

**THE MACHINE OF
PATAPHYSICS:
REIMAGINING THE
RELATIONSHIP BETWEEN
HUMANITY & TECHNOLOGY**

THE MACHINE OF PATAPHYSICS: REIMAGINING THE RELATIONSHIP BETWEEN HUMANITY & TECHNOLOGY

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Thesis Abstract

In our world there are two things that can be seen as obvious ways that humanity could end. First is that of climate change which we hear about and attempt to deal with all the time. Second, and perhaps less obvious, is the threat of technology replacing us or limiting us to a point where we are no longer human. This modern issue is drastically different from premodern uses of technology driven by analogical connections that helped to discover the universe around us. Following the rise of modern science, technology today is instead tied to productivity and is increasingly used as an efficient way to control the world, including us. The part that has changed most is not as much the technology but the way we use it and how this affects the understanding of ourselves. To mediate such changes, this thesis looks to Alfred Jarry's pataphysics to redefine the way that humanity interacts with technology, to help break us free from the current limitations we have placed on ourselves. It explores a world where machines might help us come together and create connections instead of isolating us for productivity and profit.

Thesis Narrative

As a society we have slowly grown reliant on the technology that we create, so much so now that we end up lacking enjoyment in our lives. This is caused by the need for technology to be productive and efficient instead of creative. Unlike before when technology helped us discover the world it now controls our view of everything around us.

The research to be done will look into the history of technology and defining what the major difference in ancient and modern technology. Once this is found a method of incorporating this missing piece back into technology will be sought after. This will be to help people use technology in a different way than we currently do so instead of creating a divide in humanity it can help to connect us.

The architecture of the building will need to be designed to curate this experience creating a conducive atmosphere for the activities that will go on. It should promote interactivity and communication among the visitors as well as help to inform them of the current issue.

In order to achieve this research will be done into the original meaning of play and illusion in architecture. Along with that case studies will be done on buildings that currently create an atmosphere as well as technology that promotes thought and connection.

The reasoning for this research comes from the fear of where technology is currently going but also the decline in the ability of humans to communicate with each other. Design often separates individuals creating spaces for specific activities and dividing groups. This space would attempt to do the opposite and bring together anyone who enters the building.

Thesis Narrative

The idea that this can be achieved through architecture is very achievable as certain spaces already achieve a portion of the connection desired. Through researching these spaces and combining the techniques that they implement the desired level of connection can be achieved.

The expected results of this research would be that the visitors of the building need to have a task to complete that is only achievable with teamwork. This will create the desire to interact with others in the building. There also needs to be the ability for each individual to first develop their own thoughts before becoming part of the collective.

This prompts a few new questions. How can a space such as this remain relevant? What makes people want to visit this space? How can architecture change a person's perspective?

Typology

The project will be an interactive museum gallery.

Interactive: The space should engage the users and promote them to interact with both each other and their environment

Museum: There should be an informative portion of the space to help people not only understand the purpose of the building but also the things inside of it

Gallery: The space should allow for many people to see all displays at once in order for them to form connections within the gaps between the display



Typology

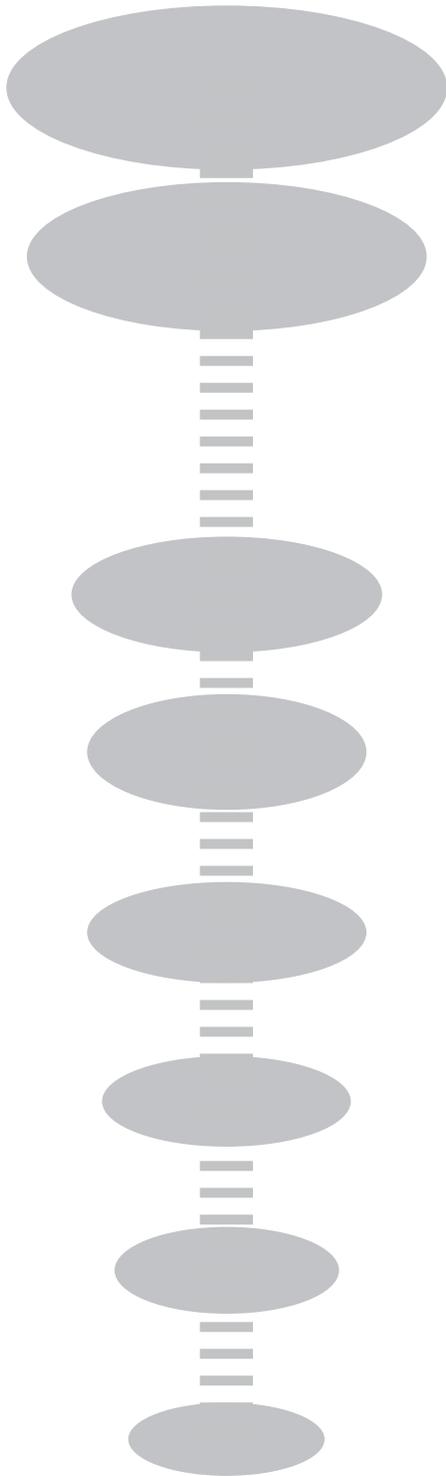
Fig 2
Museum



Fig 3
Gallery

Program

Large Spaces



Small Spaces

Gallery Space

Exhibit Space

Parking

Horz. Circulation

Entry

Vert. Circulation

Mechanical Space

Public Restrooms

Program

Uses

Gallery Space

A place where visitors can interact with each other in trying to figure out what the machines on display are and what their purpose is

Exhibit Space

Where all answers can be seen to what the machines are as well as a detailed description of the truth about the machines.

Mechanical Space

A place for HVAC as well as the storage of any tools necessary on site

User Description

Tourists

Looking for something to do this could be at any time of the day but will mostly occur in the middle of the day in order to escape the heat in the summer and so they can still experience the night life of Chicago

Parents with Children

Looking for a way to distract and entertain their children with an educational source most likely on weekends or in the evening of the weekdays

Young Adults/Adults

Looking for something to do with friends to enjoy their time mostly in the evenings and weekends

Creators

Looking for inspiration or just to see the creations of others no set time and will not make up a large portion of visitors

Pedestrians

Looking for a place to take a break from walking around the city in the outdoor space mostly during the lunch hour

Homeless

Looking for a place to rest encompasses all business hours

Staff

Security

Keep the people inside safe as well as prevent tampering with the machines

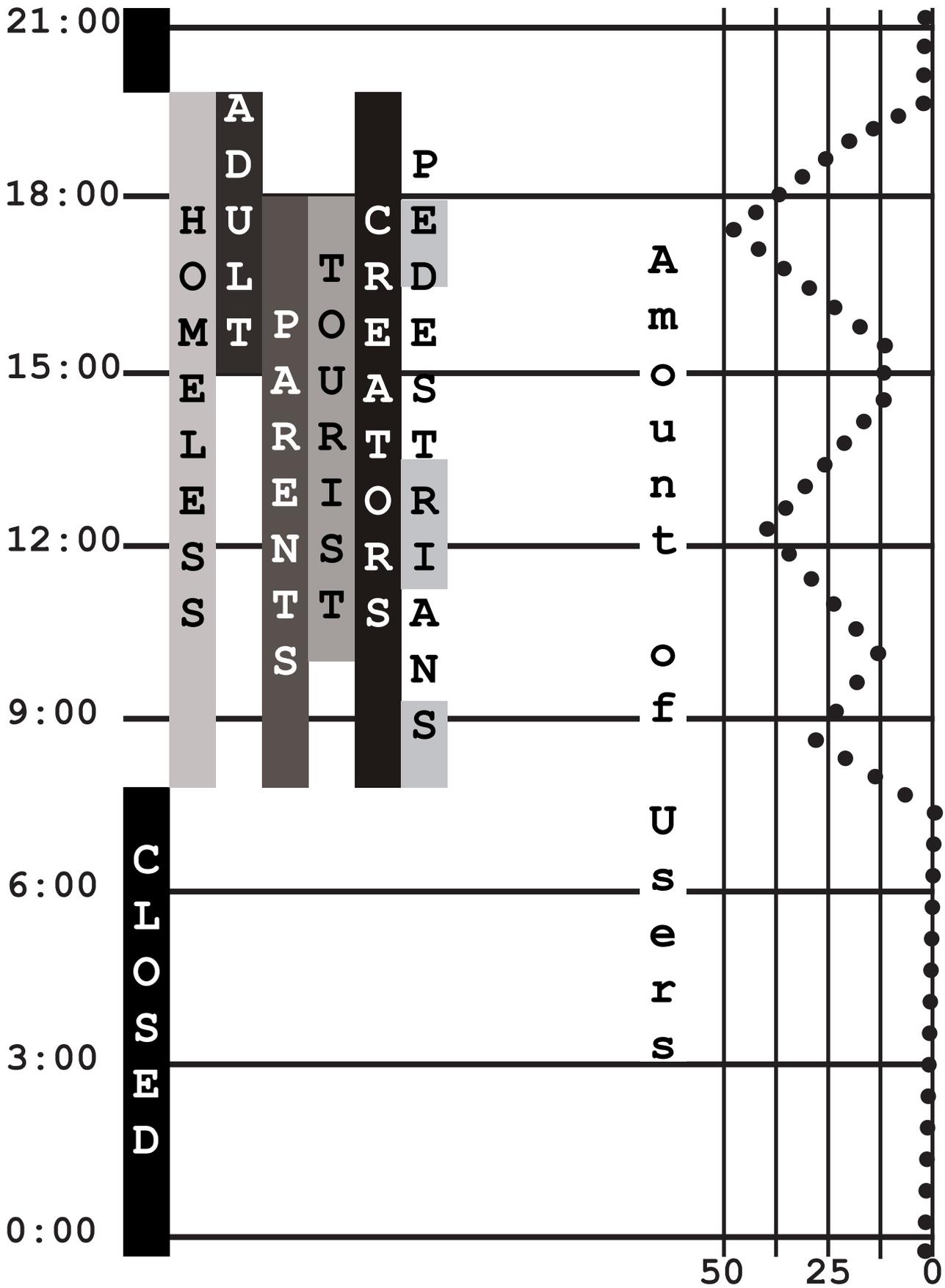
Receptionist

Welcome visitors into the museum

Grounds Keeper

Take care of the exterior spaces around the museum

User Description



Project Emphasis

The theoretical premise of the project is to use architecture in conjunction with technology in order to enrich the relationship of the visitors through pataphysics.

In order to achieve this the way to promote interaction must be found.

The Relevance of the Beautiful, Merlau Ponty

Merlau Ponty brings forward the importance of play within society and the need for people to interact with each other in a structured fashion

This goes as far as just walking around on the street where the outfit that you wear is your way of interacting with the others around you

In order to achieve this there must be a system in place that helps to promote play.

How to show pataphysics through design?

Must first answer what is pataphysics?

In order to show this there must be an individual and a collective as well as gaps within the meanings of things to promote the imagination of meanings and the want to interact with the collective

Project Goals

Physical Goals

Create a relaxing environment to view the exhibits

Make a space that engages the visitors imagination

Social Goals

Create a space where people can interact with each other

Provide an area that allows for the sharing of ideas

Theoretical Goals

Show the change in technology through time

Make metaphysics a relevant topic in the lives of visitors`

Personal Goals

Be proud of the work that I have done

Grow a depth of knowledge that previously did not exist

Research Results

The Technological Society

The Technological Society by Jacques Ellul

In the book *The Technological Society* the author, Jacques Ellul, discusses the concept of tech and the effects that it has on our society. He does this by first trying to define what he will be writing about which is technique. He tries to define this for the reader so that they can understand that it is not just technology. Technique is more akin to the systems that the human species uses to do something. These systems must be very specific and have rules the way that when helped the most to understand this was his description of how magic is a technique. After describing what a technique is he proceeds on to go over the history of them. This is where he starts talking about magic as the original two techniques were science and magic. After giving a thorough recap of the history of technique it starts to become much more obvious what Ellul will be trying to argue throughout his book. He shows us how these systems were implemented as ways to make the lives of humans easier at times but also sometimes we naturally had to create them in order to support the population. This brings up an interesting point about how almost no matter what we do these techniques will continue to be created but is that truly a good thing. It appears Ellul does not think that techniques are the best for humans he goes as far to say that we have already lost control of our own creation and at times it even seems to control us. This is an idea he had almost seventy years ago so just think about how much worse it could be now.

Ellul also describes how techniques have become more prominent as society became obsessed with efficiency. As a society we wanted to make it so basically anyone could do anything, so we have created systems that help people achieve the things they want. But this is also destroying our ability to be individuals because now instead of I can do this because I have a knack for it is all I need is the proper tool or the proper class and I can do anything. It has gotten so bad now that the technology seems to make our society create more technology. It seems like if someone wants to get good at something they must just improve the technology they were using to do it. For example, when we take photos there is a very clear difference in the quality of the photos that can be taken based on the camera and because we want to be the best at something we then must continue the improvement or creation of technology. This is a very scary thought because it shows us how we have no control over the technology we make, and it becomes scarier in today's world with self-learning artificial intelligence (AI). With self-learning AI technology can achieve autonomy and become separate from humans.

Research Results

The Technological Society

Ellul would argue that technique was already autonomous at the time he wrote the book. As he defines technique it would always be autonomous as humans cannot really affect it. Although we create the techniques, we also will inevitably create more no matter what we do. For example, how our government is run is a technique and we are always changing and trying to improve it to be more efficient which is why no matter what we do we will improve and create more techniques to help ourselves. This is just one part though as Ellul also states that techniques have been moving towards removing humans from the equation. This just makes logical sense as humans only create error within a system that could be error free which would make it more efficient and help it meet the needs that we wanted it to. Yet if humans are removed from the equation this would mean that techniques would have to be able to develop and improve themselves and then would also have the potential to move away from helping humans.

What is truly fascinating about this book is the line that Ellul is pointing out to the reader even though it has already been crossed in his viewpoint. That is the line between efficiency and the ability for humans to be satisfied as an individual. It is almost like the more we create techniques to make our lives

easier the less satisfying it becomes to do things. We no longer get that feeling of accomplishment anymore leaving us without satisfaction and it is harder for us to find out who we are. This is caused by everyone being on a relatively even playing field in their ability to use techniques meaning that they can then do anything that they want to leaving us with the feeling that it is not something that we wanted to do or "were meant to do" which is honestly where the whole of existentialism starts.

The last chapter in the part titled A Look at the Year 2000 is a window into what techniques could do to the world we live in. The section is about what people back then thought the world would be like in the year two thousand and it has some very interesting insights in it. The scientists making these predictions thought that in the year two thousand humans would all be artificially inseminated, we would have a stable population, and all learning would be done by downloading the information into your brain. If this is the prediction that the scientist of my time gave technique would be the first thing to go. These are predictions of humans just being controlled by the systems they have in place because it is "better for society and the human race." If this came true, all individuality would be gone, and we would be just as well off if we were just making a bunch of clones with a slot to insert information based on need.

Research Results

Discourse on Methods and Meditations

Discourse on Methods and Meditations by Rene Descartes

Intro

Gives a background of Descartes life and describes the release of these two books. First the Discourse on Methods was released as a preface to his other writings about light, asteroids, and geometry. Obviously to show his methods of thinking but also could make the church more accepting of his text as he proves the existence of God. This was right around the time Galileo was punished by the church so that mattered a lot. The Meditations on Philosophy was later released and was his attempt to show that his philosophy was better than that of the universities. This obviously backfired and there was a lot of backlash.

Chapter 1

This chapter generally goes over a little bit of Descartes background and describes some of his ideas about how he thinks about things. It starts out talking about common sense and how all men have an equal amount of it, but it matters how they use it and the perspective in which it is applied instead of the actual amount. This to me seems like he is saying all people are created equal as basically a blank slate with no good or bad but through their experiences then become who they are. Another interesting thought he discusses here is the idea of traveling and how it is necessary yet if done to much can cause an individual to lose their place. I relate this to how people think about finding out who they are as you must look out to see yourself being projected onto others yet if you only look out you will instead of helping find yourself become the other.

Chapter 2

This section is still about Descartes method of thinking but also starts to bring up how others think as well. He brings up this concept that there are only two types of thinkers those who prematurely think and jump to assumptions and those who are cautious and mistrusting of thought making them rely on the thoughts of others. He then talks about how slowly we progress intellectually. I agree with him on this as when you look at research papers that are widely viewed as good most of them only barely move forward the discussion because it is very hard to prove something true.

He then describes his rules of thought the first being that nothing is true unless it is absolutely evident that it is. Next, he says that things should be divided up to make them more manageable and last, he states that one should think through things from easiest to hardest. He then states that this method of thinking makes him comfortable in thinking about any topic and that the first topic he should apply it to is philosophy.

Research Results

Discourse on Methods and Meditations

Chapter 3

Here Descartes tells what his moral code is. It has three maxims first being that one should obey the laws and customs of one's own country. Next, he says to be firm and resolute in your thoughts. Do not give up on your thoughts or be whimsical with the path that they take. He then says to try and conquer oneself. This would be like instead of chasing a fortune change the desire to attain a fortune. Last, he says that this code works because we can attain everything that we want.

Chapter 4

Here Descartes gets into what everyone knows him for and the existence of God. He states that all thoughts we have can neither be proven true or false as everything we think could also be dreamed. This leads to the conclusion of how one even existing which he answers with "I think therefore I am." This works because if everything we think is neither false nor true then one thing is true, and it is that you still think. The concept of doubt is the proof of our existence in a sense because even if all we see is false there is still a mind.

He then starts in on the concept of perfection and how we can think of it if we are not in fact perfect. Here he states that all ideas have a basis in truth and gives the example of a goat with a lion's head where both animals truly exist, but the combination does not. Because of this our ideas of perfection must come from something that is real and the only thing that we believe to be perfect is God so therefore he must exist. This he says is truer than anything in the tangible world.

Chapter 5

Descartes brings up another book he wrote that describes the truths of our world which include that of the stars, planets, that things are made of particles, and the earth. He argues that these are truths as God would use them if he were to create another world. This is very interesting as we can think that God could create a world without light for example but that in fact proves that it is true because we can only think that since light exists. It is like the number zero in math we must accept that it is there even though it is the absence of having value or a unit. Then he talks about the differences between man and machine as well as man and beast. He argues that man is capable of reasoning and nothing else is and relates that to the fact that we have a mind and a soul that work together.

Research Results

Discourse on Methods and Meditations Chapter 6

This part seems to be separate from the others as it is a discussion of why Descartes should publish his thoughts. He ends up at the conclusion that one must publish their work as man can achieve any goal, but the individual is not due to our mortality. So, to reach the goal ideas must be shared so others can continue the process. He also brings up how for someone to understand something specific they must first the common so therefore ideas must be shared to hasten our learning. Last, he counterpoints himself by saying that anyone capable of furthering a topic will also be capable of finding the foundation for it and would enjoy doing it themselves more than learning it from others.

Meditation 1

Descartes is trying to prove that all previous things he believed are in fact false. First, they are false because almost all of them came from perceiving things with his senses yet sometimes the senses lie to you, and you cannot trust one who lies. Then they are false because he dreams and the things there are the same as when awake but how can you tell when it is a dream or not. While dreaming it feels real, yet you wake up but what if in fact waking up was only the act of you falling asleep and getting up in yet another dream. But this also does not matter as all ideas are based in truth so therefore all things dreamt must be real or have a basis in the real. He gives the example that even if we created something that was completely new at least the color of it would be real and to push this idea even further I would say even if we thought up something that did not reflect light and therefore had no color at least the light that hits it would be real. He then states that what if God created us for us to only deceive ourselves.

Meditation 2

Here Descartes is searching for what is true if everything is false. If all things are false is there anything true or are all things in fact not there or nonexistent. Yet we are certain that we exist, but the body and mind are perceived and false so than what truly are we. So, if we are not our body then what if we were just our soul which has thought, feelings, and senses. Out of these the only one that is truly us is our thoughts as when you stop thinking you no longer are. We are just a thing that thinks. He uses an example of wax where we know of its qualities like its taste, smell, appearance, and what it does if we touch it yet all these change if we melt it. This is the same concept as the ship of Theseus thought experiment where if every piece of a ship were to be replaced is it still the same ship. Much like that Descartes questions whether the unmelted wax really existed because all though nothing of our senses changed their perception of the wax is completely different. Then he brings forth the fact that the perception of the wax is just an action of the mind. This

Research Results

Discourse on Methods and Meditations

is interesting as it seems that he is hinting at the idea that all our perception is just thought maybe even to push it so far that all we do is that and all we are is thought.

Meditation 3

Descartes starts here by describing all forms of thought and how they are the only thing that he truly knows at that time and that he is certain of that. He states that anything certain is real yet then how is the world false and in fact are we certain that they are. He says that the more and more he believes one thing to be true the more he also believes that it is false, and that God is deceiving him. Due to this he then tries to determine which thoughts have truth starting with ideas which comprise of all things you can picture in your mind these are fictitious and only constructs of the mind. He proves this by talking about how there are two ideas of the sun the picture where the sun is up in the sky and then the one as if one is next to it and it is massive. These cannot both be true at the same time. Yet also every idea must contain as much reality as the thing that is in the world which is being pictured. Yet none of your ideas are perfect so therefore there must be some other being out there that can perfectly picture things as to be the original creator. Also, as a finite thing that has end how do we have the concept of infinite things without there being an infinite thing therefore the idea of God the only both perfect and infinite thing must be real or at least exist. We also rely on this thing that is God because how do we exist otherwise as we are obviously not God because we would in some way be conscious of that. Lastly where does the idea of God come from. No one has ever seen God so how do we have a picture of him in our mind unless he the creator put it there for us.

Meditation 4

The argument that the ideas of corporeal things are less certain than that of your mind and that is less certain than that of God. The most certain idea we have is that of God. Then he says that God cannot deceive us as deception is inherently imperfect and God is perfect. Also, if we only think of God nothing ever goes wrong but the instant, we think of other things it seems as there are infinite possibilities of error therefore error does not rely on God. Due to this our ability to determine the truth from the false is not infinite which causes said error. But then why would a perfect being create an imperfect being unless it is better for us to not see the truth and fallacy of all things. Yet we will never understand this as he is perfect, and we are not. Out of this though is that we do have the ability of understanding something. Even if we do not know whether something is real or not, we do understand it in some manner. We also have a will that helps us make choices yet when our will and understanding come together the error is created. Separately though our will and understanding are perfect. Therefore, we must be using one wrong in this situation. This

Research Results

Discourse on Methods and Meditations

This is by our lack of knowledge on everything that we interact with.

Meditation 5

Even though ideas are not of real things for say they can still have rules. For example, we can think of thousands of different triangles, yet they all have three sides that connect at corners and the angle of these corners adds up to a total of one hundred and eighty degrees. He then relates this to the idea of God and states that existence is not a rule but a relation to the idea of God. Whenever we think of the idea of God, we also think about existence yet we neither know if he exists or not. Yet is existence not part of being perfect so than God in fact does exist and in fact since we cannot think of someone other than God who could have created us then God controls existence. Due to this nothing we think or perceive can be true without the existence of God.

Meditation 6

Do material things exist? Here he brings up an interesting thought of a triangle and a chiliagon or one thousand-gon. We have a clear image in our head of the triangle, yet we also have an image of a chiliagon, but we are not sure that is right because we have never seen one before. He then asks himself where the doubt for corporeal things comes from. If all our information for the corporeal world comes through our senses which we know can deceive us, can they exist. Yet we cannot inherently distrust our senses either. This creates another unique thought where if you can think of your senses as something that can be mistrusted that then makes them separate from your mind. Basically, the mind is a distinct thing separate from the body. Then we must acknowledge that our body is of the corporeal and as previously stated God cannot deceive us so corporeal things must exist but can be miss perceived. Nature also teaches us that although mind and body are separate, they are closely tied as we can feel pain. Descartes uses the example of a pilot where if our mind was just the pilot of our body, we would not feel pain when we get cut but instead would see it as like damage to our plane.

Research Results

A History of Technology and its Relationship with Humans

Technology has been around ever since the distinction between man and ape occurred but what is technology. The word itself has two parts the root *teche* and *ology*. *Ology* is easily defined as the study of something. *Techne* is termed as Jacques Ellul puts it in, *The Technological Society*, anything and everything we use to do things that has a ruleset. He even brings up how magic is a form of *techne* as although we now know that magic is not real it used to be believed and had a set of rules that was used to help us understand the workings of the world around us.

So if technology is just the study of things that improve our lives within a set of rules then almost everything we create is a form of technology. The earliest form being the primitive stone tools that we used and soon of the most modern being robots and artificial intelligence. In order to put this into a more relevant though we will term technology as machines that we use to complete tasks.

With this definition technology of the past and modernity have some very different traits. For example, some of the most ancient machines, the automatons, were very mystical in a sense.



The Servant of Philon (Left) is an automaton created by Philon that would mix water and wine for the Greeks at the exact ratio that they preferred it, but why did it need to look like a person. Arguably it is because there was still a sense of creativity to the technology where it was not created to just complete a task but also to impress upon the people who used it. It creates a sense of wonder for the user as they could not understand how it worked and tried to imagine the way that it mixed water and wine.

Fig 4 Servant of Philon

Research Results

A History of Technology and its Relationship with Humans
Fast forward into time and we get to

another great machine, the perpetual motion machine(right). The intentions of this machine are to put in one initial force of energy and then it would rotate forever as it is perfectly balanced for this. We now know that is impossible due to the laws of thermodynamics, but in the twelve hundreds when this was invented thermodynamics had not been discovered. Even as a machine that always failed to reach its intended function it kept being made as it provided a way to explain the world

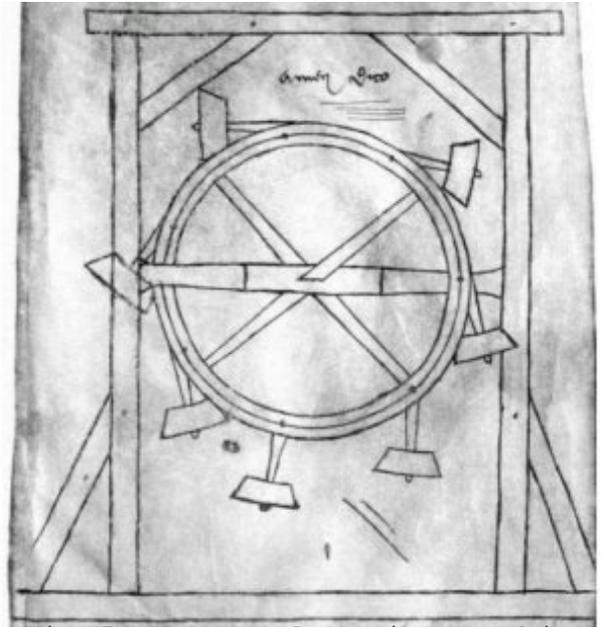


Fig 5 Perpetual Motion Machine

that we did not understand at the time. The last example of ancient technology is the block and tackle(bottom). This is probably the most revolutionary and useful piece of ancient technology but when people of the time talked about it it became something different. The people of the time referred to the block and tackle as the divine machine that which God used to create the world that we live in. Even our perspectives on technology were grounded in our spirituality and trying to understand how we came to be on this earth it did not matter how useful something was it always had another deeper meaning behind it. This is in stark contrast to the modern technology that we use. Currently the things we create are solely in lieu of production and efficiency instead of meaning. It has come so far that it is actually starting to control our lives.

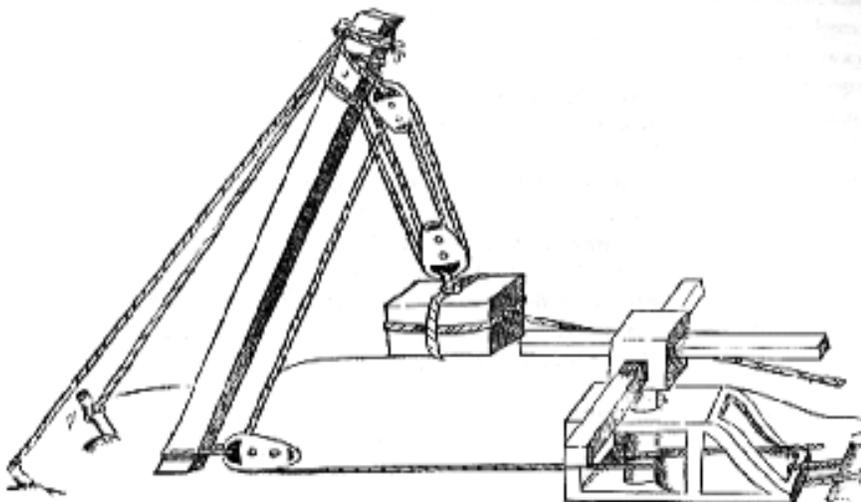


Fig 6 Block & Tackle

Research Results

A History of Technology and its Relationship with Humans
Martin Heidegger in, *The Question Concerning Technology*, goes so far as to say technology actually enframes our view of the world around us. He gives the example of how we view a river in the sense that is no longer just a river but instead a place to put a hydroelectric dam and create power. The nature around us has turned into a resource through the lense of technology where we have to control it in order to advance. In most recent times this idea has even been pushed to humans becoming a resource with the creation of targeted adds and the metaverse. The metaverse is supposed to be a place of virtual existence where we can live our lives virtually in anyway we want. But this ends up being the ultimate enframement of our lives. Where everthing we are doing is then controlled by the limitations of the technology that we are using. Due to this relationship technology while making our lives easier is also making them less fullfilling as we no longer have to try to achieve anything in life. This although could be viewed as a utopia where everyone gets what they want it lacks something that is inherently human.



Fig 7 Metaverse

Research Results

The Future of Tecnology

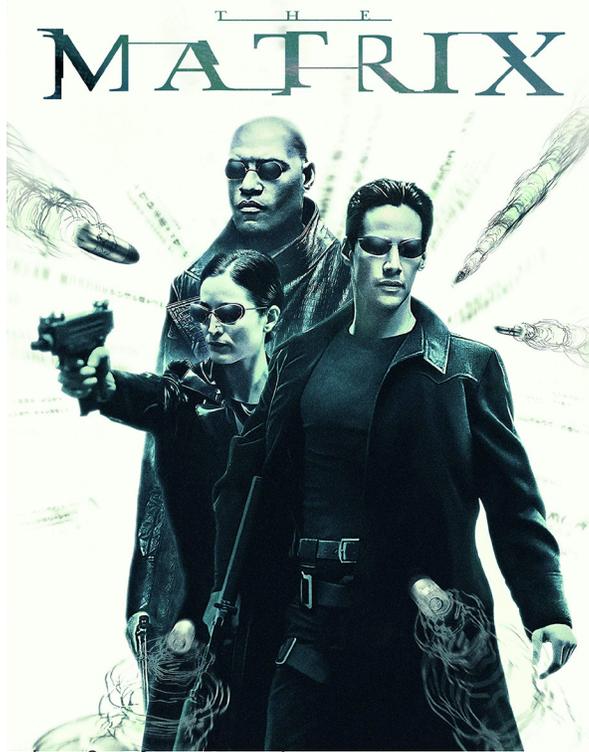


Fig 8 The Matrix

The Future of Technology

For many years people have envisioned utopias where technology helps make our lives easier and more fullfilling but is the possible. Arguably there is no real evidence proving that this idea would or would not work but there are ideas that have tried to show what could happen in a utopic society. The majority of these portray the concept that every utopia is someones distopia. Take the matrix for example while being a utopic place for the ageants that can do whatever they want with in the matrix everyone else is just living a standard life no better then the real world. Another example is

Westworld portraying an amusement park where all our wildest fantasies can be lived through the use of technology. Inevitably this technology then rises up and kills all of the users of the park. Lastly is the album The Incredible True Story by Logic. Here Logic tells the story of the spaceship Babel set in a universe where humanity has sucked Earth dry and is searching for a new planet to live on. They refer to this planet as paradise as it will meet all of their needs once again. A quote from the scene Babel goes, "My fear isn't that we won't find paradise, it's that well create purgatory." With our current path with technology we should be concerned that instead of creating a world of ultimate freedoms we are actually creating the shackles for technology to hold us prisoner.

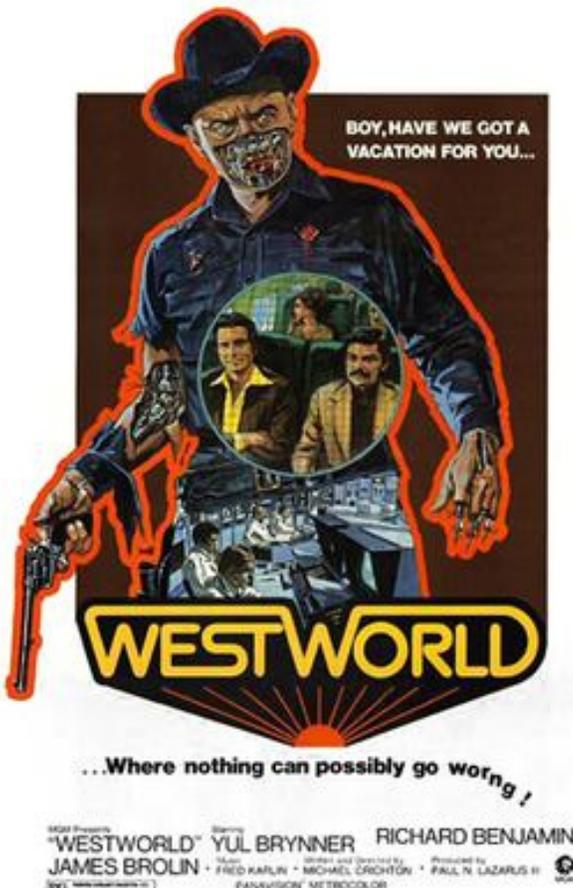


Fig 9 Westworld

Research Results

Pataphysics

Pataphysics

In order to prevent the undesirable possible futures something about technology has to change. Arguably it needs to try to be more like the technology of the past not in the sense that we do not understand it but instead that it is of the Pataphysical realm. Alfred Jarry the father of pataphysics terms it, "the science beyond metaphysics created to govern exceptions and explain the universe supplementary to this one. It is the science of imagination." He wrote a play titled, *Ubu Roi* that can show pataphysics in action. Here the main character Ubu is meant to represent the French bourgeoisie or the exception to society at the time. He imagines what the life of Ubu is like and shares that with the world through his play. This is the true power of pataphysics it has the ability to help us connect to each other in relation to the individual.

With pataphysics we each first form our own individual; perspectives about things it is a very human way of doing things. The best example of this is when a person is preparing for something they imagine many outcomes of what they will do and how those will effect them. Using these imaginations that we create we connect to others by sharing and communicating the thoughts that we are having.

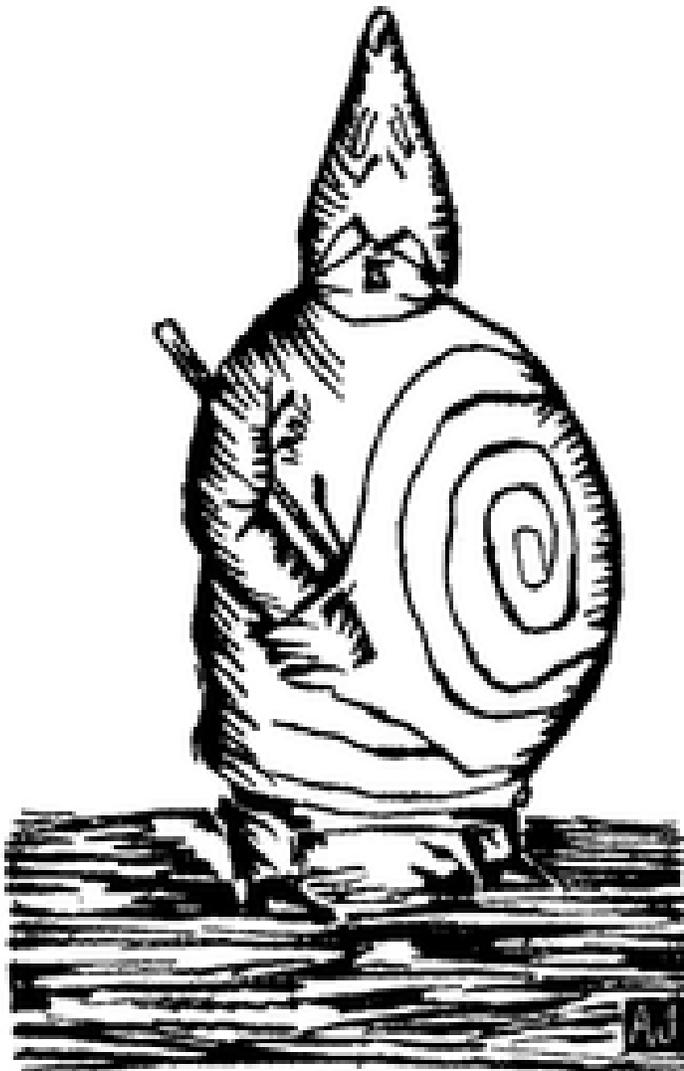


Fig 10 Ubu Roi

Research Results

Pataphysics

"Modern physics is based in the world of appearances and quantifiable phenomena, while metaphysics is lost in abstractions that neglect the concrete and historical.

Pataphysics targets precisely where we live. This includes dreams, hallucinations, and other outpourings of the imagination that modern science does not regard as "real"."

-Peter Olshavsky

Pataphysics is the piece of humanity that our technology is missing and by changing our methods of use and creation we can blaze a path to a future where technology does not destroy what makes us human.

Research Results

Metropolis



Fig 11 Metropolis

Metropolis - Fritz Lang

Metropolis by Fritz Lang shows a scary potential future that could become our reality if we continue down our path. In the film the upper class subjects the lower class to basically being slaves. The lower class are always working the machines that keep the upper class happy. It goes so far as them being part of the machine their blood the grease and their bodies the gears to keep it running. This is quite the opposite of pataphysics and helps to broaden the conversation on technology overall.

Case Studies

Jewish Museum, Berlin



Fig 12 Jewish Museum

Jewish Museum, Berlin, Germany, Daniel Libeskind

The Jewish museum is supposed to be a place not only to inform people about the holocaust but also to help bring the weight to those who wer not effected and also a place for those who were to remember. This is a great study as the building itself creates an atmosphere that evokes feelings from the users. Through the architecture one can grasp the devastation of the Holocaust even when the building is completely empty. It does this through the exquisite use of light and void connecting us in some way to those who were killed.

Case Studies

Jewish Museum, Berlin



Fig 13 Void

Through the use of void Libeskind creates a unique environment that helps represent the loss of life in the Holocaust and the things that we will never understand about what they went through.



Fig 14 Loss

Shalekhet - Fallen leaves by Menashe Kadishman is a permanent installation that brings reality to the Holocaust through metal faces representing all the Jewish lives that were lost.



Fig 15 Contrast

As a stark contrast to the Kollegienhaus building next to it it brings a new perspective to those who enter both physically but also creating an atmosphere for this

Case Studies

Jewish Museum, Berlin

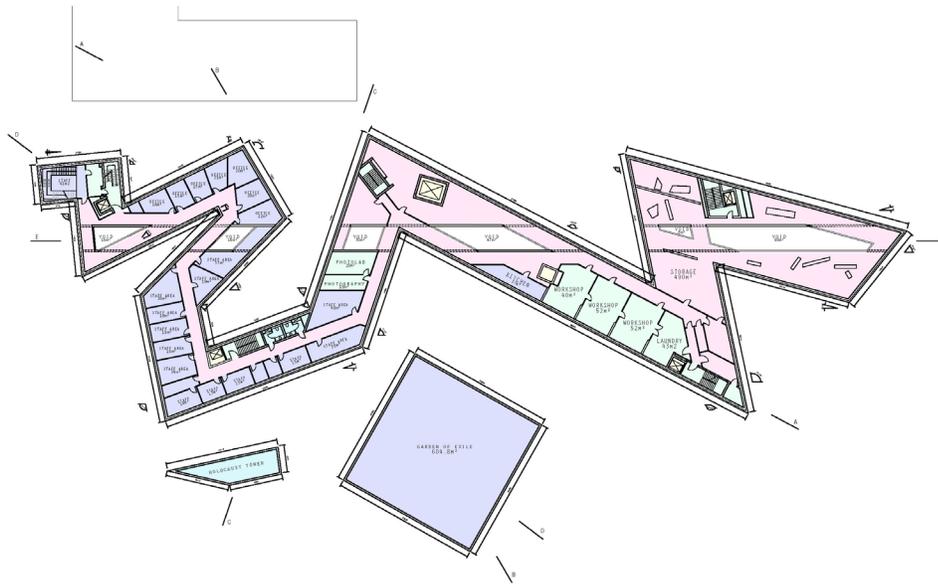
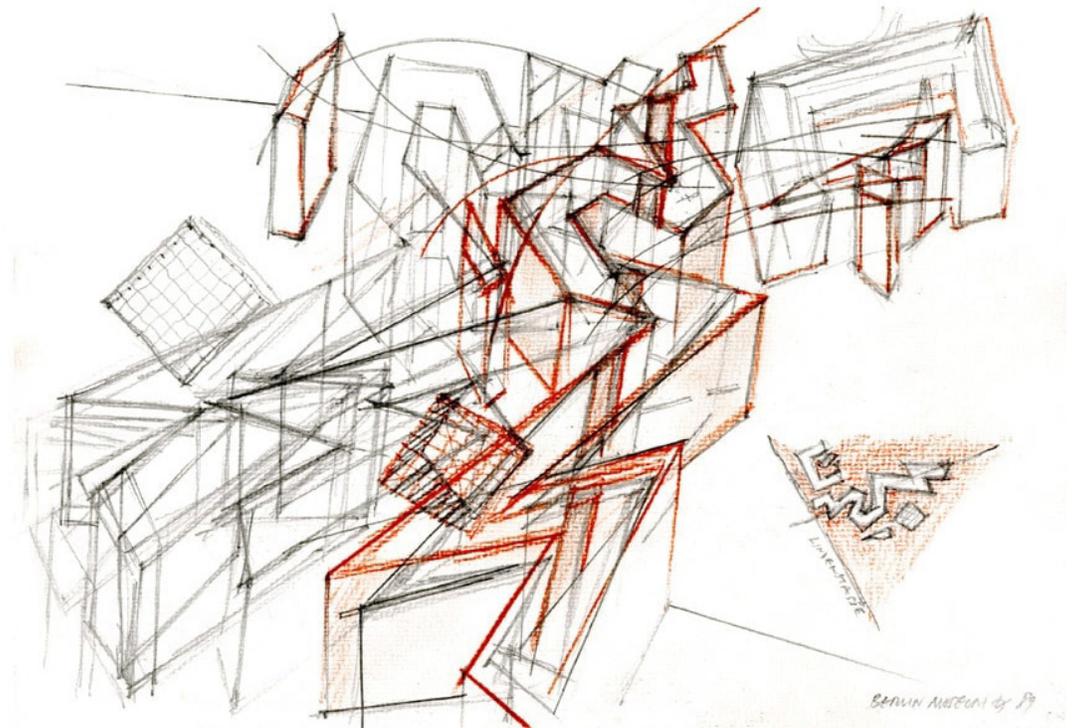


Fig 16 Jewish Museum Plan

Through looking both at the plan and Libeskind's drawings it is visible that the building itself is not of the standard cartesian plan. Instead it is made through his mind and ideas put on paper and when looking at his drawings almost seems as though there is some play involved with his method of design.

Fig 17 Jewish Museum Sketch



Case Studies

The Large Glass

The Large Glass or The Bride Stripped Bare by Her Bachelors, Even by Marcel Duchamp

The Large Glass is largely looked at as an exploration of male and female desire. On the top is the bride and the bottom her bachelors sometimes being referred to as the love machine it is more like the opposite as they are doomed to never be together as the top and bottom sections are permanently separated .

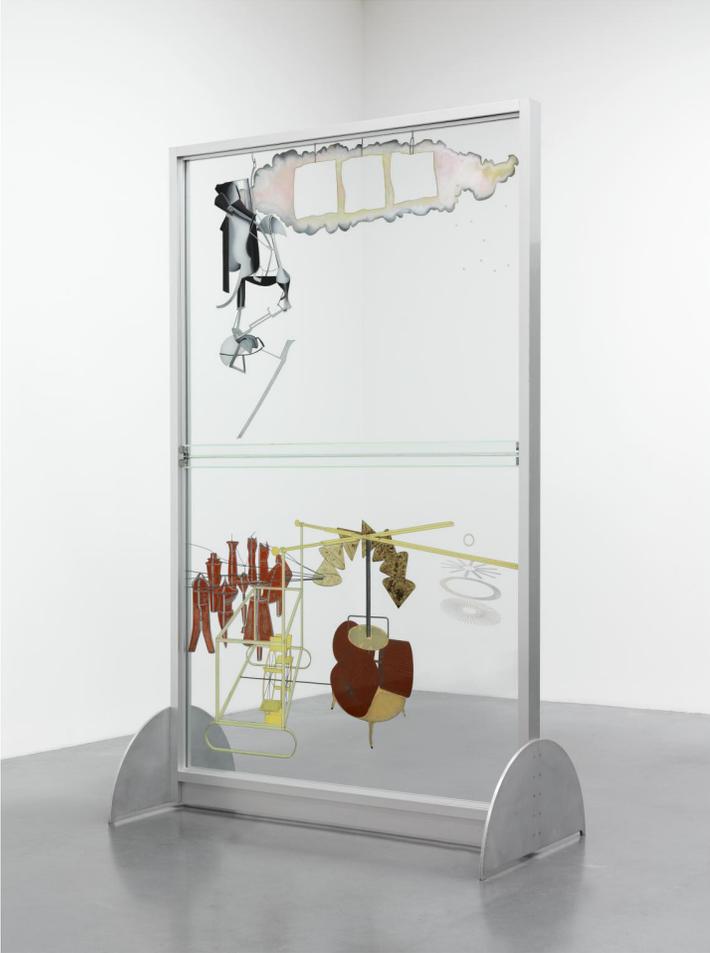


Fig 18 The Large Glass

Through this piece of art there is a duality of a person placing a meaning on something or a person finding the meaning through something. Each individual will end at a different meaning or purpose behind the art none of which are wrong and all of which can be used as a tool to connect those people. It also again is touching at playfulness by leaving gaps in its meaning. Each piece is placed in relation to each other yet they all leave gaps in between them which is where the ability for multiple interpretations comes from. Creating a space for conversation on what lies within those gaps.

Case Studies

The Large Glass

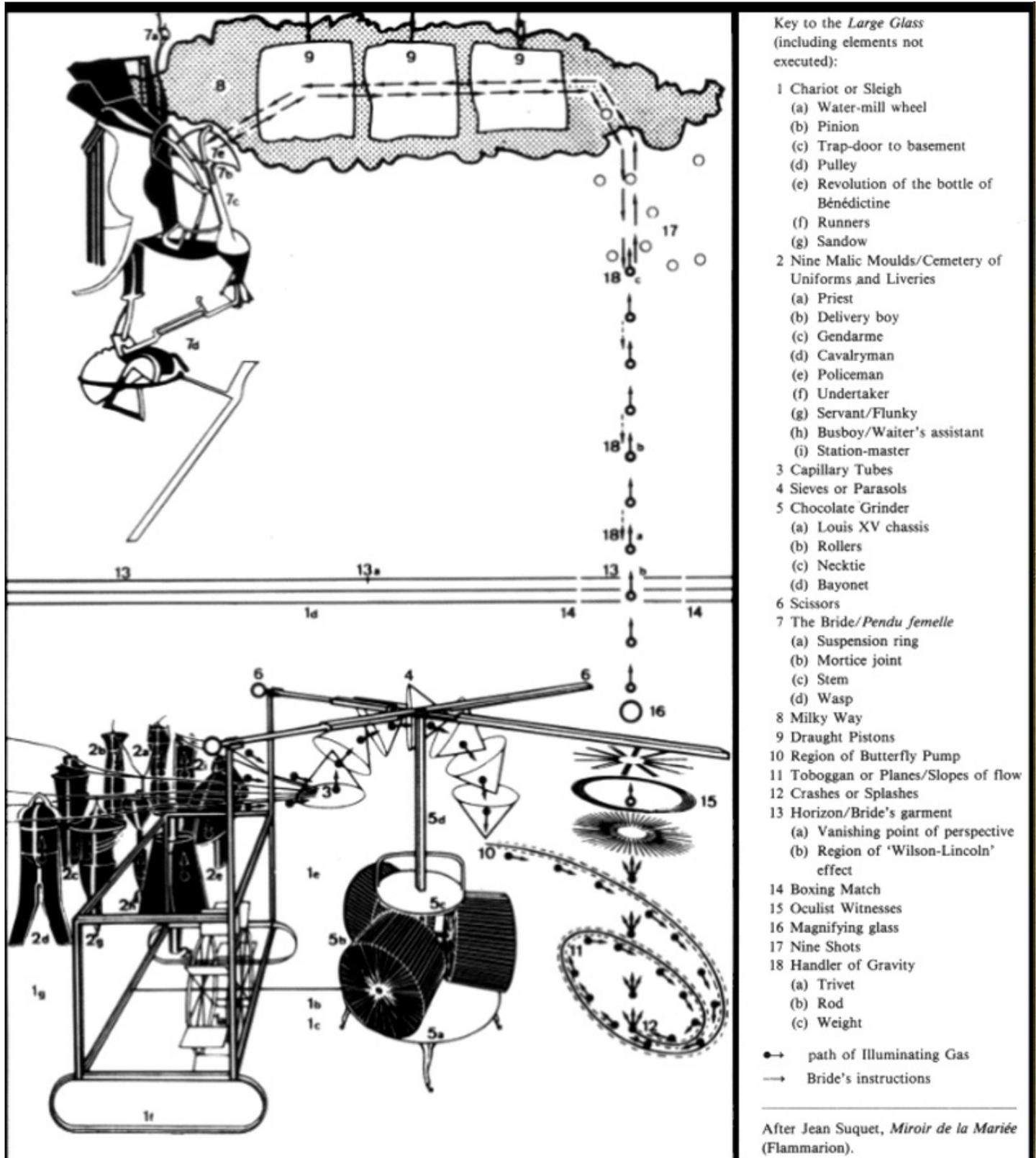


Fig 19 The Large Glass Explanation

Case Studies

Libeskind Machines

The Reading Machine (Top), The Memory Machine (Middle), and The Writing Machine (Bottom)

These are three machines created by Daniel Libeskind based on machines of the past. Each representing a lesson in architecture. First, is a look back reminding us of the history of how architecture was done in the past. Second, is a lesson in how things have meaning before they are interacted with. Through the memory machine Libeskind attempts to disconnect things from the earth returning them to their original meaning. Last, is a look at our modern cartesian system mapping things out through coordinates. Through these machines it is quite obvious that the former methods of architecture were if not better at least more interesting to the individual and evoked a larger sense of participation.

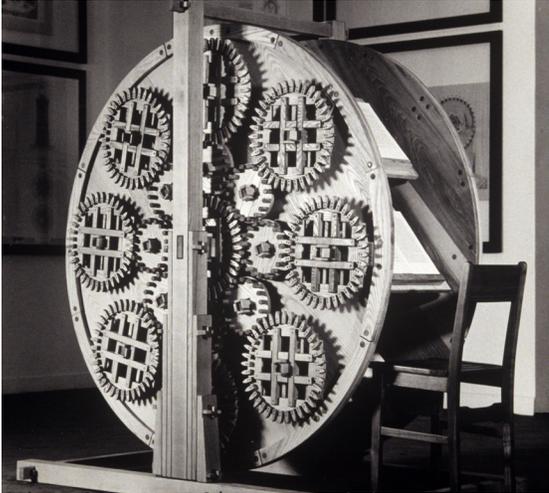


Fig 20 Reading Machine

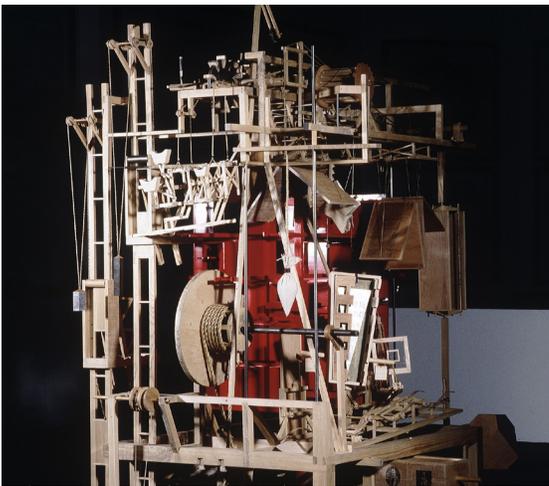


Fig 21 Memory Machine

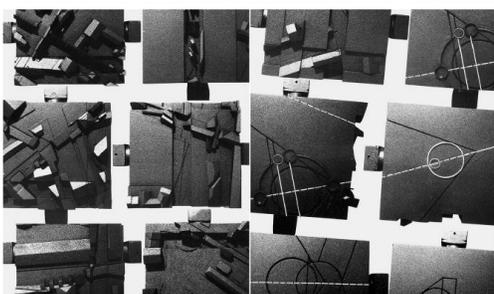
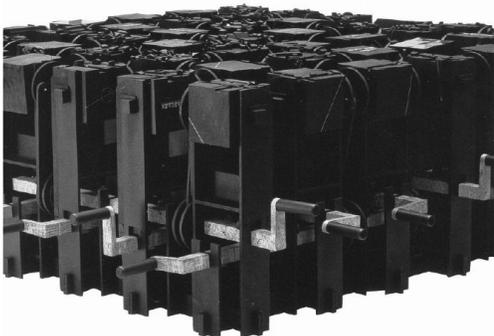


Fig 22 Writing Machine

Case Studies

International Spy Museum



Fig 23 International Spy Museum

International Spy Museum, Washington D.C.

Rogers Stirk Harbour + Partners

By creating a one hundred percent immersive experience this museum not only attracts visitors to it but helps to build connections between those who visit it. With proper use architecture can create an illusion that allows a space to turn into something that it is not. Much like the large glass it leaves gaps but these instead of being between objects or ideas they are in our vision and memory allowing us to believe the space we experience is different than it is.

Case Studies

International Spy Museum



Fig 24 Atmosphere

EXHIBITS START (ON 5TH FLOOR)

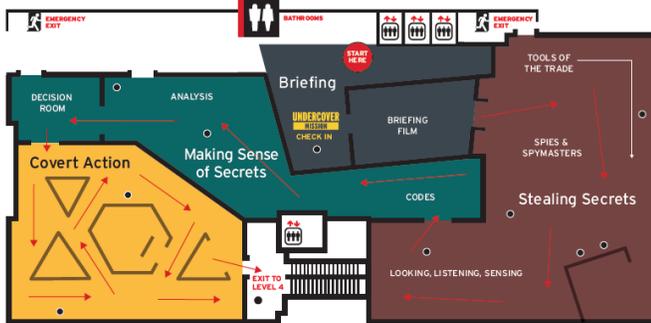


Fig 25 ISM Floor Plans

Exhibits that are not only informative and interesting but are also curated to help envelope the viewer in the idea of being a spy. Along with this the layout of the museum while promoting flow also gives the illusion of having the ability to explore through the exhibits



Fig 26 Activity

Lastly the museum also has an interactive system in place that encourages the users to interact with the exhibits in the museum as if they are on a top secret mission

Historical, Social, and Cultural Context



Fig 27 Site1 1999



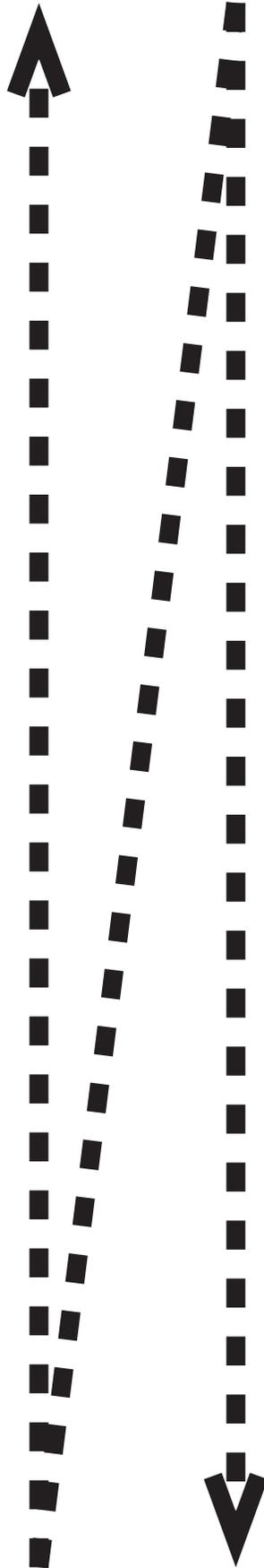
Fig 28 Site2 2002



Fig 29 Site3 2005



Fig 30 Site4 2009



2015 Fig 31 Site5



2018 Fig 32 Site6



2021 Fig 33 Site7

Historical, Social, and Cultural Context

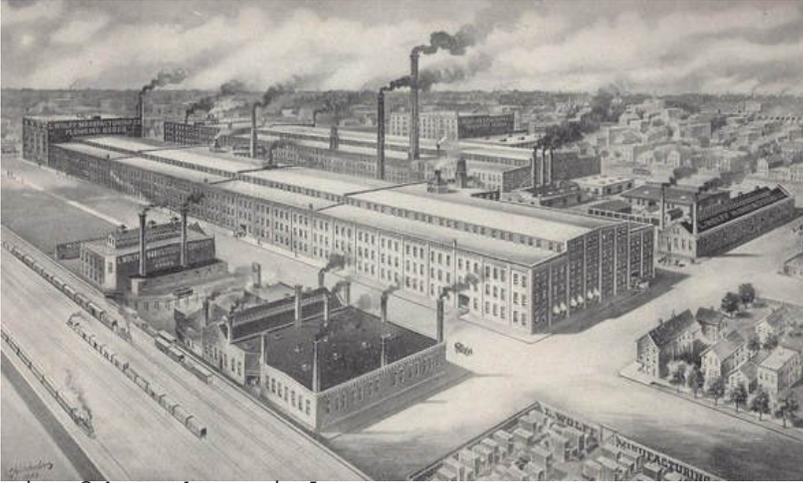


Fig 34 Industrial

As a city Chicago was born out of industry being the center of midwestern transportation. Being at the junction of both a river and the railroad nearly all of the goods that went west from the east coast passed through Chicago.



Fig 35 Museums

Chicago is a city rich with museums as well as the Art Institute of Chicago. Due to this the city has a prominent art community.



Fig 36 Tourism

Chicago is also a major tourist destination attracting people from all over. This helps not only create a great economy but brings many cultures together with the potential to interact.

Site Analysis

Overview

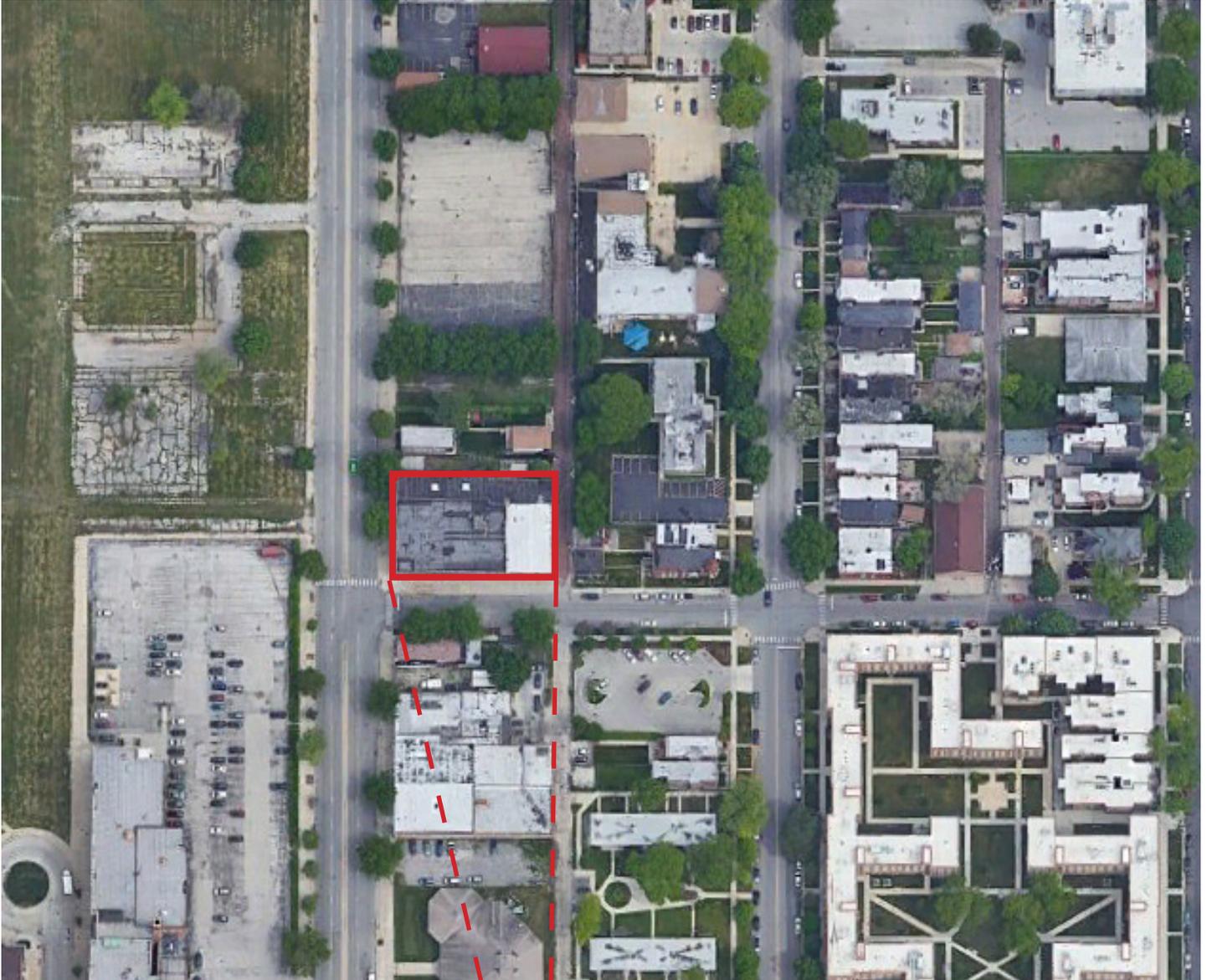


Fig 37 Site Overview

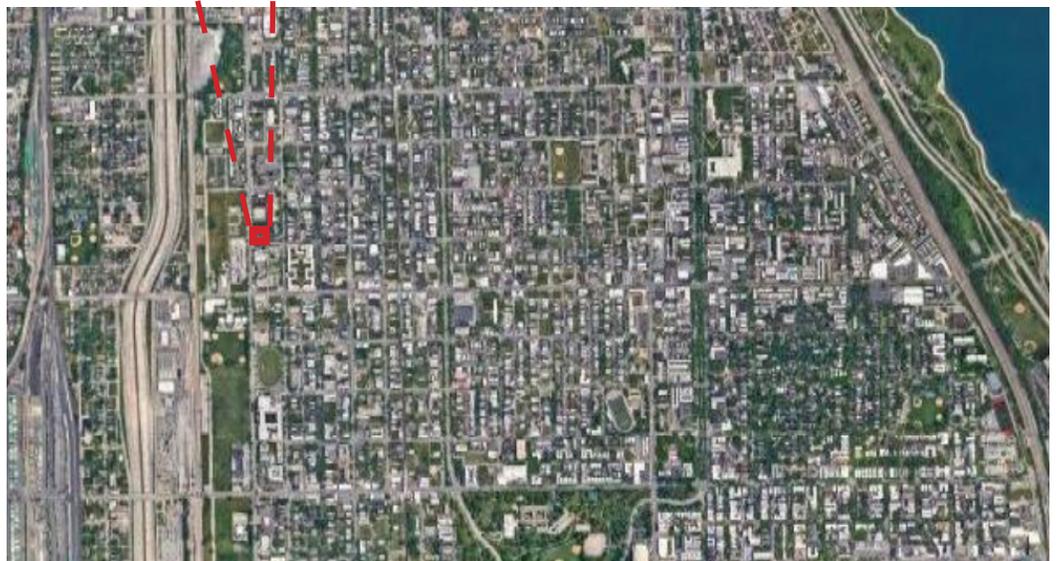


Fig 38 Site Context

Site Analysis

Why Here

The site that has been chosen is located at 4557 South State Street, Chicago, Illinois. Currently on the site there is a warehouse that is vacant. This location was chosen first due to its relevance to the project. As a vacant warehouse is the perfect representation of a place where our drive for production has inevitably failed us. Also being in Chicago a place that was once the industrial hub of the midwest there is a slight irony in the critique of technology that is taking place. Chicago also being a place with many museums and a tourist destination it already attracts the proper demographic to utilize a museum. With these conditions it is a prime spot to try and connect cultures in a way that has not been done yet.

In relation to the sites context in the city itself it is easy to get to from other attractions that already exist within Chicago. There is also a metro stop just six blocks away from the site to promote the use of public transit and make it easier for tourists to get to and from the location. Right next to the site there is also a green space which promotes walkability around the site and helps reduce the amount of drainage needed on and around the site.

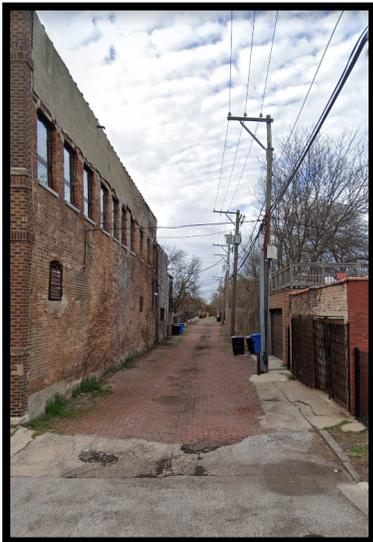
Site Analysis

Site Materiality

Fig 43 Brick

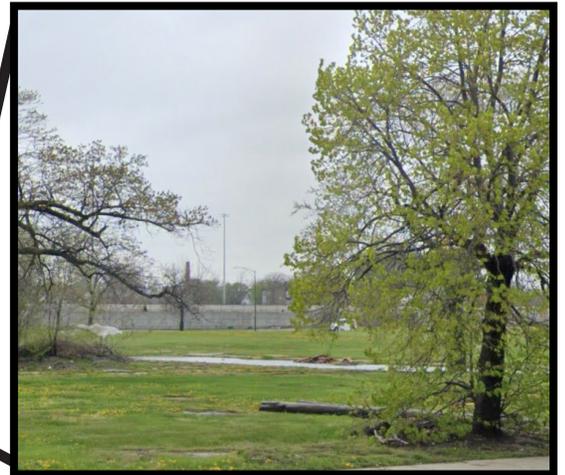


Brick Buildings



Back Alley

Fig 39 Alley



Green Space

Fig 42 Green Space

No Parking

Medium-Rise



46

Fig 40 Parking



Fig 41 Medium-Rise

Site Analysis

Site Perspectives

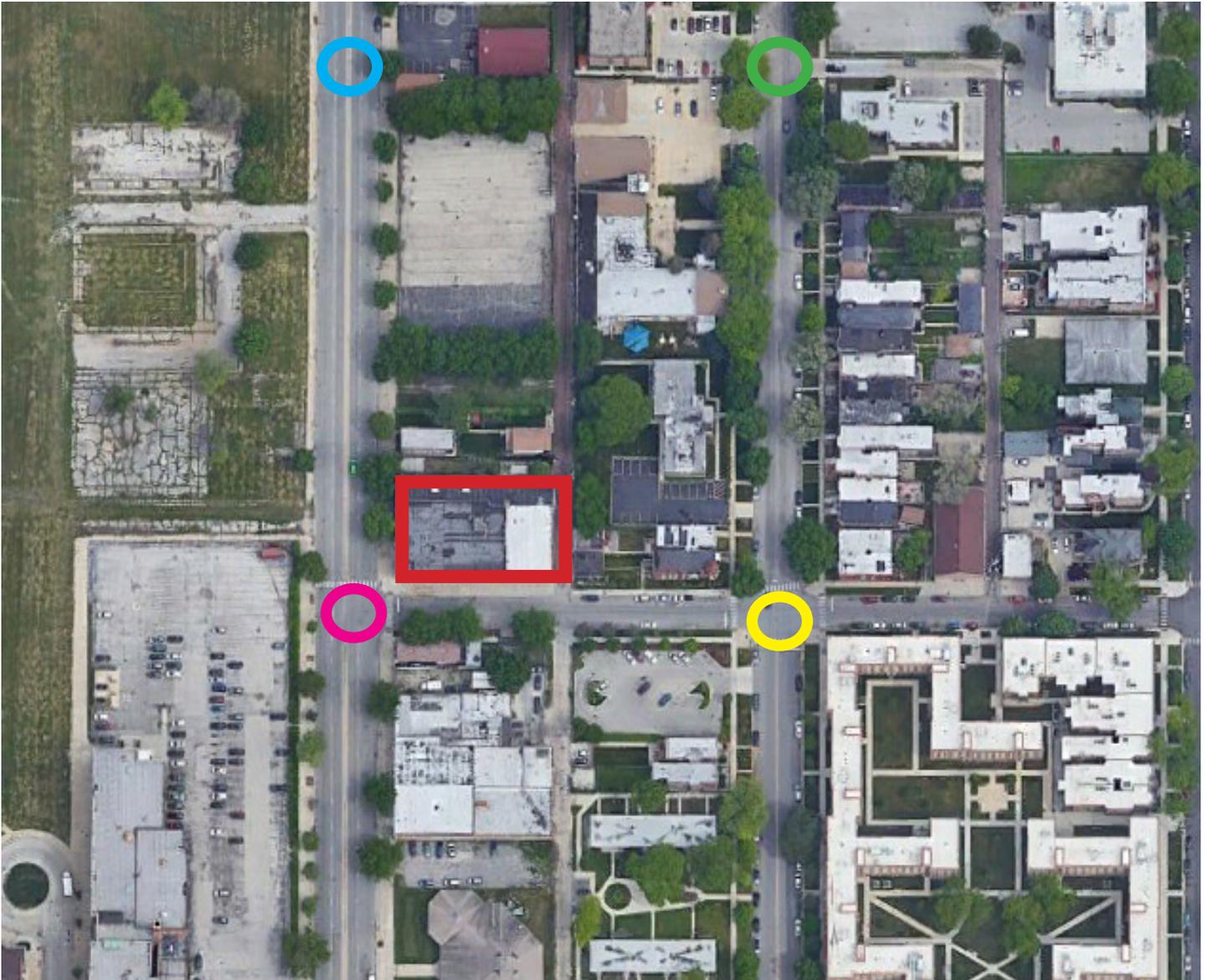


Fig 44 Locations

-  Location #1
-  Location #2
-  Location #3
-  Location #4

Site Analysis

Location #1



North

Fig 46 Loc.1N



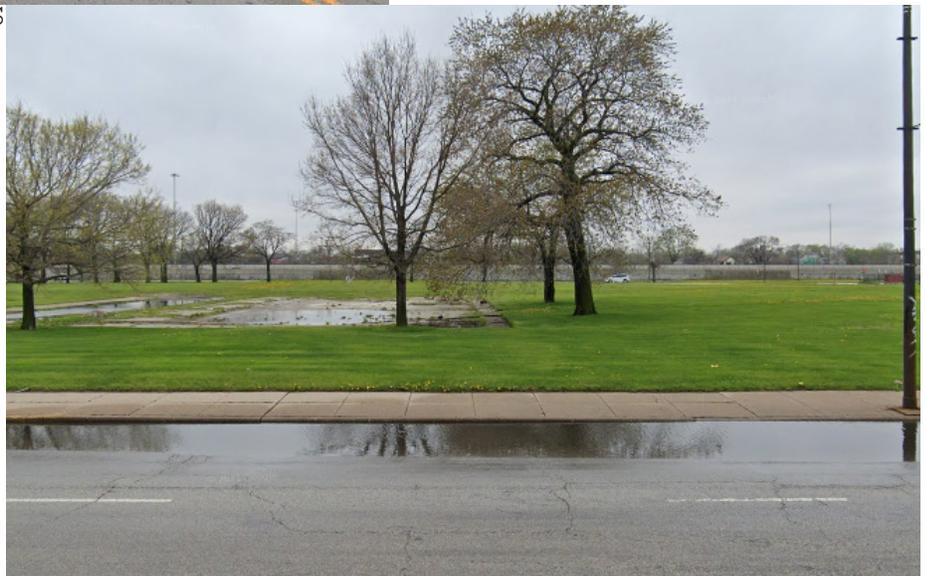
Fig 47 Loc.1E

East



South

Fig 45 Loc.1S



West

Fig 48 Loc.1W

Site Analysis

Location #2



Fig 51 Loc.2N

North



East

Fig 50 Loc.2E



Fig 52 Loc.2S

South



Fig 49 Loc.2W

West

Site Analysis

Location #3



North

Fig 53 Loc.3N



Fig 55 Loc.3E

East



South

Fig 54 Loc.3S



West

Fig 56 Loc.3W

Site Analysis

Location #4



Fig 59 Loc.4N

North



East

Fig 58 Loc.4E



Fig 60 Loc.4S

South



West

Fig 57 Loc.4W

Site Analysis

Vehicle Traffic

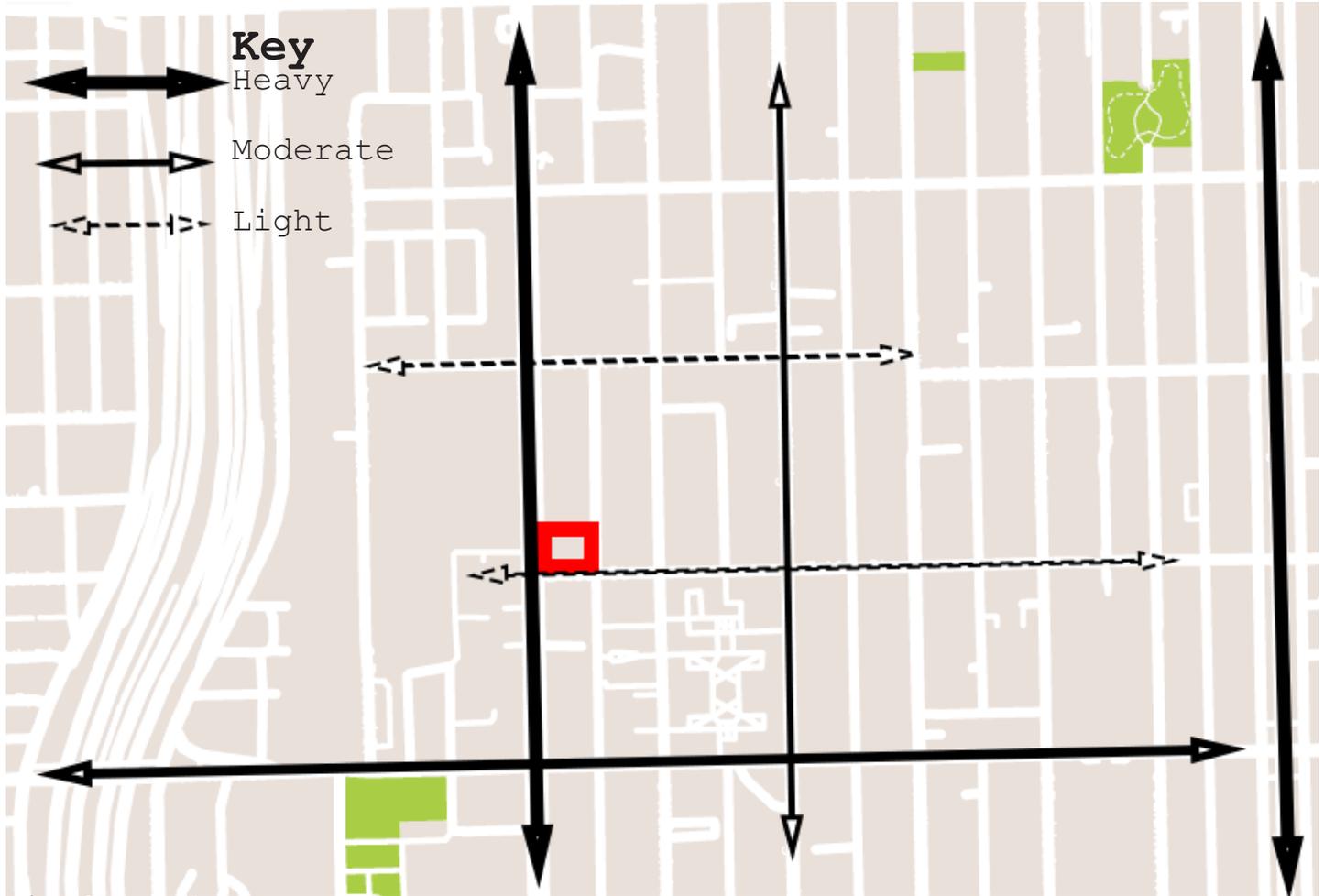


Fig 61 Traffic

Due to the low amount of traffic immediately close to the site it is optimal for pedestrian traffic as well as street parking. With the completion of this project the traffic will most likely increase slightly but it should still remain safe with the current infrastructure. Also being located only six blocks from a metro station it will be easy to get here through transit options.

Site Analysis

Pedestrian Traffic

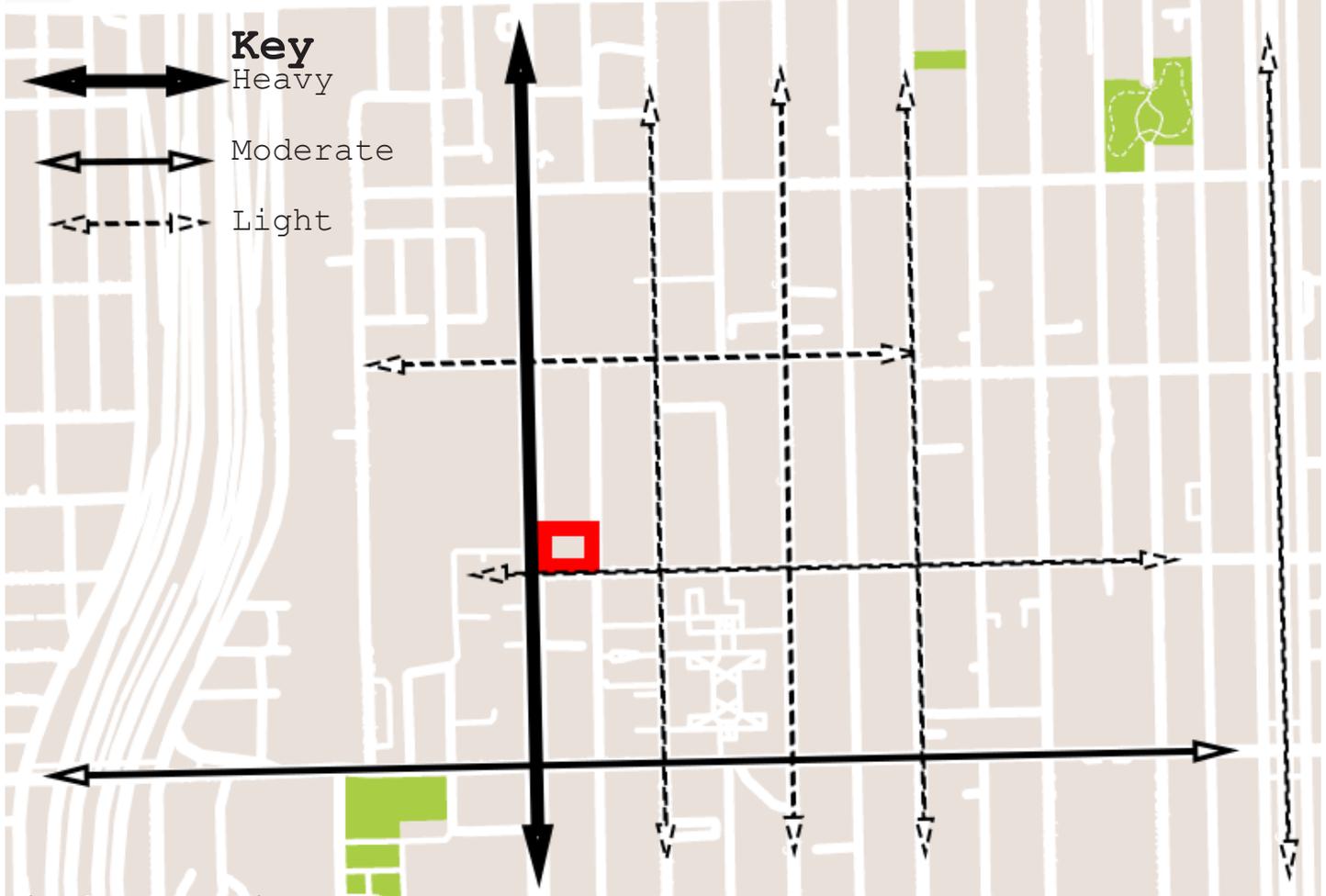


Fig 62 Pedestrians

Currently there is not a large amount of pedestrian traffic in the area as it is mostly residential. With the completion of this project that is expected to dramatically increase as many of the users will be tourists and would use public transport to get to the site. In order to compensate for this the design will attempt to promote walkability on and around the site in order to keep pedestrians safe.

Site Analysis

Site Contours



Fig 63 Site Contours

Chicago is a relatively flat city hence where the nickname the windy city comes from. Due to the flatness and the height of the buildings many wind tunnels are created making it a struggle for pedestrians in the winter.

Site Analysis

Temp. and Wind Data

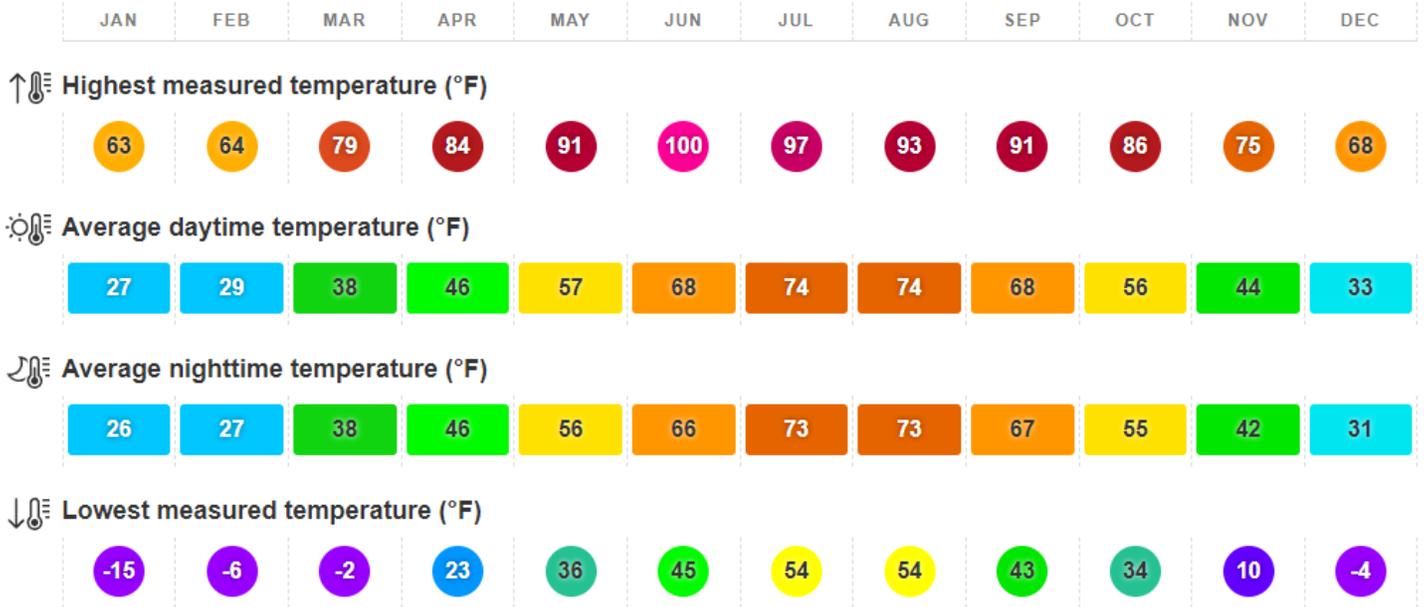


Fig 64 Temperature

With the close proximity to Lake Michigan the temperatures in Chicago are relatively temperate for its location. On that note it still does get cold in the winter meaning that the Museum would be busier in the summer then the winter. The wind is also a major factor in this as it will prevent users from wanting to come in the winter. In order to compensate for this some sort of windbreak will be placed to reduce the effects of the wind.

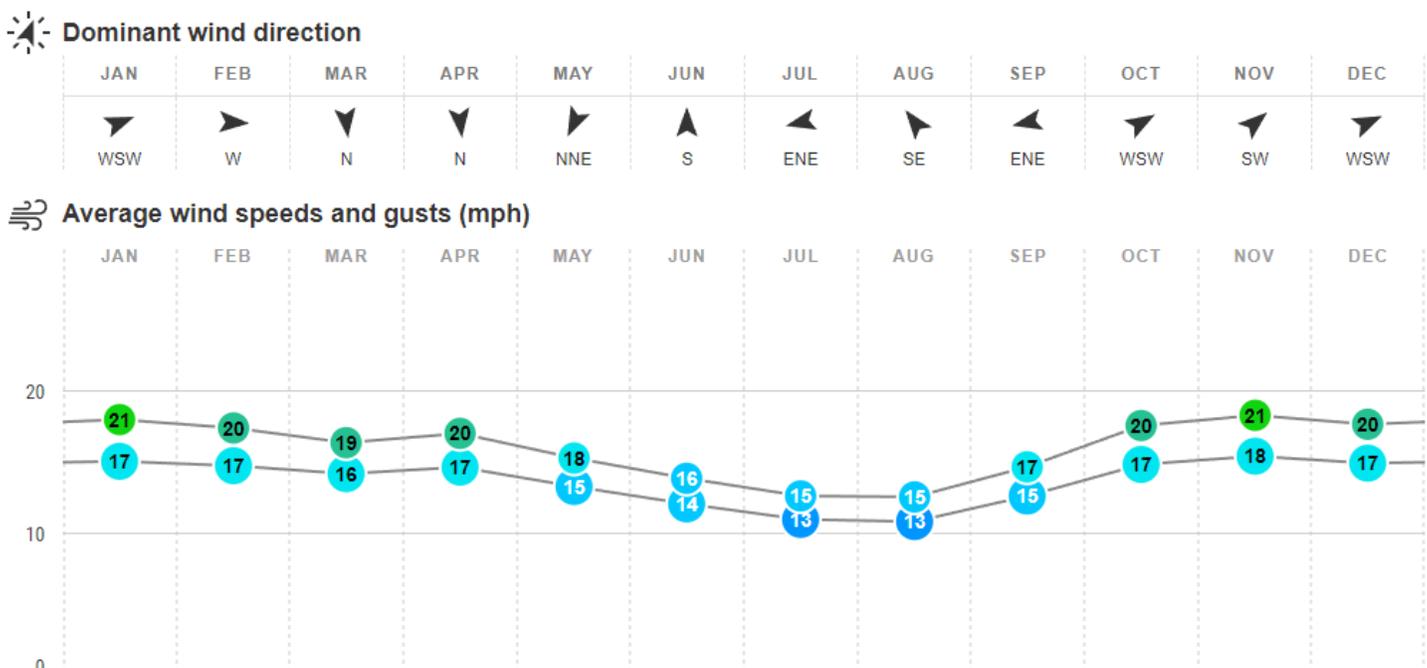


Fig 65 Wind

Site Analysis

Precipitation Data

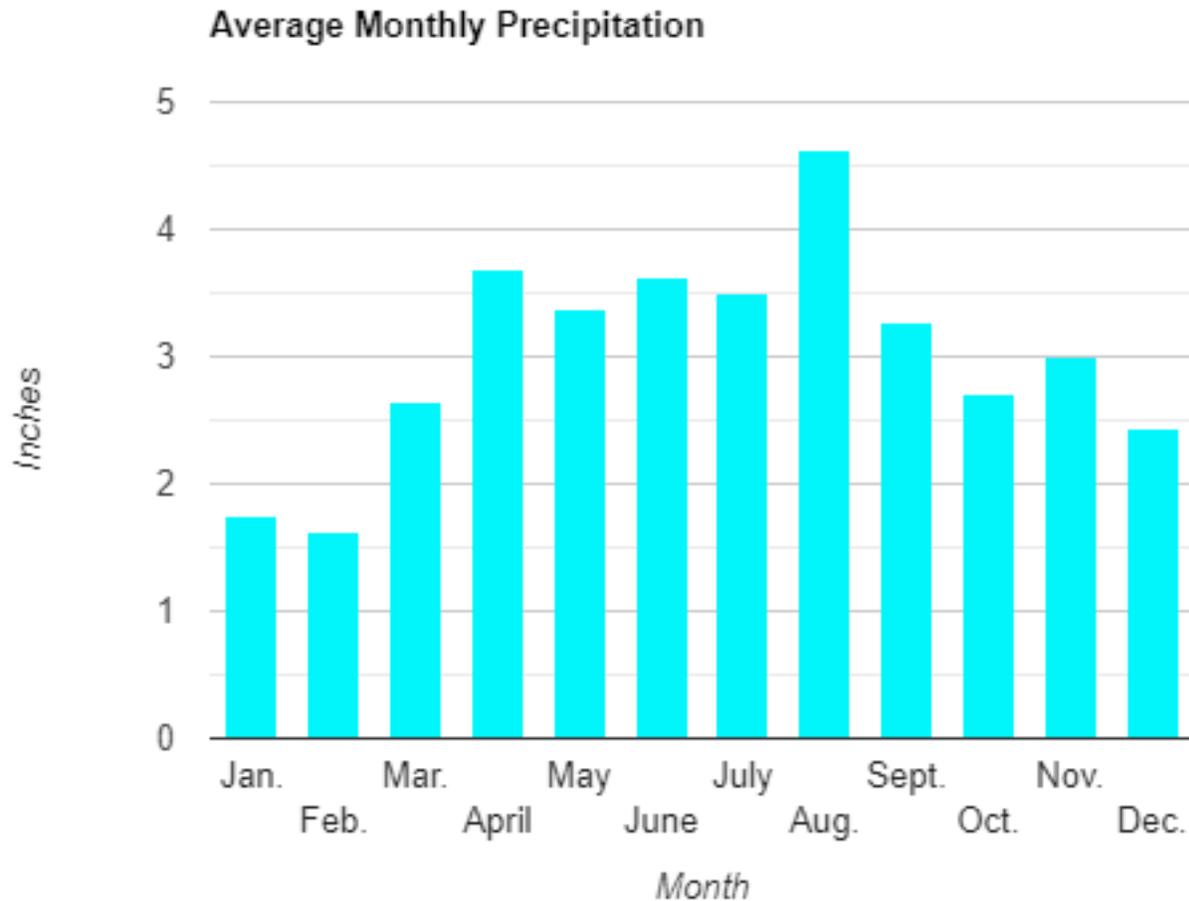


Fig 66 Precipitation

In order to help prevent the overflow of water on the site multiple greenspace will be placed to help soak up the moisture. Along with this they will serve as places to put snow in the winter so walkways and parking can always be clear for use.

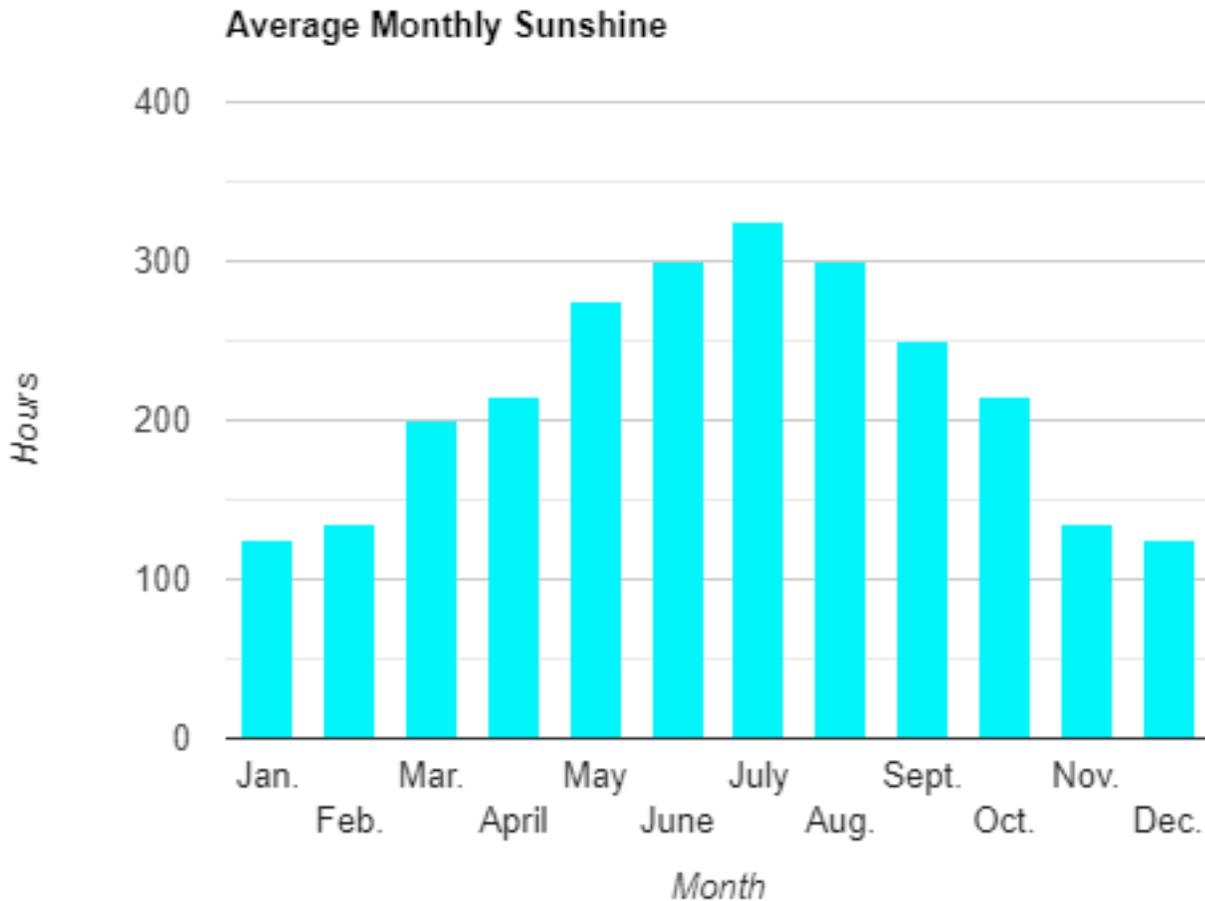


Fig 67 Sunshine

With the large fluctuation of sunlight between the summer and winter there will be trees placed on the sight to provide shade in the summer and allow for sun in the winter. Along with this due to how little sunlight there is in the winter the site will be properly lighted in order to make pedestrians feel safe wlk-ing around the sight in the evening.

Performance Criteria

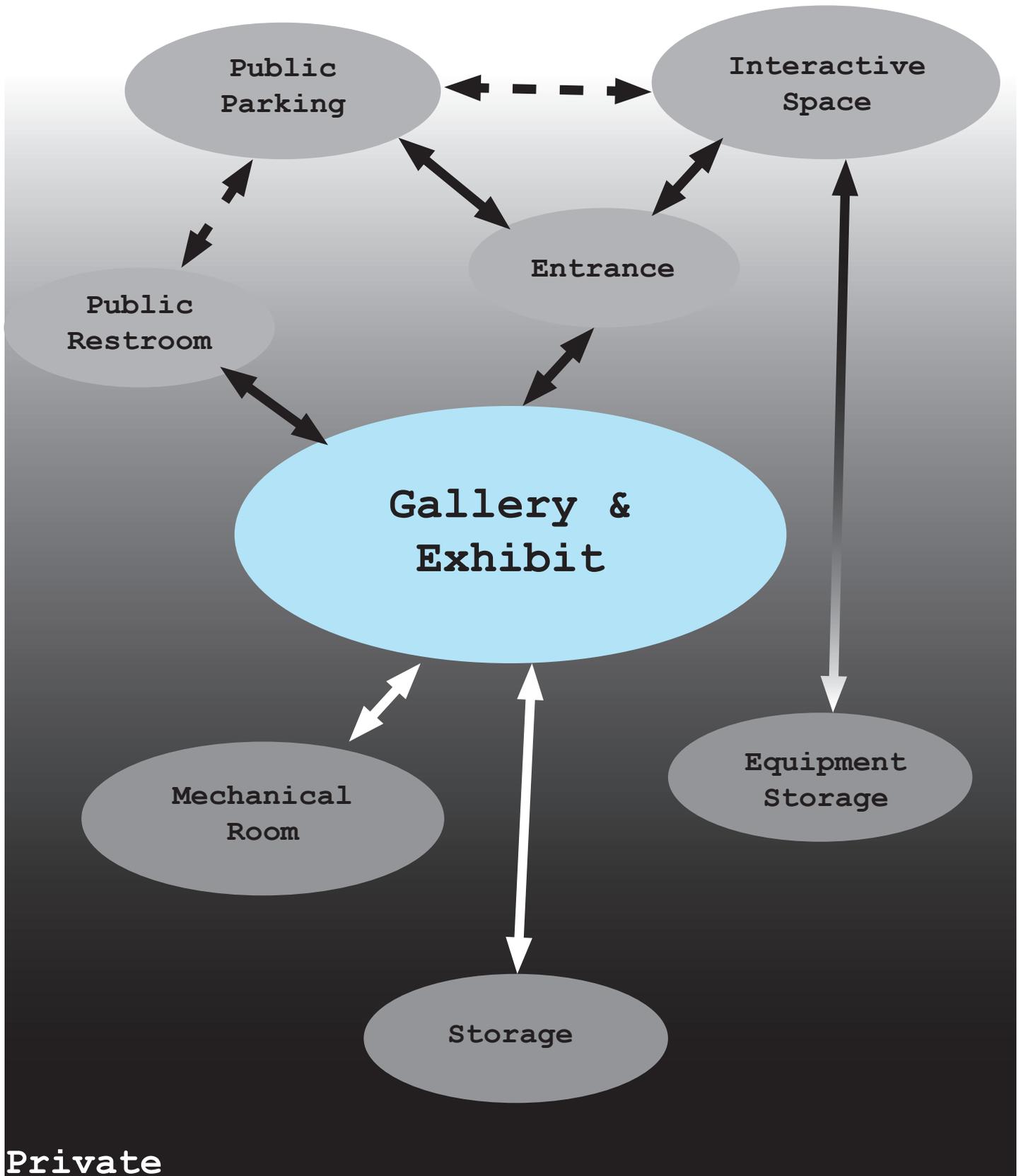
Behavioral Performance

1. The site must provide a place for people to interact this can occur in many different ways such as:
 - people watching
 - participating
 - established groups
 - parents watching kids
 - discussion
2. On top of this the site should provide a place that is relevant to the ideas presented within this thesis. This can be achieved through the site's relation to technology.

In order to judge whether the design accomplishes these goals drawings will be created to demonstrate how these could take place. An artefact has also been created to help test ideas and inform future design options that could potentially work. The data from this artefact has not come back yet so that will be discussed in more detail later.

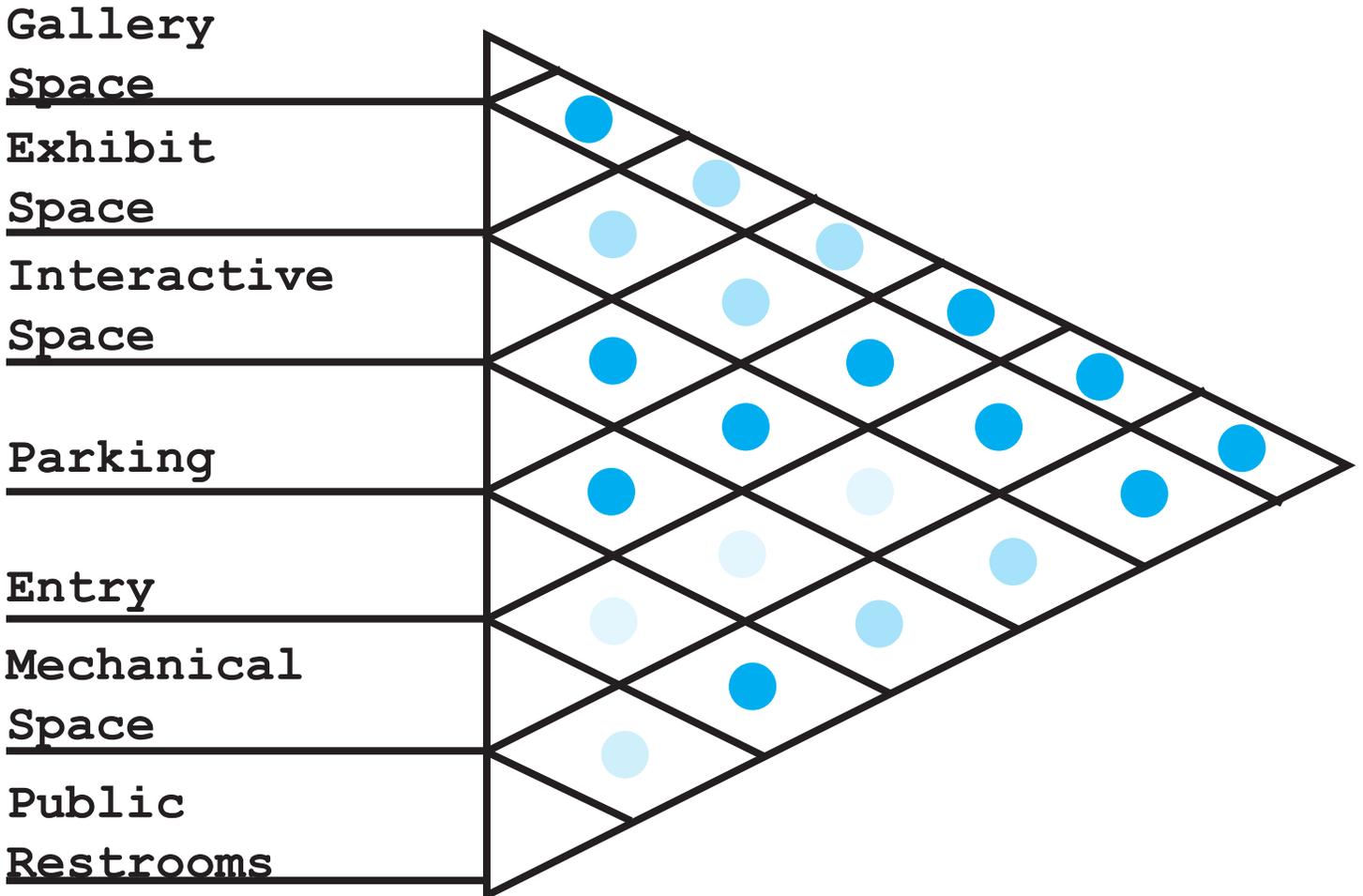
Performance Criteria

Public



Private

Performance Criteria



- Adjacent
- Nearby
- Not Connected

Plan for Proceeding

	Thesis Research	Thesis Studio	
Aug.	Proposal Draft		Research Direction Moving forward the most prominent research methods to be used will include historical, logical, qualitative, and case studies. Through the research of history, a logical argument will be created to help describe the plot of the thesis. The end of that plot will be based in modern case studies that show us our current state in the topic. This will then be furthered to deepen the conversation.
Sept.	Proposal Final		Design Methodology The design itself will be based in both qualitative and quantitative research to help cater to the demographic that will be served within the space. This will not only include research on the people using the space but also the ability of technology and how it could improve the space and the experience that its users will have. Lastly this will be a place that is meant to be an experience not only through the space itself but also the leaving and returning to the space.
Oct.	Research Draft		
Nov.	Research Final	Artifact	Documentation of Design All research will be documented in the final book in digital format. The design process will be recorded through sketches, pictorial representations, and graphical representations of data that influences the design. This information will then be presented at the end of the semester and made available in the final thesis book through the NDSU library database.g
Dec.			
Jan.	Thesis Studio		
Feb.	Reviews	Thesis Book	
March	Designing		
April	Final Reviews	Exhibit	
May			

Artefact

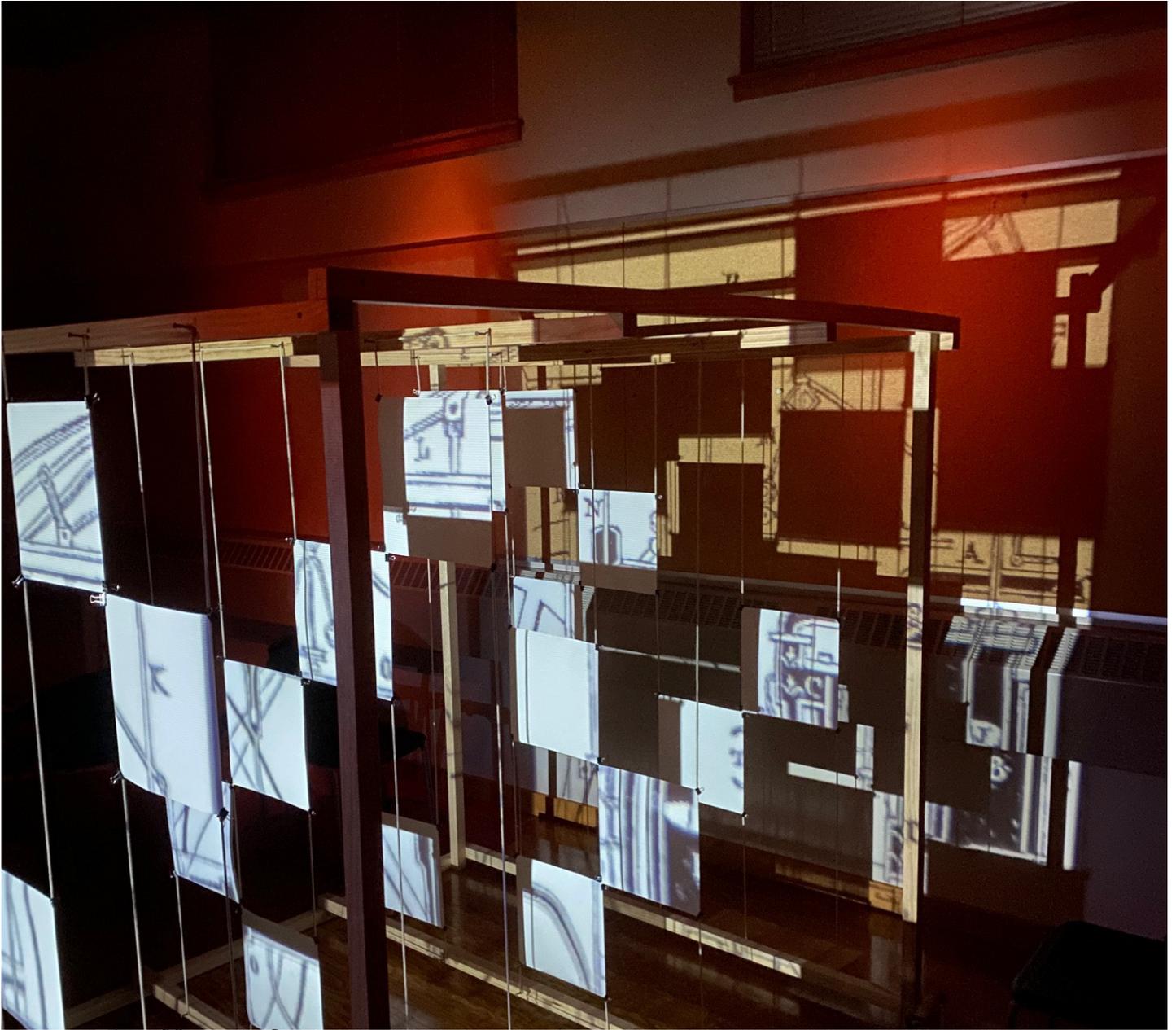


Fig 68 Artefact

After finishing my research I wanted to put my new found knowledge to the test by creating something that communicate and embodied the ideas that I had researched. In order to do this I created a collage of images from the movie Metropolis and quotes from Alfred Jarry. This created a sense of dissonance as these sources encapsulate opposite sides of technology. This image is portrayed on the next page.

Artefact

This image was then projected onto my physical artefact. When projected on to the artefact it separates the images and creates a sense of disconnection. I then ask that people attempt to draw something that represents machines onto the collage. As this is being done they can see their drawing creating connections between the images drawing their eyes forward and backwards. Through time they also start to reflect off of the already existing drawings leading to very interesting creations.

Fig 69 Collage



Artefact

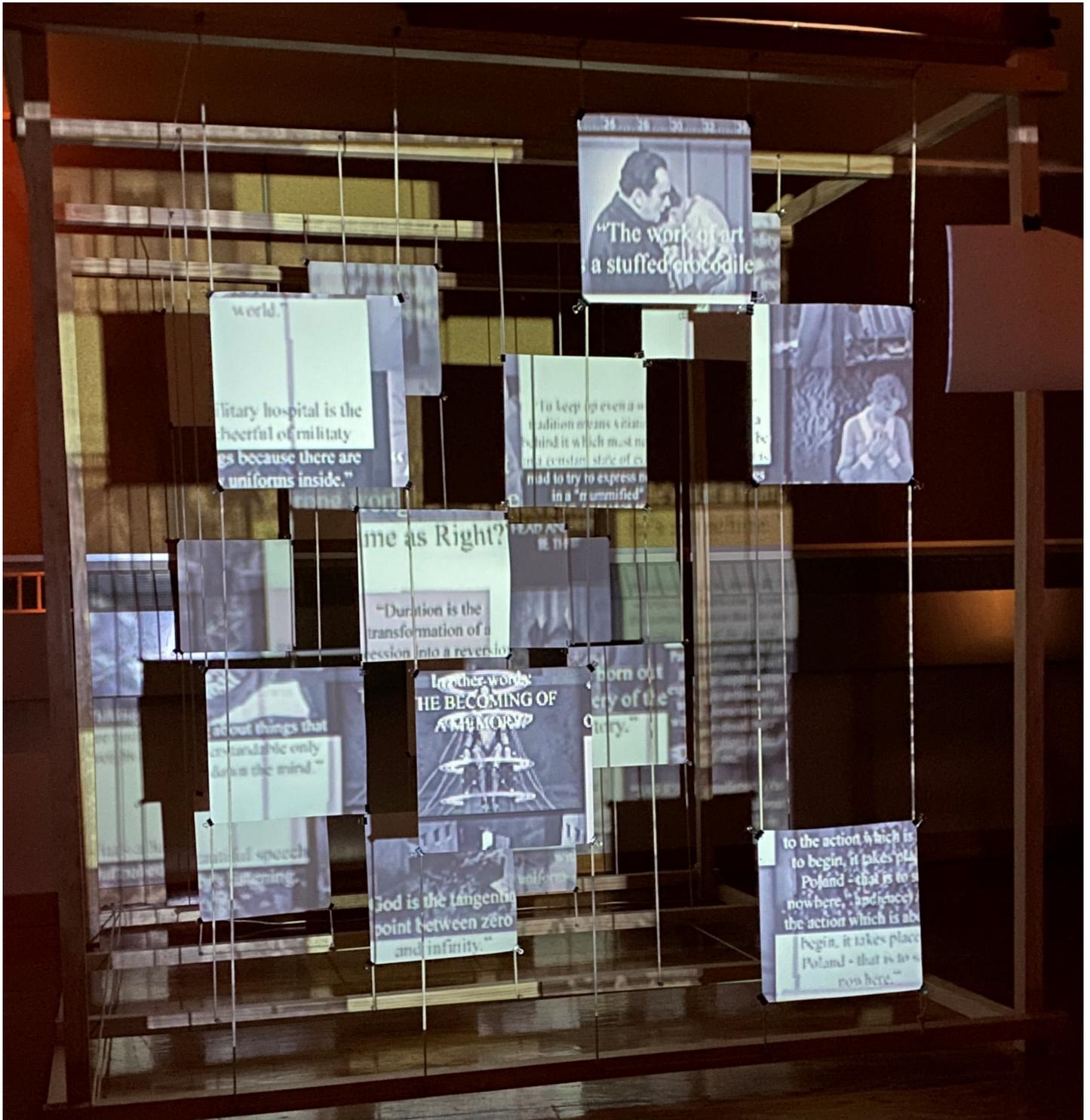
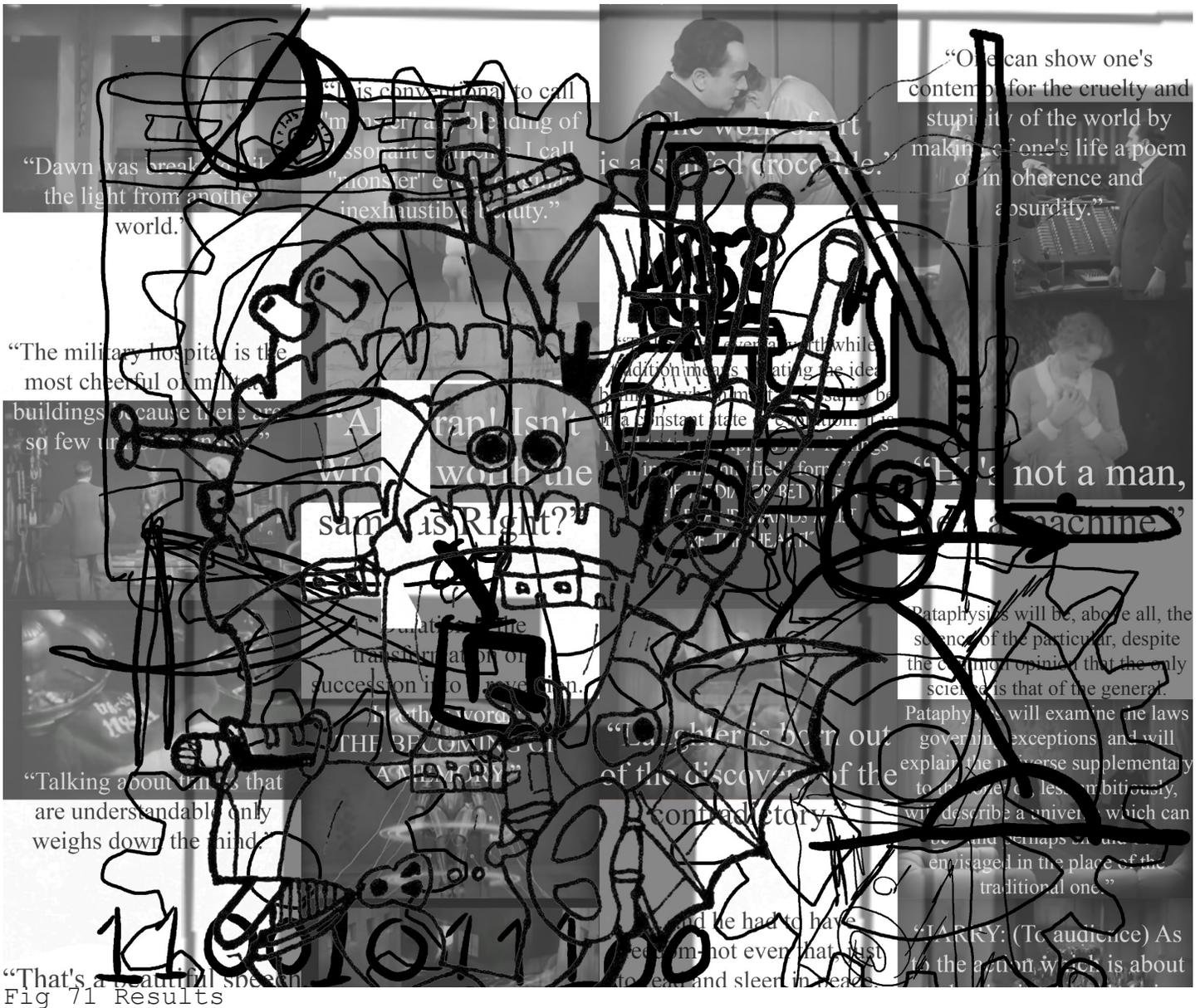


Fig 70 Artefact with Collage



In order to get more drawings and feedback I eventually created a website where anyone could send me drawings. Eventually after about a month I ended up with what is depicted above. Within the drawings all of technology is encapsulated from productive to imaginative. Along with that through imagination it creates new things based on the layering that existed. I then proceeded to attempt to translate this into my building.

Process

In order to try and translate the first drawings I attempted to highlight lines that existed within it and see if anything really stood out to me. Although this didnt result in a building it did lead to the realization that visitors should be allowed to choose many paths through the building. It also pushed the importance of layering even further.

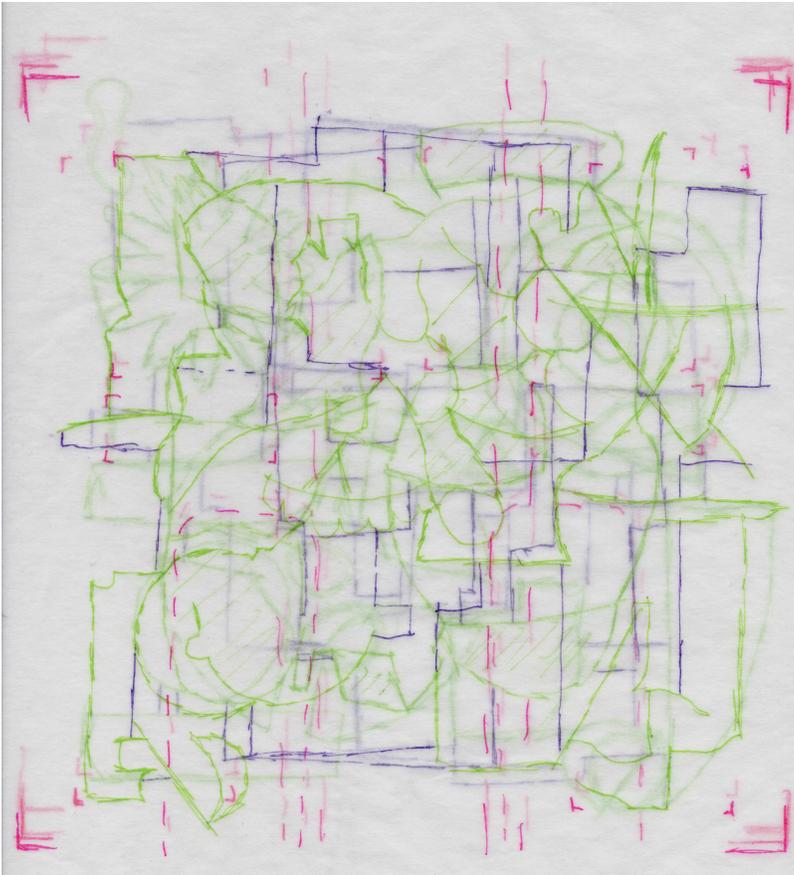


Fig 72 Layers_1

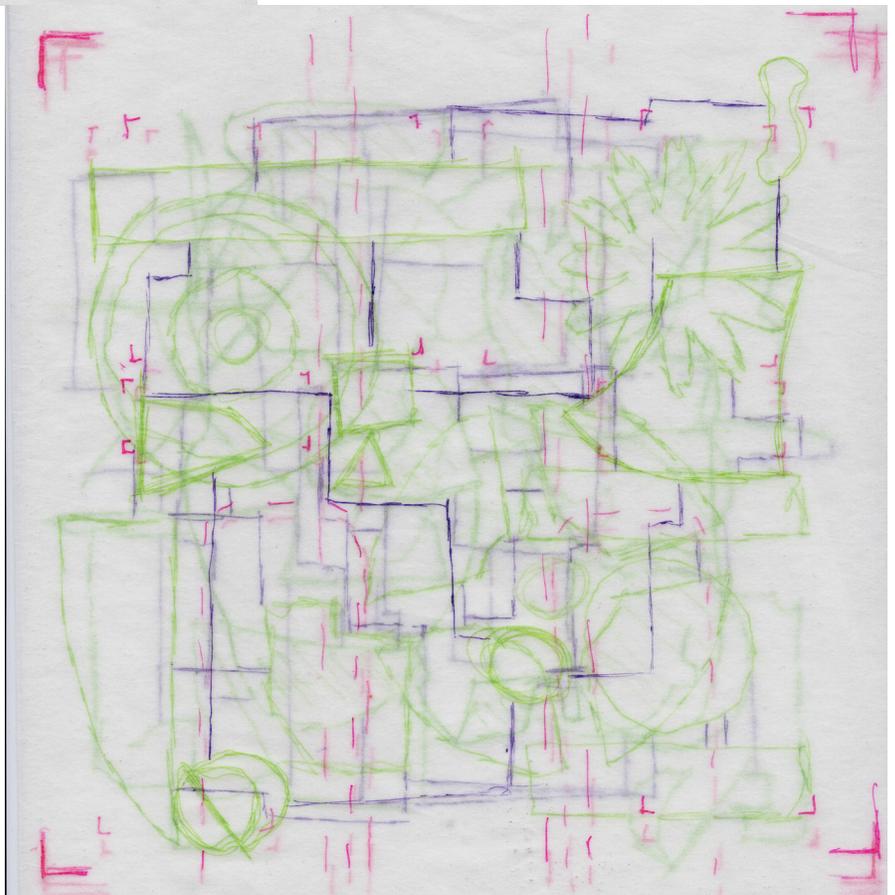


Fig 73 Layers_2

Process

I then started to attempt to create models that could convey my research and ideas. None of them really worked to do that though.



Fig 74 Model_1



Fig 75 Model_2

Process

After having little success with my models I decided it may be a good idea to create a machine instead. What I created is a Rube Goldberg machine. Here I tried to create a representation of the progression of technology through time, but through the process I realized many other things. First within this machine my research was present as well as my ideas. It had the concepts of interaction as well as connection as multiple people could interact with it at once. It also was organized in a way to allow for someone to imagine it as a building creating the architecture in their own mind. It was a machine that provoked your mind as it was fascinating yet nothing about it was obvious. Why would this be relevant to an architectural thesis? Well it truly accomplishes my goal of creating something that shows the user the history of technology as well as the relevance of pataphysics and the importance of our imagination in the creation and use of technology.

Process



Fig 76 Machine_1



Fig 77 Machine_2

Process



Fig 78 Machine_3



Fig 80 Machine_4



Fig 79 Machine_5

The Machine

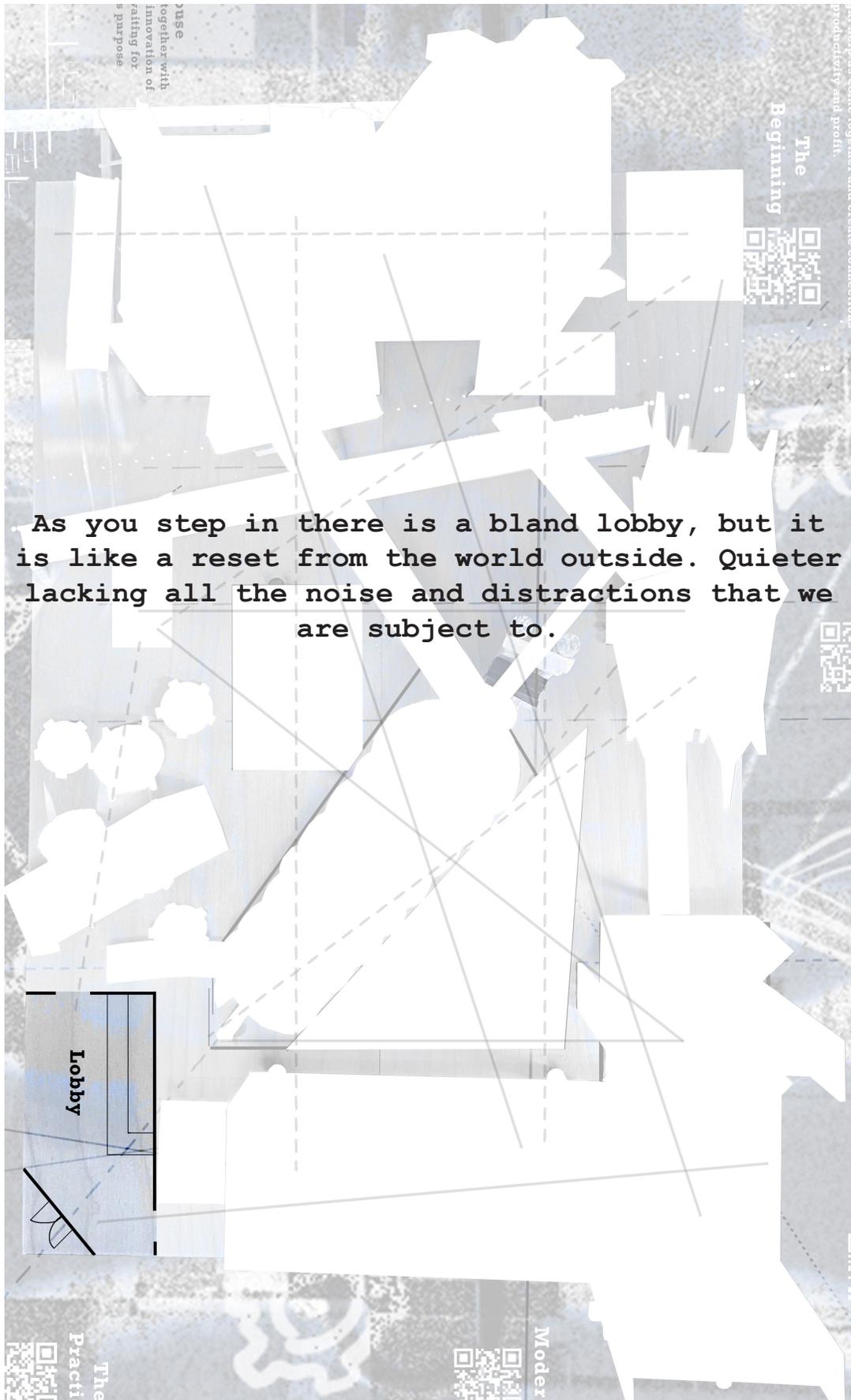


Fig 82 Lobby

The Machine

The Epitome

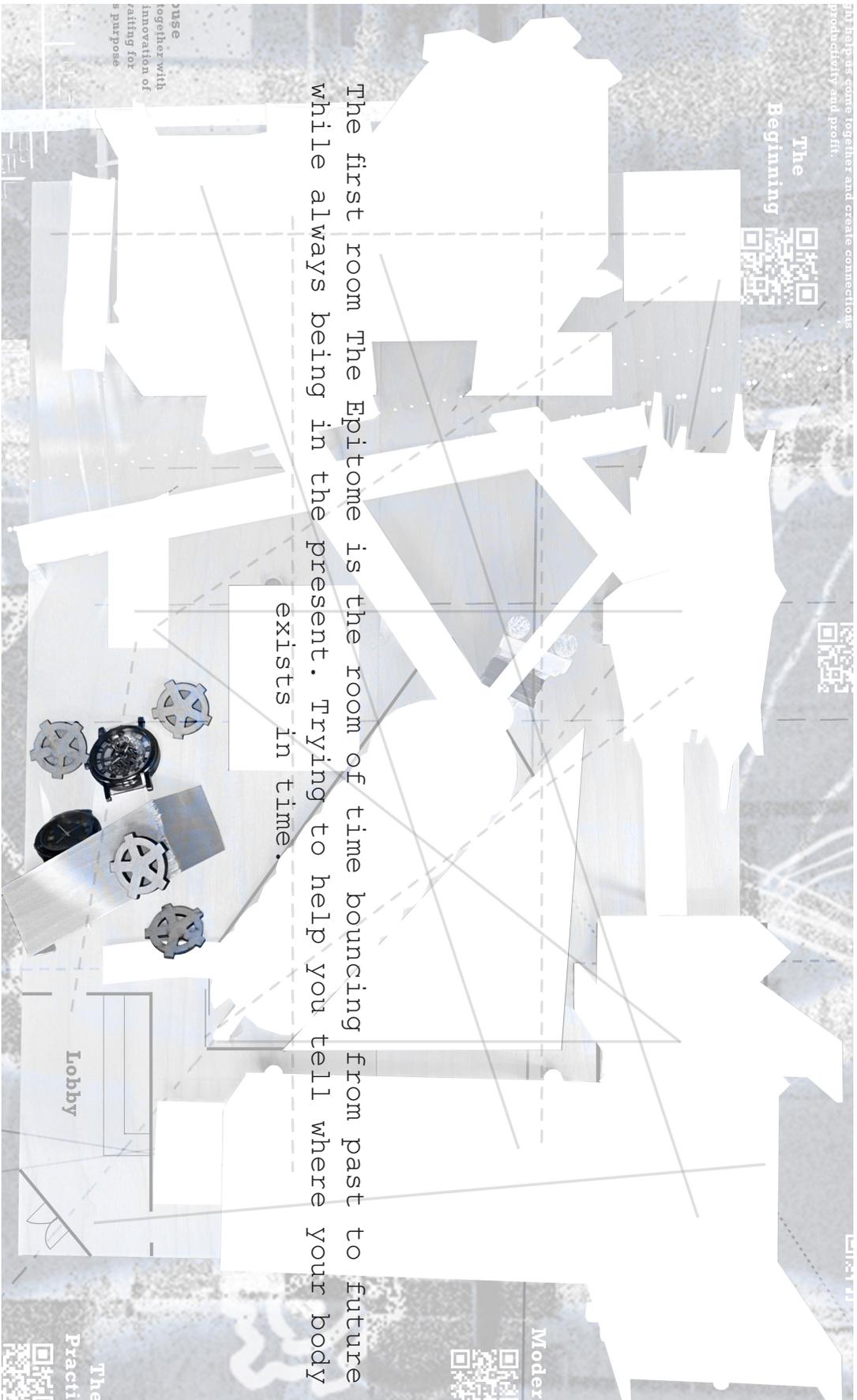
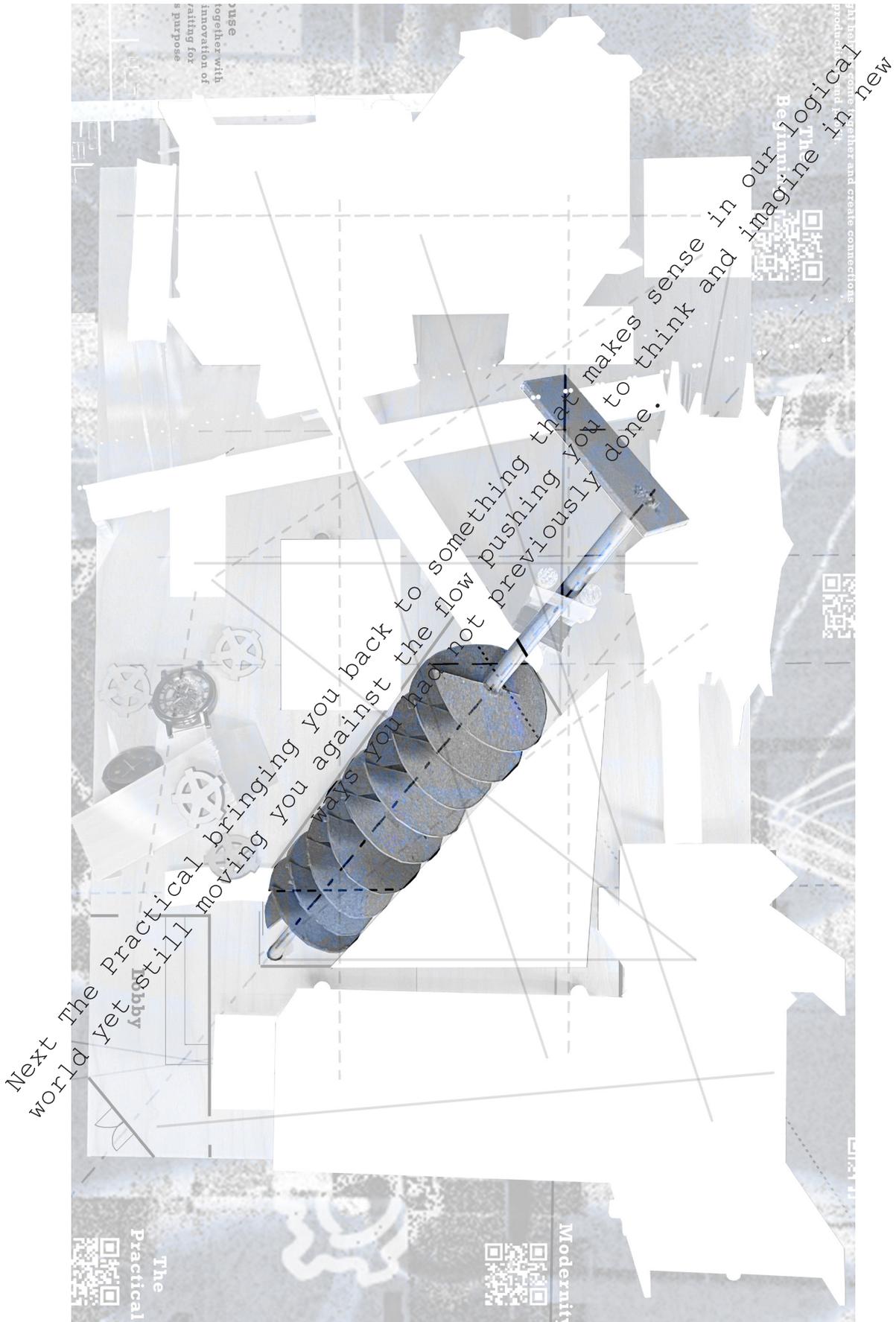


Fig 83 The Epitome

The Machine

The Practical



Next The Practical bringing you back to something that makes sense in our logical world yet still moving you against the flow pushing you to think and imagine in new ways you had not previously done.

use together with innovation of rating for s purpose

product and create connections

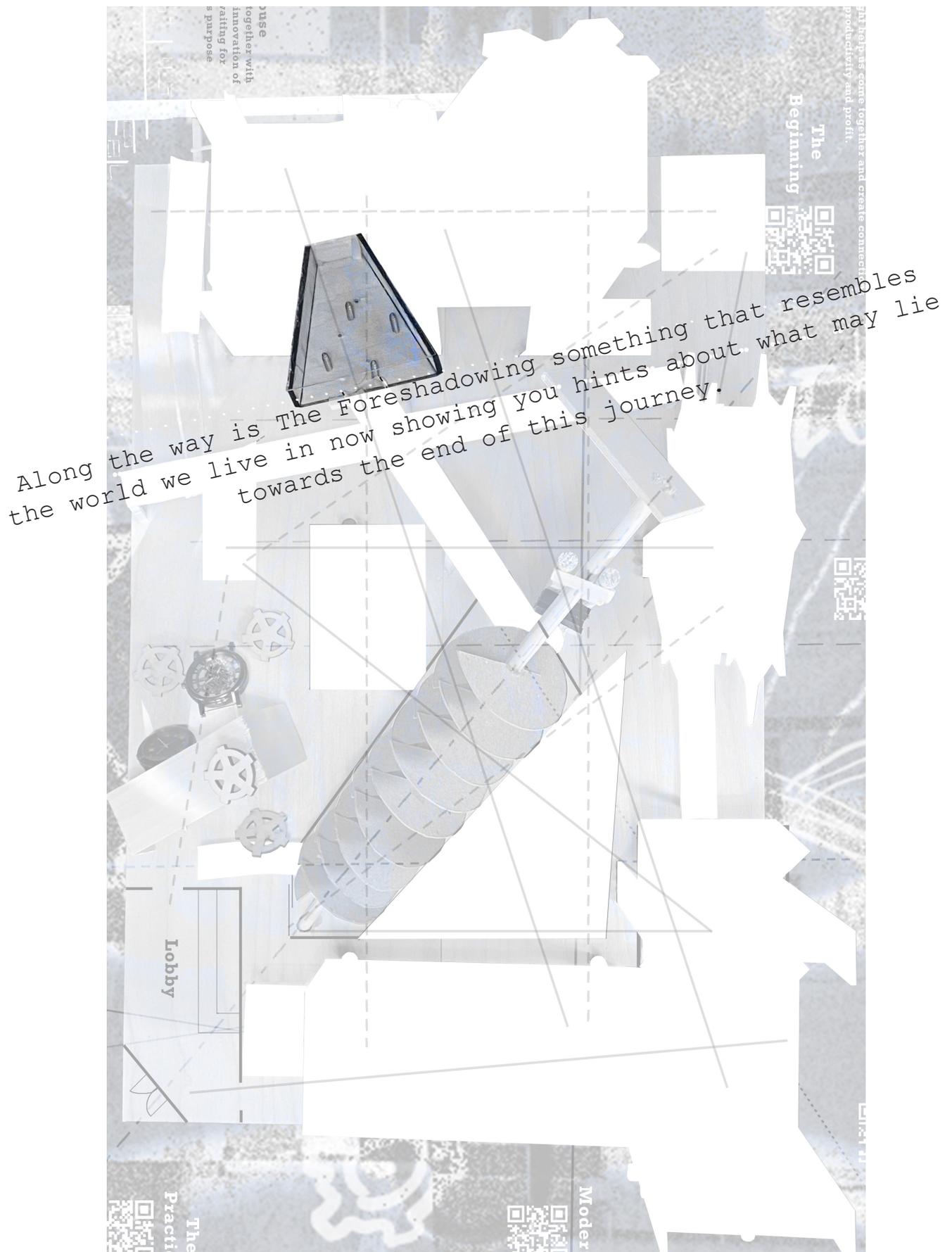
Remind

Next The Practical bringing you back to something that makes sense in our logical world yet still moving you against the flow pushing you to think and imagine in new ways you had not previously done.

Next The Practical bringing you back to something that makes sense in our logical world yet still moving you against the flow pushing you to think and imagine in new ways you had not previously done.

The Machine

The Foreshadowing



Along the way is The Foreshadowing something that resembles the world we live in now showing you hints about what may lie towards the end of this journey.

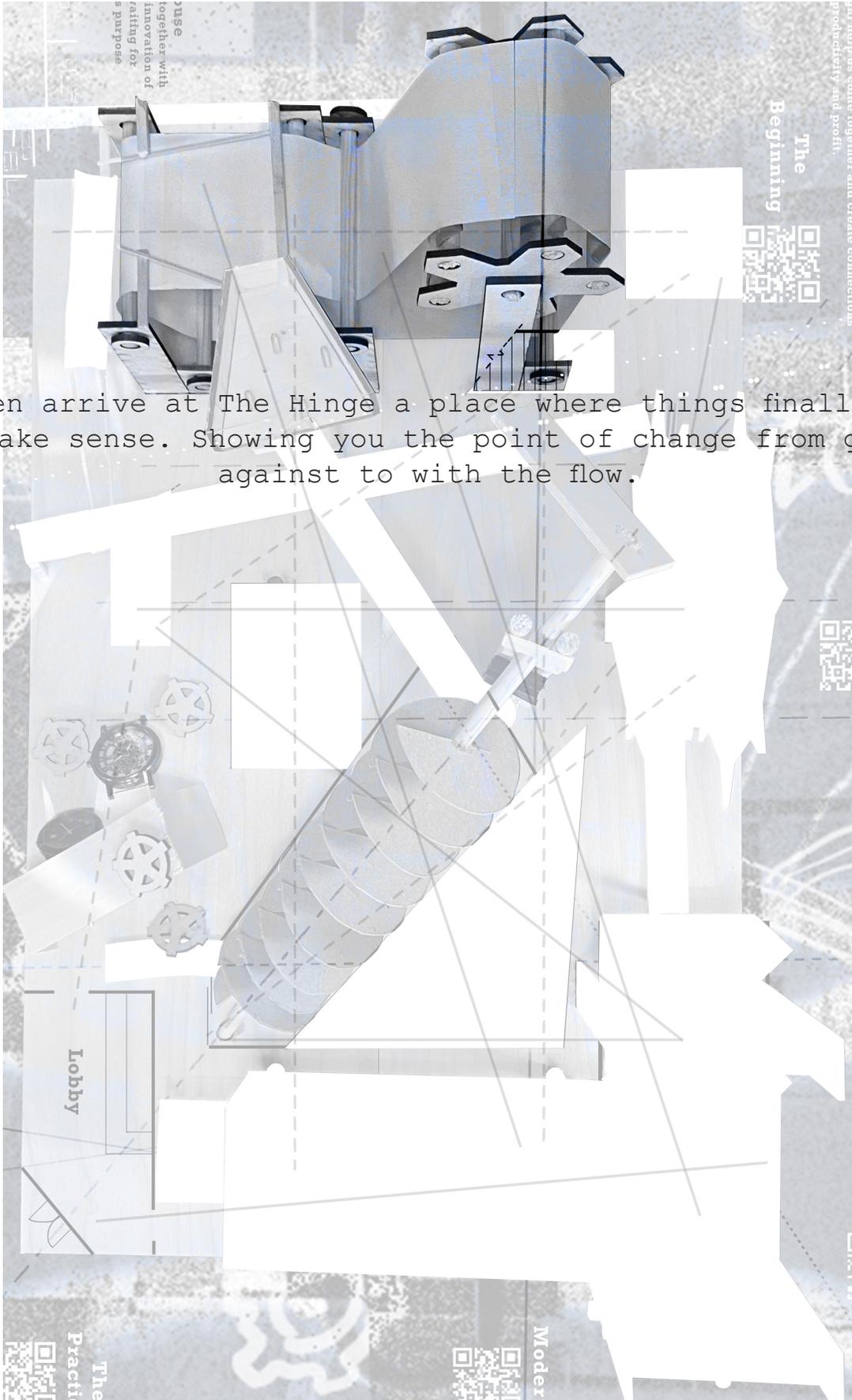
The
Practi

Mod

Fig 85 The Foreshadowing

The Machine

The Hinge



You then arrive at The Hinge a place where things finally start to make sense. Showing you the point of change from going against to with the flow.

The Machine

The Undefined

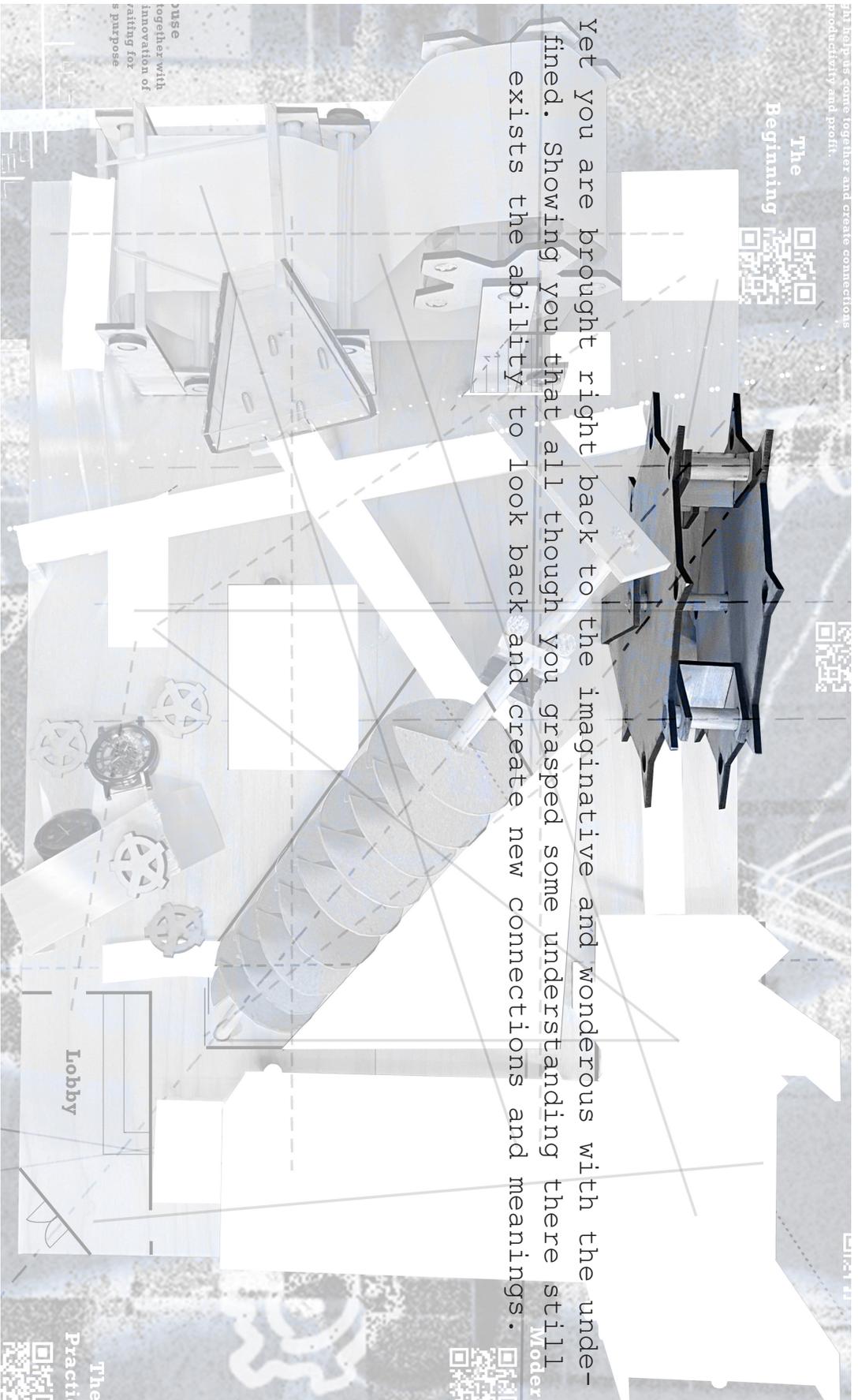


Fig 87 The Undefined

The Machine

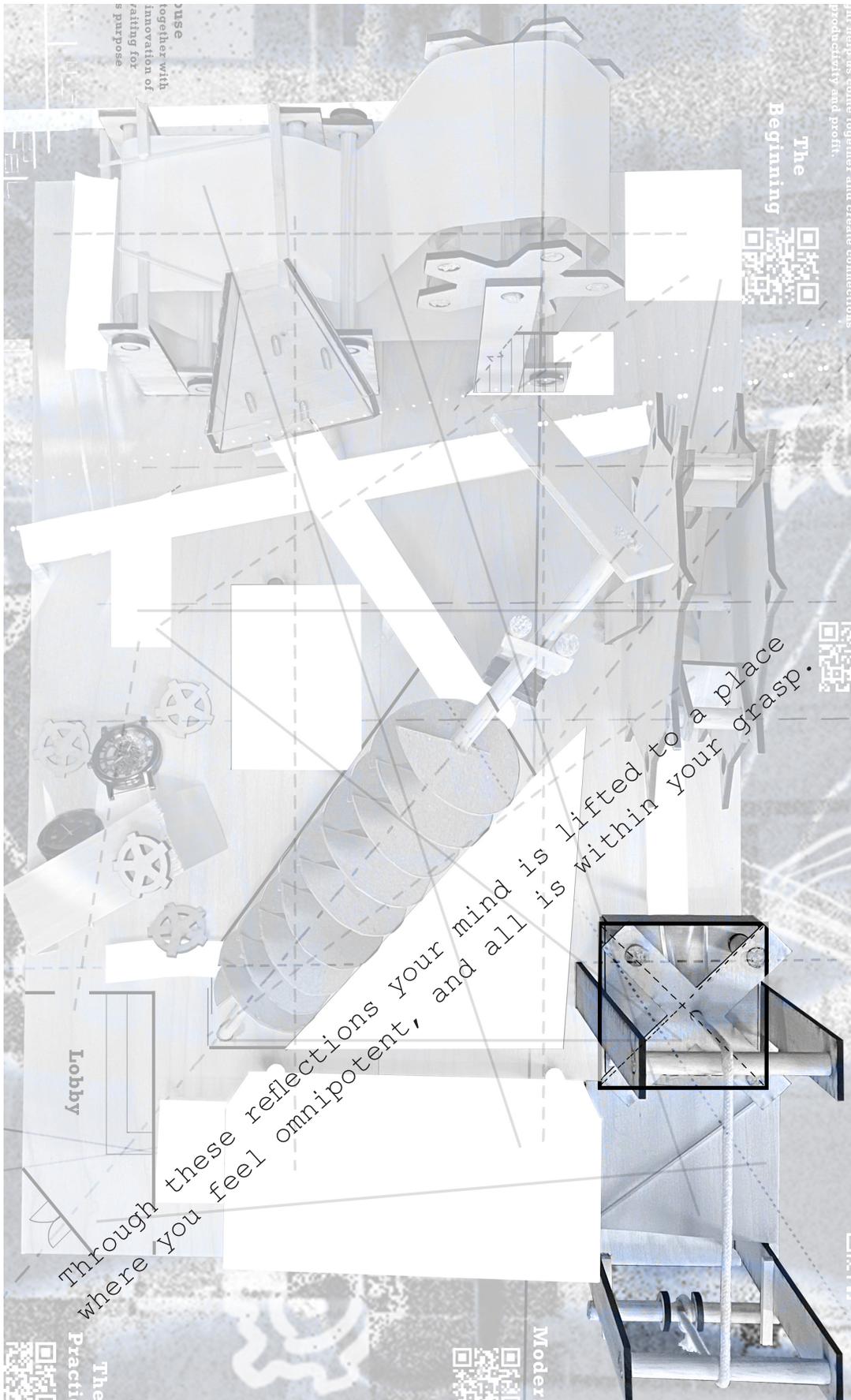


Fig 88 Lift

The Machine

Modernity

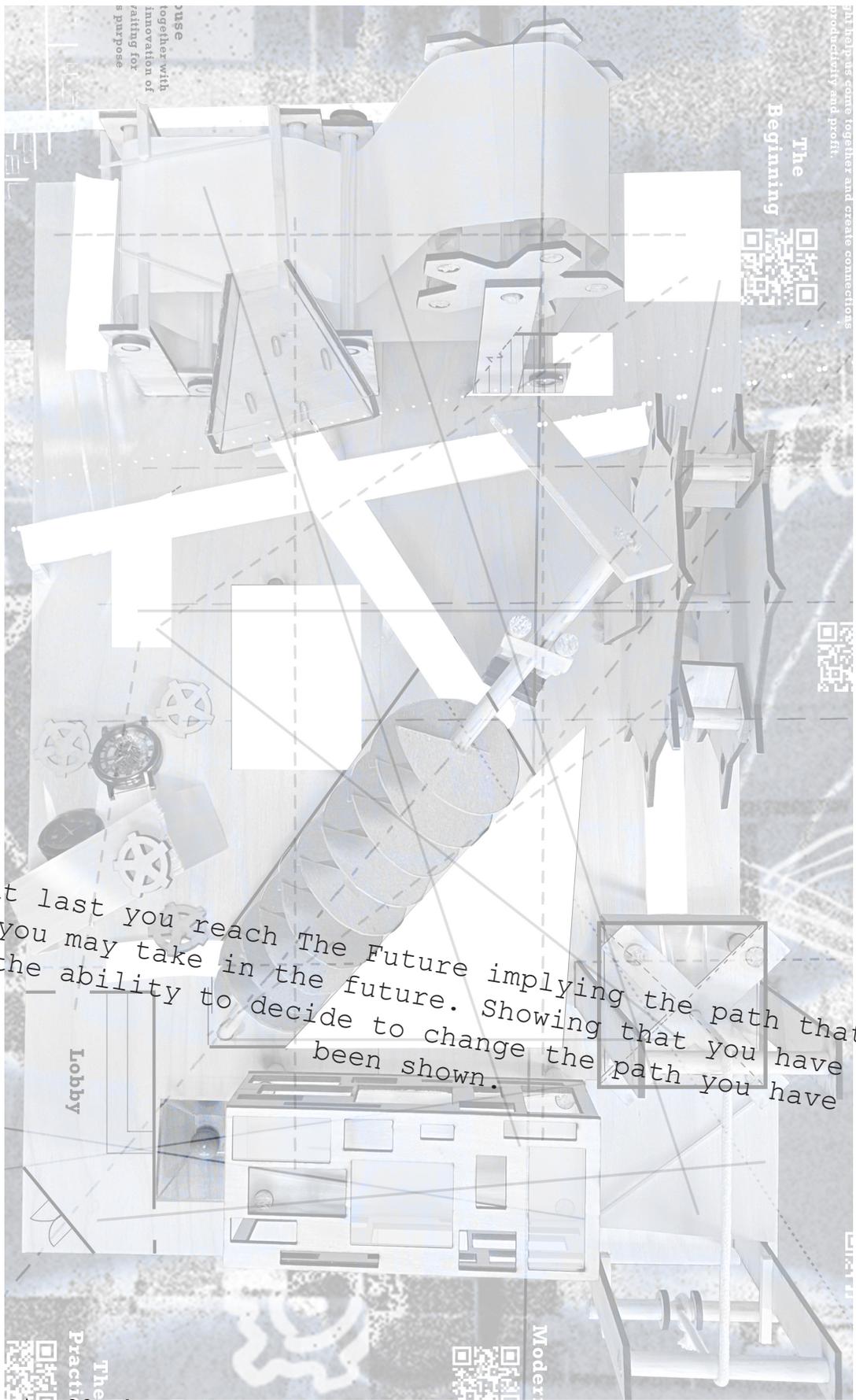


Bringing you to Modernity where you have many views that frame your image of the world. Making everything have a value.

Fig 89 Modernity

The Machine

The Future



3D helps us come together and create connections
productivity and profit.

The
Beginning

use
together with
innovation of
waiting for
s purpose

At last you reach The Future implying the path that
you may take in the future. Showing that you have
the ability to decide to change the path you have
been shown.

Lobby

Modern

The
Practi

The Machine

The Beginning

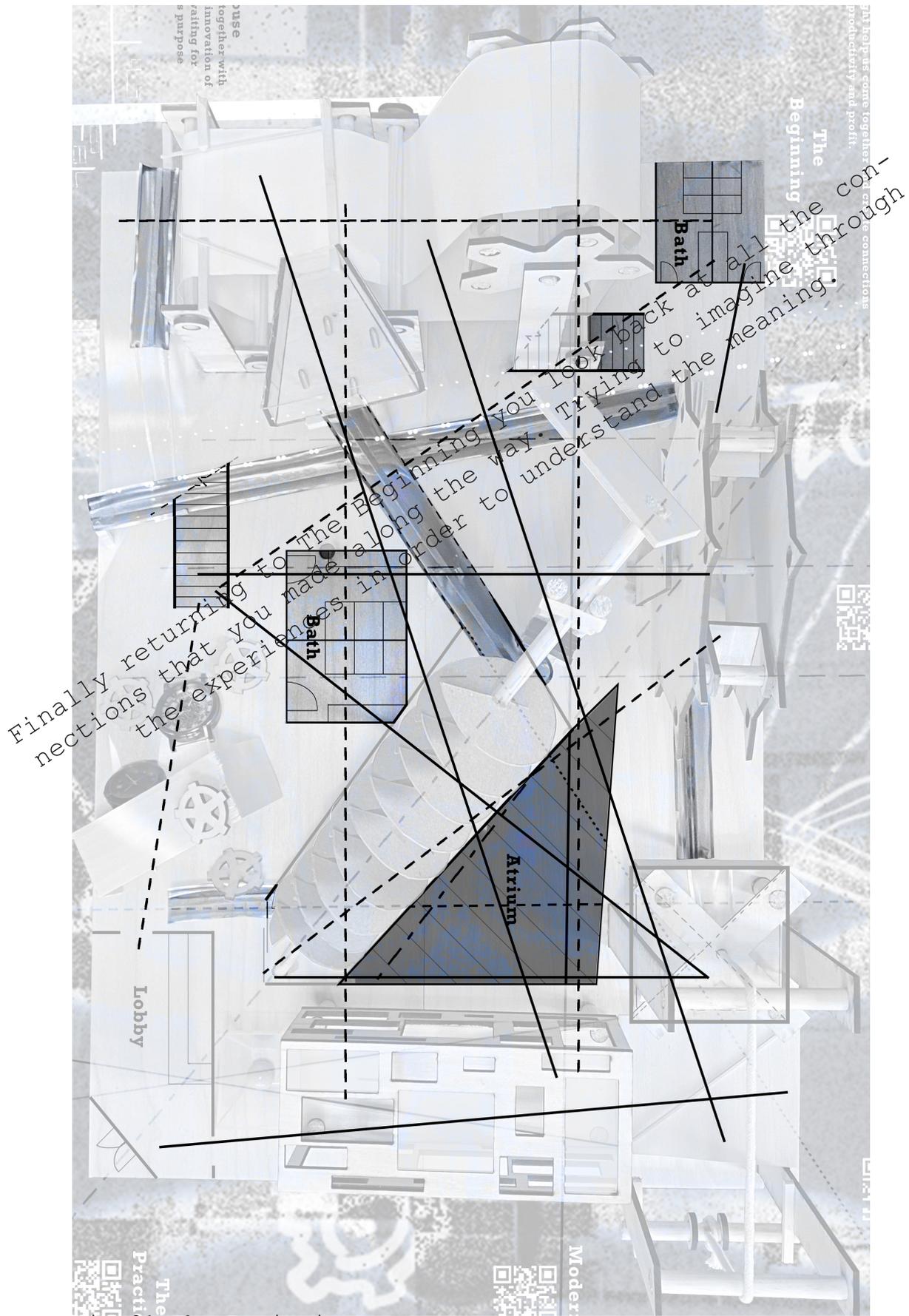


Fig 91 The Beginning

The Machine

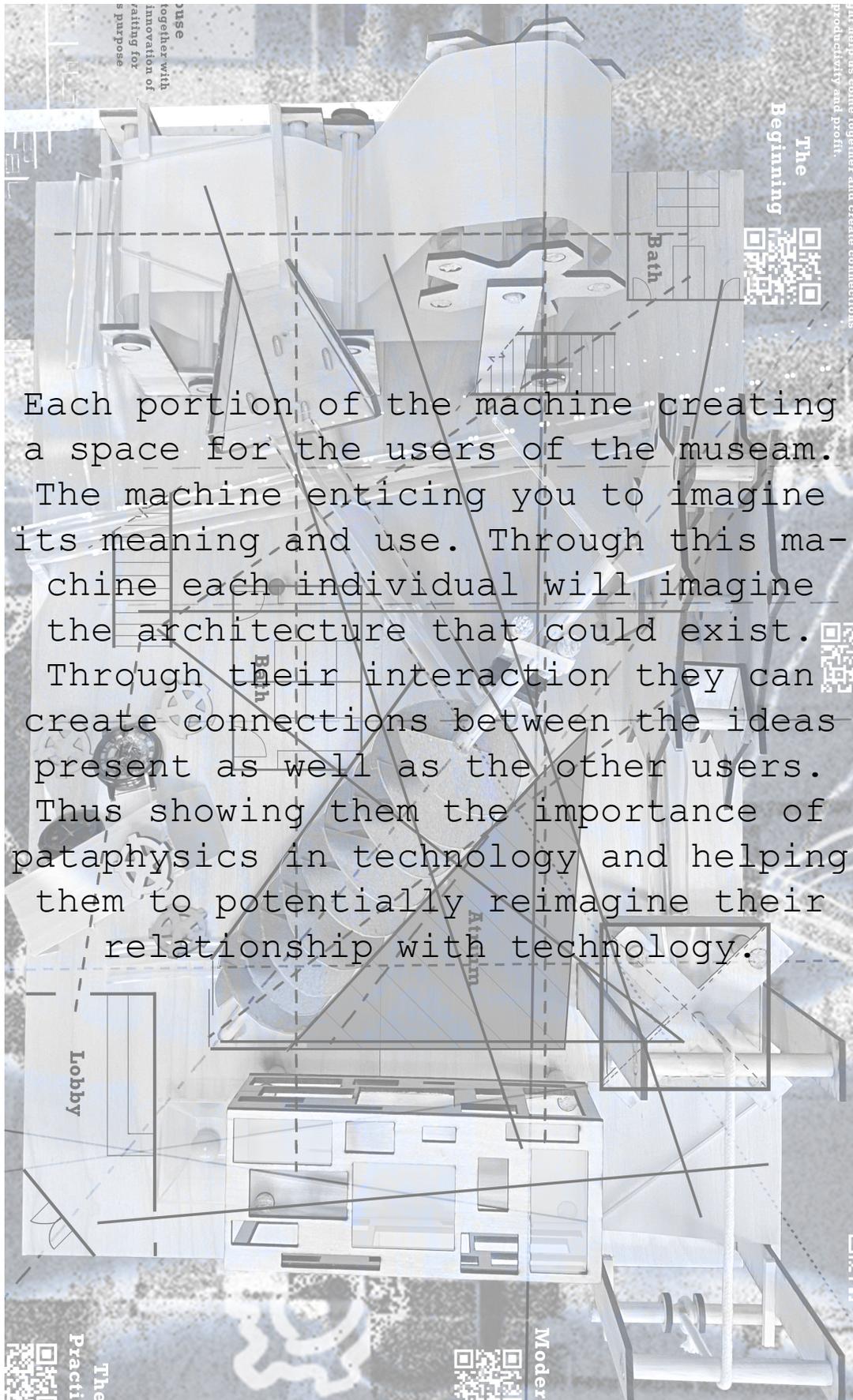


Fig 92 Complete

The Machine

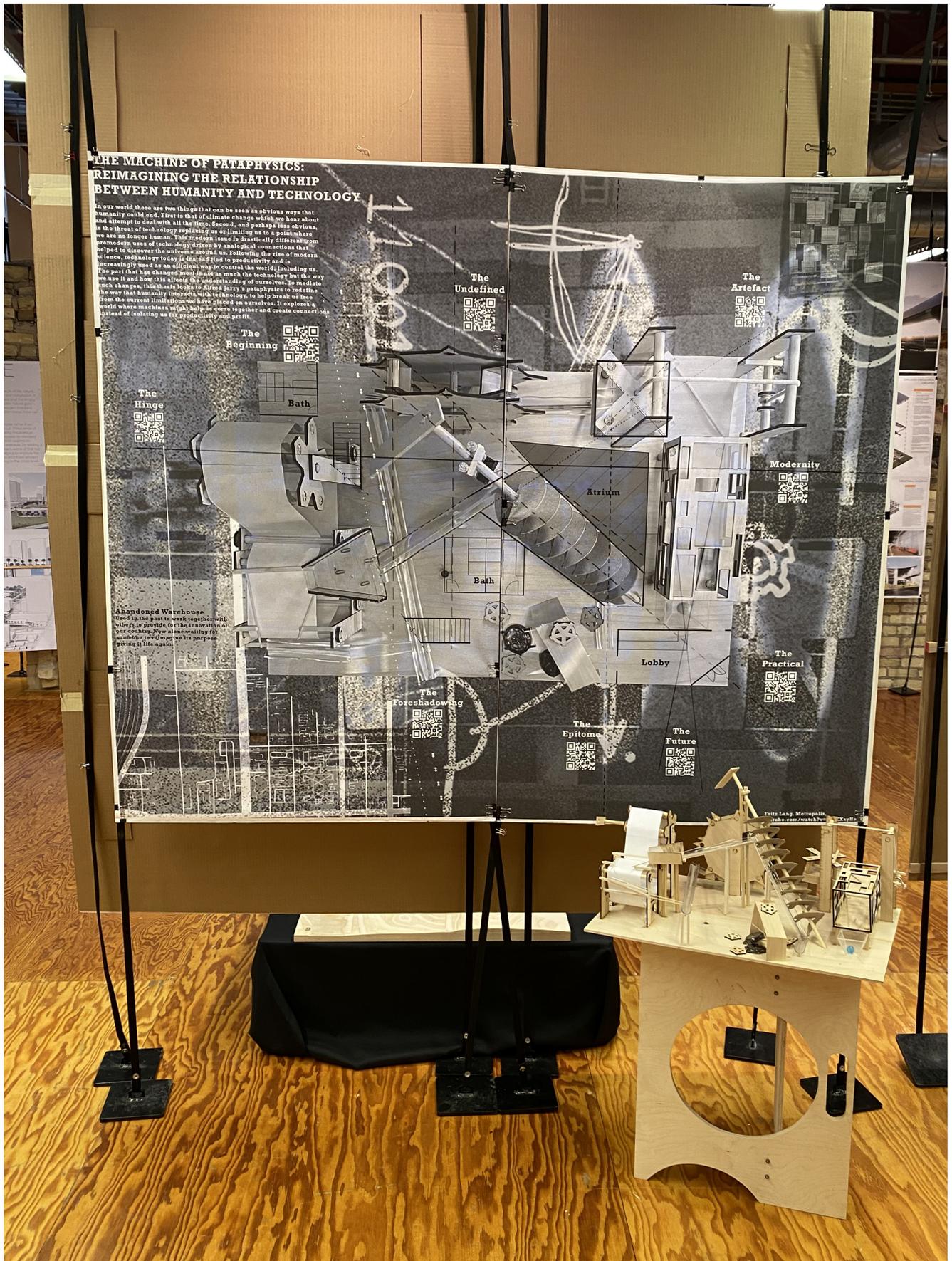


Fig 93 Exhibit

Project Jusification

My thesis project is to design a museum of technology that is curated to help the people who use it to create connections with each other. It will be open to everyone and will serve as a place to try to bridge cultural divides that currently exist.

Social and Cultural Context

In our world there seems to be many things that keep us divided as humans, but that is not our true nature. The reason we are a successful species is due to our ability to work together and communicate. This project aims to help bring us together by showing how our technology can be used differently to help create bridges over our social and cultural divides.

Site Choice

The specific site is the optimal location for a building of this type as it will help contribute to promoting more pedestrian traffic and consumers in the area. It is also conveniently accessible to the targeted demographic. The site itself also helps to play into the theoretical meaning behind the project and the atmosphere that is trying to be achieved.

Advancement of the Profession

As a project that is attempting to use architecture to curate the users experience and create an atmosphere it will be pushing the boundaries of what architecture currently does. This will be achieved through the use of illusion and play within the design to help place the user into theoretical realm that is behind the design.

Typology

In order to showcase the technology and bring in the targeted demographic a museum works perfectly. It will help attract a large variety of people and allow them to interact with each other.

Project Jusification

Growing Knowledge and Skills

Being that this is a thesis I will gain the knowledge to work through every aspect of a design myself making decisions on what the criteria are. This will benefit me in the future as not all clients will know exactly what they want and I will have to come up with some of the criteria to help create what they envision. This has also greatly expanded my knowledge base in the theoretical side of architecture bringing forward a wealth of knowledge that can be used on all future projects.

Personal Justification

As both a student and a working landscaper I have experienced the failure of our architecture to enrich our relations with the people around us and this project is aiming to do that. Along side that growing up through the two thousands I have seen technology morph and progress in a way where it is now becoming not only something we are addicted to but also something that controls us. In order to combat both of these issues at once this project aims to change the way we use our technology in order to enrich or relationships with others. This is something that I must do as even though any other architect can do it they will not have the same perspective that I have and therefore create something that is completley different then the intended outcome of this thesis.

Design Methodology

The initial method consisted of theoretical research, contextual research, an artefact, and modeling. In order to assure I had many thorough discussions with my peers. These were an integral part in the development of the thesis.

Case studies were used to provide a starting point and give inspiration on how to achieve things with architecture. They also informed what would be important to include within the design.

As most of the research is theoretical and explored through language a physical manifestation of these ideas was necessary. The artefact portrays these ideas as the best and encapsulates the main points within this book.

In order to fully understand the research the design will be played through. This is achieved by moving between reading, writing, drawing, modeling, and discussing the topics at hand. This creates a web of processes that represent the main ideas present.

Lastly as nothing here we do will be built in the real world a physical model will be the best way to portray the design. Drawings are not the way we experience a space and therefore these spaces must be created and interacted with. This will allow a realistic way to experience the ideas of this thesis.

Appendix

Reference List

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Appendix

Studio Experience

2nd Year 2018-2019

Fall: Milton S. Yergens|Tea House Project|Meditation Garden
Boathouse Project|Clubhouse

Spring: Amar Hussein|Immigrant Apartments|Low-Income Apartments
Community Housing Project|Eco-Home Design

3rd Year 2019-2020

Fall: Paul Gleye|Visitor Center|Lighting Design
Multi-Use Low Rise|Conservatory

Spring: Regin Schwaen|Residential|Concrete Design
Government Office|Steel Design

4th Year 2020-2021

Fall: David Crutchfield|High-Rise|Concrete Structure, Skin Design

Spring: Mark Barnhouse|Residential|Client Specific Design
Arboretum|Large Scale Planning

5th Year 2021-2022

Fall: Stephen Wischer|Thesis Research

Spring: Stephen Wischer|Thesis Research|Thesis Design