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ILLUMINATING THE INNOVATIVE MIND:
The Design of a Stimulating Environment to Encourage Productive Thought and Accelerate Social Evolution

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How does the world change? We often give credit of our society’s evolution to innovative products, radical theories, complex equations, major discoveries, and so on. At all these different means of social change have one thing in common: an origination of a simple idea within the human mind. Ideas are everything. The mind is capable of wonderful, helpful things, a concept needing to be embraced by all members of our society. However, today new ideas are being encouraged from within the baricades of an office, within the cubicle, calculated processes, andssel away as private, financial values or goals of power take precedent over social advancement. Ideas are on the verge of becoming commodities, where good ideas are valued solely for their financial potential. Our over-specialized educations, our bombarding of smart technologies that we “need” to function socially, and our reliance on the corporate world to supply us with “life-changing” ideas are essentially discouraging us from exploring our own minds and our capacity to contribute to this dynamic world. The dormant forces of the corporate community and the expectations of society are enabling us to become mere consumers rather than proactive, productive, and intelligent contributors to the present and future.

This thesis has sprung from the importance of productive thought, not for financial gain or for the sake of our evolution. The aim is to change the perspectives of the individual and remind us of our collective responsibilities within this social system in which we live. The intentions of this design of a sanctuary for free-thinking thoughts, is to address the disconnect with the individual mind and our over-stimulated and corporate-dominated society with an architecture intended to open the minds of our public and encouraging the population to take measure of the self, the whole, and their role in our own society’s evolution. Using the techniques of Albert Einstein, one of the greatest thinkers the world has ever known, as well as providing the structural support for our own intellectual potential, this site will challenge the public to take part in our cultural evolution.

In order to inspire thought within the individual’s mind, the location for this sanctuary enforces public land. In a world which values a constant stream of information, personal interaction is an inviting obstacle. This modern-day problem demands the site of this sanctuary to be available to all members of the system, where an unrehearsed and exploratory thinking can take place. The public park has long been a staple to the well-being of the communities of Salt Lake City, allowing momentary escapes from the structured daily life, in a city dominated by corporations, banks, church influence, and academic structure.

How it is because of these looming powers that Salt Lake City is destined to become one of the most influential cities in the U.S. As resources, jobs, and diverse populations continue to expand exponentially each year, the public park as a viable public resource is at risk. Sugar House Park, one of the most beloved in the area, at 110-acres of open natural space and a beautiful view of the Wasatch mountain range that borders the city, is set to lose its ownership by the year 2040 with privatization seeming to be its impending doom. It is the belief of the board of directors that the park is becoming a relevant entity in the coming years, contributing to our system’s advancement as a productive society. It can remain as public land. Within the park that breaks the city grid of Salt Lake City, the Techne Sanctorium will provide a break from the major powers that drive our system today, becoming a center of culture for everyone to explore their own thoughts, communicate with others, and collectively change the world.

Einstein’s ability to think productively, thus solving some of the world’s greatest anomalies, stems from two actions that are released through the design of Techne Sanctorum. Analytic Mediation (understanding of the self and answering the question “who?”) and Collaboration (using others to understand the whole and exploring the question “why?”). In order for the individual to maximize their role in the social system, ideas must incorporate analysis of the self and the individual’s role in our world, as well as the whole, our actions’ ability to affect the overall system. Much like the mountains serve as a reminder of the power of nature, the monolithic wall that serves as the entrance to the site reminds us of our ultimate goals: to rouse new ideas, new actions, and our responsibility to the world as a whole. To design for change, this park must reflect the pulsating world in which we live, where the only true constant of our world is its potential to completely change with the enlightenment of a new idea.

In order for the individual to live, where the only true constant of our world is its potential to completely change with the enlightenment of a new idea. This thesis recognizes that in order for a place to truly allow for new ideas, and productive thinking, it must be designed through the medium of time. As Rodger Ackoff once stated, “The only thing harder than doing something new is stopping something old.” The institutional architecture that frames our built world, have been designed for permanence, making social evolution as difficult as ever. However in a world that constantly fluctuates from society, an architecture as nimble as the thoughts that enter and leave our minds should be present. As our minds continue to discover new paths and insights, the people can create new paths and workplaces, using the site as canvas upon which we can explore new ideas and redesign our world.
ILLUMINATING THE INNOVATIVE MIND
We cannot solve our problems with the same thinking we used when we created them.

Albert Einstein
This project is to design a public space intended to stimulate the mind for productive thinking. This ideation movement will result in the acceleration of our social evolution and inevitably change the world for the better. This thesis is intended to change the individual’s views of their relationship to the world and bring to light the capabilities of the individual to impact the entire social system in which we live. This intentions of this thesis is to design the location for our world’s next big idea, the future shift in the paradigm...
How can we bring back the beauty of ideas to our modern society? This research is intended to address the modern world’s stagnation of productive thinking. What is holding us back?

Beginning with the basic understanding of the greatest innovative mind of the human race, Albert Einstein, I will attempt to uncover the ingredients of a genius’s mind. Looking into childhood development, education, and personality traits, it becomes apparent that the qualities of a genius may be accommodated through an architecture dedicated to analytical views of the self, and systemic views of the whole.

This research further addresses what social norms need to be adjusted in order for an innovative revolution to occur, subsequently changing our cultural development. This thesis is taking the claim that a better way of thinking is necessary in order to advance our society efficiently and with the maximum benefit to the system and therefore, our world. These academia, business, design, and development models are used by the majority of corporations and other major social influencer that are producing the ideas that our social structure is surrounded by. However, it is the synthesis of these complex pieces, rather than solely the analysis of its parts, that will provide for a more effective ideation process. By taking a systematic approach to idea making, and encouraging the public to break apart from these corporate run processes and linear guidelines to productivity, that are dominant in our social fabric and setting precedents that are outdated in today’s world, we can better prepare our society for change, and expedite our forward evolution. Innovation does not happen in a linear process, it happens by accident, it happens through experience, and it cannot be accurately predicted. By providing an environment dedicated to stimulating the mind towards productive thought and reminding the individual of their role in the system, this thesis attempts to contribute to world change.

3.1_AREA OF FOCUS SUMMARY
THE SYSTEM WILL CRASH...

By ignoring the system in our pursuit of an exponentially advancing society, our future system will become disconnected. It is easy to forget that we are all parts of the social system. Each individual plays a role in our society, and thus has the ability to affect the greater whole. In order for our ideas to benefit rather than harm our system, we must look at how our actions are connected to one another. Systems thinking requires us to look at how the parts interact with one another, rather than how each part acts separately. By thinking of the system, our problems can be solved better than where they are when they appear. Each theory, product, or innovation that is released into the world will have an inevitable impact on another stream of our overall system. By ensuring that our ideas come from a better understanding of the system, our symbiotic relationship with the evolving world will thrive.
GENERAL SYSTEMS THEORY: A methodology which employs systems approach to understanding complex phenomenon and problems. GST focuses on the system’s structure instead of on the system’s function. It proposes that complex systems share some basic organizing principles irrespective of their purposes.
CAN WE PRODUCE OUR EINSTEIN OF THE 21ST CENTURY?

By utilizing Einstein’s greatest techniques for productive thought and creating an environment based upon these concepts, we can enable more individuals to take part in an idea revolution. By designing an environment that encourages constant experiences in both analytical meditation zones and collaboration areas, productivity and innovation can thrive. Einstein was able to look deep into his thoughts through meditation to gain a clearer picture of the issues he was trying to solve, while using the minds of others to establish the long term influence of current methods and future solutions can have on the greater good.
THE HOW
ENLIGHTENMENT
THE WHY

ANALYTIC
MEDITATION

COLLABORATION

THE HOW
ENLIGHTENMENT
THE WHY

To solve new questions, new possibilities, in regard old problems from a new angle, requires creative imagination and more and adhesion in patience.

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Today, we associate innovation with what we see from corporations. The most encouraging messages are from those trying to sell us things we “need”.
There never was a more profound insecurity about our directions than in present times; a deeper, more all-pervading gap between facts and values, between the world which is and the world which ought to be.

-Ludvig von Bertalanffy [Father of Systems Theory]
CHANGERS ← → USERS
TOMORROW.

THINKERS
Much Like the ever-shifting kaleidoscope... as one moves throughout the world, new experiences bring new ideas. Our built environment should also be an influential experience, beneficial to our thought process. In order to redefine one’s perception of the world and their relationship to it, one must experience changes to their built environment. When the thinker becomes comfortable within the structure that is designed to the scale of the human form and moves towards a new destination, these scales will slightly shift. Throughout the park, these changes in scale, perspective, and usage brings awareness to the thinker; and changing how one perceives comfortable spaces. Like the person experiences the colorful chaos of a kaleidoscope, the changing structural environment will bring awareness to the self and their place within the system.
Redefining our surroundings to change the way we see ourselves in relation to the world.
The design of this project, titled Techne Sanctorium, literally meaning knowledge sanctuary, is intended to put the thinker through a variety of experiences. These experiences have been dictated by the techniques of the muse, Einstein which I previously mentioned. Through the provision of spaces, which allow for analytic meditation, productivity and collaboration, the ideas that are produced will involve awareness of the self, and of the whole thus benefiting our role in the system. The main building houses such spaces, and does not contain a specific program to allow for change, the first floor allows for personal space areas, for meditation, private working, or relaxing. The second, contains adjustable work spaces, and ample room to work on various projects, the third level is for collaboration, and allows for large groups to occupy the space, while overlooking the entire site. The building is designed based upon the measurements that are tied to the human’s awareness of the environment. How we perceive space can impact our ideas. These rules of measurement are used within the main building to emphasis our minds perception of space. These ratios become skewed as the thinker moves on to the site to enhance awareness and enable questioning. Slight changes in the environment will bring about more awareness of the self.
MEASUREMENT OF WHOLE

IDEA CONCEPTION

MEASUREMENT OF SELF

THE IMMENSITY: BUILDUP OF IDEAS, COLLECTION OF INDIVIDUALS

PRODUCTIVITY ACHIEVEMENT

THE VASTNESS: REFLECTION OF THE SOUL

ACHIEVEMENT

THE VASTNESS:

THE IMMENSITY:

IDEA CONCEPTION

MEASUREMENT OF

SELF

WHOLE
Where are the EXPERIMENTERS? the QUESTIONERS? the ADVENTURERS?

Einstein once wrote in 1930 “Life is like a riding a bicycle. To keep your balance you must keep moving.” Now in the of the 21st century, I believe our society is partaking in new era of human history, one that is dependent on our ability to advance at a pace relative to our technologies. With our technologies faster than ever, our society more connected, our world is becoming increasingly globalized and reliant on fast-paced, innovative thinking. We are currently participating in a society where the products we use daily guide the way we function, interact, and advance or delay our next cultural phases. Our world is shaped today by human innovation of the past, but now it is time to move on to our future and determine the direction in which we are going by taking a close look at our present society.

Let’s take a minute to reflect on our daily lives (i.e. morning routines, commute to work, business meetings etc.) Now, imagine this routine again without turning on a single light. Difficult right? Imagine driving to work without headlights, or being out past six without streetlights, not to mention the thousands of devices we use that rely on electric power. One hundred and forty years after Thomas Edison’s invention of the light bulb entered the lives of the masses, it continues to serve as a staple to our social construct. People were able to work later, function more efficiently, and have more control over their daily lives all because of one alteration to the status quo. Now envision a day without a more recent innovation, your cell phone. That small device that is always in your pocket, purse, or hand is your one instant connection to the outside world. Surviving one day without it means a day without e-mail, Facebook, or text messages, social connections right at the tip of your fingers. Smartphones only became widely available amongst masses within the past seven years, however it feels like decades since flip
phones or pagers were the most common communication devices. Because of inspiring minds whose visions of an interconnected world with technology that can reach the masses, our lives have changed forever. This is the power of ideas. Our culture has been able to evolve into what it is today because of the sequence of technological advancements. From the invention of the wheel, to the toaster oven, cultural change is directly related to the innovative ideas that resulted in technological developments. Today, innovation is often associated with the development of new digital technologies designed to improve upon our current state of being. So often we expose ourselves to new technological developments, accepting these objects into our lives simply because Steve Jobs had told us it was the “next big thing”, the technology became affordable, or because anyone who’s anyone is using them. But what is unique to our society today is our lack of questioning these new social circumstances, lives dictated by the devices in our pockets. It is amazing how much our lives have changed just in the past fifteen years because of wireless internet, cell phones, personal computers, and so many social technologies. But with little to no resistance, these items have been accepted and embraced into the public life allowing few industries to dictate how our society changes in relation to innovative thinking. When industrial revolution occurred, many resisted and questioned the benefits of an industrial world led by machines and mass production. Without questioning the issues that can result from the technologies we accept into our lives we are sacrificing the democratic freedoms we worked so hard to obtain.

Even the developers themselves often speak of a new era technological development but don’t expand further on the idea of change. Computers are a symbol of information yet what can result from this access to information is not often explored, or at least expressed publicly.

“It seems all but impossible for computer enthusiasts to examine critically the ends that might guide the world-shaking developments they anticipate. They employ the metaphor of revolution for one purpose only— to suggest a drastic upheaval, one that people ought to welcome as good news. It never occurs to them to investigate this meaning any further” states Winner in regards to this typical anthem of revolution in computers. It seems that people don’t seem interested in what could go poorly with the expansion of new technologies and information. We are blinded by the excitement associated with these positive potential these technologies can bring into our lives. Technology has become personal; these changes made by the small population of specialists can directly and instantaneous affect each and every one of us. The power of an idea is an amazing force with which to be reckoned. The ability to create and think abstractly is an identifying feature of the human race. We not only have been able to establish creative technologies, but also take advantage of these technologies available to us, morphing our world in sync with innovative thinking. The true reason why the watch, the freezer, the ballpoint pen were considered huge contributions to society was due to the public’s usage of them. How we embrace the opportunities handed to us while using these innovations to better our futures is as crucial to our evolution as the technology itself. Mihaly Csikszentmihalyi exemplifies this idea by narrowing the process of creativity to three interacting elements: “a culture that contains symbolic rules, a person who brings novelty into the symbolic domain, and a field of experts who recognize and validate the innovation”2. I believe the public can and will serve as this ‘field of experts’, which can validate the usefulness of an idea and


push its success. In the era of communication, it is now simpler than ever to share opinions on products, politics, and policies and express new ideas through social media outlets and public forums. However, despite our ability to take advantage of the technologies offered to us, have we collectively become too reliant on what is available? Are we restricted solely to what the small percentage of minds with the opportunity to produce their ideas can offer?

Public involvement in today's innovations will be critical to the advancement of our world. As a democratic society, we should allow our technologies to reflect the populations, not solely the minds the corporations developing them. Feenberg makes a clear argument involving these ideals, “the degradation of labor, education, and the environment is rooted not in technology per se but in the antidemocratic values that govern technological development.” By focusing on the changes that need occur socially, rather than pinning our issues on the technologies available, we can make our technological potential suit our social needs.

How do we do this? We have to release our social norms and move forward. We can do this allow the public access to innovation through education, hands-on experiments, and collaboration with the experts in various domains. Our technological potential has surpassed our cultural evolution. As Irina Suhkova mentions in her article, Towards a Creativity Framework, “The global recession has revealed the accumulated problems due to the new conditions of life, which require new approaches to solve at higher levels of human activity — creativity.” The world demands us to move beyond our creative comfort zone. We need to celebrate our innovative minds and bring back the poetics of invention to everyone, not solely the scientists, the researchers, and the computer geniuses but to anyone and everyone who has an interest taking the express train to our future society. In the past, there have been a variety of place where the top technologies have been developed. Edison’s Menlo Park, Tesla’s Colorado Springs, Xerox PARC in Palo Alto, and even today’s Apple R&D centers are all locations known for the innovative thinking that occurs within their walls. But what is missing from all of these places is the public’s insight. If our world is more connected than ever before, then why aren’t our innovations being made from a collective point of point. Instead, we give the job to a set of specialists and corporations, giving them the power to change the world. Why not acknowledge on the innovative viewpoints of the masses rather than the select few? We need to learn to question what is offered to us, instilling a curiosity about the powers and potential of the technologies that we encounter daily. Can we mass-produce the elements of a genius? What are these variables in the genius equation? How can we regenerate Einstein’s brainpower through a physical structure dedicated to changing the world?

Today it is not uncommon to see a line bursting out of the doors to receive the latest and greatest cell phone or video game consul. In a society that is so fast-paced that waiting for an internet connection or battery charge is grounds for tremendous annoyance, so why is it that we are always waiting for the next big thing, the next advancement to suit our specific needs as individuals. We are dependent on the minds of the specialists to improve our own technological lives. But what if we, the public, took back the control of the products being handed to us? How can we know if the technologies being produced will really benefit us in the long run, if our own personal voice is not heard in its production? You wouldn’t let a doctor operate on you without knowing the long term benefits and/or risks, but when it comes...
to the technologies we carry with us daily and completely depend on, we don’t often look further than brand name, price and popularity. People don’t often question our technologies unless certain rights are affected or particular circumstances arise, but public involvement in innovation could exponentially increase our advances into the future. In Langdon Winner’s The Whale and the Reactor, he describes the potential for this phenomenon. “It is possible that a society strongly rooted in computer and telecommunication systems could be one in which participatory democracy, decentralized political control, and social equality are fully realized. Progress of that kind would have to occur as the result of that society’s concerted efforts to overcome many difficult obstacles to achieve those ends”. We should look to our current world and analyze the issues that we face changes that can be made to improve innovation amongst the masses. This potential can only be unlocked if we collectively embrace the technologies offered to us today and invent a world better suited to our current needs. It is time to reinvent our future, design a world that is capable of expanding our innovative potential. Steve Jobs once perceptively stated, “What is important is that you have faith in people, that they’re basically good and smart and if you give them the tools, they’ll do wonderful things with them.” This is our opportunity to offer the most basic tools to our public, and allow them to use their unique world perspectives in a variety of ways. Instead of simply offering the products they are to use, we can offer the tools to draw their own conclusions and understand their own needs. We can offer the technologies in a learning, freethinking environment where ideas can emerge relative to need. One of Einstein’s (and other great minds of our past) most memorable traits was his rejection of contemporary social conditions and his rejection of authority. Einstein could not accept a blind faith in a larger power. This self-reliant point of view proved to be one of his most vital features to his development of ideas. He was quoted in 1901 to his father stating, “A foolish faith in authority is the worst enemy of truth”. If Einstein was able to see how our society so blindly accepts the technologies offered to us today, shaping our lives around them without partaking in the innovative era ourselves, he may be distressed. We live in a world of fantastic technological potential yet our public puts the responsibility of improving our world in the hands of a select few. “Without [Einstein’s suspicion of authority] he would not have been able to develop the powerful independence of mind that gave him the courage to challenge established beliefs and thereby revolutionize physics” states one of Einstein’s collaborators in Walter Isaacson’s Einstein: His Life and Universe. Today it is very important to realize Einstein’s ideas again of independent thinking. Our world is as interconnected as ever, and our social structure reliant upon working technologies and rapid advancements, so let us utilize this new world’s potential by involving the masses in the process of innovation. Andrew Feenberg boldly claims in his writings, Critical Theory of Technology, “A good society should enlarge the personal freedom of its members while enabling them to participate effectively in widening range of public activities. At the highest level, public life involves choices about what it means to be human”. If society collectively should be allowed to involve themselves in these major decisions involving our humanity, what does it mean to be human? Our humanity is based upon our ability to adapt to our world. To shape it to our needs, and CREATE a life that will not only benefit our current society, but also the future. By examining views of various

6 Winner Langdon. 107.
9 Feenberg, Andrew. 3.
great minds in the past of what it means to be human, we can uncover an existing pattern: man’s need to create. Taking a look at the father of Systems Theory, Ludwig von Bertalanffy’s definition of humanity, “He is a biological organism with the physical equipment, drives, instincts, and limitations of his species. At the same time he creates, uses, dominates, and is dominated by a higher world…this is what man tries to achieve beyond satisfaction of his biological needs and drives; in turn it governs and controls his behavior10”. Man is driven to enhance his surroundings by a desire to create, to improve the world beyond basic survival needs. This is an important factor to understand. Our human instincts do not stop with the need for preserving life, but there exists a multitude of human elements that affects our humanity. One of these layers being man’s instinct to transform the environment into perfection. Obviously, the idea of ‘perfection’ changes with time, but the instinct remains the same. Creating our environment is necessary for human culture to remain. Using one of the most influential texts, Thomas P. Hughes interprets creation ideals in America using man’s interpretation of the Bible. “Christians possessed a divine creative spark that would enable them to design tools and machines capable of transforming the land into the new Garden on Eden11”. Our inherent needs to shape the world can be seen in historical texts like the Creation of the world in Genesis. In the past, as a new land was occupied, for example the Puntans in America, many settlers looked to this idea of shaping an Edenic landscape to conquer new territories through “deforestation, swamp draining, land reclamation, and other land-transforming work12”. The success of our country and its advancement to one of the leading nations in the world, were due to the ideals associated with creation. The idea of success through creativity has been instilled in our minds for generations, even centuries. In Shakespeare’s The Tempest pastoral imagery of land shaped by human hands is described in detailed, and is representative of a British Garden (which would have been highly manicured, picturesque gardens). As Leo Marx interprets the description in the writing, The [garden] paradise is a product of history in a future partly designed by men13”. Closer examinations of our literary masters of the past and even religious inspirations lead to the conclusions that man strives to create a better world, an instinct that remains today. Hughes continues with his opinion, “Majoring nature into the machine leads to human pride, or hubris. In a human-built world, prideful humans see themselves, not God, as the all-powerful creator14”. It is in our blood to shape the world, but through instinctual insights, but through a soulful need to use the capacity of our brains to match our visions with nature. Humans throughout history have transformed the world, dominated over nature, due to our aims for a perfect world. Hughes, Thomas P. Hughes, Thomas P. Hughes. Humanity-built World: How to Think about Technology and Culture. Chicago: University of Chicago Press, 2004. 19. 12 Hughes, Thomas P. Hughes, Thomas P. Hughes. Human Cultures of the past and even religious inspirations lead to the conclusions that man strives to create a better world, an instinct that remains today. Hughes continues with his opinion, “Majoring nature into the machine leads to human pride, or hubris. In a human-built world, prideful humans see themselves, not God, as the all-powerful creator14”. It is in our blood to shape the world, but through instinctual insights, but through a soulful need to use the capacity of our brains to match our visions with nature. Humans throughout history have transformed the world, dominated over nature, due to our aims for a perfect world. Is there a way to bring back this creative spirit to the public domain? Can we instill our instinctual desires to have control over our future? I feel that this certainty is possible. As we have explored, our humanity is dependent on our freedom to shape the world in which we live. However, today, the creators and the users are two separate bodies. I want to eliminate this boundary, and explore the advancement into the future. Technological advances rely on the societies they are created in, so bringing more minds into the process of creativity can be exponentially beneficial to the development of technology. But social media outlets and information availability are not enough to quell our need

10 Bertalanffy, Ludwig Von. General System Theory; Foundations, Development, Applications. New York: G. Braziller, 1969. 17. 11 Hughes, Thomas P. Hughes, Thomas P. Hughes. Human Cultures of the past and even religious inspirations lead to the conclusions that man strives to create a better world, an instinct that remains today. Hughes continues with his opinion, “Majoring nature into the machine leads to human pride, or hubris. In a human-built world, prideful humans see themselves, not God, as the all-powerful creator14”. It is in our blood to shape the world, but through instinctual insights, but through a soulful need to use the capacity of our brains to match our visions with nature. Humans throughout history have transformed the world, dominated over nature, due to our aims for a perfect world. Is there a way to bring back this creative spirit to the public domain? Can we instill our instinctual desires to have control over our future? I feel that this certainty is possible. As we have explored, our humanity is dependent on our freedom to shape the world in which we live. However, today, the creators and the users are two separate bodies. I want to eliminate this boundary, and explore the advancement into the future. Technological advances rely on the societies they are created in, so bringing more minds into the process of creativity can be exponentially beneficial to the development of technology. But social media outlets and information availability are not enough to quell our need
to partake in our innovative society, a physical outlet to help our public understand our technological developments and experiment on their own accord is a solution to this problem. Social media has taken off in the past tens years as a means for our society to express our opinions, and potentially help the producers change what is wrong with a product or circumstance. Though social media is a small bridge between the consumer/producer gap, it is not a solution in the long run. In fact, I feel that social media, has made our society more passive aggressive to solving issues at hand. It is an anonymous way to reach out to a major corporation without really partaking in the discussion or decisions being made. Winner describes this circumstance. “Passive monitoring of electronic news and information allows citizens to feel involved while dampering the desire to take an active part. If people begin to rely upon people’s willingness to act together in pursuit of their common ends...This is considerably different from the model now upheld for democracy: logging on to one’s computer reviving the latest information and sending back an instantaneous digitized response”. Winner accurately describes this ironic turn of events. We are throwing away our democratic rights by idly watching and waiting for the world to change through our computer screens. By actively participating in the process of innovation working side by side with professionals in various fields, we can develop a world shaped to our personal needs. As our scholar Einstein stated, “The only source of knowledge is experience,” therefore we owe it to our society to educate them on world-changing innovative factors through experience in creation. We can create the world in the way that our ancestors challenged us to, using our creative instincts to guide us. Can we use our most advanced technological resources to involve everyone in innovation expansions? Through open innovation, can we discover our next era of thinkers? Can we produce our Einstein?

Another one of the elements that can be attributed to sparking Einstein’s interest in Theory of Relativity was his ability to tune in to his inner child filled with curiosity. Einstein is a memorable figure not only for his intelligent theories, but his intelligent questions. These questions stripped down the most complex concepts of the human world into the most basic, almost child-like questions. What is time? What is space? Einstein himself has attributed his ability to think of the most complex solutions to his ability to ask simple questions. In Howard Gardner’s Creating Minds Einstein is quoted on the reason for his development of the theory of relativity. “The reason, I think, is that a normal adult never stops to think about problems of space and time. These are things which he has thought of as a child”. It is very counter-intuitive to think that some of our greatest complexities and theories have come from the most basic questions. With a child-like curiosity, Einstein could fuel his mind, opening it up to some of the greatest solutions. Can we channel the public’s inner child? If we are able to instil an element of play into the daily lives of some of the most over-worked members of society, maybe new questions can result. In today’s world where our eyes are glued to our phones or computer screens and our days are dictated by meetings and traffic jams, can we serve the people by allowing them time for their minds to open to the world around them? I feel that understanding the benefits that a child’s curiosity has had on one of the world’s greatest thinkers proves that allowing ‘playtime’ back into the schedules of the working class will bring about a new set of world inquiries. The need for creative play is not a new revelation. It is an inherent trait to allow our brains to express imagination.
and free ourselves from the stressful demands of our society. This idea is expressed in Joseph M. Meeker’s *The Comedy of Survival*: “The brain gives animals an opportunity to expand their perceptual and behavioral repertoires, and to venture into new and unexpected levels of experience. Play may be one of the ways the newly emerged brain developed in order to accommodate novelty and to explore the unknown.”

By encouraging play amongst children and adults, we will subsequently invest in our creative future. To delve into the unknown, we must have the ability to open our minds to new ideas. We can finally relax by relying on the beauty of our complex yet child-like brains and take advantage of the imaginative soul. This is not only vital at a young age, but also through adulthood as well. Many of the best-known companies of our time have celebrated the productive potential of play. Ping-pong tables, slides, game rooms are all becoming increasingly popular additions to the workplace thanks to Google, Pixar, and the influence of Steve Jobs.

But how can this idea be accepted as a social norm, when we are facing more social pressures to achieve career, financial, and even social success? As mentioned earlier, we are pressured into taking up these roles as career specialists, trying to become the top in our fields. But not only are we pressured into these positions, but we also need to pay for them. Today, on average, students graduating with a bachelor’s degree leave with at least $29,400 in debt. This debt leaves the student without much choice but to accept a job as soon as possible in order to pay these loans and simply adjust to the cost of living. How can we have time to “play” if we barely have time to make a living?

This goes back to the original argument about leaving behind old social norms. Why does the American Dream still have to involve this self-reliant, rise from nothing to the top social classes? Not only is the cost of education exponentially increasing, but also our society is leading us in the wrong direction. Attend the top schools, work through school to pay loans and graduate with one degree that allows you the capacity to work in one field. Why is community college or online school often described with negative connotation? These lower cost schools allow students to explore a variety of fields and focus on studies and social skill building rather than paying financial loans and just passing through to get that degree. Our educational ideals lead us to these destructive student loans, discouraging students from accepting aid from parents.

Can’t we develop the new American Dream? One where we work together to achieve our goals and innovate our own future? Where we encourage freedom from social obligations and one where being free from financial burdens leaves us taking jobs we truly desire? We can collectively accept what Einstein had figured out in his development of the most innovative world theories: that bringing our childlike wonder into our daily routine and thought processes can spark newer and deeper revelations. In Heliman’s novel *Creativity and the Brain*, he discusses the impacts of stress on our fluid intelligence and the ability to draw connections between subjects, “stress is associated with increased activity of the noradrenergic systems.” Later tests concluded that when students were given a sample of a drug that decreases the brain’s reaction to stress, they improved their scored dramatically. The lack of the stress on the brain “allows for activation of larger networks, and the activation of large networks enhances cognitive flexibility.” By embracing the natural and social concept of “playtime” we can address the issue of stress on the minds and alleviate it. We can also
invigorate our minds, and allow new opportunities to learn and discover when we separate ourselves from our overworked lives and begin to question the world again. With the wonder of a child and the experiences of an adult, a new idea or question can be conceived by anyone who is willing to participate. Sandra Chapman explores this concept as well in How to Make your Brain Smarter, “The unfiltered, massive influx of new information competing for your consideration and the constant interruptions from cell phones chirping, emails ding, and in-person intrusions rob you of clear, strategic, insightful thinking”. This is the importance of play, removing yourself from the constant pressures suffocating your mind and preventing its potential for critical thinking. Allowing this removal will ultimately enhance our minds’ abilities to make connections and widen our creative scope. This concept of play not only applies to the dedicated time out of our day to play catch or paint, it also implies that we take time out of our lives to realize who we really are and what we truly want. We can’t expand our minds and unleash innovation when stifled by uninspiring jobs, and piles of debt. This evidence allows us to accept the needs for a low-cost, multi-disciplinary education. One that doesn’t discourage dabbling in a few interesting fields, and an education that will prove more useful to not only the companies and businesses seeking innovative employees but also the innovative souls of our future creators. According to Robert Hinde’s article, “Humans and Human Habitats: reciprocal influences” he address our abilities to shape our experiences, implying that we need to use our current technologies to improve our current society. “What we experience is a product of what we are and do, and that we need to come to terms with a continuing dialectic between ourselves and the environment that we experience”. By making a more positive, freethinking environment available to everyone, this can positively respond to our actions. Allowing the people to engage in a “playtime” environment to tinker and explore, will inevitably affect the lives the participants. Innovative minds reflect innovative environments. Csikszentmihaly mentions in his book Creativity, after a sequence of interviews with people all around the world, enjoyment in what you are doing ultimately consists of 9 steps. These 9 steps were the most common factors in responses for what serves as an enjoyable experience:

1. Clear goals every step of the way
2. Immediate feedback to one’s actions
3. Balance between challenges and skills
4. Action and awareness are merged
5. Distractions are excluded from consciousness
6. No worry of failure
7. Self-consciousness disappears
8. Sense of time becomes distorted
9. Activity becomes autotelic

All of these responses combined give us a clue into what we require in an environment to truly become immersed in what we are doing. Using these as a model for the design of a creative environment that appeals to our needs for happiness, a fulfilling and educational community is possible. Can we make this model apply to all minds, regardless of the level knowledge, personal interests, or backgrounds? I believe we can. Einstein had the inherent ability to recall childhood wonder when trying to understand the world. I feel that we can instill this ability within the public in order to revitalize creative thought amongst the masses. In addition to the
channeling the inquisitiveness of a child as well as the questioning of authority, various other elements in his life may have attributed to the making of Einstein’s genius. Another one of these factors was his exposure to wide variety of subjects and courses, developing his well-rounded interest in world complexities. Einstein was infamous throughout his childhood to reject the contemporary learning style, which was a rote-learning based form of education. However, his dissatisfaction did not prevent him from engaging in an array of subjects during his schooling. In fact, it is most probable that his dabbling in various subjects gave him the well-rounded exposure to various ideas, leading him towards a life dedicated to the advancement of mankind. It was in the school the young Einstein developed a passion for music. He became one of the notable violinists at the school, improving his ability for abstract thinking. According to the school for young learners’ former educator, Johann Heinrich Pestalozzi, the students were encouraged to visualize their conclusions. “He thought it was important to nurture the ‘inner dignity’ and individuality of each child. Students should be allowed to reach their own conclusions”.

The young Albert was free to explore subjects such as algebra, geometry, art, engineering, theoretical sciences, abstract thinking, and music as well expose himself to a natural surrounding taking days to hike in the mountains and travel to nearby countries. It was in this school the young Einstein developed a passion for music. He became one of the notable violinists at the school, improving his ability for abstract thinking. According to the school for young learners’ former educator, Johann Heinrich Pestalozzi, the students were encouraged to visualize their conclusions. “He thought it was important to nurture the ‘inner dignity’ and individuality of each child. Students should be allowed to reach their own conclusions.”

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What do you want to be when you grow up?” is probably the most common question asked of us since we learned how to communicate our desires. A doctor, vet, superhero, painter, are all acceptable answers as a child. But what about the one person who wants to be everything or many things? Funny looks from the crowd would probably result, but let’s think, is there really anything wrong with gaining experience in multiple disciplines? Why, at such an early age, are we forced into these “boxes” of disciplines, and expected to become a specialist in one particular field of study. What was most notable about Einstein’s thinking was his ability to engage in multiple disciplines when asking the questions he wanted to uncover. Is striving to be the specialist, expert in one field truly the key to success? To happiness? It certainly is not the key to innovative thinking. When I was younger, when something in our house broke, we always called the same man. When a pipe burst, water heater broke, or a piece of drywall needed fixed, we always called one number.
The same man showed up for anything in our house that needed fixing. Thinking back, it was quite amazing that one person had the knowledge of all these systems and parts that made up my childhood home. This is the kind of thinking we should adapt to. Because this man had a general knowledge of the workings inside the house, he was able to fully understand each problem and efficiently solve it with the various systems of the house in mind.

Today, we are told to get an education in one field, specialize, excel. Can’t we be the handymen of tomorrow? Fixing problems with an understanding of the whole picture. With seemingly infinite information available to us at the click of a mouse, why aren’t we exploring the value in learning different disciplines and attaching new meanings to discoveries made across all information sciences? With seemingly infinite information available to us at the click of a mouse, why aren’t we exploring the value in learning different disciplines and attaching new meanings to discoveries made across all information sciences? Because this man had a general knowledge of the workings inside the house, he was able to fully understand each problem and efficiently solve it with the various systems of the house in mind.

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newest set of questions. By limiting ourselves, society is at risk for a psychological downfall. We live in an era where information is readily available, however turning this information into knowledge seems to be dwindling. By encouraging our society to engage in multiple areas of knowledge and understand the underlying relationships amongst the various systems in our culture, creative connections can be conceived. It is our inherent need to expand our minds and understand our surroundings. As previously explored, our humanity depends upon our ability to shape our world and create an environment suited to our needs. The best way to accomplish this is through general systems learning. This approach allows us to make the relationships necessary to form new questions relevant to our current world. We will become victims to our own society by not allowing ourselves the ability to discover. Bertalanffy describes this tragedy, “the loss of psychological freedom is paid for by a loss of goals worth fighting for and, consequently by a feeling of emptiness and meaninglessness.” Is our future destined to be without meaning? Or can we change our pathways by designing a new way of applying knowledge to problems that are emerging within today’s culture?

As we have learned Einstein’s exposure to good education allowed him the ability to make creative connections and ask the right questions. Therefore, a critique of our education system is in need as well. Education is key to shaping the ways we view the world from toddlers to adults. Is there a way to teach creativity? Can we produce our generation of Einsteins by instilling a new way of learning these new subjects? I believe it is not only possible but VITAL to establishing a world in which innovation and forward change are goals. As mentioned earlier we are taught at a young age that in order to succeed, we must desire to excel in one particular field. Not only does this already begin to establish limits on our knowledge capacity, but also address the need for individual success. Why must we strive for superiority rather than for global success? Can’t our world also benefit from your education, from your understanding of the intertwining systems in which we currently live? We need to redefine our society’s goals through the education given to students of all ages and backgrounds. In the article, “Building Creativity: Collaborative Learning and Creativity in Social Media Environments” written by Kylie A. Peppler, it becomes apparent the ability for our society to utilize technology in order to help students gain a better creative understanding. In this article, Peppler describes the comparison between two choices within an on-line game in which players can build up the digital world and interact with other players. One option is to interact and work with an ‘architect’ who lays out the exact directions of a building which the player must replicate, resulting in work with a free-spirit architect, building a house with colors and materials. The choice is the players’. The results from this gaming test showed a higher level of enthusiasm and collaborative working. The students who did not have limitations on their designs pushed their projects to the extremes. Peppler writes, “… each individual interacted and was influenced by their peers, the conversations... stimulated ideas different from what either individual would have come up with on their own.” By allowing the free flow of ideas and the ability to interact, a perfect creative environment instilled. This allows us to view the value in creative freedoms in younger populations. The use of an on-line forum also is an excellent medium in which current technologies can stimulate...
playful innovation. What is so important about allowing ourselves the freedom to break away from limitations? We fear change. We fear failure. We must overcome this fear collectively to move forward in our world. But what is the value in the release from our social pressures? As we learned from the on-line game study with our young designers, those who broke free from the financial persuasions and instructive designs had not only been an enjoyable experience, but a more productive one. Creative play was the more successful route, leaving room for expansion and collaboration of ideas.

According to two scientists Helmholtz and Wallas from 1896 and 1926, creativity has four components: preparation, incubation, illumination, and verification. These four components theorized in the late 19th century are actually still used as a model today to describe the necessary steps the mind must go through in order for an idea to truly take form as a creative thought. These four components are:

1. **Preparation**: This is the stage where the mind is preparing itself for a new idea. The person is gathering information and is in a state of readiness to create.
2. **Incubation**: During this stage, the mind is working on the idea in the background without conscious thought. It is a time of rest and relaxation.
3. **Illumination**: This is the moment when the idea is revealed to the individual. It is like a flash of insight or a sudden realization.
4. **Verification**: The final stage is when the individual tests the idea to see if it is valid and if it can be made into something practical.

These components have been studied extensively and are still used in creativity training today. They help individuals understand the process of how creativity unfolds and guide them in developing their own creative ideas.
as philosophical and academic sessions, Einstein constructed many of his ideas, confirming their validity and methods of reaching the masses. In fact, many of his peers took on his ideas and provided lectures around the world, elevating Einstein’s notoriety. It was with these academic peers that Einstein would hike through mountains with, and engage in creative, freethinking activities that are vital to the process of innovation. Some of the masters of the digital age also experienced how vital teamwork is to the development of new ideas. The most brilliant minds such as William Shockley and his Shockley Semiconductor could not excel because of a lack of collective minds serving to stimulate the creative process. In Isaacson’s *The Innovators*, collaboration is seen as the common thread in the most successful digital undertakings. “The most successful endeavors in the digital age were those run by leaders who fosters collaboration while also providing a clear vision...collaborative groups that lacked passionate and willful visionaries also failed.” The relationships developed in these successful businesses were not based around education but experience. The most dramatic paradigm shifts in our world have not been the result of one man or woman’s endeavors. They are solely one part of the innovation equation. The partnerships formed during the digital revolution, for instance, were also not developed from inside a conference room during an interview, but out in the field, in a working environment where experimentation was encouraged. Too often our society finds its future colleagues through a resume-interview process, without understanding if the dynamic between two individuals really works. In a freethinking environment, where the motivation is purely to develop creative ideas, no interviews or formal connections need to be forced. People can simply come together with a common vision, and approach new ideas in a comfortable setting. An interesting conclusion made by Isaacson furthers this idea of collaboration being vital to the process of ideation and the later realization: “Creative geniuses (John Mauchly, William Shockley, Steve Jobs) generated innovative ideas. Practical engineers partnered closely with them to turn concepts into contraptions. And collaborative teams of technicians and entrepreneurs worked to turn the invention into a practical product...” What is important to note, is that these teams were created right from the start. All of the inventors had similar goals and began working through their ideas in their free time. If there was an environment where collective thinkers could come together and work on similar ideas, more of these amazing connections could occur. Essentially the more people involved the process of innovation, the more chances of these wonderful associations between thinkers.

In Sandra Chapman’s *How to Make your Brain Smarter*, she doesn’t address the level of intelligence that one person possess, she focuses in on exercising your mind in order to draw connections between the topics that do interest a person. “Quality over quantity. It is not how much knowledge capacity you have, but how you use what you know to solve new problems and chart new directions.” Our society would greatly benefit from minds of all different levels of intelligence in all areas of knowledge, simply using what they know in new and creative ways. Every one of us has a different viewpoint to bring to the table, but if we’re too afraid to even enter the room, we could be excluding the best answer to an important question. We must be reminded that anyone has the capabilities of creative, earth-shattering innovation. By gathering minds
from different fields, ages, or backgrounds we can enhance the probability of an innovative breakthrough. Engaging with peers is often a way to reduce the stress of creative projects. By providing an environment where creative play can occur with a multitude of players in the game of innovation can assist in the process of flow.

American writer and poet, Carl Sandburg once wrote in the 19th century, “I don’t know where I’m going, but I’m on my way” proving that even if the future is unclear, it is crucial to keep moving forward. We are our own worst enemy. It is our minds that have saved us, and it is our minds that could destroy us. Creatively solving our most important issues while considering our future direction our culture will partake in, we can continue on. We must keep pace with technological world, and not lose the innovative spirit. Today we hold a moral obligation to our future generations to uncover the importance of creativity. We owe it to our ancestors, the creators before us, to move our society forward. Can a better understanding of the human mind and its potential to adapt to a rapidly changing environment result in an innovative generation? Are we capable of producing the next Einstein? We may never know if this is truly possible but it certainly won’t hurt giving it a try. After all, as long as we keep moving forward, questioning the potential of new ideas we can discover our next paradigm shift. A new revolutionary era is upon us. We can reorganize our methods of educating our society and rethink our priorities and social expectations. I believe that a program in which I am proposing in this book can be a solution to a problem that we will soon be facing. The U.S. is failing behind in global innovation rankings. As one of the world’s major superpowers this is unacceptable. Our society should not be satisfied, we can be working towards a world that will fit our needs when our environment changes and our resources deplete. We must be able to put the responsibility of innovation upon all of us. In our world that is dependent upon easy communication and interconnectivity, it is vital that our technologies reflect the needs and perspectives of the masses. The human’s ability to shape and adapt the landscape to our needs is becoming an obsolete necessity. Our world changes so rapidly, it is vital that the public become involved in these changes. True knowledge relies on experience, and it is time that we re-establish our society to include all in the process of change. We can illuminate the innovative mind today to best shape our world for tomorrow.

Bill joy

**This is the first moment in the history of our planet when any species, by its own voluntary actions, has become a danger to itself.**
3.3 THEORETICAL ISSUES

Why has innovation in America stopped? How can we inspire creative minds to shape a new world?

Can we "produce" an Einstein by utilizing his techniques for productive thought?

How can we remove ourselves from the dominating powers of today, in order to create world-changing ideas?

How can we prevent this process of ideation from becoming obsolete in the public world?

What are the underlying factors that contribute to innovation and creativity?

Can we readjust our analytical means of thinking to incorporate a systems level of thinking through design?

3.4 ARCHITECTURAL ISSUES

Can architecture stimulate the conception of ideas?

How can we maintain the relevance of a space designed for our rapidly changing society?

How can ideas be inspired through a natural and built environment?

How can design expand the brain's potential for creativity?

Do our architectural styles and habits truly fit in today's world?

Can we establish an architecture representative of adaptability?

How can a public building accommodate our rapidly changing society, becoming as nimble as the thoughts that come and go in our minds?

How can an environment adjust the way we see ourselves in the world?
3.5 ARCHITECTURAL PRECEDENTS

Exploratorium-EHDD Architects
San Francisco, California
Mission Statement:
“to create a culture of learning through innovative environments, programs, and tools that help people nurture their curiosity about the world around them.”
-Design allows for visibility, public access, and flexibility.
-Outdoor connectivity
-Controllable features to allow changing exhibits

Googleplex Office Headquarters
San Jose, California
-soon to be 3.1 million square ft by 2015
-contains two swimming pools, laundry rooms, volleyball courts, pianos, 18 cafeterias and a large screen presenting live feeds of Google searches
-roof contains a series of solar panels providing them 1.6 megawatts of electricity
-shuttle provided to workers not living within the area
-leased space to other innovation companies including NASA

Apple “Campus” 2.0- Norman Foster
In construction
- circularity encourages collaboration
- media center
- fitness center
- cafeterias
- 13,000 employees
- self-contained power-grid
- runs on “entirely renewable energy
- completely walkable

Ferrari Factory - Renzo Piano, Marco Visconti
Jean Nouvel
Maranello, Italy 2009
-maintains existing facade from the 1940s
-mirrored steel to control interior solar reflections
-interior and exterior gardens for circulation and recreational spaces for workers
-angled roof plane reflects light as well as lets the sky show into the workspaces below
-fully self-sufficient in energy production and CO2 carbon emissions have been reduced 40%
CURRICULUM PRECEDENTS

the Harvard innovation lab
- Online courses
- Resources with expert advice from lawyers and engineers
- Experiential learning experiences
- Venture Incubation Program (incubation, mentoring, private workshops, community building events)
  allows 12-week opportunity for students to advance their entrepreneurial goals, work with community members and a diverse array of students.

Umeå University  Umeå, Sweden
Interaction Design
- “aim is to enable designers to create understandable products”
- focuses on the relation between people and machines with and the exchange of information between product and user
- attempts to design both the physical and “cognitive product interface” and to integrate them into the physical world
- Top ranking design schools in the world
- has a working relationship between the real world design and the design of user-friendly products and computer programming

Massachusetts Institute of Technology Curriculum/
Mission Statement:
“The mission of MIT is to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century.”

Center for Integrated Systems
Stanford University
“Teaming graduate students, faculty and industrial liaisons through research:”
- Conducting research on conceptual design and feasibility of various systems, including the development of new design concepts and the ensuing process for implementation and manufacturing.
- Exploring long-range technology and device options for VLSI systems.
- Addressing high-level specification issues, including implementation, refinement, and testing.
- Accelerating technology transfer with industry.
- Providing a forum for the exchange of best practices among industrial partners and between our partner companies and Stanford.
HISTORICAL PRECEDENTS

Menlo Park, New Jersey 1876
- Edison’s industrial research laboratory
- It was the first facility ever built with the purpose of technological developments and improvements.
- It was the first facility designed with the purpose of creating knowledge.
- Location of the development of Edison’s first commercially available light bulb.

Colorado Springs, Colorado 1889
- Tesla’s experimental laboratory for high-voltage and high-frequency experiments.
- His choice for this location was based upon the availability of high-voltage power in the area, and his ability to utilize it without cost.
- The scientists experiments here enabled his later developments of trans-Atlantic wireless communication.

Newton’s Cenotaph
Étienne-Louis Boullée, 1784
- Contributed to the ideal that of the design of architecture as a pure art from the science of building.
- It was intended to manifest conceptual ideas through structural forms and evoke immense feelings.
- Uses simplistic forms to create powerful statements with design.

Einstein Tomb
Lebbeus Woods, 1980
- Embraces the concept of symbolic architecture to design dedicated to the accomplishments and intelligence of a great figure.
- Combines scientific principles through conceptual form to create strong imagery that evokes emotions and memories.
"Creativity is more likely in places where new ideas require less effort to be perceived"

-Mihaly Csikszentmihalyi

The project began with the question of how one idea can impact our evolution as a society. But as a designer I realized which idea, which person or group creates them, when or even how the ideas is conceived, is beyond the control of the designer. What can be controlled is the where. I started with the city of its location. By using various factors in precedent paradigmatic shifts, we can attempt to predict where the next shift in the time line of humanity will occur. Based upon—these factors, such as energy resources, economic improvement, population growth, and the social makeup of cities in the U.S., it is predicted that Salt Lake City will become a major contributing city to the advancement of the United States, thus proving to become the ideal location for a growth and expansion of new and socially beneficial ideas.

Located in the 110 acre park, which breaks the city grid originally laid out by the Mormons who took up the area in the 19th century is Sugar House Park. This is a loved park in the area, yet it is at risk of becoming privatized land when its contract with the city expires in 2050. When Salt Lake City becomes a major contributor to United States advancement, it is these public spaces that will be sacrificed. Therefore it is the goal of this project to maintain the relevance of the public park, by enhancing the space so that it continuously contributes to our system.
By establishing a general list of factors involved in previous innovative areas, it may become possible to predict where the next city of innovation will be located.
Salt Lake City has a lot to offer to the United States. Known for the Mormon population that resides in the area, the city is rapidly expanding, much like the social changes that are taking place within the U.S. The city is predicted to be one of the strongest in economic growth by 2015 and has a diverse population that has overcome a number of hardships, including residential and public drastic improvements. The town is recognized for its many public parks, including the Sugar House Park, which is the perfect location for a public involvement project.
IBM’s predictions of the next 5 life-changing innovations:

_The classroom will learn you._
_Buying local will beat online._
_Doctors will use your DNA to keep you well._
_A digital guardian will protect you online._
_The city will help you live in it._

_BUT WHICH CITY?_
4.3_SITE STUDIES

Why?

Salt Lake City may be one of the leading cities in the next phase of our cultural evolution...

Consistent leader in economic growth in 2013-2014 with a projected growth of 4.4% in 2016.


Median income in 2014.

Median age range.

Foreign-born residents.

Unemployment in 2014.

Salt Lake City may be one of the leading cities in the next phase of our cultural evolution...

Major universities in the area:
- Natural Gas
- Crude Oil
- Coal
- Wind
- Geo
- Biomass

US Flight traffic patterns:

US freight traffic patterns:

Maps and data related to the study area.
Salt Lake City is dominated by certain powers that have shaped the social structure of the city for centuries. The church, university, banking, political, and corporate powers have not only formed the physical identity of the city, but also the social identity. This problem demands change. Through an architecture that does not limit the activity or views that take place within, society can move forward.

THE FATE OF THE PUBLIC PARK...

By the year 2040, Sugarhouse park will relinquish its ownership by a board of trustees, thus leaving it at risk for privatization.

In order for the park to be as adaptive to change as the society it accommodates, it must be designed with time as a factor.

Sugar House Park is proposed to become the location of the Techno Sanctorium, a place where new ideas are born. The park will allow its users to shape its features, paths, and open spaces, allowing the mind to experiment and the park to become a staple in a changing society.
If this thesis is intended to accommodate our chaotic minds, transforming with the ideas that are conceived within the system, the project’s program should reflect this flexibility. Therefore, in order to design for change, a specific program does not exist. Our societies are often dictated by certain powers, whether academic, corporate, financial, religious, etc, these structures are often designed around the program they entail, thus resulting in a specific architectural style designed to outlast the societies which build them. If we can design without a specific program, than a structure can be used for a multitude of functions, allowing room for a changing world and changing minds.

This system-based project is designed without a specific program. It is designed to bring to the attention of the thinker certain perspectives and views. It it designed to reiterate the importance of the self and whole when our ideas are explored.
Using Einstein's techniques of establishing productive thoughts and applying them to the design of the experiences of the user throughout the thesis, I became more aware of how this project can change the perspective of the user in relation to their world. These techniques used are at opposite ends of the ideation spectrum. The first: analytic meditation. Using our own mind to take apart an issue, and study its pieces, as well as looking into our own sense of self and personal capabilities. The second element to productive thought is discussion or collaboration, understanding the whole. How do our actions affect others and how do others view the world different from us? When creating ideas, it is vital to have a clearer understanding of the whole, the systems, and how our actions react with others. By allowing the thinker to be aware of these two extremes: the self and the whole through a designed environment, the ideas produced in the future will have a stronger impact on our social structure, expediting evolution. The program embraces this ideal through the structure environment of the main building. As the thinker moves from the building onto the site, the program becomes much looser, and more focused on creating one’s own environment. The site becomes a place where program changes with new ideas.
I wanted an architectural experience that allows for flexibility and mimics the chaotic processes of the mind. The wall serves as the anchor of this ever-shifting site and is a symbol of this relationship between the two extremes, the self and whole, and serves as a constant reminder to the thinker that the ideas produced should always maintain this relationship. The main building is intended to serve as a timeless symbol, while the site itself is unstructured and not dictated by any certain path. The site is designed for change. As I mentioned earlier, there are many certain powers that dominate the social system, these are often represented by a very specific, structured architecture designed to outlast the societies that build them. The unchangeable nature of these architectures is symbolic of the unchangeable processes they represent. Rodger Ackoff once stated that “the only thing harder than starting something is stopping it.” Our program architectures that have maintained their symbolic natures for centuries are contributing to this idea. Therefore our designs should allow for the flexibility of life. A positive evolution is dependent on our structured world’s ability to adapt to change. The site of Techne Sanctorium has been designed to support our constantly changing system. Using simple shapes, unobtrusive structures that simply rest upon the earth, and non-delineated paths, the site can become as nimble as the ideas that come and go in our minds. In fact, the thinkers can build their own paths. The gravel is available to shape spaces and leave a mark of one’s own thought process. The concrete structures on site can easily be demolished and reduced to this gravel that the users shape their environment with. The techne Sanctorium is meant to represent and allow for a changing world. Those who enter are able to produce ideas that are based upon the notion that individual can undoubtedly leave a mark on the system. Essentially this thesis strives to build an environment that can house the next shift, and serve as a starting point for our future society.
6.1_ ARCHITECTURAL DESIGN

EYVOLVING SOCIETY, EYVOLVING SITE

Our world demands change. However, the institutions that provide the framework to our daily lives are being represented by architectures of permanence. If we are to evolve as a society, and change for the better, our structural world should be designed for rapid change. And architecture that is as nimble as the thoughts that flow through our mind will enable us to change and evolve as a society. An architecture that is designed to fade away or be destroyed as our social system fluctuates will enable us to move forward to a better future.
TECHNE: (n) tech ne ['tekne] knowledge; especially: the principles or methods employed in making something or attaining an objective
FLOOR ONE
ANALYTIC MEDITATION
ANALYTIC MEDITATION

PRODUCTIVE THOUGHT

COLLABORATION

FREE FLOW

LINEAR CONNECTION POINTS

PATH OF THE INDIVIDUAL

PATH OF THE GROUP

PAINTED ALUMINUM COPING

EPOM ROOFING OVER SLOPED INSULATION

COMPOSITE LIGHTWEIGHT CON/STEEL DECK

MOTORIZED SOLAR CONTROL SHADES

WELDED CATWALK ASSEMBLY FOR HORIZONTAL LOAD RESISTANCE

STEEL GUTTER

FIREPROOF STEEL FRAMING

LIGHTING

DOUBLE LAYER GLASS WITH TRANSLUCENT INSULATION

SINGLE LAMINATED GLASS WALL SYSTEM

THE SELF

THE WHOLE

THE SITE
In order to maximize the site’s changeability, storage spaces should be available around the site. These will house the gravel materials, tools, work supplies, and other amenities in order to ensure flexibility of the site’s function. The ambiguity of the program for the structures on site can be strengthened by providing tools to make the space change with need.

Changing the thinker’s relationship to the built and natural environment throughout the site, altering light and perspective to bring awareness to self and the environment.

SCENE: (n) [seen] the place where some action or event occurs; an incident or situation in real life; a unit of action or a segment of a story in a play, motion picture, or television show; a set of information that can flow from a physical environment into a perceptual system via sensory transduction.
6.2 ARCHITECTURAL MODELS
Our Society is at risk...we are leaving our creative potential as a species to the few rather than the many. In order for our society to advance in our social evolution, we must collectively harness the power of the mind and use it to benefit the world. A new way of thinking is needed to inspire this ideation movement. Using one the greatest minds of the past, Einstein, and applying his techniques to better the future, we can expedite our evolution.

By encouraging the public to look within themselves and their place in the system in which our society lives, new great minds will emerge. As Bertalanfy poetically stated, our new frontiers are within the soul. Our society must look within as well as embrace the system in order for our new ideas to have stronger impact in the long run.

In addition to an ideation movement, our structural world must change. Our society’s framework is made for permanence. Major powers that loom over our society are anchoring our evolution, keeping us from running ahead. Our built world has become unmovable as the policies they represent. This demands change.

If our world is to survive and keep pace with mind’s capacity, our designs should be able to come and go, changing as our ideas enter and leave the mind. We live in a fast paced world, but the society in which we live is soon going to fall through the cracks. We must illuminate the innovative mind in order to ensure a positive advancement into the future.


IF WE DID ALL THE THINGS WE ARE CAPABLE OF, WE WOULD LITERALLY ASTOUND OURSELVES.

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Dual-Majors: Architecture (B.Arch) and Anthropology (B.A)
Minors: Architectural History and International Studies
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• Received honorable mention for Thesis Design Project in the Kossman Thesis Competition 2015
• Constructed and designed various art installation pieces and projects for the Anthropologie Store
• Collaborative recipient of the Penn State Architecture Column Award for 4th year students in 2014
• Worked on an array of projects for Strada Architects, in Pittsburgh, PA including the conversion project of a 1915 armory and a 1916 school into apartment complexes

- AutoCad: Proficient
- Revit: Proficient
- Rhino: Proficient
- Adobe Creative Suite: Proficient
- ArchiCad: Proficient
- Maya: Proficient

• Volunteered with UNICEF Penn State, THON, American Institute of Architecture Students, and the Anthropology Society
• Went on independent site visits for photos and site measurements, handled construction documents and formal presentations for various client visits at Strada
• Received honorable mention and Pantheon Institute Scholarship for Premio Piranesi Competition in Rome.
• Received the Penn State Matson Student Fellowship for The Archaeological Institute of America
• Received the 2013 Richard L. Grube Memorial Scholarship in the Department of Architecture

• Designed site plan for Villa Borghese which involved collaboration and interaction with landscape architecture firm, Olin Studios.
• Spoke with community members of Bloomfield in Pittsburgh, PA to design community needs for a recreational facility
• Collaborated with Italian architecture students for the International Competition Premio Piranesi 2013

Strada Architects Llc. - Architectural Intern
05/13 - 08/14

Anthropologie - Visual Display Intern
05/12 - 08/12

LA Fitness - Front Desk Management
06/12 - 09/12

References Available Upon Request