1016/S0360-1315(01)00081-1)

This study looks at how a sample of college students react to web-based

learning interfaces, and how they perform within them. The researchers look to the pedagogical possibilities of digital and information technology. They specifically look at how university-level students in science courses engage with the material, and if it addresses issues with passive learning. The study works with a course that had been offered for several years prior to the study, integrating web-based environments into the course and requiring students to interact with it. The control engaged with the course as it had been run in the years prior, in a typical lecture format. The results highlighted students' improved understanding, and compared it to the results of the lecture based course which produced a recitation of given information where the digital course produced a more complete integrated understanding in students. The study results were qualitative, based on the given responses from students from the survey. This identifies both a result from an environment, as well as the perceptions of the environment from the perspective of the students.





The following three buildings were selected for analysis early in the process for several reasons. The most important factors were programmatic links to the design that will result from this research, desirable formal qualities of the building, and an overall variety of activities within each building. With those in mind, three buildings were selected from three different typologies to cast a wide net for analysis. That typological breadth will be substantial as the program for this project develops through the next semester during research and exploration.



Top: Figure 2  
 Middle: Figure 3  
 Bottom Figure 4



### Tama Art University Library

Toyo Ito  
Tokyo, Japan

The Tama Art University Library, designed by Toyo Ito, is located in the suburbs of Tokyo. Ito designed the library to be integrated into the campus' existing circulation by designing a structure meant to follow the natural flow of the students walking, as well as their view patterns as they enter or walk by.

The building features concrete arches arranged in a seemingly arbitrary pattern in a way to interact with the garden just outside of the building. The arches intersect with each other, allowing a thinner structure throughout the building while still supporting the

heavy loads that come with a library.

The arches also serve as a soft separation for different areas of the building. Ito utilized the arches to articulate different areas of the building without the complete termination that comes with solid walls and doors. The soft separation gives the library to have a sense of continuity while allowing each space within to have individual

Above: Figure 5  
Top -Right: Figure 6  
Bottom-Right: Figure 7





### Ray and Maria Stata Center, MIT

Frank Gehry  
Cambridge, MA

The Ray and Maria Stata Center houses offices and facilities for the Computer Science and Artificial Intelligence Laboratory, the Laboratory for Information and Decision Systems, Linguistics, and Philosophy departments. The building also provides several auditoriums and classrooms.

The idea behind Gehry's design was to connect MIT scientists and students who tended to isolate themselves in labs. The building Gehry designed has lived up to that goal, according to the

buildings occupants. The nature of MIT was embodied in the building, allowing scientists to explore new ideas in the building and on the new building they'd been given. Gehry is quoted as saying, "I'm happy when the building is forgiving enough so you can do things to it without destroying it. Put a new light where you want, knock out a wall."

The nature of a private university allows for work on a building as Gehry describes, but much of that spirit can be applied to civic institutions in which STEAM (Science, Technology, Engineering, Arts, and Mathematics) works are being created. The always-changing nature of the Stata Center should be adopted to some degree or another in libraries.



Top-Left: Figure 8  
Top -Right: Figure 9  
Bottom-Right: Figure 10



### Innovation Center UC

Alejandro Aravena  
Santiago, Chile

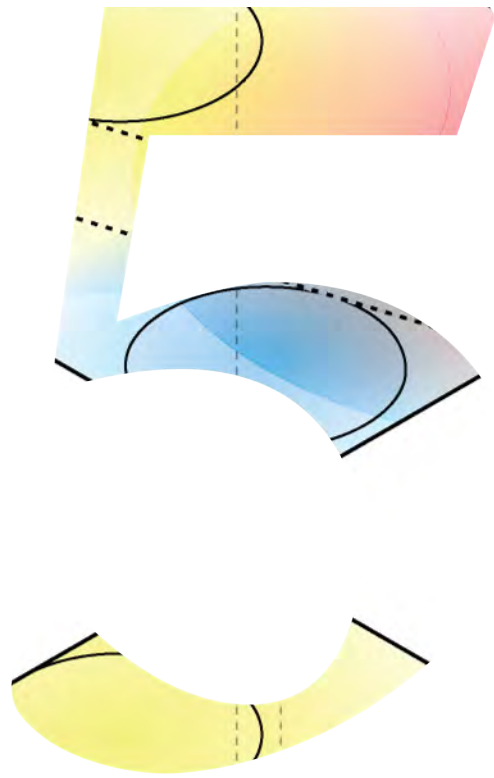
The Innovation Center by Alejandro Aravena and Elemental was developed to provide businesses and researchers a space in which they could collaborate. The space identified was on campus of the Universidad Católica de Chile. The funders of the project sought to bring businesses and researchers together to better foster business opportunities for researchers, and to allow business owners to become part of the process of idea creation in a university setting.

The design of the building stemmed from functional concerns as

well as environmental. Elemental was tasked with producing a contemporary-looking building, but resisted the trend of facades identified in Santiago at the time. They cited the greenhouse effect that the glass facades had in a warm-climate area like Santiago. Elemental was also worried about functional obsolescence. They approached the programming and layout of the building as an infrastructure project by looking at the building as something that had to have a degree of toughness to withstand wear and tear, and to have as much flexibility incorporated into its plan as possible.



Top-Left: Figure 11  
Top-Right: Figure 12  
Bottom-Right: Figure 13



### George Latimer Public Library Expansion Program

#### Function

The library will feature several types of media that community members can utilize, going beyond typical stacks, creating a variety of activities within a close proximity. Because of this, much of the floor plan surrounding areas allocated for basic needs will be unprogrammed to allow the users to use space as they imagine, and in as many ways as they wish within reason.

The discovery of the media provided will be supported in many ways, including proximity and openness of the floor plans to allow users to meander. With much of the space being unallocated, users coming to the library will be opened to various activities they were not necessarily searching for.

#### Economy

The library is a public building, which calls for a high quality of design and respect for the community members paying taxes to support the construction. The design will incorporate beautiful, but very durable construction materials throughout to maintain the building's performance for years to come.

#### Form

The building is situated between two major streets in St Paul, Kellogg boulevard and Shepard road, which have a height difference of nearly 100 feet. The building should incorporate public circulation into the functions of the library, both to support foot traffic in the area and to support the work presented within the building.

#### Time

The library typology has changed significantly over the past 100 years, and quite rapidly in the past 5. Adapting to new technologies as they are developed is critical to the success of the building for the community it serves. A flexible floor plan, with much of the organization based on the desire of the users, will help the building stay relevant going forward.

#### Notes

Each section of the building is based on the basic needs for those activities. The design should feature large amounts of unallocated space surrounding each section for community members to organize projects, work groups, etc. within the space as they see fit to form democratic spaces. Exhibit spaces are not included with any specific media space to allow for freedom of use. Just like the unallocated democratic spaces, the exhibit spaces should also be utilized freely by users to allow for a formal space for presentation.

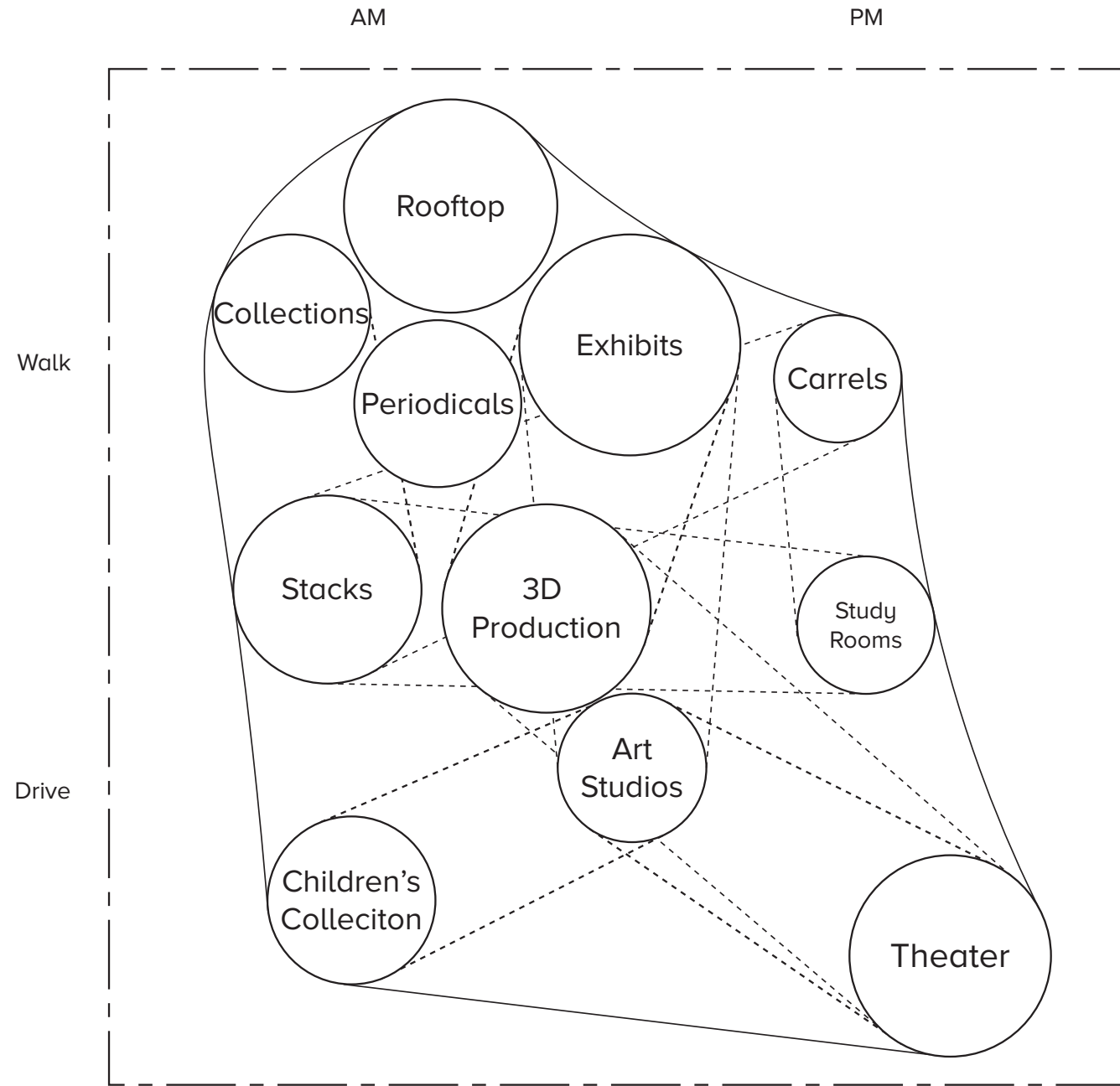
<b>Space List</b>						
<b>Function</b>	<b>People</b>	<b>Capacity</b>	<b>Unit</b>	<b>No. of Units</b>	<b>Area/Unit</b>	<b>Net Area</b>
<b>Front End</b>						
Entrance and Exhibits		100		1	2000	2000
Check Out	2	20		1	200	200
Reference Desk	1	10		1	300	300
Reference Computers		10		1	400	400
Bathroom		10		2	500	1000
<b>Subtotal</b>		<b>150</b>				
<b>Literary</b>						
Lounge Seating		25		1	2800	2800
Table Seating		20		1	2000	2000
Carrels		10		1	1100	1100
Microfiche Cabinets		6		1	150	150
Digital Catalog Computers and Microfiche Readers		20		1	1200	1200
Periodicals		30		1	1000	1000
Reference Stacks		50		1	3000	3000
Collections Stacks		30		1	1000	1000
Bathroom		4		6	300	1800
<b>Subtotal</b>		<b>195</b>				
<b>Audio-Visual</b>						
Research Computer Terminals		20		1	1200	1200
Audio Lab and Studios		5		3	100	300
Audio-Visual Media Collection	1	30		1	1500	1500
Duplication Center		4		1	275	275
Bathroom		4		6	300	1800
<b>Subtotal</b>		<b>63</b>				
<b>Production</b>						
3D Printers and Design Tools	1	20		1	1000	1000
Power Tools	1	12		1	1250	1250
Hand Tools	1	10		1	750	750
Production Computer Lab		20		1	1200	1200
Art Studio		12		3	500	1500
Cleaning Stations		5		2	50	100
Bathroom		4		6	300	1800
<b>Subtotal</b>		<b>83</b>				

<b>Theater</b>						
Black Box Theater		200		1	3000	3000
Green Room		15		2	450	900
Score and Script Collection		25		1	500	500
Theater Storage		10		1	500	500
Lobby Area		200		1	3500	3500
Box Office	1	2		1	30	30
Bathroom		10		4	300	1200
<b>Subtotal</b>		<b>462</b>				

<b>Building Area</b>						
<b>Space Name</b>	<b>People</b>	<b>Capacity</b>	<b>Unit</b>	<b>Net Area</b>	<b>Net:Gross</b>	<b>Gross Building Area</b>
<b>Library</b>						
Front End	3	150		3900	0.6	6240
Literary	0	195		14050	0.7	23885
Audio-Visual	1	63		5075	0.6	8120
Production	3	83		7600	0.6	12160
Theater	1	462		9630	0.6	15408
Staff	8	31		1450	0.6	2320
<b>Subtotal</b>	<b>16</b>	<b>984</b>				<b>68133</b>

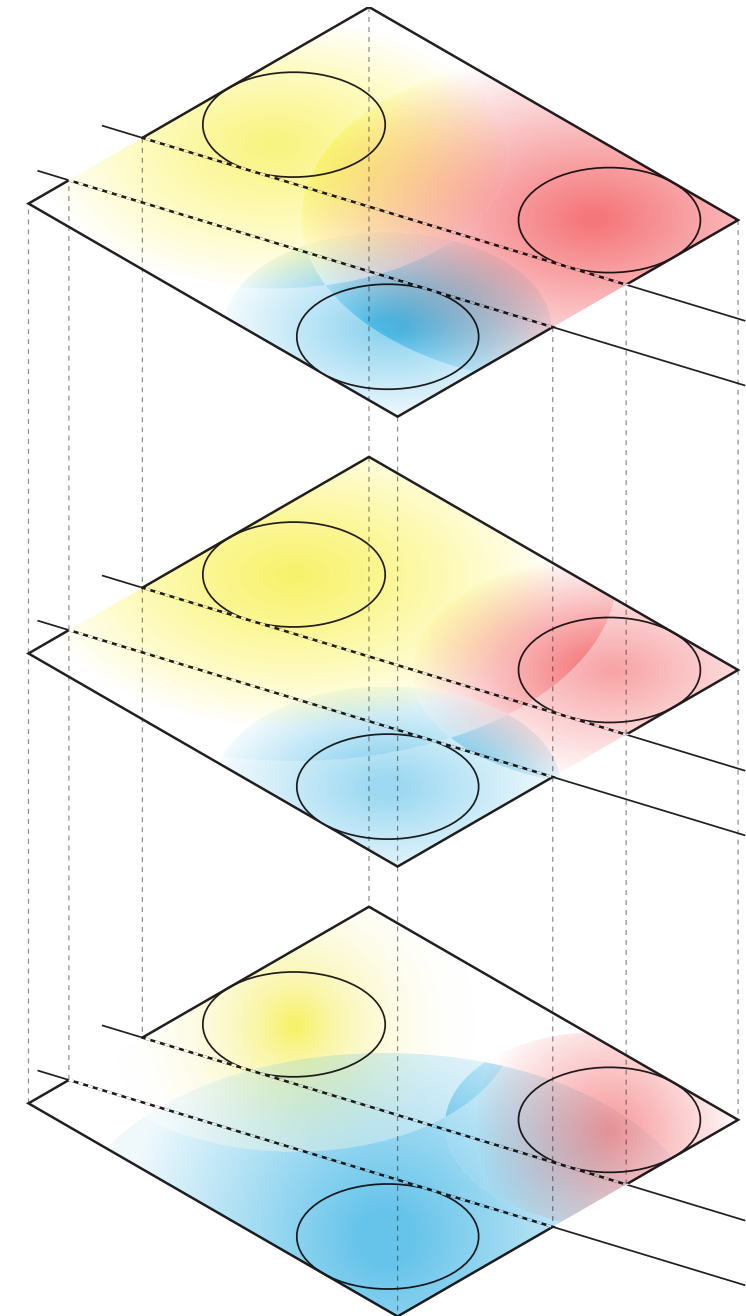
<b>Land Use Area</b>							
<b>Library</b>	<b>People</b>	<b>Gross Building Area</b>	<b>Floors</b>	<b>Building Footprint</b>	<b>GAC</b>	<b>Land Area</b>	
Building	984	68133	3	22711	25%	28388.75	
Parking							
	Staff	16	2592	1	2592	70%	3240
	Public	150	24300	2	12150	70%	15187.5
	<b>984</b>	<b>95025</b>		<b>37453</b>		<b>46816.25</b>	

Left: Figure 14  
 Top -Right: Figure 15  
 Bottom-Right: Figure 16

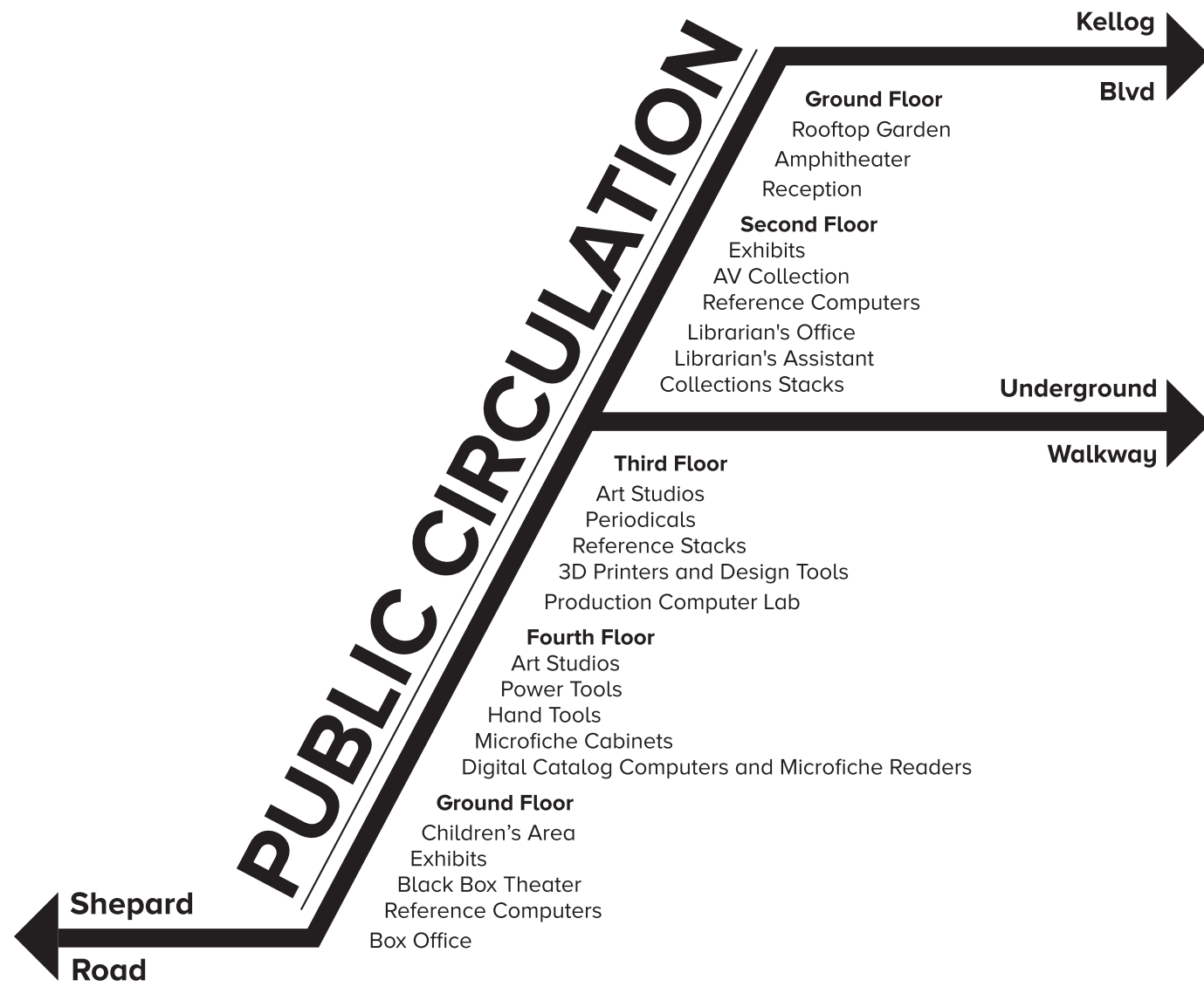


Space diagram showing the relationship between function and size through bubble size; usage throughout the day (x-axis), and typical transport type of visitors of that space (y-axis).

Left: Figure 17  
Right: Figure 18

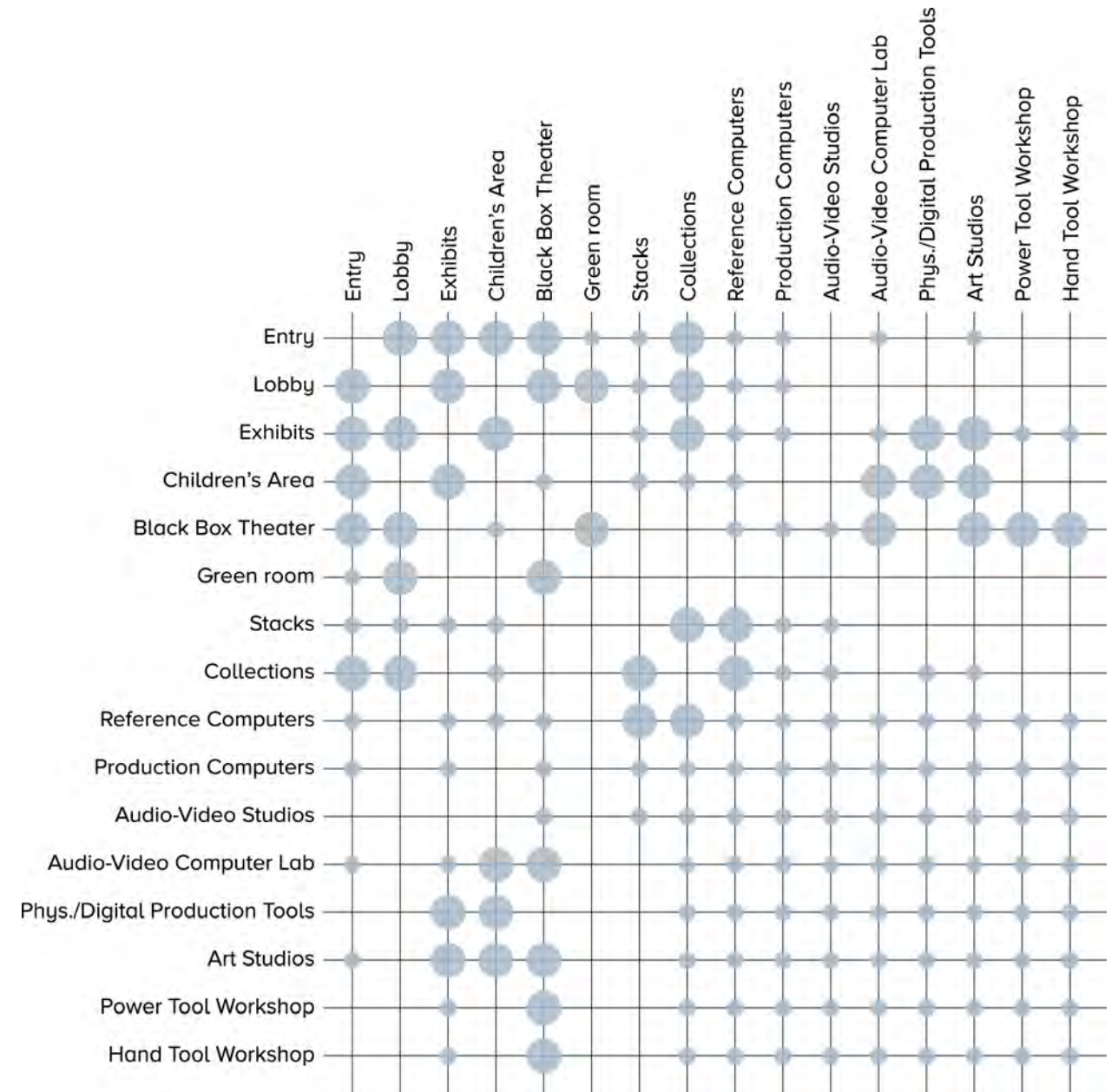


Relationship diagram showing staff-allocated spaces (outlined) versus user-appropriated spaces (color gradients), with a central circulation channel. The colors signify three different zones, (literature, fine arts, production/ industrial), but not specifically. The colors are to emphasize how activities on one floor may overlap differently than on others.



Early Floor-by-floor breakdown to begin to show the distribution of activities through multiple floors, as well as the significant presence of public circulation.

Left: Figure 19  
Right: Figure 20



Relationship Matrix



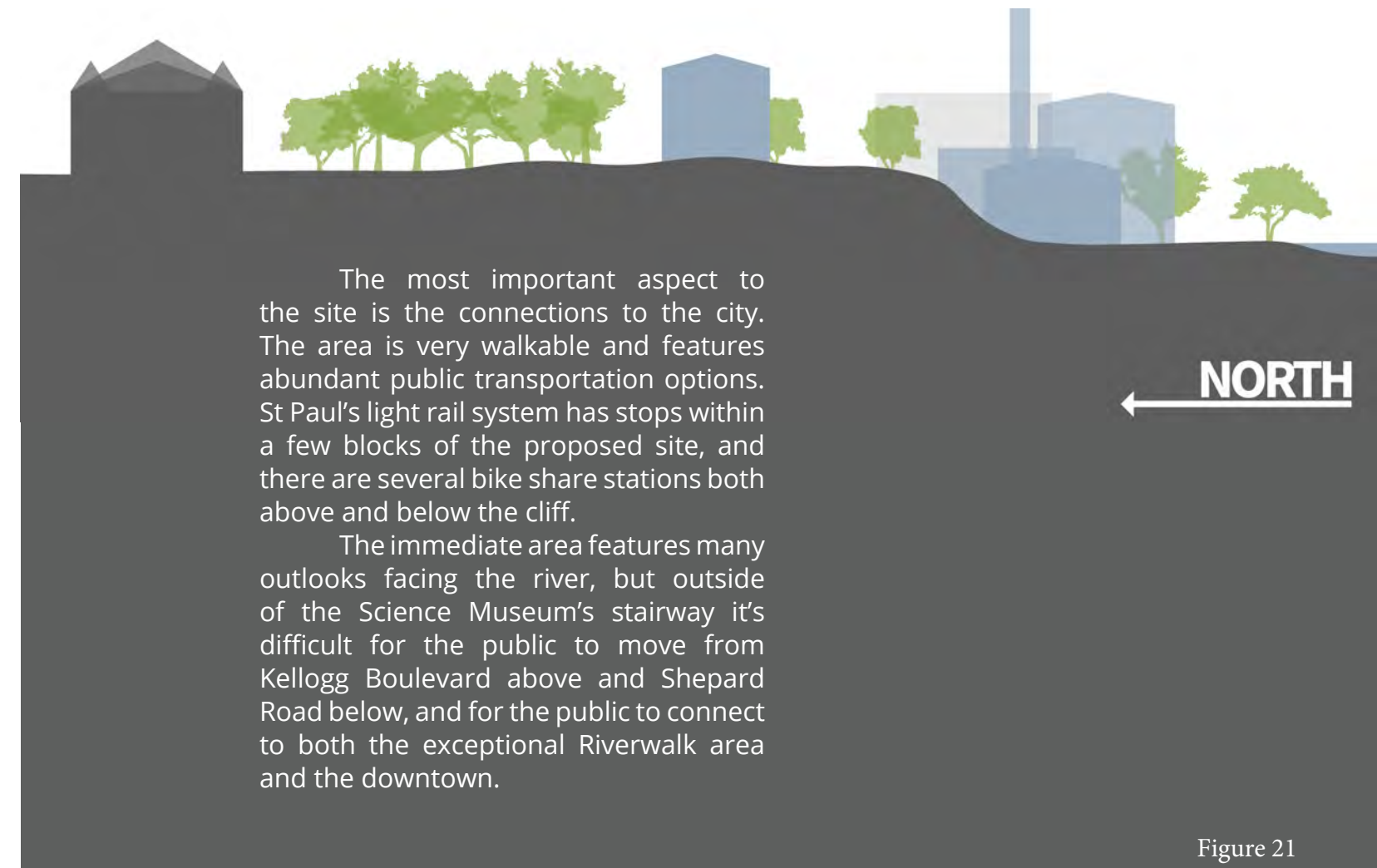
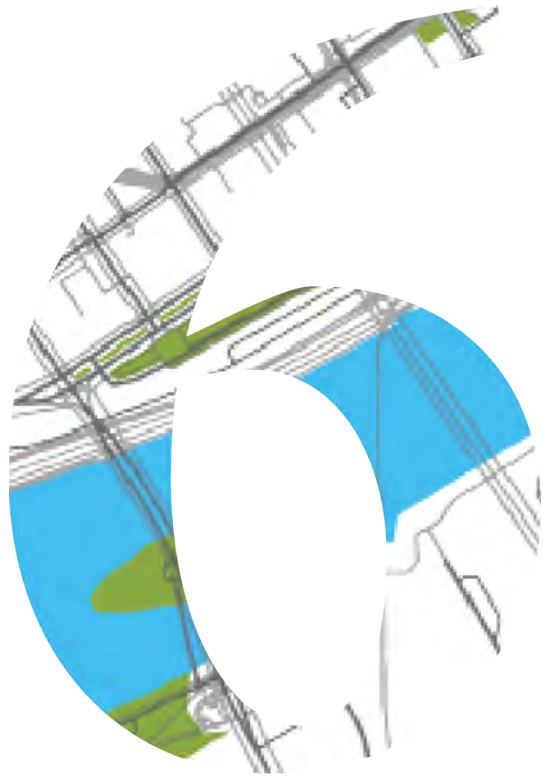


Figure 21



Figure 22



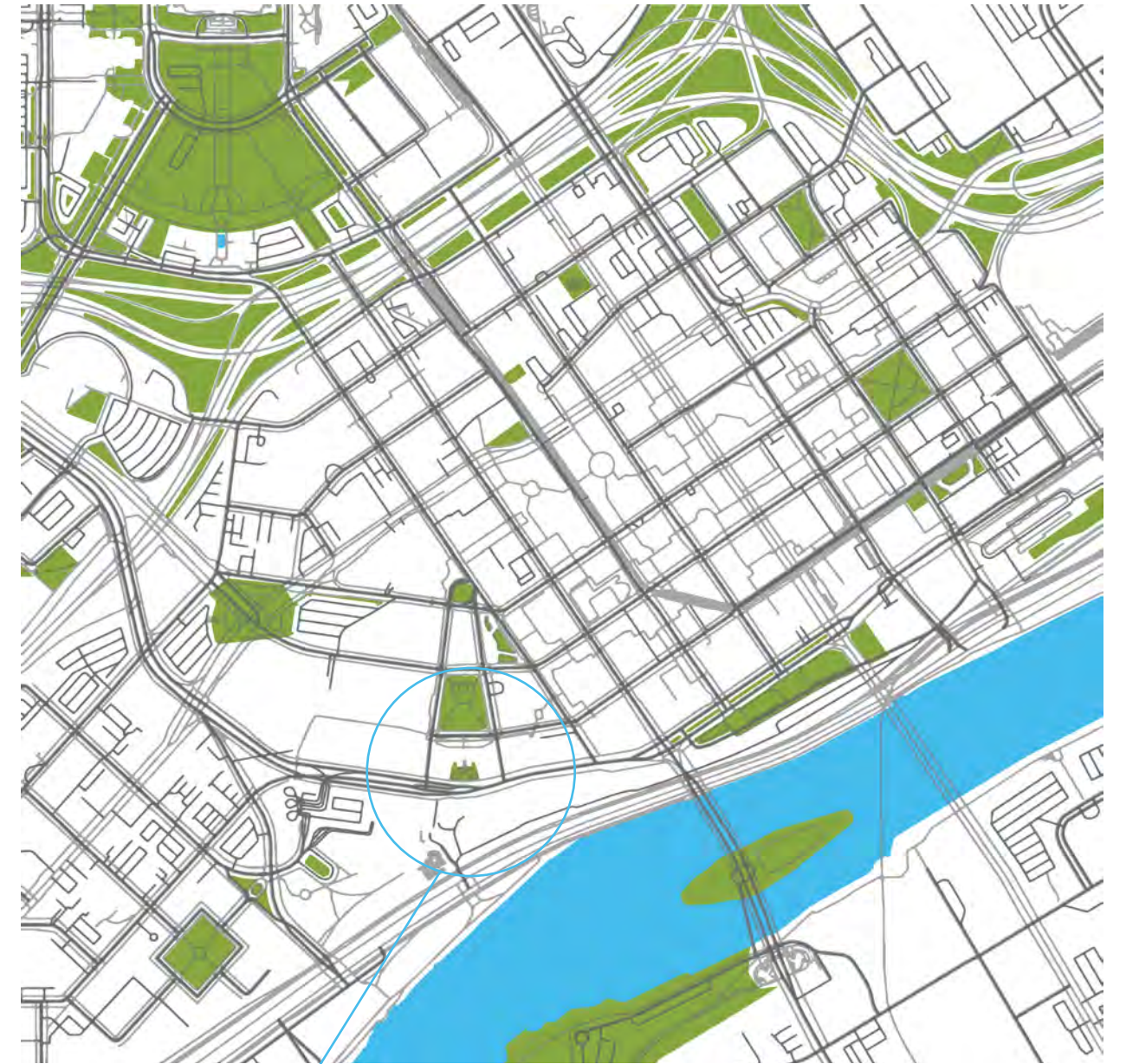
Figure 23



Figure 24



Figure 25



Top: Figure 26  
Bottom: Figure 27



The project is located in St Paul, Minnesota, and will be designed in accordance with the 2015 Minnesota Building Code.

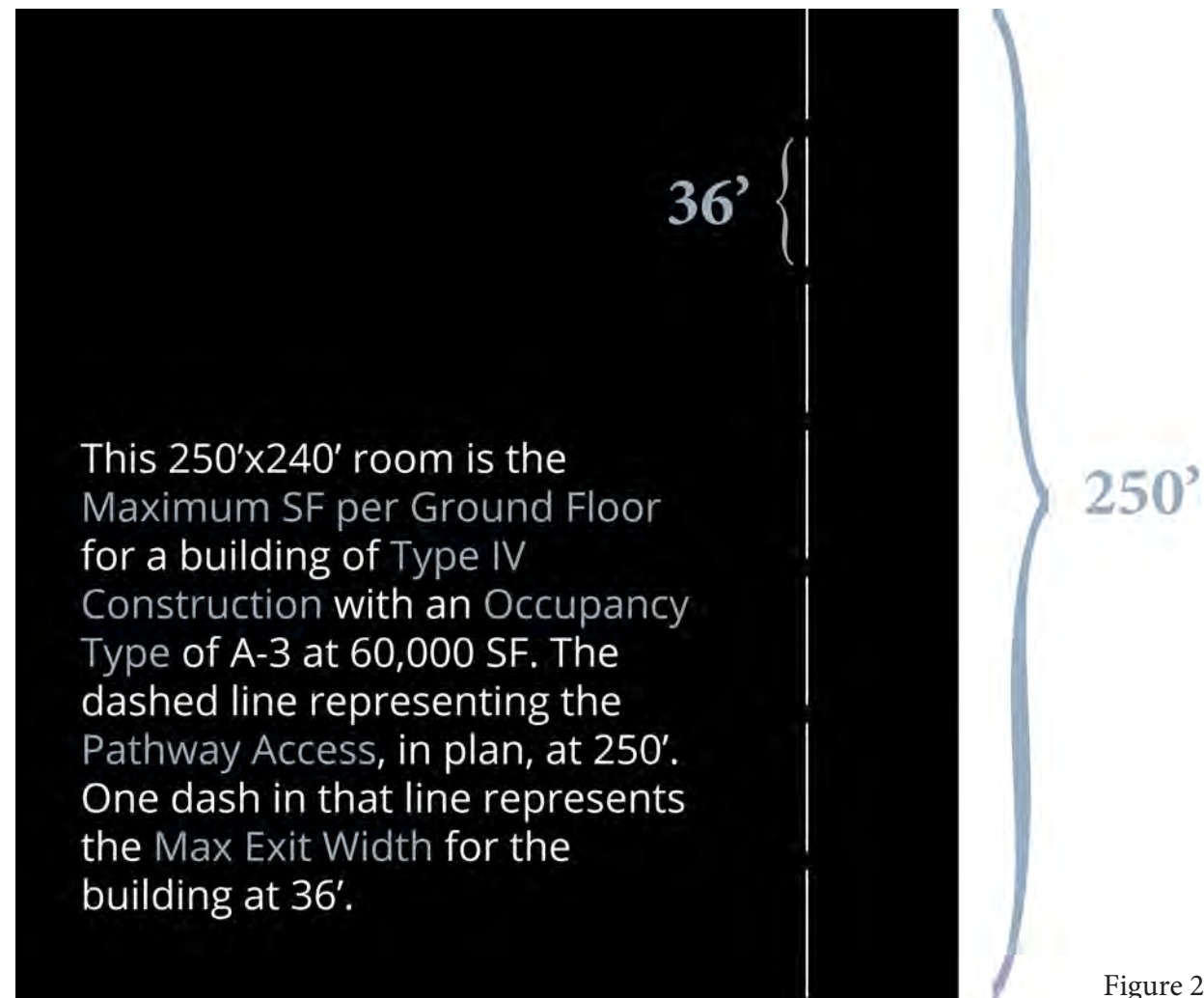
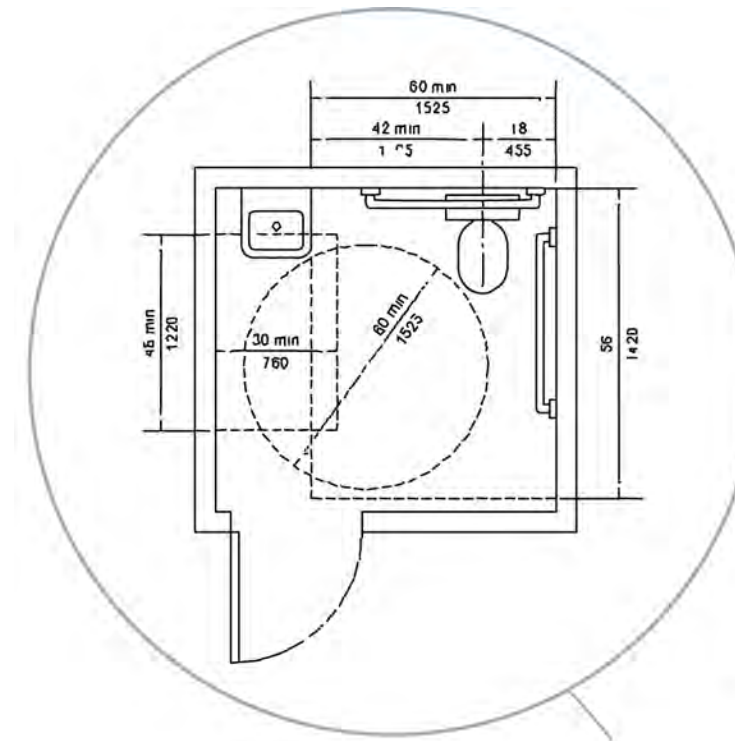


Figure 28



This is the typical Toilet Room Access Size. It also illustrates an ADA Door Width; a minimum of 32".



This is the Maximum Building Height, at 85'.

And this is a bathroom.





### Definitions of Research Direction

The first portion of the semester is dedicated to developing the building's program. It is in this phase that evaluative research methods will be of most use. This phase will incorporate historical precedent through texts and drawings, some from the original designer, some from scholars, to compare the ideas currently being applied to buildings from many years ago. The writings of Federica Goffi are of particular interest, and include drawings by architects of many eras as part of a thorough analysis.

The second portion of the semester is dedicated to building form. Interpretive research may be most applicable here as the architecture begins to take shape. The assessment and reassessment of values and ideas in order to apply them to future work is a useful tool as the design is now somewhat tangible and more impacted by public perceptions of what form should fit the program.

The third portion of the semester is dedicated to the accumulation of all of the data from the semester into a design result. The strength of the results of this form, and validity of the project as research, lie in how the process is framed for presentation. The presentation will utilize a multitude of visualization tools, including drawings and models, to convey and evoke as many feelings about the building as the research dictates.

Plan for Documentation

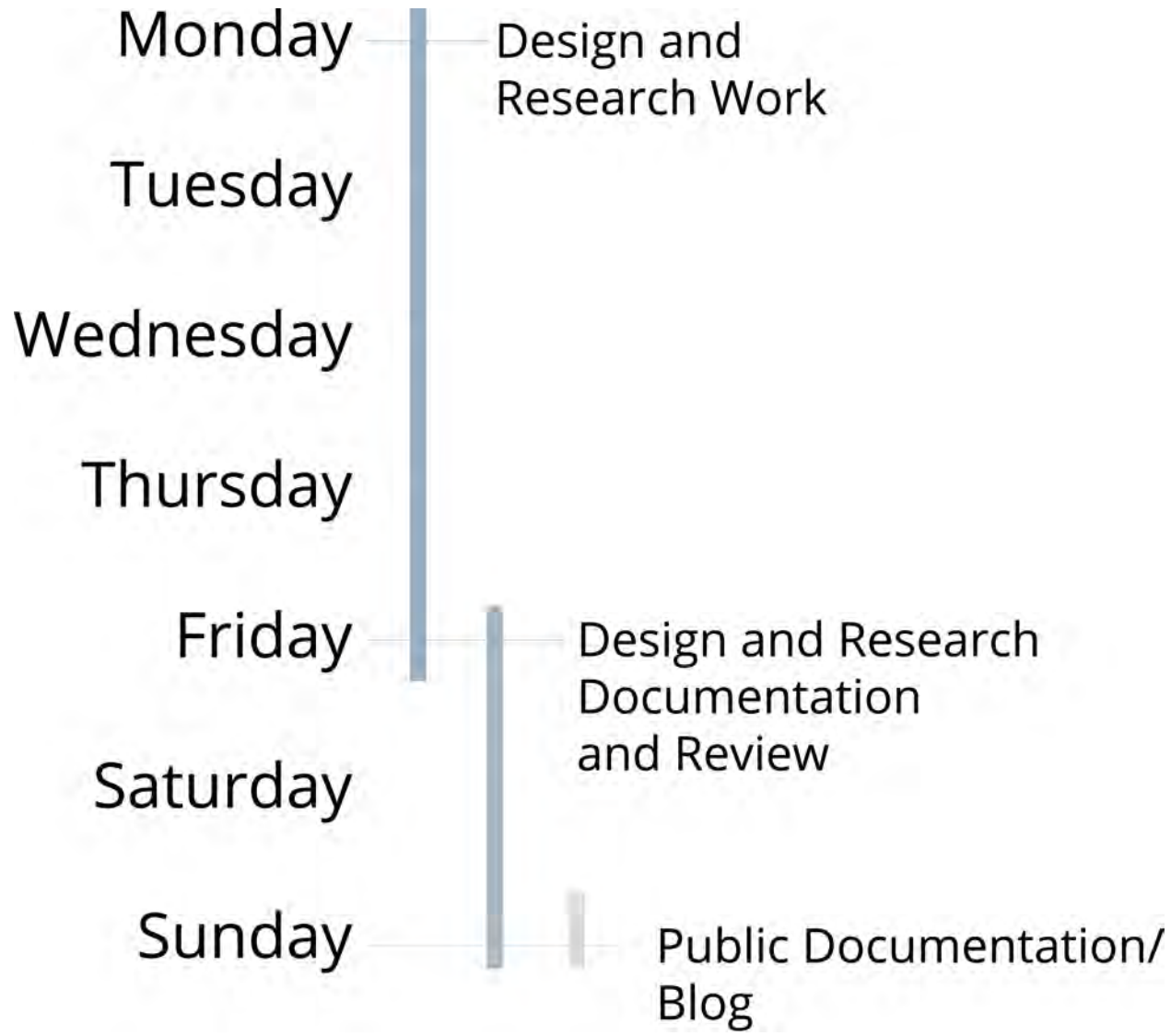
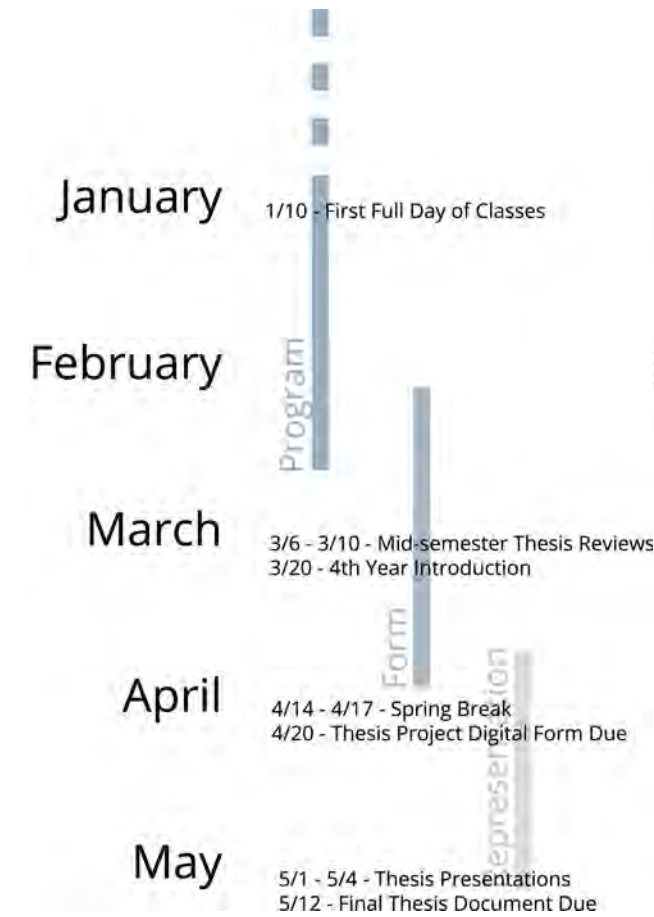
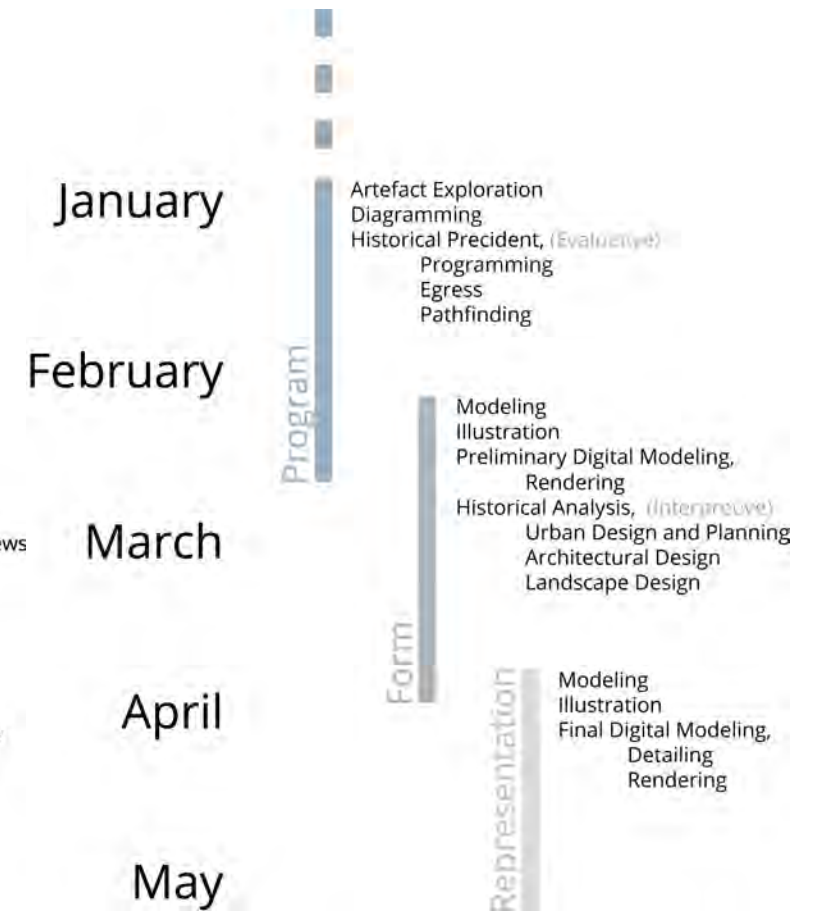


Figure 29

Semester Schedule



Plan for Design Methodology



Left: Figure 30  
Right: Figure 31

### Resources

Gallery of Architecture City Guide: Boston - 17. (n.d.). Retrieved December 10, 2016, from <http://www.archdaily.com/114206/architecture-city-guide-boston/stata-center>

Gómez, A. P. (2008). Built upon love: Architectural longing after ethics and aesthetics. Cambridge, MA: MIT.

Innovation Center UC - Anacleto Angelini / Alejandro Aravena | ELEMENTAL. (2014). Retrieved December 11, 2016, from <http://www.archdaily.com/549152/innovation-center-uc-anacleto-angelini-alejandro-aravena-elemental>

Minnesota Administrative Rules. (n.d.). Retrieved December 10, 2016, from [https://www.bing.com/cr?IG=CED0743BA43C41CC84EAF365904775D0&CID=35F74B1353BB69E1138B42F9528A684B&rd=1&h=9knAZ4EWq-Rxd-silU971ls\\_pkubD5pajK5ryePsTtc&v=1&r=https://www.revisor.mn.gov/rules/?id=1300.1300&p=DevEx,5070.1](https://www.bing.com/cr?IG=CED0743BA43C41CC84EAF365904775D0&CID=35F74B1353BB69E1138B42F9528A684B&rd=1&h=9knAZ4EWq-Rxd-silU971ls_pkubD5pajK5ryePsTtc&v=1&r=https://www.revisor.mn.gov/rules/?id=1300.1300&p=DevEx,5070.1)

Tama Art University Library / Toyo Ito by Iwan Baan. (2009). Retrieved December 11, 2016, from <http://www.archdaily.com/22711/tama-art-university-library-toyo-ito-by-iwan-baan>



## Thesis Research

### Theoretical, Historical, and Cultural Context

In the early 21st century, communities are beginning to see a shift in how they handle media. With current social and economic forces in mind, a civic approach to any media, art, literature, or otherwise, that only affords space for digital devices and a help desk will make it difficult for communities to make to accommodate new applications of technology and new ideas.

Today there is a need for a reimagining of what our communities offer to media. As we move forward, we must ask what our architecture says about our relationship with knowledge. This integration requires taking a step back to look at how we have handled media in the past, how that has developed, and how it can work in the context of communities as part of a larger world. As we move forward, we must ask what our architecture says about our relationship with knowledge.





Figure 32

Our capacity for communication is the reflection of ourselves. Alberto Perez-Gomez discusses the origin of architecture and its correspondence with the origin of culture in *Built Upon Love*, citing the writings of Vitruvius. Vitruvius describes the origins of flame that drew humans together and for which they learned to communicate and create language. Architecture was made from the need to house and protect fire, a gift from the gods, and coincides with this creation of culture. To protect the flame in the clearing of the forest, we came together, began to communicate, and began to build, all because of a space that facilitated this.



Figure 33

### Record Collections

Texts, even records of transactions, were the world. The Epic of Gilgamesh was a record of the world as much as a story, with imagination being inseparable from nature. The development of written record marks the beginning of history. Much later, the Greeks embodied their stories, though resisted the written language that saw adoption many years prior. The space of the clearing developed over time and created the space for participation in Greece. The space that facilitated discourse and ritual fostered the recognition of individuals and their relationship within society and the natural world.

Greek storytelling was primarily an oral tradition. As stories were considered living, the permanence of written language was not at all desirable. To write these stories down was to stop their ability to grow. This oral tradition made ritual of myth. Communities performed the recitation of story. This recitation eventually became an embodiment of the story, moving beyond narration, with individuals acting the parts of characters in the story, embodying their personalities and their divinity for a time.

The presence and dedication of architectural space in the center of the Greek city notes the importance of ritual of Greek oral traditions and alludes to an echo of the clearing Perez-Gomez

discusses. In the heart of the Greek polis was their clearing, the agora, and the symbol of the clearing, the prytaneion. The prytaneion was important in Greek cities because it provided a space for the community to meet and greet, housing space for feast and ritual. This communal house provided a place for citizens to carry out ritual banquets and meetings, and to entertain foreign ambassadors visiting the city.

The prytaneion also housed objects of significance for the community. These objects were collected in large part to create a collective remembering and shared understanding. The objects held in the prytaneion were not collected for archival or for stylistic curation. They were instead held to remind citizens of crucial times in the city in a quasi-museum space. This collection created a space in which citizens could form and recall memories together to assess themselves and their actions, and to engage in democracy and justice. This space was not the only catalog found in Greek cities, but the function of this space in the prytaneion was unique because of the active role of the artifacts in discourse, as opposed to the archival qualities of the others throughout the city.

Along with space for nourishment and communication was the polis' fire. The prytaneion housed and protected the flame of Hestia, goddess of domestication, femininity, and stability. Hestia's pairing



Figure 34

with Hermes, the god associated with the masculine traits of communication, discussion and connection with the world, and interpretation, creates the allegory of dualities within the city. The masculine-feminine duality seen in the pairing between the two gods serves as a reminder of the inseparable nature of other relationships: public-private, personal-interpersonal, exterior-interior.

The placement of the symbol for these dualities in the city center is then critical to understanding the Greek's relationship to their public, and how the polis mirrors the clearing as these needs were met in the prytaneion. From the need to protect the fire came a place in which they could communicate. The stability and femininity of the flame's housing pairs with the masculinity of discussion; the mobility and changing nature of the space for discussion. Greeks were able to use the centers of their city as a space for shared mobility, using knowledge to move forward.

The prytaneion also served a purpose in the late life of cities. As these cities grew and reached a maximum capacity, Greek settlers utilized the flame of the polis in colonization. Settlers from Greek cities took from the flame as they settled throughout the region, hoping that it would spark the same communal spirit in the new settlement. The conquests of Alexander the Great resulted in settlements as far East as India

and as far West as Egypt. He gave Egypt to Ptolemy I Soter, beginning Egypt's Ptolemaic dynasty. Ptolemy eventually founded the Library of Alexandria in the 3rd century BCE.



Figure 35

### Centers for Scholarship

The Library of Alexandria is one of the most significant libraries in history. The library, founded in the 3rd Century BCE, was organized by Demetrius of Phaleron, a student of Aristotle, and styled after Aristotle's Lyceum, his school of philosophy in Athens. The library's founding and dedication to the Muses, the nine goddesses of the arts, was part of its relationship with the adjacent Musaeum, all creating a home for music, poetry, a school of philosophy, and a library. The Musaeum of Alexandria was a service provided by the Pharaoh for the purpose of scholarship and research as much as a means to boast the wealth service Egypt. Despite that, the Musaeum still housed some of the most influential scholars in history, including Archimedes and Euclid, each having a tremendous impact on the future practice of architecture.

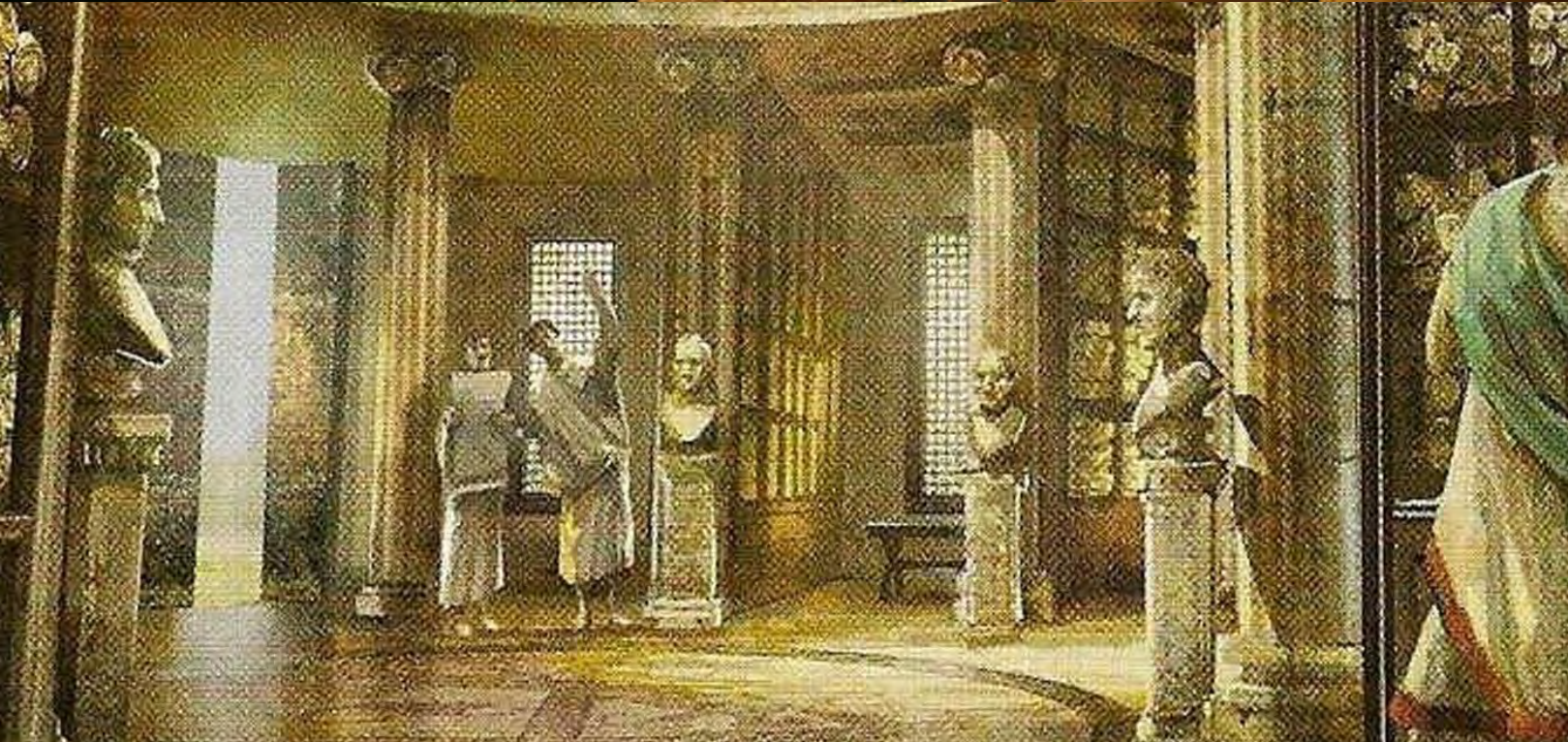
There was a shift in the space of participation in the Enlightenment, as rituals changed shape (e.g. Freemasonry). In "The Age of the World Picture," Martin Heidegger discusses the many phenomena of modernity and the impact on our reflections of ourselves. The advent of modern thought created a shift in perception of records. Records, even those of dreams and myth, became objects of experience when compared to the investigations of science. With specialization as the base of scientific progress, our position with knowledge

shifted from scholarship to research and results, and from discussion to verification. The change alters the driver for knowledge, putting the publisher in the front guiding the direction of the researcher.

With the 18th century began the establish new relationships between proprietor and user in the area of art. Many individuals opened personal collections to scholars and donated to institutions in the event of their death. This era marks a tremendous shift in the sense of ownership, with the well-endowed considering their collections as resources for many and treating them as such. One of the most significant examples is the British Museum.

The British Museum began as the personal collection of Sir Hans Sloane, described as a cabinet of curiosities, opened in a home given to the crown. The museum opened in 1751 as a "universal museum" featuring a wide variety of objects, the museum contained over "71,000 objects of all kind ... [and] 50,000 books, prints, and manuscripts." The museum also received the right to a first copy of every book published in the country, which allows the museum's library to expand directly with the culture of the country.

The British Museum existed in the same way as the Library of Alexandria centuries later in an entirely different



Top: Figure 36  
Bottom: Figure 37

world. The relationship between owner and user, and even in its idols throughout, highlights the similarities. These elements all point to the works within and the powers and inspirations from the larger world. The change in inspirations and powers underlines the difference between the Library of Alexandria and the British Museum. Those differences signify a change in our relationship with works of art and literature, with the provider becoming members of society in place of Pharos, and idols shifting from the Muses to the great men of the Enlightenment.

The British Museum and the Library of Alexandria each carry the torch, providing public space for discussion, storage of significant artifacts, and discussion among their community members; the thread of the gift of fire and creation of architecture in the clearing. Heidegger notes in "Age of the World Picture" that with modern thought, the artwork moves from record to a different communication as an object of experience. The organization of these objects in a house echoes the housing of artifacts in the prytaneion. As a housing for both domestication and discussion, the spirit of the agora lives through the new architecture of the museum with the adaptation of a new mentality. This echo is not possible without a change in the position of art and its relationship to knowledge.

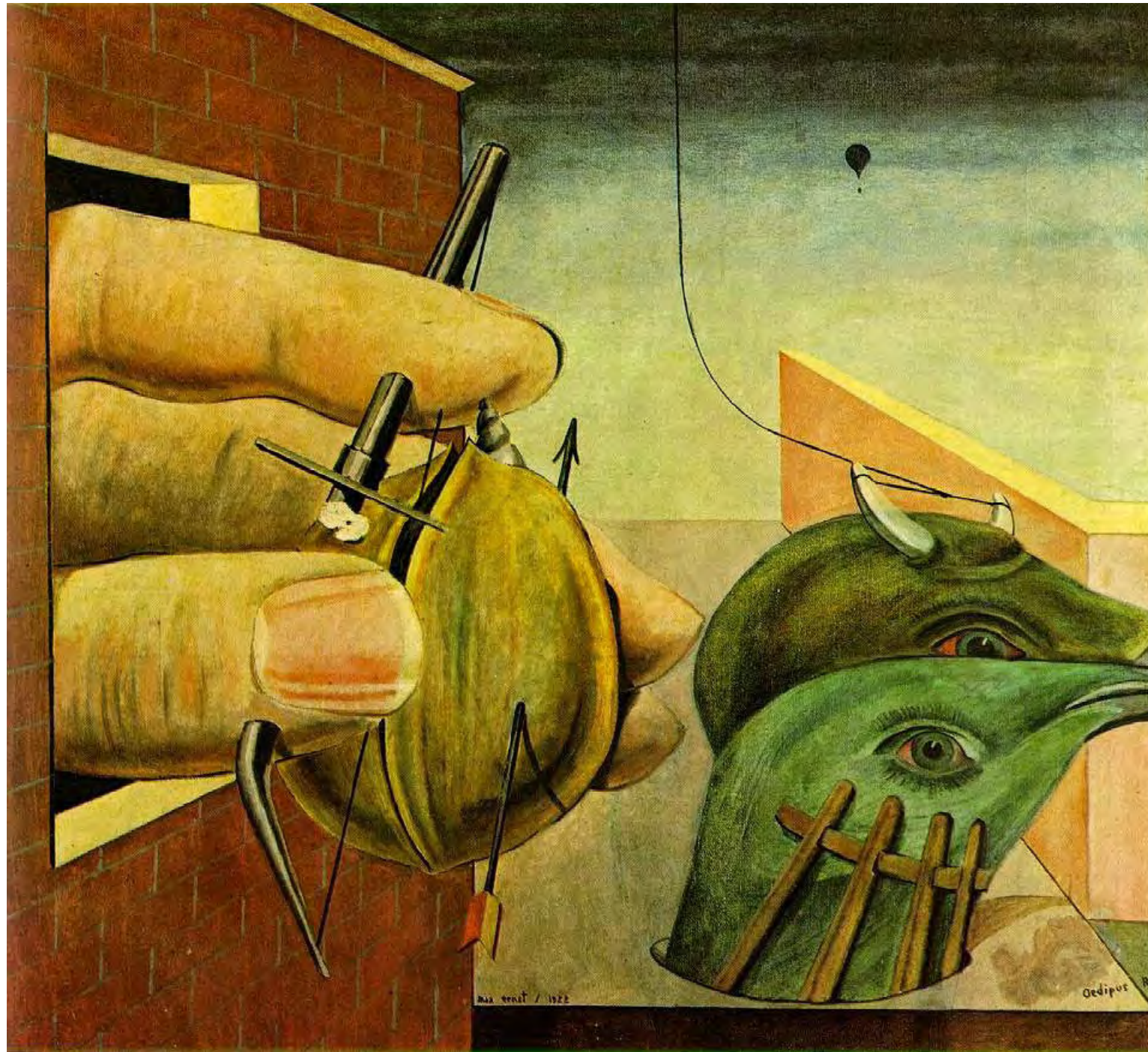


Figure 38

### Fragmentation

The history of knowledge thus far has shown the development from the documentation of existence to include works that show artistic and intellectual value. This process has transformed literature into an object itself. This transformation is an act of fragmentation, traced through the development of works and the architecture around them. Fragments are many things; a stone from a broken building sculpted into a new work, a classic book isolated on a special shelf, a town with a simulated vernacular. Each example holds elements that reference things outside of their new context. Ultimately it is in modern action, processes of division and isolation, that creates fragments; objects pointing to different wholes.

Dalibor Vesely describes effects of fragment as having both destructive and healing qualities. The history of our relationship with knowledge traces the transformation of art from records of the world to experiential objects. This effect of modern thought has created fragmentation, traced through the objects and the architecture that houses them. Vesely's positive and negative aspects manifest in poetic and scientific acts, respectively. In scientific acts, empiricism breaks down the meaning of objects and reduces them to useful derivatives. In historical analysis, the negative factors of fragments are visible in the objectification

of the past. This manifests in architecture as reductions to language that don't convey experience: demands for square footage, building skins developed with non-inclusive algorithms.

The poetic and healing qualities of fragments manifest differently. Fragments have an ability to restore when they are used to point to the different whole, alluding to a world waiting to be called forth through expression. Vesely cites the work of Surrealists as strong positive uses of fragment, especially that of Max Ernst. His work, according to Vesely, utilizes the nature of collage as a "mechanism," bringing separate realities into one plane. The ability for fragment to heal comes in reuse, akin to the reclamation of the spoils of conquest. Ernst's work incorporates fragments in an illusionary way, combining elements that evoke many other situations to form one collage. These elements utilize scale, shade, color, and texture with the distance between fragments.

Vesely then compares Surrealist art to the work of Le Corbusier. The solarium atop the Charles de Beistegui apartment creates a room framed against and formed by the outside. The art of the Parisian cityscape adorns the walls of this rooftop, making something new with the old, allowing one to look both forward and backward simultaneously.



Figure 39

### Directions

Looking forward and backward through our architecture gives us a way to look through and to ideas, a way to remember the past and imagine something new. The modern library has traces of many of the buildings that have come before it. Assemblages like the indefinable curations of the cabinet of curiosities of the Renaissance come together with the intimate collections of our communities and regions like in the prytaneion, each with innumerable fragments within them. The significance of the public library moving forward now rests on the ability to help its visitors look back into many histories, thus mirroring the Roman Janus head. The head is the embodiment of the Roman god Janus. Janus is the namesake of January, the month of new beginning and reflection of the year past, the one who presides over every entry and departure. The embodiment on each arch graces the responsibility to join the past and future. Janus took the form of keystones in Roman arches to create the formal transition and to frame the fostering of memory and imagination. Marco Frascari discusses the Janus head in *Monsters of Architecture*, suggesting that the head is not to bring attention to the arch, but to instead to mark the nature of passing through.

Just as the Greeks and Romans did much earlier, modern architecture

must utilize modern fragments to guide the users of buildings to both remember and imagine. Looking again at the work of Le Corbusier, we can see fragments acting out the tendencies of the Janus through architecture. The space is treated both as an interior as well as open space, walled and open to the sky. The individual elements of the solarium each point to a different whole through the understanding of their cultural context and condition, with the elements further creating a continuity to make a communicative space. Elements like this give architecture a sense of memory, or a mnemonic depth.

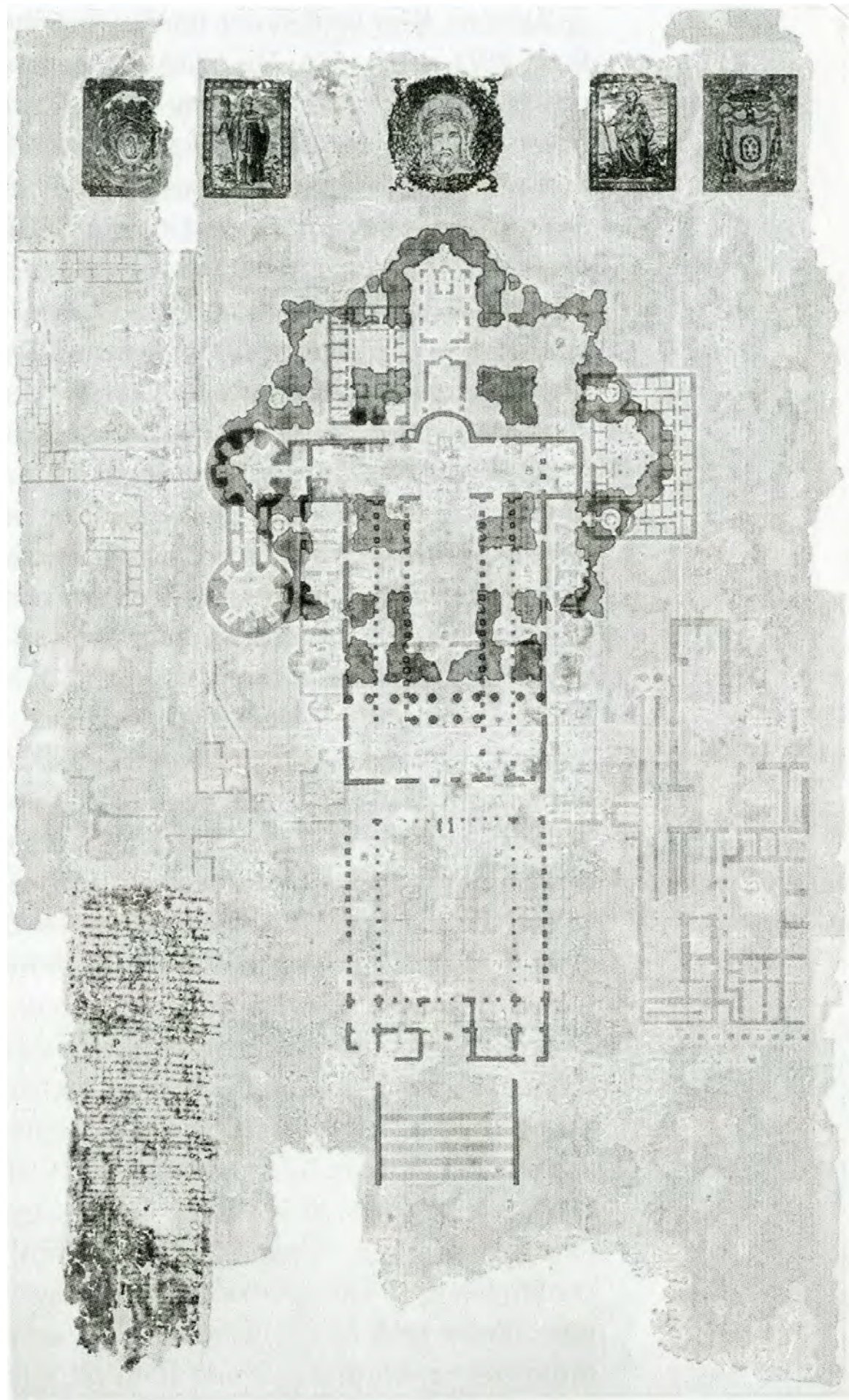


Figure 40

## Ruins

Mnemonic building is a typical function of human development. It can occur in the form of appropriating entire temples, and it can happen in the process of recovering stones from one building's demise for the creation of new forms. In *Time Matter(s)*, Federica Goffi discusses the temporal and atemporal constructions of St Peter's Basilica, and how at this time a building was never finished, and certainly not a finished product. The process of architecture included working and reworking far beyond the original design and is likened by Goffi to drawing, saying it too was looked at as an ongoing process.

Architectural artifacts, as fragments of and within a building, point to different wholes: different buildings, constructions, and works. Goffi's analysis shows the layered dimensions of the drawings of Tiberio Alfarano. His plans for St Peter's Basilica feature several layers, representing the plan of Old St Peter's along with the plan for the new. Every choice made by Alfarano was significant and suggest something beyond the plan. The gold paint of the walls of Old St Peter's representing a mythical body and spirit of the church, those walls' red undercoat representing the sacrifice of Peter, a layer of white wash on top of which began the drawing of New St Peter's and it is many layers. Each points to something beyond the technical to create continuity

between word and image.

The continuity seen in Alfarano's drawings breaks up the flow of time we perceive in our buildings today. The relationship between built, unbuilt, and building yet to be has changed to create an expectation of a finished project, and that one must mask the aging of a building. In the time of the construction of St Peter's, the construction of a cathedral could take several decades; New St Peter's took over 100 years on top of Old St Peter's which stood from around 326 CE to 1506 CE. Our current relationship with architecture is greatly benefited by looking more closely at a building's timeline to reexamine new and old, and to look forward and backward.

Gordon Matta-Clark, an artist with an educational background in architecture, produced many works that broke down our relationship with architecture. Matta-Clark was born to two artists in New York City, and godson of Marcel Duchamp's wife. He studied architecture at Cornell University, with a year at the Sorbonne, though never entered the field of architecture traditionally. With the artists' group Anarchitecture, Matta-Clark created works critical of the excess and permanence desired of architecture by creating massive deconstructions, rearrangings, and reformations with buildings. These incisions exposed the built structure to reflect our views of "destruction," as well as arbitrary





Figure 41

distinctions of property.

In *Splitting*, Matta-Clark reveals the layers of a residence in a way similar to Goffi revealing the layers of Alfarano's drawings. The section of the residential building reveals the structure, board and drywall, finishes, paint, dirt, blemishes, and more paint: the timeline of the building. This timeline highlights the particular relationship homeowners share with their building, which goes beyond architecture as a product. The homeowner, who typically owns very few buildings, is forced to fix issues and adapt to changes (structural, personal or otherwise). For many, there is no option of buying a new house, so they must take care to work with their existing conditions.

The idea of buildings as perpetually developing is not new, but it has required articulation to bring it forward out of a haze. Louis Kahn is one particular architect who has noted the relationship between occupant and a building's timeline. Kahn's position differs from that of a typical consumer of architecture, as he notes the spirit a building reveals to us.

*"I note that when a building is being made, free of servitude, its spirit to be is high—no blade of grass can grow in its wake. When the building stands complete and in use, it seems to want to tell you about the*

*adventure of its making. But all the parts locked in servitude make this story of little interest. When its use is spent and it becomes a ruin, the wonder of its beginning appears again. [...] Everyone who passes can hear the story it wants to tell about its making. It is no longer in servitude; the spirit is back."*

The phases of our buildings all have different relationships with their surroundings. The middle of the timeline Kahn gives highlights the same things Matta-Clark reveals with his work; both discuss the "finished" building. The building as a product requires upkeep to maintain the servitude of its parts that, during construction and later in decay, call out.

Whether with the joists of a two story house or the reinforced concrete Kahn used in Bangladesh, buildings want to tell you their personality, identity, and history. Matta-Clark exposed the negative fragments of building science to create an arrow with the structure pointing at his larger ideas. As with Kahn creation of a symbol for a new country's parliament, the Greeks' first facilitation of space for public participation, and the original clearing around the flame, Matta-Clark created a criticism and discussion through a building's personality.

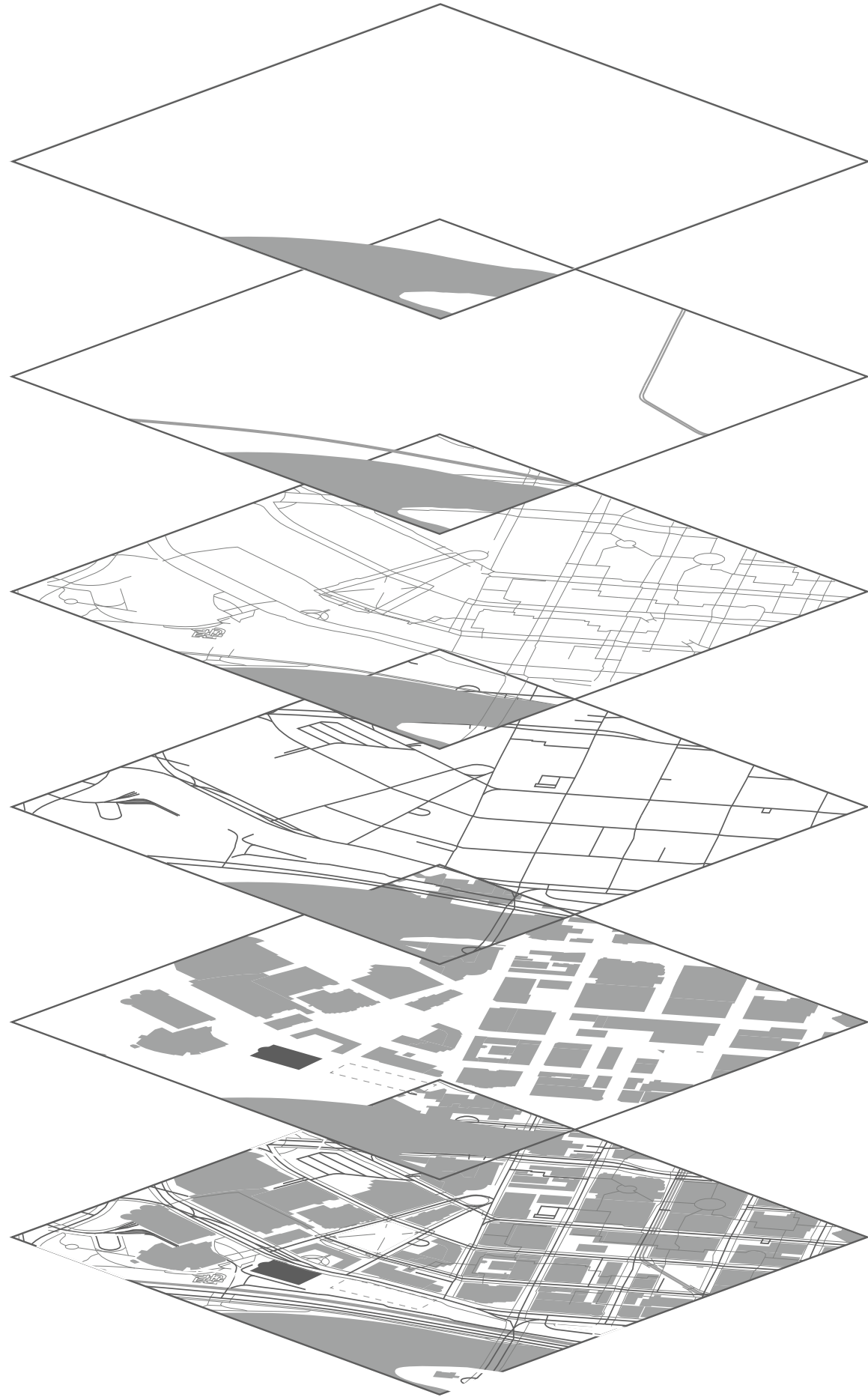


Figure 42

### Passing Through

We are currently at a point of pressure. Economic issues and the devaluing of ideas is forcing an act of contemplation and reflection. Our civic architecture should embody the Janus, opening its community to the possibilities of memory and imagination, giving a space that points beyond itself and allows us to do the same with our ideas. This project and the context given is only relevant if we accept that the architecture surrounding our art says just as much about our ideas as the works within it. Our approach to designing spaces for ideas, both recorded and in the process of being made, should reenter the public domain. Communities should be reminded of their place in relation to the ideas before them, as well as their place in the timeline of their civic building.





**Water**

The site connects to the Mississippi river to the south. The riverwalk area includes a long parkway, cycling and walking paths along its entirety, and multiple historic ruins celebrating the history of the river's industrial and cultural importance.



Top: Figure 44  
Bottom: Figure 45



Figure 43

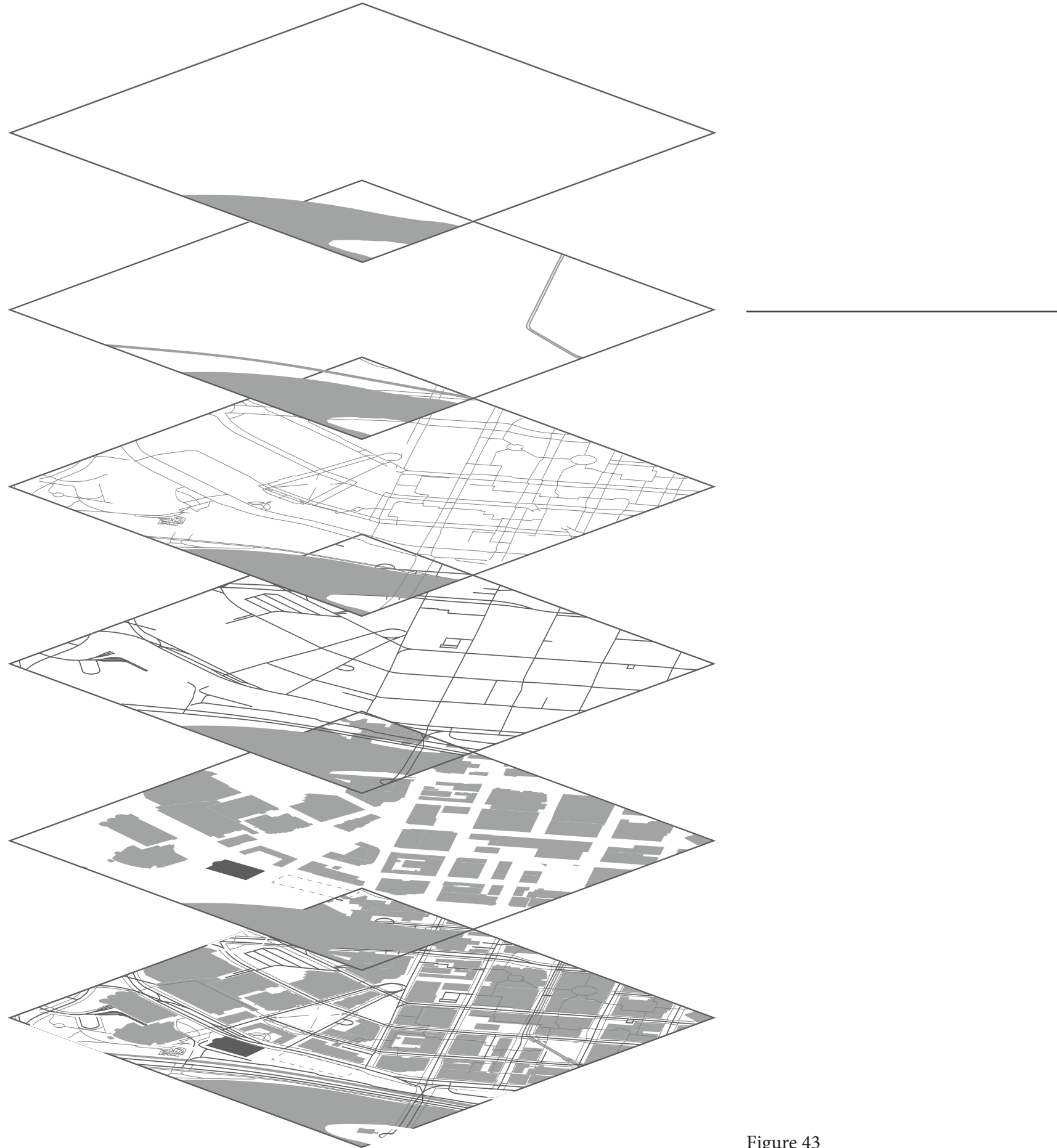
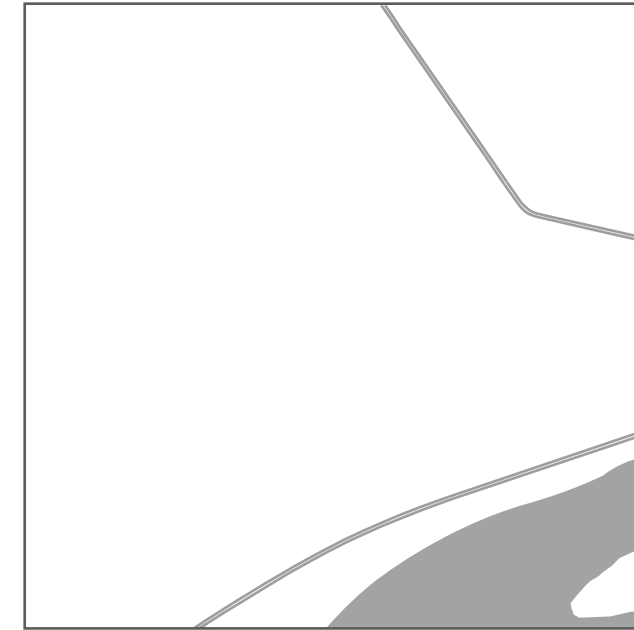


Figure 43



**Rail, Transit**

The center is surrounded by public transit and rail systems. The site is near the newly-constructed Green Line, connecting downtown St Paul to the Twin Cities' light rail system, as well as industrial and Amtrak trains.

Top: Figure 46  
Bottom: Figure 47



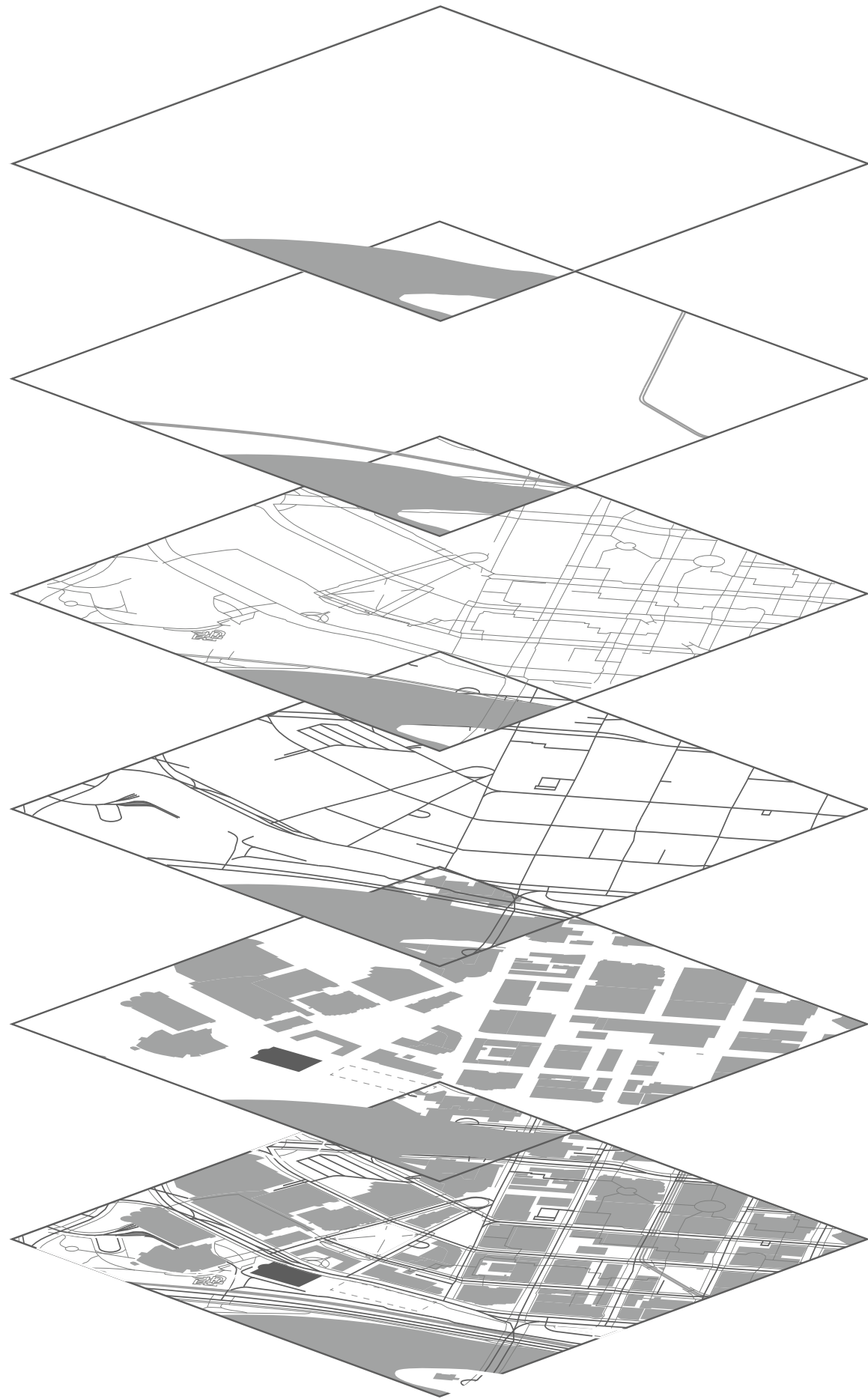


Figure 43



**Pedestrian**

The area is friendly to pedestrians, with the density of the city as well as verdant features along the Mississippi. The Twin Cities also features a strong cycling culture, and offers a bike share system with broad reach across the metro.

Top: Figure 48  
Bottom: Figure 49



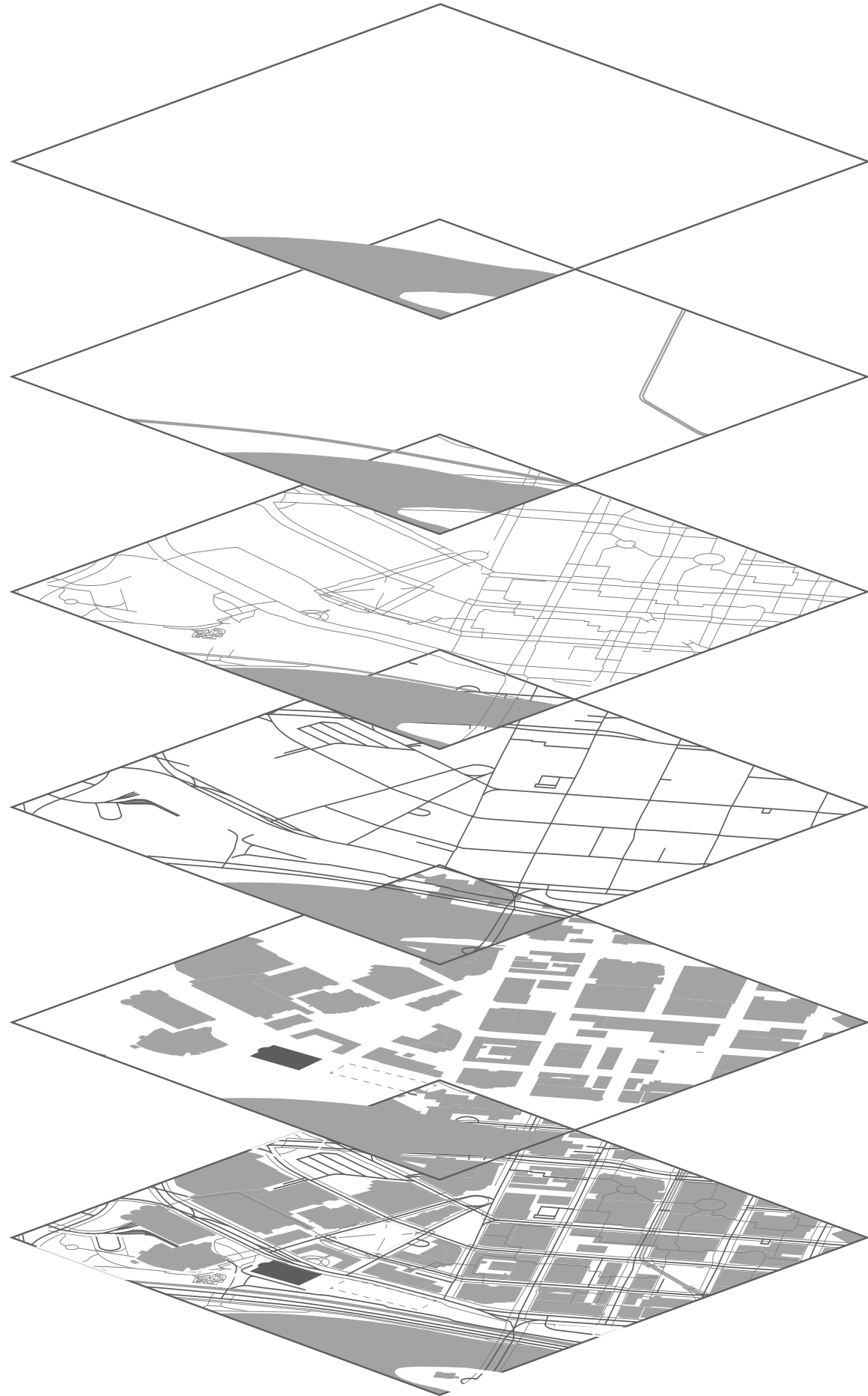


Figure 43



**Roads**

This area is flanked by two of St Paul's most heavily-traveled streets in Kellogg Blvd and Shepard Road, and is next to the dense downtown area.

Top: Figure 50  
Bottom: Figure 51



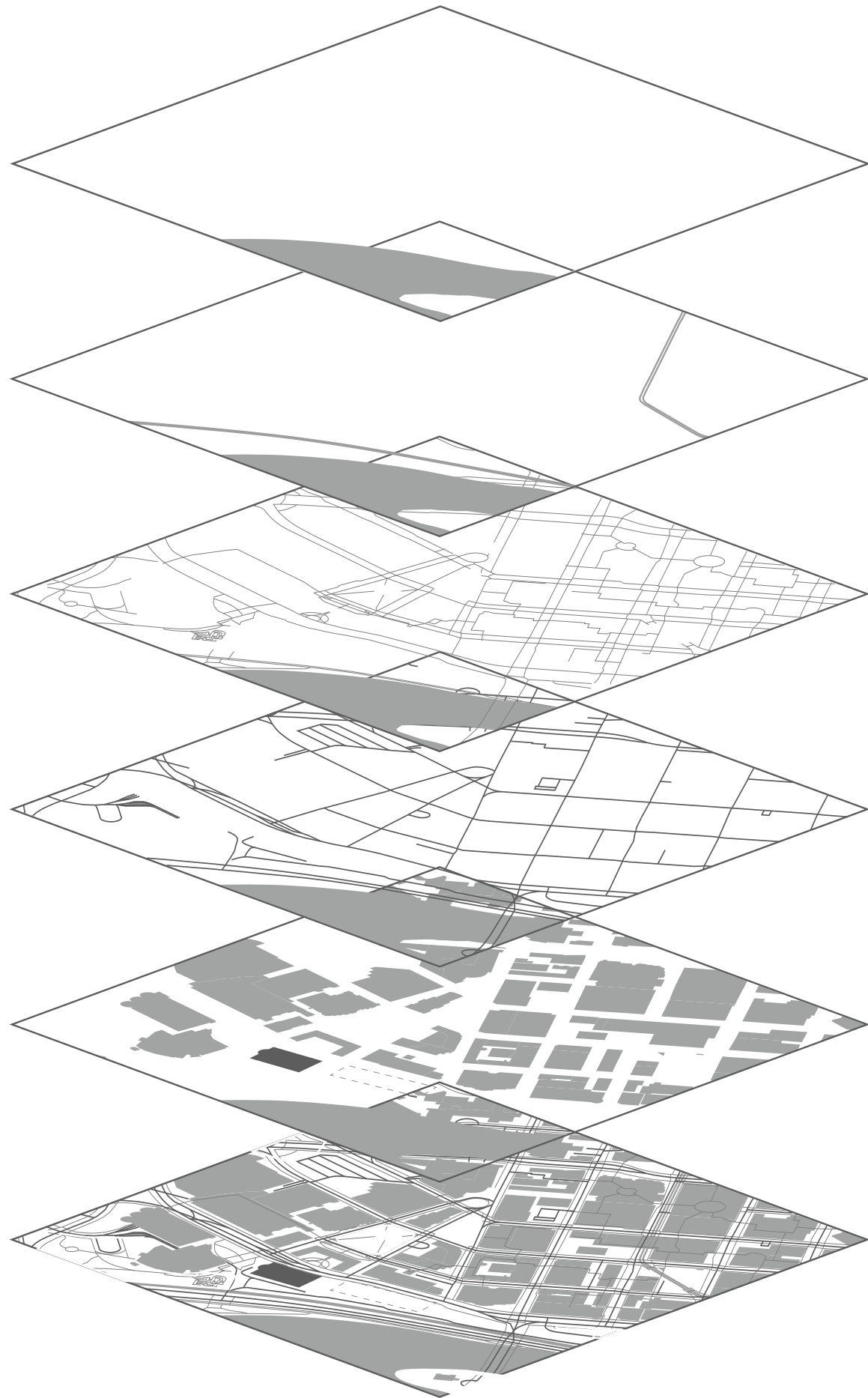


Figure 43



**Built Environment**

The surrounding area of the site includes a wide variety of cultural, civic, and commercial spaces. Immediate surroundings include the Xcel Energy Center, Ordway Center for Performing Arts, St Paul City Hall, and the George Latimer Public Library.

Top: Figure 52  
 Bottom: Figure 53





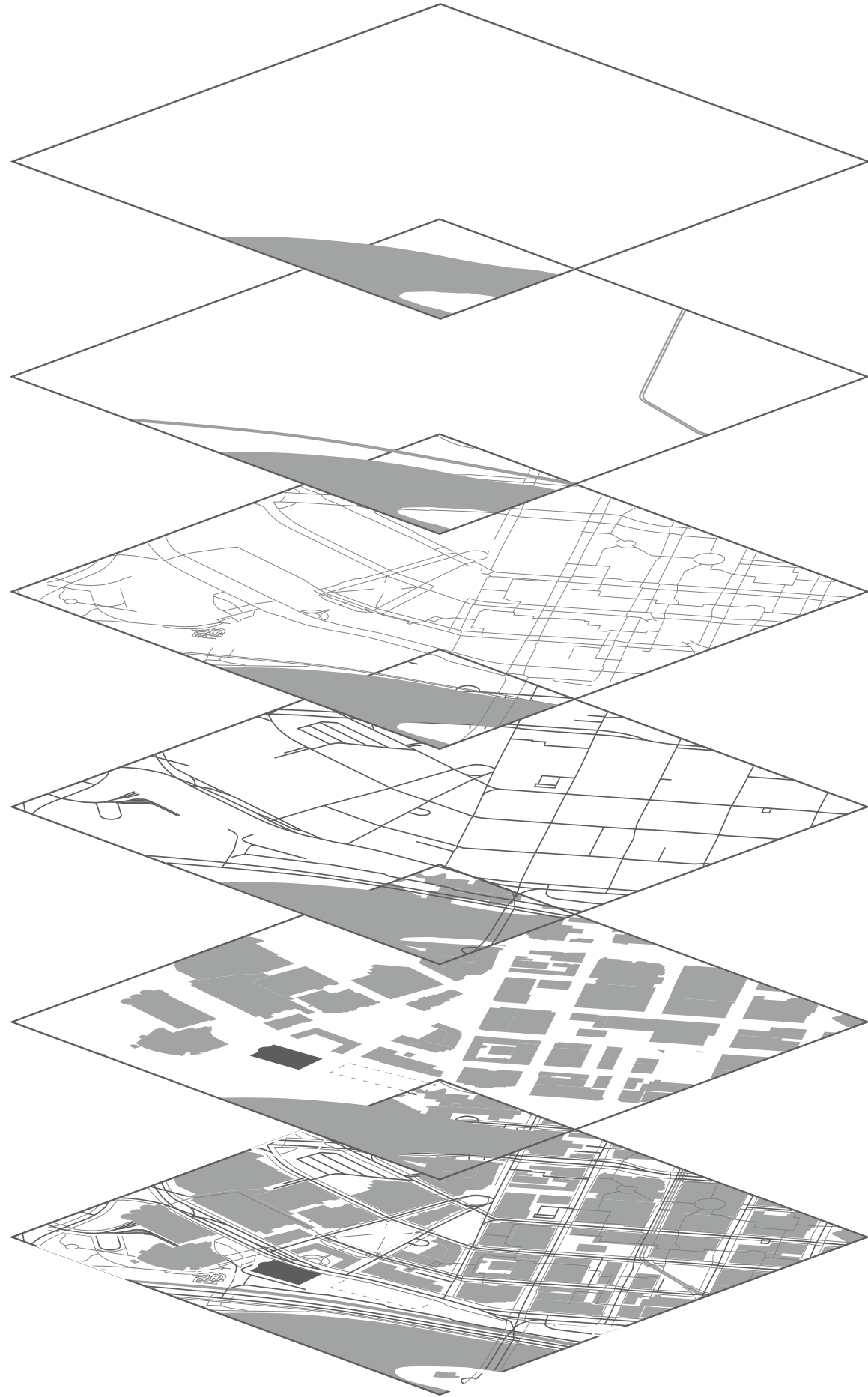
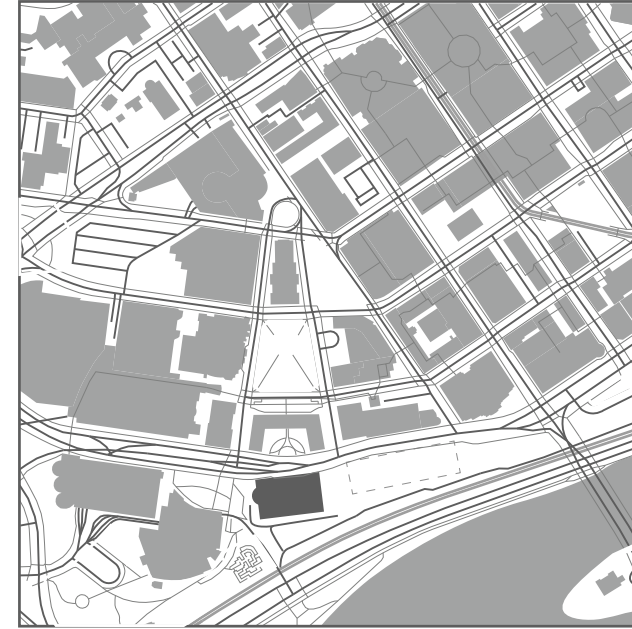


Figure 43



**St Paul, Minnesota**

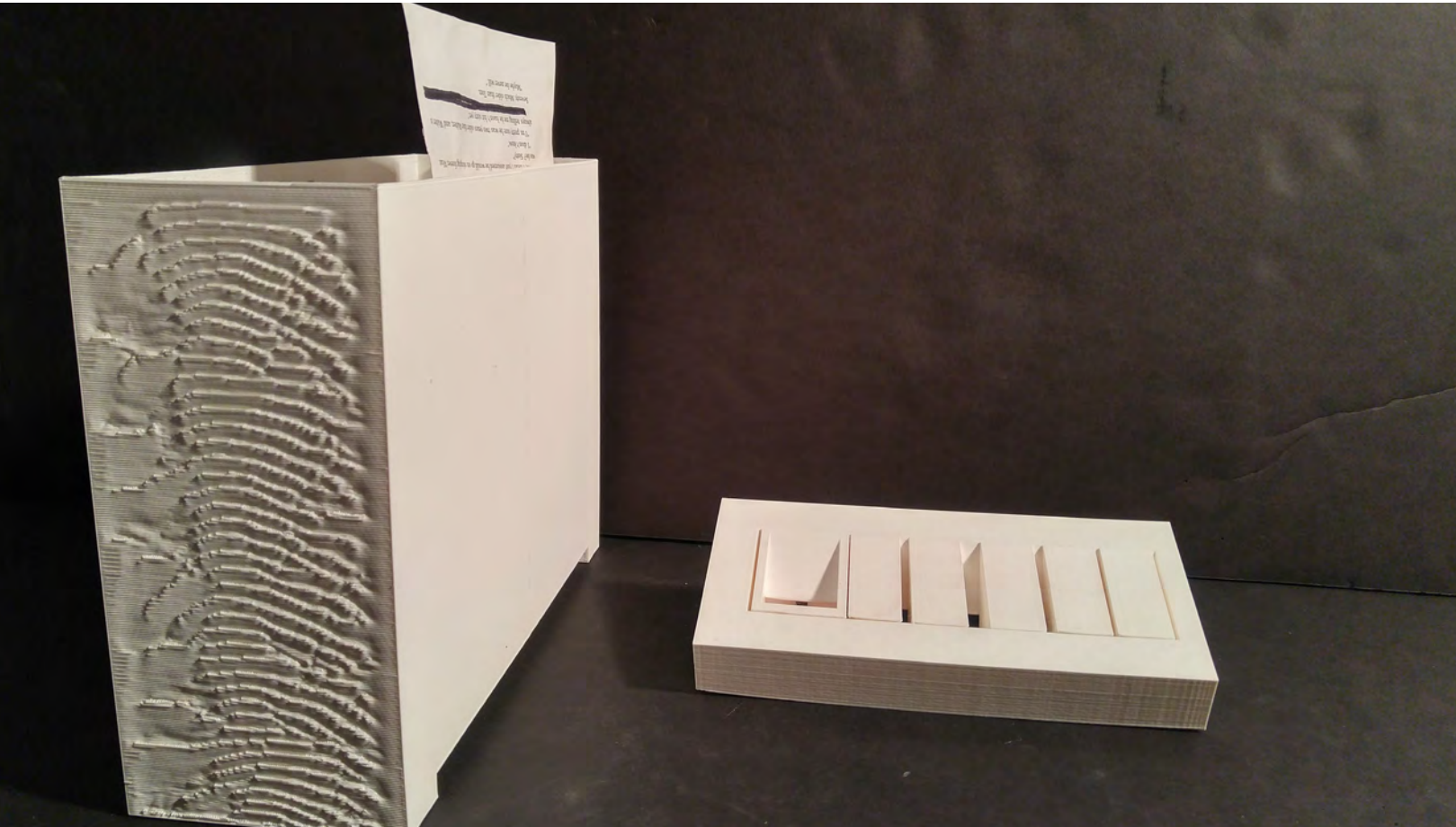
St Paul is the capital of the state of Minnesota. The town was officially incorporated in the Spring of 1854, but served as an economic hub for French-Canadian traders for several decades prior .

Top: Figure 54  
Bottom: Figure 55



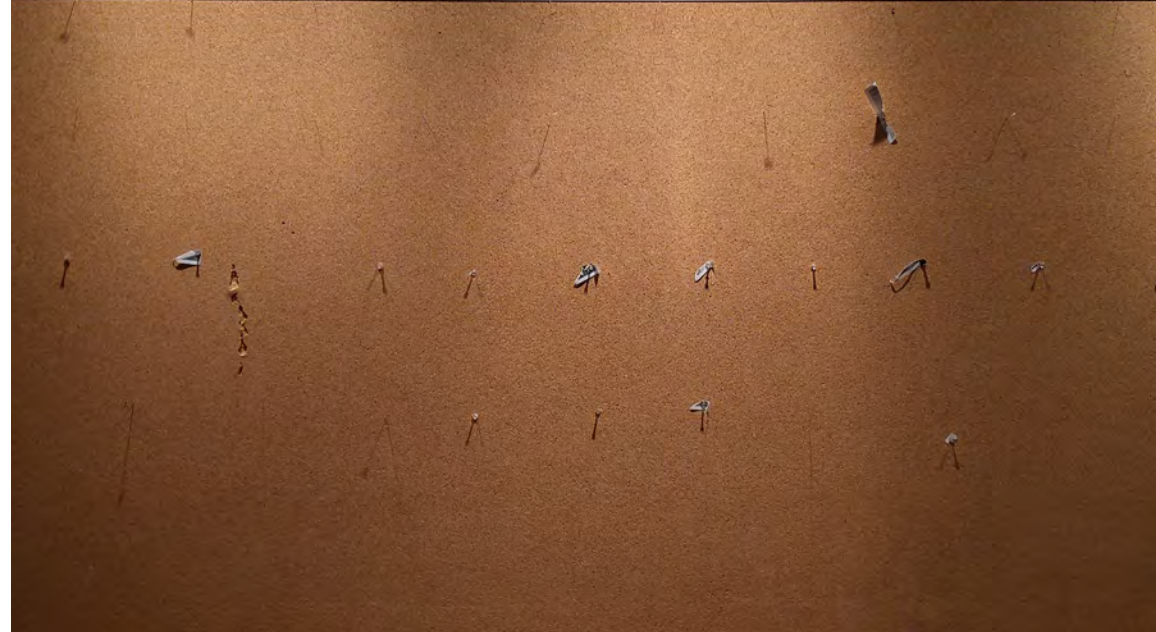
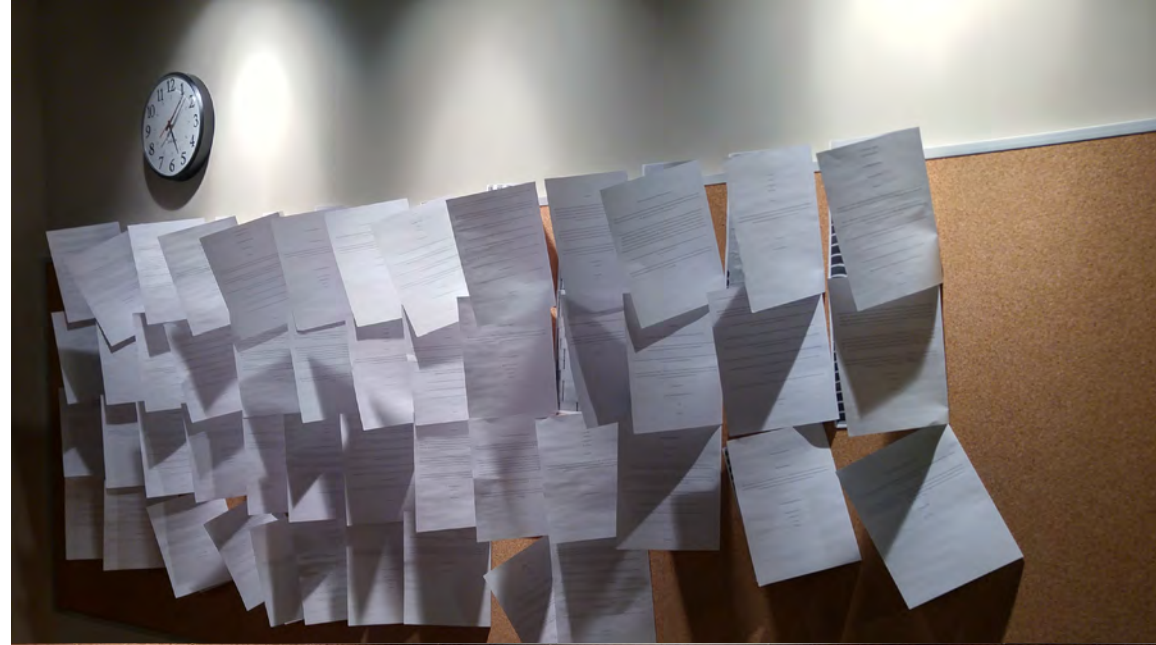


The process of imagining the architectural program through artefact has led to many discoveries about the incendiary character of knowledge. The artefact reconstructs letters from the historical contexts of the site by fragmenting and scattering, then asking a group to collect and reorder them through speech.



Page 99  
 Top: Figure 56  
 Bottom: Figure 57

Pg 100  
 Figure 58

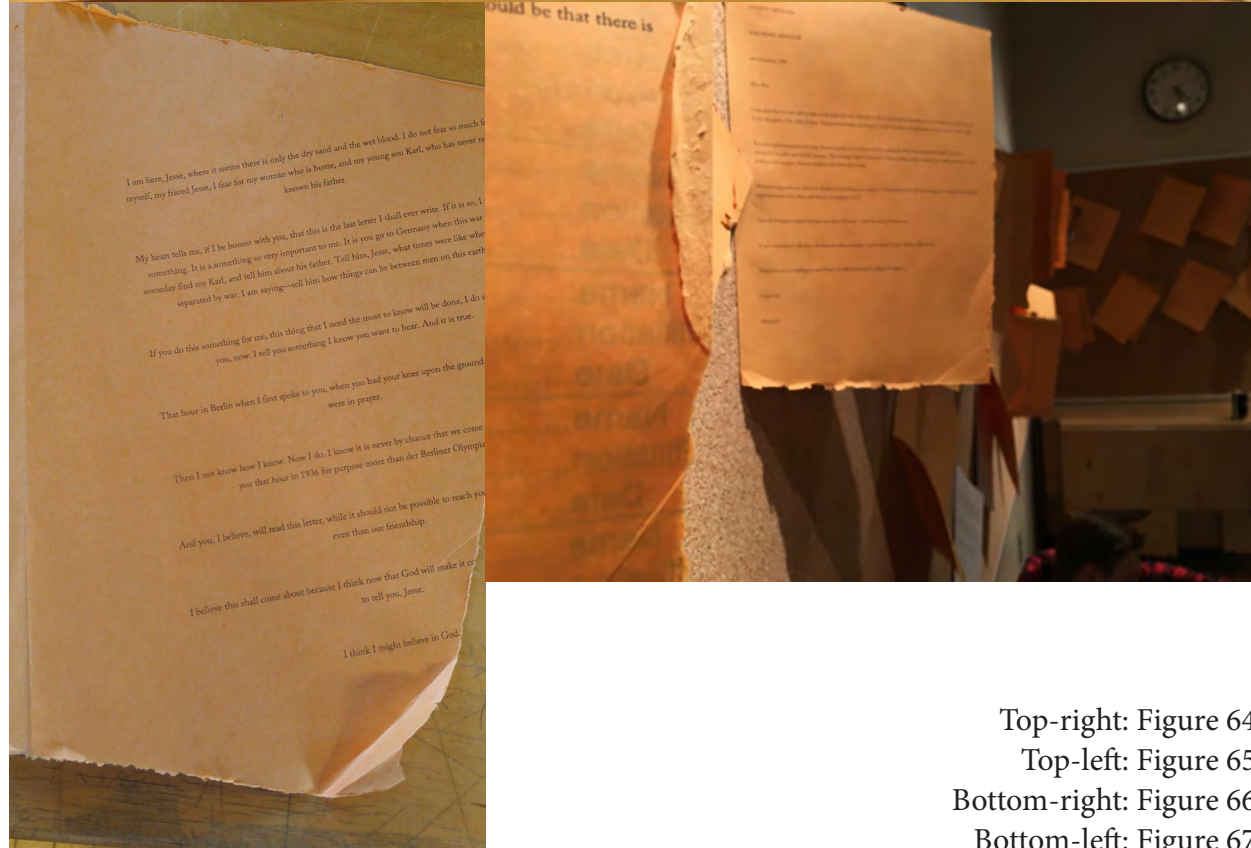


Page 101  
 Top: Figure 59  
 Middle: Figure 60  
 Bottom: Figure 61

Page 102  
 Figure 62

Page 103  
 Figure 63





Top-right: Figure 64  
 Top-left: Figure 65  
 Bottom-right: Figure 66  
 Bottom-left: Figure 67

Recitation melts the fragments of the letters together into a constellation of possibilities. Each new combination dances in a unique direction, creating an arrow for readers to seek more. With similar forces at work, the architecture will provide a new cultural center in St Paul, Minnesota.

*OLD LETTERS ARE SPLIT, EACH FRAGMENT OF A FORMER WHOLE TOSSED INTO THE ROOM LIKE FUEL INTO A HEARTH. THE NEW FIRE OF THE OLD LETTERS BURNS FASTER WITH THE BREATH OF EACH READER.*

I am here, Jesse, where it seems there is only the dry sand and the wet blood. I do not fear so much for myself, my friend Jesse, I fear for my woman who is home, and my young son Karl, who has never really known his father.

My heart tells me, if I be honest with you, that this is the last letter I shall ever write. If it is so, I ask you something. It is a something so very important to me. It is you go to Germany when this war is done, someday find my Karl, and tell him about his father. Tell him, Jesse, what times were like when we were not separated by war. I am saying—tell him how things can be between men on this earth.

If you do this something for me, this thing that I need the most to know will be done, I do something for you, now. I tell you something I know you want to hear. And it is true.

That hour in Berlin when I first spoke to you, when you had your knee upon the ground, I knew that you were in prayer.

Then I do not know how I know. Now I do. I know it is never by chance that we come together. I come to you that hour in 1936 for a purpose more than the Berliner Olympiade.

And you, I believe, will read this letter, while it should not be possible to reach you ever, for a purpose more even than our friendship.

I believe this shall come about because I think now that God will make it come about. This is what I have to tell you, Jesse.

I think I might believe in God.

And I pray to him that, even while it should not be possible for this to reach you ever, these words I write will still be read by you.

Your brother,  
Luz

Dear Mr Hill,

Seeing that I have seen your fantastically entertaining and award-winning film *The Sting*, starring Paul Newman and Robert Redford, and enjoyed it very much, it is all together fitting and proper that you should 'discover' me. Now, right away I know what you are thinking: 'Who is this kid?' and I can understand your apprehensions. I am a nobody. No one outside of Skyline High School has heard of me ... My looks are not stunning. I am not built like a Greek God, and I can't even grow a mustache, but I figure if people will pay to see certain films ... they will pay to see me.

Let's work out the details of my discovery. We can do it the way Lana Turner was discovered, me sitting on a soda shop stool, you walk in and notice me and – BANGO – I am a star. Or maybe we can do it this way. I stumble into your office one day and beg for a job. To get rid of me, you give me a stand-in part in your next film. While shooting the film, the star breaks his leg in the dressing room, and, because you are behind schedule already, you arbitrarily place me in his part and – BANGO – I am a star.

All of these plans are fine with me, or we could do it any way you would like, it makes no difference to me! But let's get things straight. Mr. Hill, I do not want to be some bigtime, Hollywood superstar with girls crawling all over me, just a hometown American boy who has hit the big-time, owns a Porsche, and calls Robert Redford 'Bob'.

Respectfully submitted,  
Your Pal Forever,

Thomas J Hanks

Tulsa Okla  
10th April  
Mr. Henry Ford  
Detroit Mich.

Dear Sir: -

While I still have got breath in my lungs I will tell you what a dandy car you make. I have drove Fords exclusivly when I could get away with one . For sustained speed and freedom from trouble the Ford has got ever other car skinned and even if my business hasen't been strickly legal it don't hurt enything to tell you what a fine car you got in the V8 -

Yours truly

Clyde Champion Barrow

tell Ea-nasir: Nanni sends the following message:

When you came, you said to me as follows : "I will give Gimil-Sin (when he comes) fine quality copper ingots." You left then but you did not do what you promised me. You put ingots which were not good before my messenger (Sit-Sin) and said: "If you want to take them, take them; if you do not want to take them, go away!"

What do you take me for, that you treat somebody like me with such contempt? I have sent as messengers gentlemen like ourselves to collect the bag with my mone y (deposited with you) but you have treated me with contempt by sending them back to me empty-handed several times, and that through enemy territory. Is there anyone among the merchants who trade with Telmun who has treated me in this way? You alone treat my messenger with contempt! On account of that one (trifling) mina of silver which I owe you, you feel free to speak in such a way, while I have given to the palace on your behalf 1,080 pounds of copper, and umi-abum has likewise given 1,080 pounds of copper, apart from what we both have had written on a sealed tablet to be kept in the temple of Samas.

How have you treated me for that copper? You have withheld my mone y bag from me in enemy territory; it is now up to you to restore (my mone y) to me in full.

Take cognizance that (from now on) I will not accept here any copper from you that is not of fine quality. I shall (from now on) select and take the ingots individually in my own yard, and I shall exercise against you my right of rejection because you have treated me with contempt.



Brooklyn, January 29th 1874.

Mrs. Kang and Ang,

We wish to negotiate with you about the Bodys of the twins it is a (?) subject but we wish you to answer by Return Mail the lowest price Cash. Confidential on our part you will oblige us very much. Name your price. We would not think of proposing the subject but we think it will be for the Benefit for the County as others may be so unfortunate.

We Remain Respectfully Yours

Rozell, Horton and Gray  
387 Myrtle Avenue  
Brooklyn  
N York

10 DOWNING STREET  
LONDON SW1A 2AA

THE PRIME MINISTER

4th December 1986

Dear Ron

I was glad that we were able to talk on the telephone the other day so that I could tell you directly how very much you and Nancy are in my thoughts at this difficult time. The press and media are always so ready to criticise and get people down. I know what it's like.

But your achievements in restoring America's pride and confidence and in giving the West the leadership it needs are far too substantial to suffer any lasting damage., The message I give to everyone is that anything which weakens you, weakens America, and anything that weakens America weakens the whole free world.

Whatever happened over Iran is in the past and nothing can change it. I fervently believe that the message now should be that there is important work to be done and that you are going to do it.

You will find great support for that over here in Europe - and I am sure in America too.

If you would like to talk about the issues on which we need to press ahead, I hope that you will call me.

Denis joins me in sending you and Nancy our affectionate good wishes and support.

Yours ever

Margaret

June 7, 1938

Miss Mary V. Ford  
Searcy,  
Arkansas

Dear Miss Ford,

Your letter of recent date has been received in the Inking and Painting Department for reply.

Women do not do any of the creative work in connection with preparing the cartoons for the screen, as that work is performed entirely by young men. For this reason girls are not considered for the training school.

The only work open to women consists of tracing the characters on clear celluloid sheets with Indian ink and filling in the tracings on the reverse side with paint according to directions.

In order to apply for a position as "Inker" or "Painter" it is necessary that one appear at the Studio, bringing samples of pen and ink and water color work. It would not be advisable to come to Hollywood with the above specifically in view, as there are really very few openings in comparison with the number of girls who apply.

Yours very truly,

WALT DISNEY PRODUCTIONS, LTD

By:

(Signed)

To the American Red Cross, New York City.

The retrospect is glorious, the prospect is inspiring: Much might be said of both. But one idea dominates my mind. This — my best, my dearest — is for your noble cause.

I have observed electrical actions, which have appeared inexplicable. Faint and uncertain though they were, they have given me a deep conviction and foreknowledge, that ere long all human beings on this globe, as one, will turn their eyes to the firmament above, with feelings of love and reverence, thrilled by the glad news: "Brethren! We have a message from another world, unknown and remote.

It reads: one ... two... three..."

Christmas 1900

Nikola Tesla

10 Downing Street,  
Whitehall

June 27, 1940

My Darling,

I hope you will forgive me if I tell you something that I feel you ought to know.

one of the men in your entourage (a devoted friend) has been to me & told me that there is a danger of your being generally disliked by your colleagues and subordinates because of your rough sarcastic & overbearing manner — It seems your Private Secretaries have agreed to behave like school boys & ‘take what’s coming to them’ & then escape out of your presence shrugging their shoulders — Higher up, if an idea is suggested (say at a conference) you are supposed to be so contemptuous that presently no ideas, good or bad, will be forthcoming. I was astonished & upset because in all these years I have been accustomed to all those who have worked with & under you, loving you — I said this & I was told ‘No doubt it’s the strain’ —

My Darling Winston — I must confess that I have noticed a deterioration in your manner; & you are not so kind as you used to be.

It is for you to give the Orders & if they are bungled — except for the King, the Archbishop of Canterbury & the Speaker, you can sack anyone & everyone — Therefore with this terrific power you must combine urbanity, kindness and if possible Olympic calm. You used to quote:— ‘On ne règne sur les âmes que par le calme’ — I cannot bear that those who serve the Country and yourself should not love as well as admire and respect you —

Besides you won’t get the best results by irascibility & rudeness. They will breed either dislike or a slave mentality — (Rebellion in War time being out of the question!)

Please forgive your loving devoted & watchful  
Clemie



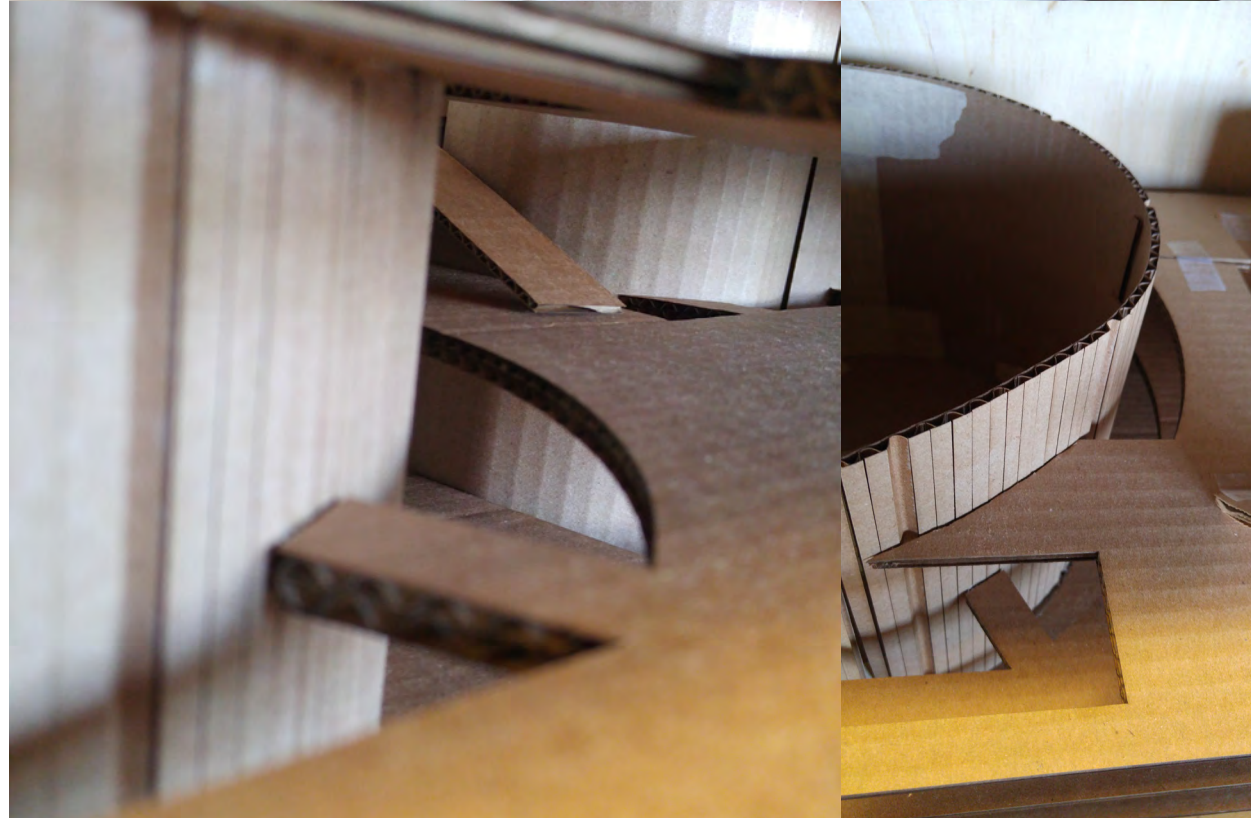
I wrote this at Chequers last Sunday, tore it up, but here it is now.

Sir,

Everyone seems to agree upon the necessity of putting a stop to Suffragist outrages; but no one seems certain how to do so. There are two, and only two, ways in which this can be done . Both will be effectual.

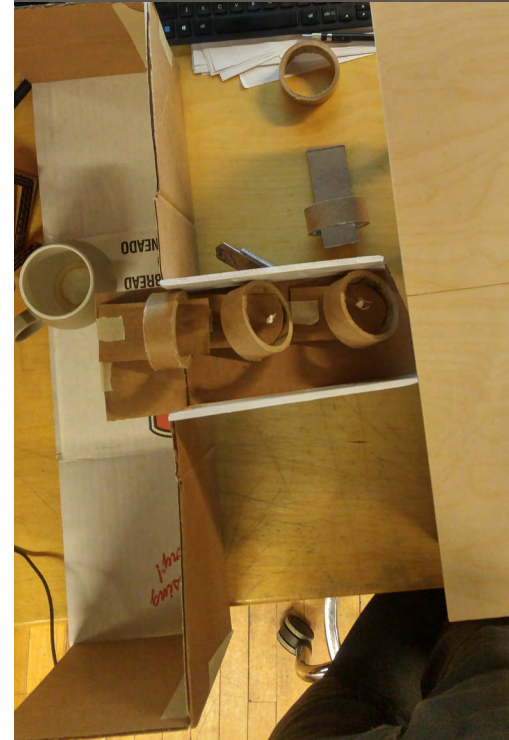
1. Kill every woman in the United Kingdom.
2. Give women the vote.

Yours truly,  
Bertha Brewster



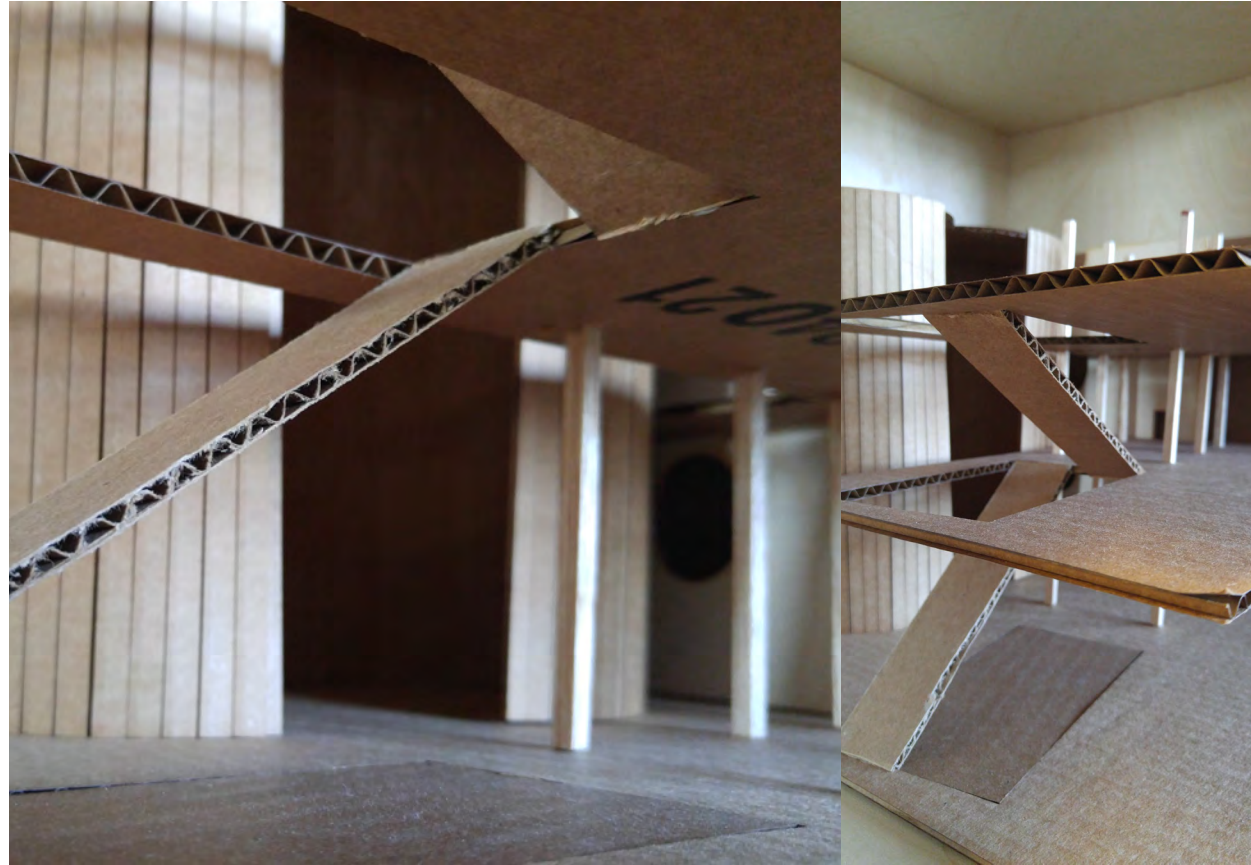
Initial response to site, examination of existing structures.

Top: Figure 68  
 Middle-left: Figure 69  
 Middle-right: Figure 70  
 Bottom: Figure 71



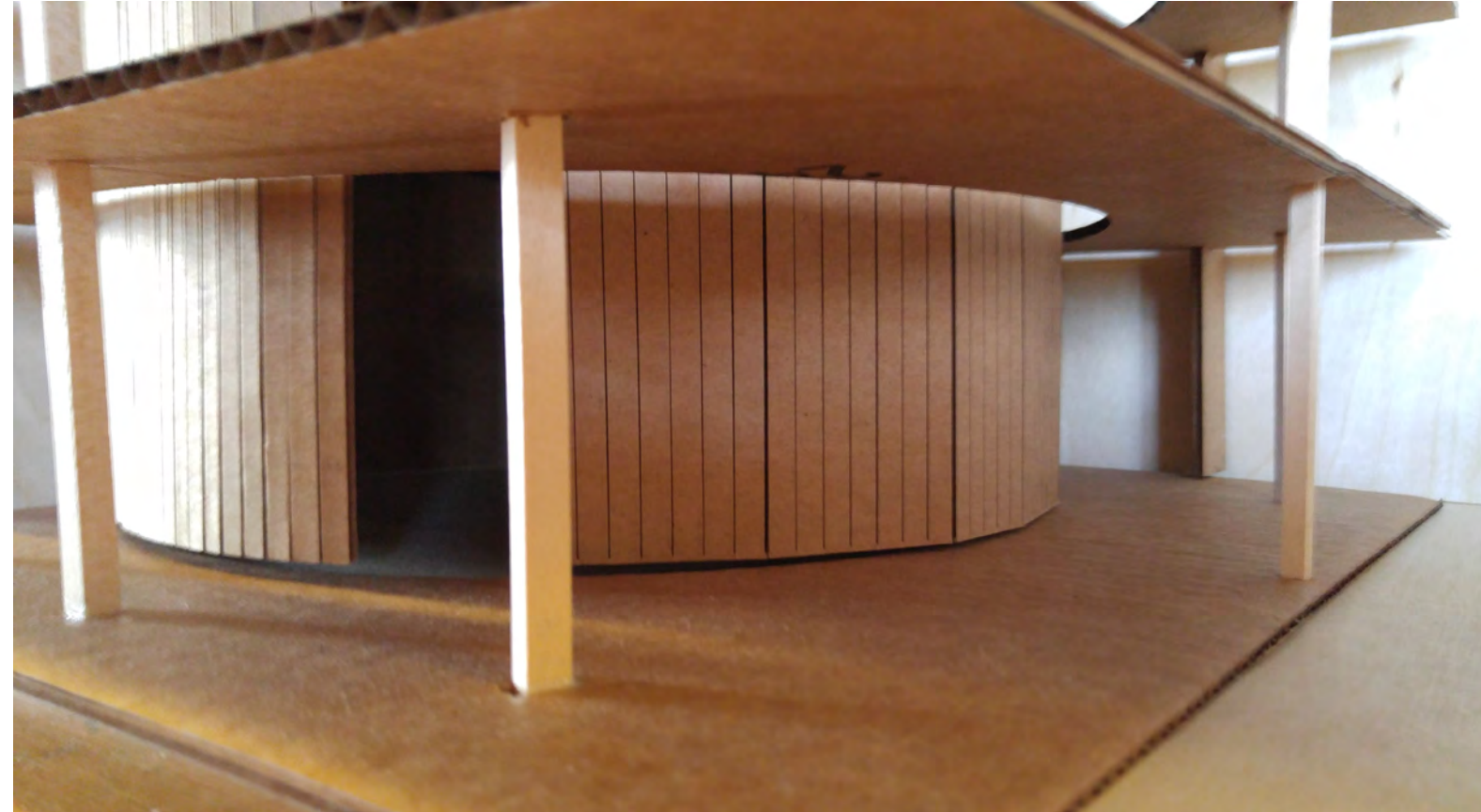
Second permutation. The ramp structure is a direct response to the position of the silos' remains and to the cliff.

Top: Figure 72  
 Left: Figure 73  
 Upper middle-right: Figure 74  
 Lower middle-right: Figure 75  
 Bottom: Figure 76



Third permutation examining the possibilities of new structures working with and against old.

Top-right: Figure 76  
Top-left: Figure 77  
Bottom-right: Figure 78  
Bottom-left: Figure 79



Recitation melts the fragments of the letters together into a constellation of possibilities. Each new combination dances in a unique direction, creating an arrow for readers to seek more. With similar forces at work, the architecture will provide a new cultural center in St Paul, Minnesota.

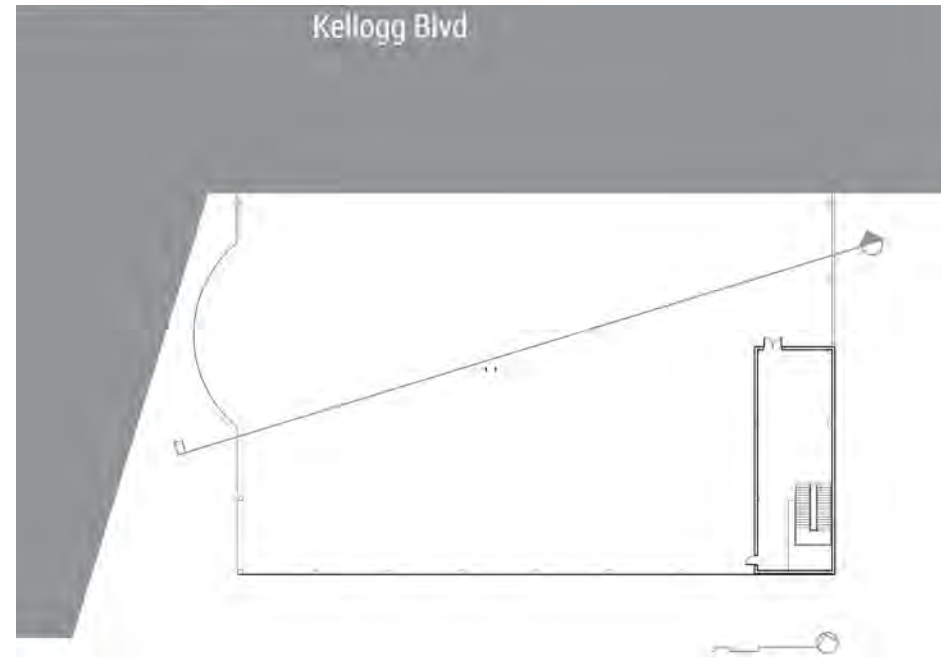
Figure 80



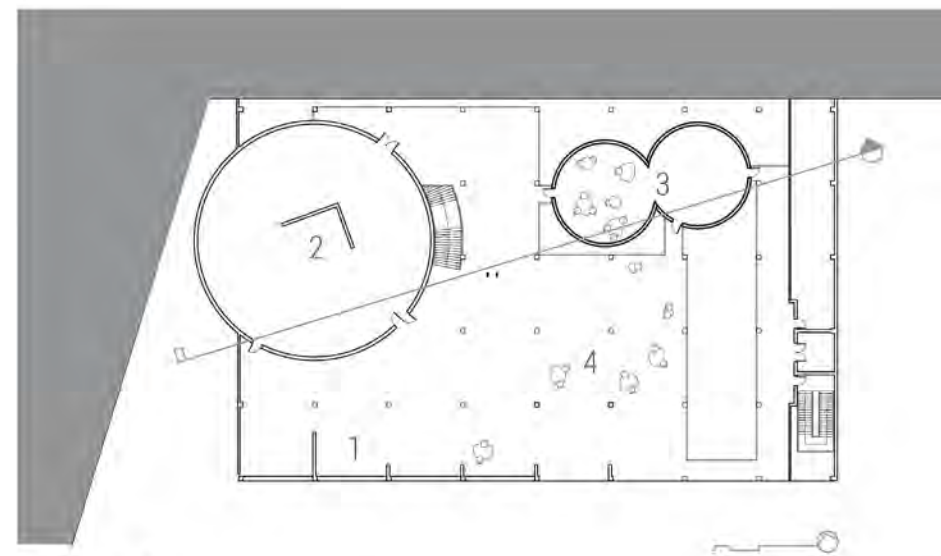
The project explores the relationship knowledge plays in the development of communities today. Through combinations of cultural and historic fragments, the building provides the public space for theaters, galleries, and tools for 3D fabrication and other arts. The program gives direction to artistic and communicative endeavors by reconciling its own context in the city and reflecting the socio-political stories within space that inspire new discussions, presentations, and creations.



Figure 81

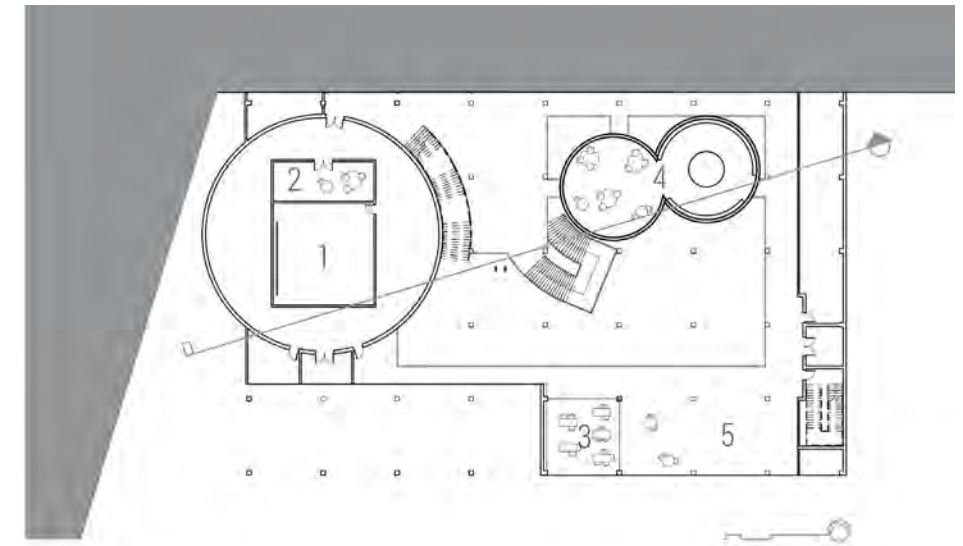


**Floor 4** - Access to Kellogg Blvd  
Public Rooftop Access

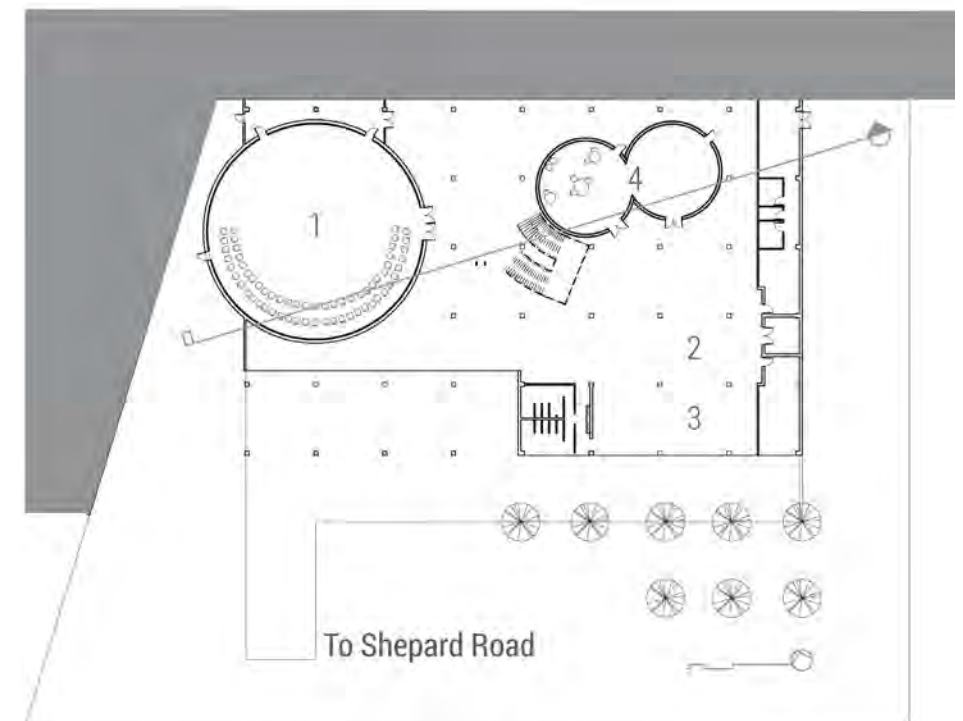


**Floor 3**  
1. Open Classroom Spaces  
2. Main Gallery  
3. Computer Workspaces and Audio Media Archives  
4. Open Workspaces

Figure 81  
Figure 82



**Floor 2** - Access to Downtown St Paul Tunnel Network  
1. Film Studio/Green Screen  
2. Control Room  
3. Maker Space  
4. Computer Workspaces and Visual Media Archives  
5. Open Workspaces



**Floor 1** - Access to Shepard Road, Mississippi River  
1. Black Box Performance Space  
2. Atrium Gallery Space  
3. Open Practice and Workspace  
4. Digital Workspaces and Archives

Figure 83  
Figure 84

Page 127  
Figure 85







Figure 86

Page 131  
Figure 87





Figure 88

Page 134  
Figure 89

Page 135  
Figure 90

Page 137  
Figure 91

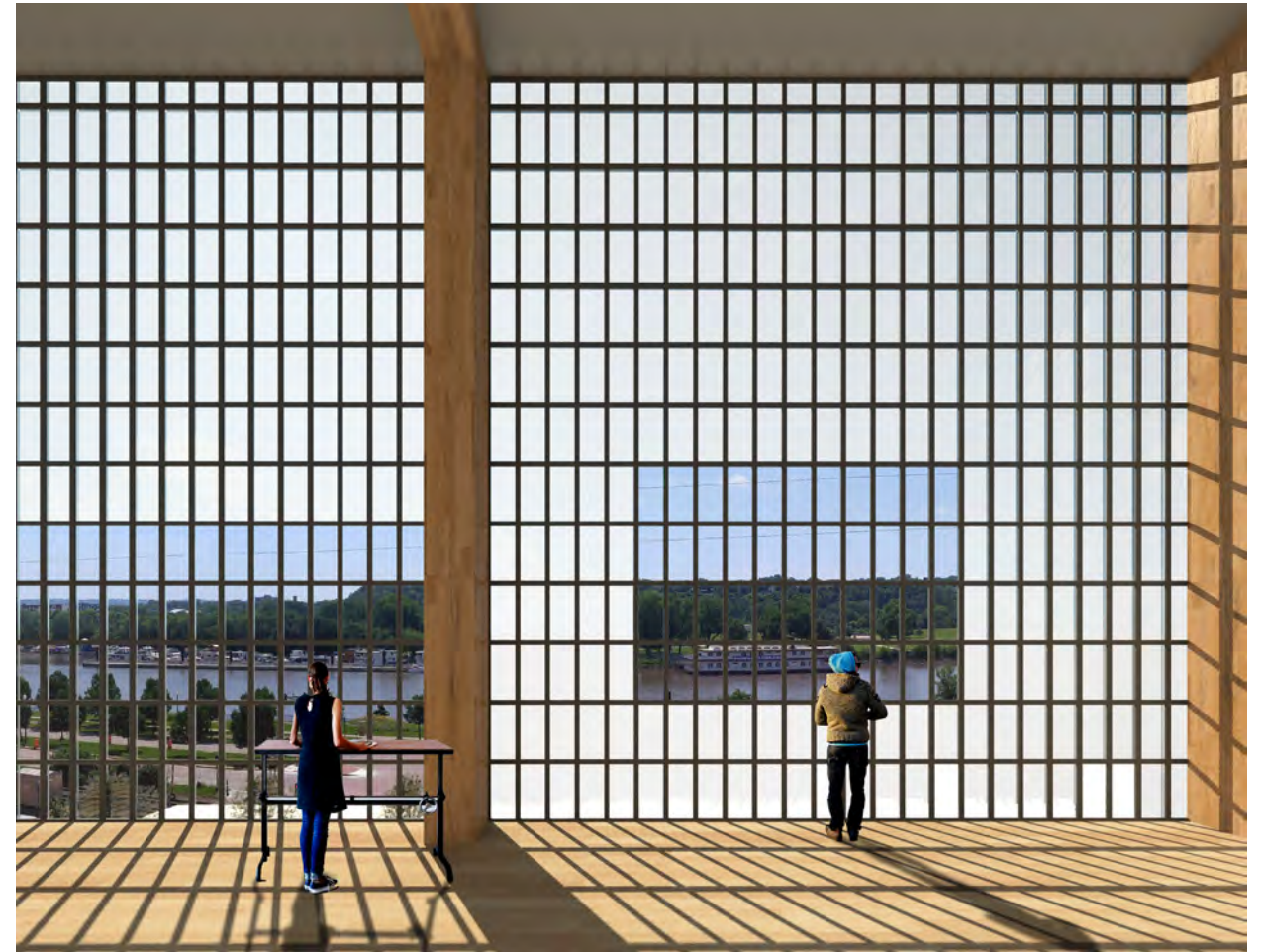








Figure 92

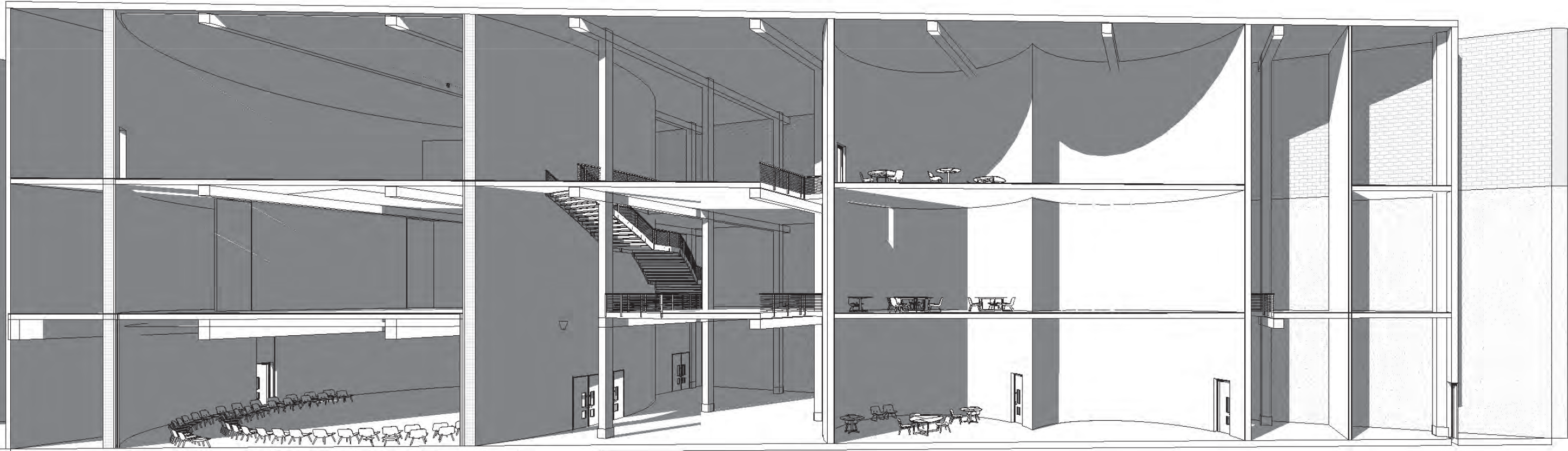


Figure 93





Figure 94



**Performance Analysis**

Response to Context ..... 148

Response to Site ..... 152

Response to Goals and  
Project Emphasis ..... 156



Figure 95

### Response to Context - Collage

*Just what was it that made yesterday's homes so different, so appealing?*

In 1956, artist Richard Hamilton was invited to participate in the This is Tomorrow exhibition in London. The exhibition grouped architects and artists of many disciplines and gave them the task of creating works of contemporary art that elicit an external environment of the future. Hamilton, with architect John Voelcker and artist John McHale, created a collage of contemporary advertisements and photographs to reorganize themes (or products) into a landscape of societal direction.

Hamilton began the construction of his collage with a list of themes which guided his selection of images; "Man, Woman, Food, History, Newspapers, Cinema, Domestic Appliances, Cars, Space, Comics, TV, Telephone, Information." With this list, Hamilton selected imagery from American magazines. The base image, or template, came from an advertisement from Ladies Home Journal for flooring which featured a sitting room with new flooring from the advertiser. The ad also provided the title for the piece; the line of copy "Just what is it that makes today's homes so different, so appealing? Open planning of course — and a bold use of color" provided the name and textual framework for Hamilton's work. The

images placed on the template come from many other American magazines, including the people featured. Each element taken from a different context and sales pitch, when reconstituted, frames a vision of a newly developing societal context through an uncommon means of creating architectural space in collage.

Hamilton's collage, as well as being one of the most notable examples of modern British art, is a great example of collage that creates a space that is particularly architectural. The reframing of advertisements for new products to create a view of an old home creates a reflection of society that is itself new and forward looking. In "Reading Poetry and Philosophy" Cyril and Liliane Welch discuss the difference between making and creating. They note that to make is to bring something into our view, but to create is to bring it into a new light completely. Hamilton's work with collage highlights the strength of both processes. Hamilton makes an assemblage of pop iconography that flows together and creates a comprehensive image. He is successful in making a readable, appealing collage. Hamilton also creates a reflection and direction with his work. The collection of ads realigns the original intent of each image (to make money on a product) to create a critique of what he saw as a direction of society (to spend money on products).



Figure 95

*Just what was it that made yesterday's letters so different, so articulate?*

This work reconstructs letters from historical contexts related to the architectural project by fragmenting and scattering, then asking the group to reconvene with portions in hand in order to read the works aloud. The disseminated letters flowed into the room in coalescence, the disparate parts pooling, slowly losing individual definition as it blended with the edges of others. Where other iterations mixed water and oil to make meaning, the final utilized voice and simplicity to stir elements into potential creations.

The final presentation of the artefact shows what happens when knowledge and process are allowed to spill out into a presentation. The works filled the rooms, its new container, differently than how previous arrangements of the artefact had done so before. The openness of the presentation along with the direction of the reading created a current, pulling elements from the selected correspondence off the page to intrigue. The weight of the words was finally allowed to act and set static, hidden words in motion. Once in motion, they mixed with each other and with the wills of the reader and their expectations.

The letters, freshly pooled, showed early signs of motion. The knowledge

contained in them which had been sliced into paragraphs and sentences from letters were recombined and redefined. The collective process of the drops of knowledge rolling from wall to ground to hand revealed a portion of the letters in a way that other forms of the artefact had not. Where other permutations concealed, the arbitrary scattering and pinning revealed a greater direction. The turbulent relationship between knowledge and reader found a resting point, however a new attempt at participation could again set the works in motion, opening different audiences to the same fragments reconvening in new streams bent to new readers.



Figure 96

### Response to Site

#### Gugalun House

Versam, Switzerland  
Peter Zumthor

In 1990, Peter Zumthor was approached by a Swiss family to renovate an old farmhouse in the Alps. The building had been in the family for generations, though the latest owners had moved to the city. The challenge to Zumthor was to modernize without losing the magic of the original house.

Zumthor was a good choice for the family because of his willingness to work with history where others may be apt to work history into the architecture. He designs in a way that allows the new structure to grow naturally into the surroundings and into the history of its place. Zumthor articulates his philosophy on the matter by saying that works should not only reference local history, but communicate with it.

*“Every new work of architecture intervenes in a specific historical situation. It is essential to the quality of the intervention that the new building should embrace qualities which can enter into a meaningful dialogue with the existing situation. For if the intervention is to find its place, it must make us see what already exists in a new*

*light. We throw a stone into the water. Sand swirls up and settles again. The stir was necessary. The stone has found its place. But the pond is no longer the same.”*

Zumthor’s pond metaphor articulates not only the reason for his selection by the family, but also his approach to design. Architecture as stone, disturbing and changing the pond, also welcomes the effects of history and how it may disturb and change the built form. Zumthor sees his work as sculpting both in time and with time.

The artefact elucidated a similar metaphor in my own work. The scattering of letters through several interventions created a new pool of knowledge than what was there before. The final presentation of the artefact shows what happens when knowledge and process can spill out into a presentation. The works filled the rooms, its new container, differently than how previous arrangements of the artefact had done so before. The openness of the presentation along with the direction of the reading created a current, pulling elements from the selected correspondence off the page to intrigue. The weight of the words was finally allowed to act and set static, hidden words in motion. Once in motion, they mixed with each other and with the wills of the reader and their expectations.

The exploration of the artefact is guiding other aspects of architectural

design both figuratively and literally. The presence of old silos on the site have given the new project containers in which other forms of knowledge can flow together and settle in new exhibits and collections. As currently designed, the center is built around the silos, with floor plates and circulation approaching them without coming into contact. The empty vertical space surrounding each silo allows sounds and conversation to flow from one point of interest to another convectively. The arrangement of cultural elements on each floor then encourages visitors to settle from points of movement to the far reaches of the center, permeating through each crack in the arranged collections.



Figure 97

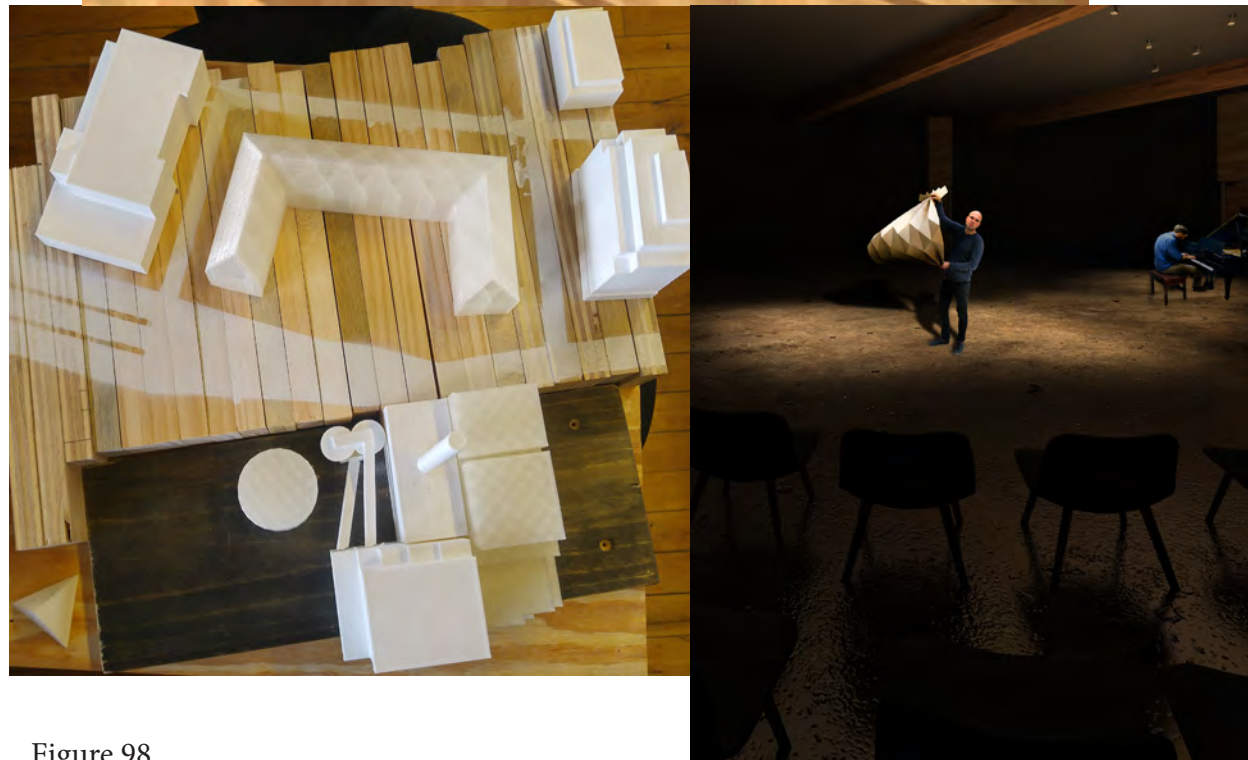


Figure 98

### Response to Goals

*Unite community through works or research, art, etc.:*

The building accommodates a wide variety of galleries, workspaces, and performance spaces that allow nearly anyone in the community to interact with the building on some level.

*Flexible, durable building:*

From large black box theaters to intimate hallways with potential for one-on-one interaction with works from local people, the building affords a multitude of ways for people to experience and exhibit. The new GluLam structure surrounding the remains of the old power plant give the building a structure that is equally flexible programmatically, and durable for years to come.

*Connect to existing city infrastructure:*

The center connects not only to the downtown street, but to the Riverwalk on the lower level, as well as the underground tunnel network below grade. The building guides visitors from the community through new and old structures holding up new and old works from the members of the community that support the possibility for such a community center.



Figure 99



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Figure 100

Joshua Highley

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San Francisco, CA

Hometown: St Paul, MN

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### Previous Studio Experience

2nd Year

Spring 2015  
Malini Srivastava

Fall 2013  
Cindy Urness

eFargo Center and Riverwalk  
(museum and research center, Riverwalk)

Teahouse  
(teahouse)

4th Year

Spring 2014  
Joan Vorderbruggen

Fall 2015  
David Crutchfield

Modern  
(school of dance)

659 Mission  
(mixed-use high rise)

IM Pei Bird House  
(avian residence)

Spring 2016  
Malini Srivastava

Beck Residence  
(single-family residence)

Design+Build  
(high-efficiency single-family residences)

3rd Year

Fall 2014  
Ronald Ramsay

5th Year

Se-purr-cher  
(cat mausoleum)

Fall 2016

Elder Wickersham Hall at Darrow School  
(performance hall)

Stephen Wischer  
Thesis

Fennimore County High School  
(k-12 public school)

Spring 2017  
Stephen Wischer  
Thesis

**NAAB Criteria**

*A.1*

*Professional Communication Skills*

Write and Speak Effectively

Use representational media appropriate for both within the professional and within the general public

*A.6*

*Use of Precedents*

Examine and comprehend the fundamental principles present in relevant precedents ..... Pages 62-82

Make informed choices about the incorporation of such principles into architecture and urban design projects ..... Pages 147-156

*B.1*

*Pre-Design*

Prepare a comprehensive program for an architectural project that includes:

An assessment of client and use needs ..... Pages 11-12

An inventory of spaces and their requirements ..... Pages 40-43, 45, 46

An analysis of site conditions ..... Pages 84-96, 117-120

A review of the relevant building codes and standards, including relevant sustainability requirements and an assessment of their implications for their project ..... Pages 53-54

A definition of site selection and design assessment criteria ..... Pages 48, 84-96

*C.2*

*Integrated Evaluations and Decision-Making Design Process*

Demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project, including:

Problem identification ..... Pages 40, 62

Setting evaluative criteria ..... Pages 12-14

Analyzing solutions ..... Pages 147-156

Predicting the effectiveness of implementation ..... Pages 155-156