

Joseph J. Wunderlich Work Portfolio

2008-2015

2008-2013 Personal Minecraft Projects

All Minecraft Designs can be downloaded & viewed here:

<http://www.planetminecraft.com/member/kodkrigare/>

French Château



Medieval English Castle



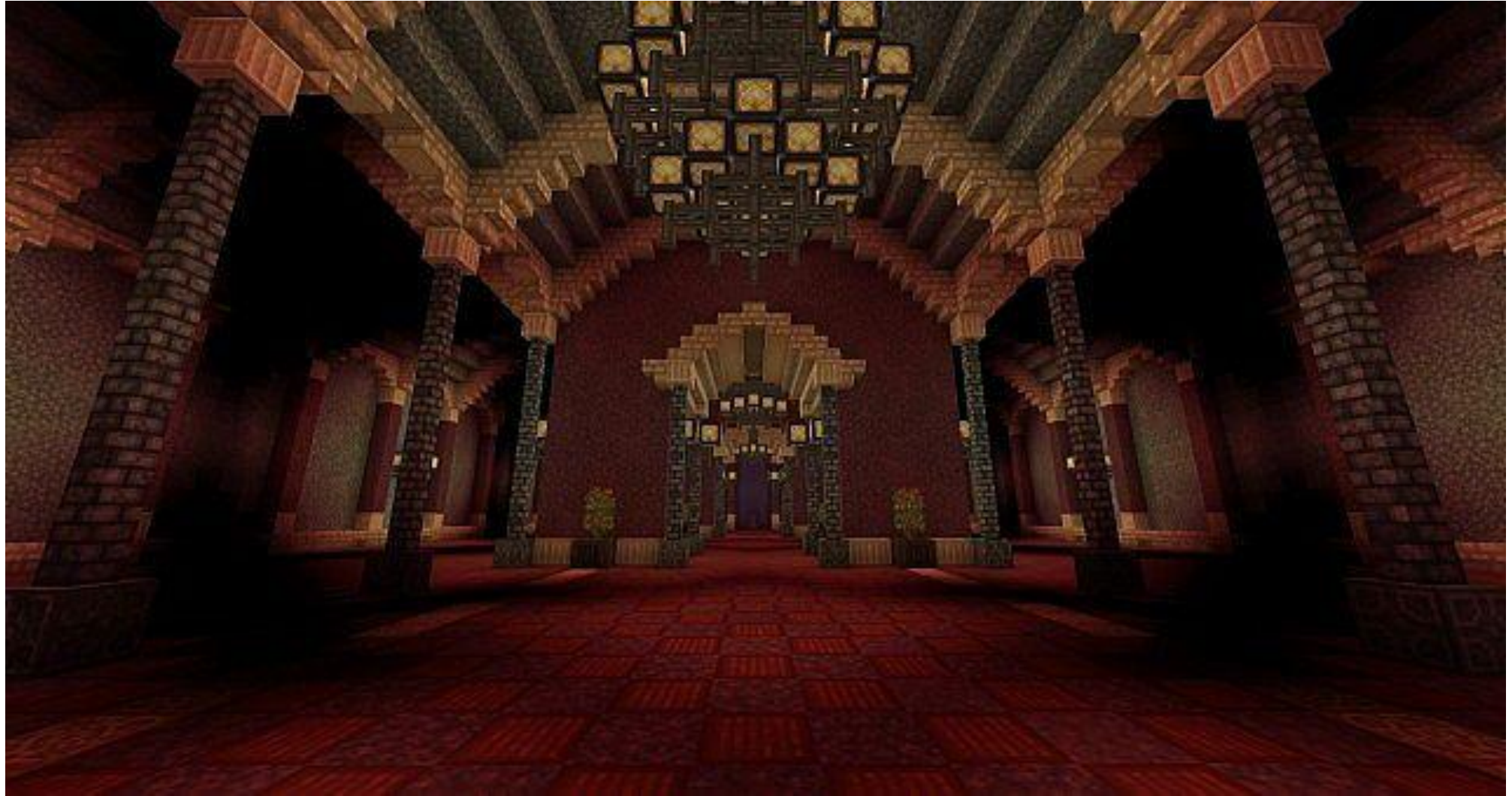
Underground Subway/Iron Mine



7-Story Chinese Pagoda and Bridge



Underground Castle



2014-2015 Elizabethtown College work
(11th Grade)

Semester: 1
Course: Art History
Project: Roman Architecture
Full Document:

http://users.etaown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/ART%20155%20Roman%20Architecture%20Paper.pdf

Roman Architecture

The Etruscans 1000-509 BCE

Rome started with the Etruscans around 1000 to 509 BCE with architecture resembling Greece's

Because Rome was a society with collective ideals, as opposed to Greece's more individual "be the best you can be" approach to living life your own way, Rome was quickly able to solve people's needs quickly by creating the first representative

democracy and senate, which the United States of America's government is based off of today. Because of this new, well functioning system, problems such as disease were eliminated through the use of sewer systems that are still functional to this day such as the Cloaca Maxima (see figure 1) meaning "greatest sewer" in latin, which began construction in 600 BCE by the fifth king of rome, Lucius Tarquinius Priscus.

Architecture from this early period in Rome's history is classified as classical as a whole with Greece.

The Etruscans, about 700 BC, were the first people in northern and central Italy to build big buildings out of stone. They learned from the Greeks and the Phoenicians to build big stone temples for their gods. Not many Etruscan temples survive. This is probably because some of them were built out of wood and clay, and others were destroyed by the Romans when they

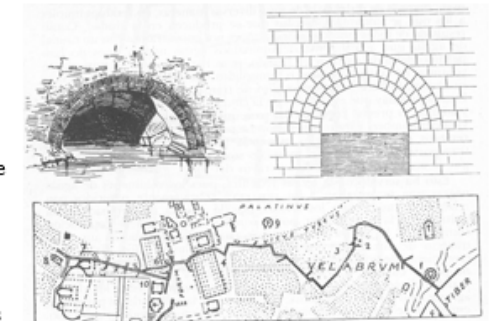


Figure 1: Cloaca Maxima

Semester: 2
Course: Architecture Design Studio
Project: Architecture and the Environment
Full Document:

http://users.etsu.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/Art_Egr%20499A%20Joseph%20Architectur%20the%20Environment.pdf

ART/EGR 499A and B: Architecture and the Environment

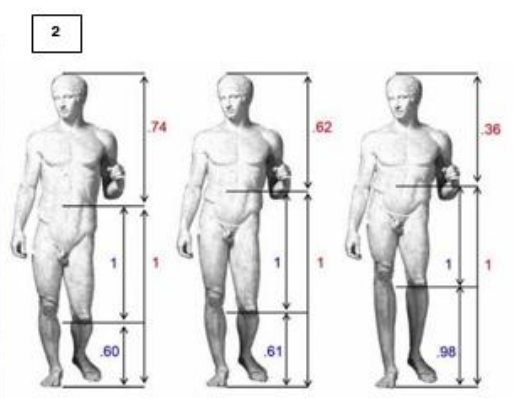
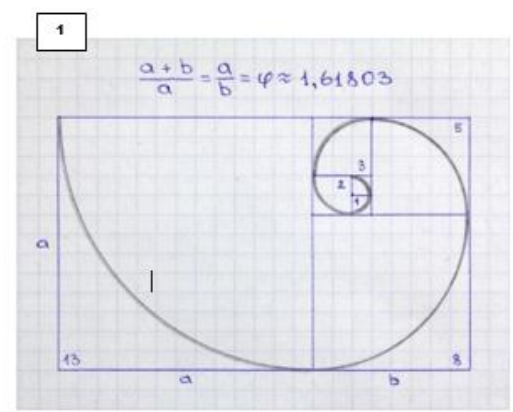
Joseph J. Wunderlich

March 10-14, 2015

There is no such thing as a truly unique building. All architecture or art is a subtle collage inspired by people, naturally occurring forms, and even which was inspired by something, gathering inspiration from hundreds of thousands of different sources and inspirations across time, but still all traceable to specific roots. The earliest buildings such as the Egyptian pyramids and Mesopotamian ziggurats were modeled off distant mountains. More modern examples are buildings such the Beijing National Stadium (also known as the bird's nest) is designed to look like you would imagine, a birds nest. Even at microscopic levels, geometric shapes that are normally considered man-made or unnatural such as cubic, tetragonal, and hexagonal are very much existant in natural occurring elements like Sodium. These shapes are also observable to the naked eye in the form of crystals.

Certain paterns and shapes are more pleasant to the human eye than others, though it varies by time period and location. Generally speaking, curved, concave, and smooth forms were considered ideal for architecture. Some people believe we find these kind of forms to be beautiful because of human proportions and natural curves in women for instance. For example, a slight curve in the shaft of the column or other structure for aesthetic purposes is known as as entasis. In geometry there is a shape called the golden spiral or golden ratio that it represented as the character ϕ , but you might know the shape better from the nautilus shell (1) which almost perfectly follows the logarithmic spiral. This shape is significant because artists all the way from the ancient greeks to as recent as the renaissance observed that many proportions considered to be attractive, including that of humans, can be determined by this simple swirl (2).

The Greek people made good use of the natural environment in their architecture. The third order of columns known as the Corinthian order have a flowering design around the capital of the support. This specific style was inspired by the Greek Acanthus Plant. Columns like those in Greece can be found even today in buildings such as the National Archives in Washington DC, USA. Another Greek sculpture inspired by natural forms is the Caryatid. These are columns shaped in the form of a female. The Caryatid Porch of the Erechtheion, Athens is a good place to find these. Dating back to around 400 BCE they are some of the oldest examples of this style of support.



Semester: 2
Course: Architecture Design Studio
Project: Government Building in Minecraft
Full Document:

http://users.etown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/Art_Egr%20499A%20Joseph%20Modern%20City%20Center.pdf

Watch the presentation here:
<https://www.youtube.com/watch?v=UFlz1KzANow>

Finished project renders:



Modern City Center

ART/EGR 499A and B

Joseph J. Wunderlich IV

I am designing a municipal government building for a very wealthy city. It will consist of a large C shaped parking garage / office building that connects to the main skyscraper from the sides. There will be 3 main entrances to the complex; one in the center of the C shaped building and two from the sides. All entrances will meet at one roundabout. On two sides of the roundabout will be two ramps leading to a lower level where cars can be parked, adjacent to these ramps will be staircases for walking up to the roundabout again. The smaller front building will be 3 floors high, not counting ground level, while the skyscraper will be about 70-120 floors. There will be two hollow sections of the building, one on each side going from the roof to the first floor to allow light and air through the building.

The main building will be designed in a neo-futuristic style with white and black marble exterior with very tall but thin glass windows. There will be high gothic inspired buttresses around the base of the two towers as well as the top for aesthetic purposes that look to support the sides of the building that will taper inwards like the lowercase letter h.

Below is a screenshot from the video game Final Fantasy XV with a building built in a shape and style that I hope to achieve, as this game's architecture is exactly the kind of blend of futuristic, gothic, and modern japanese architecture that I had intended to make before finding the game. Below to the lower left is the Tokyo Metropolitan government building, and to the right of that is the cathedral of Sainte-Chapelle, Paris. Both, large primary inspirations.



Semester: 2
Course: Coaching & Leadership
Project: The #1 Coach
Full Document:

http://users.etown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/The%20Number%201%20Coach.pdf

Seeking My #1 Coach

Joseph J. Wunderlich IV

February 6, 2015

Ever since I was young I have always enjoyed jumping around like nobody's business. When my mom would take me to the playground in kindergarten I would climb up onto the big wooden train and jump off, scaring the other children's mothers as my mom had to explain, "It's fine, he always does this..." at least that's how I imagine the conversation might have sounded like. Even today not much has changed. Anyway, in elementary school I signed up to practice at the gymnastics center of Hershey (pictures below). The coach I had there was an older man in his 60s who was very flexible and had a history in competitive gymnastics as an athlete. He was mellow and kind but didn't take the initiative to hone each student's skills even though this was a small class, though we were only young kids so it can be hard to discipline high energy kids who want to start doing flips and tricks like action movie heroes right off. Overall this coach was average. Often an older woman (left picture wearing the pink shirt) would substitute when our main coach was not in. She also had a history as a competitive gymnast and would later teach at the second gym I practice at. She was the first person to teach me how to perform a standing front flip and still teaches to this day.



Later when I was an early teenager (6th-7th grade) I was less interested in gymnastics and had just begun practicing parkour, which is similar, but more focused on jumping and climbing. This was around my first year at a new, private school. My gym teacher Mr. C was a martial artist and had a daughter involved in a gymnastics school called Accelerations Gymnastics Academy. When he caught word that I was interested in parkour he mentioned a parkour class that gathers on Thursday nights. I signed up as soon as I could. This class had no formal teacher, it was more of a free-for-all where you could jump around on the equipment. Apparently this class existed because several parents had kids who were as crazy as I was and loved to jump around but needed a safe place to do so. This class was not on the gym website, but there was an open gym on Saturdays that was nearly 100 people running a muck. I obviously chose the Thursday parkour open gym. There were about 4 other people in this class on my first day, all older than I was for once; two sixteen year old wrestlers who happened to be brothers, Jesse and

Semester: 2
Course: Coaching & Leadership
Project: Final Project
Full Document:

[http://users.etaown.edu/w/wunderjt/JOSEPH_SCHOOL2/PAPERS_and_TALKS/Coaching & Leadership Final.pdf](http://users.etaown.edu/w/wunderjt/JOSEPH_SCHOOL2/PAPERS_and_TALKS/Coaching_&_Leadership_Final.pdf)

Coaching & Leadership Final

Joseph J. Wunderlich

5/1/2015

My one word, Quiet, is not what represents my personality or what I stand for, but what I believe everyone including myself must have in contrast to our busy lives to live happily. You could say quiet is my favorite word but not a word I would necessarily use to define myself. This is because the few moments every day that I have where I am bothered by nothing are the ones that I value most and can help me figure out what I am doing, how I am doing it, and what I need to change before I go any further. I don't meditate as often as I used to, but at least once or twice a month where I can sit down after building up to a single increasingly relaxed state, I sit and do so. In general, a difference must exist for anything to happen. In about a googol years when the universe reaches maximum entropy there will be no potential for change or action. I don't mean to make this analogous for doing absolutely nothing being ideal, but rather that separating oneself from the daily routine is valuable and that being consistently busy can do more damage than being consistently at rest. If I use up all my energy at once I won't be patient enough to reach the top of the pyramid (Maslow's hierarchy of needs). This applies to myself.

My coaching philosophy should be one that applies to both young and old, so I won't be overly specific.

Think as a whole. "What are we doing?", "Let's do this in particular". As soon as you all (my team) know what you are doing you won't even have to speak.

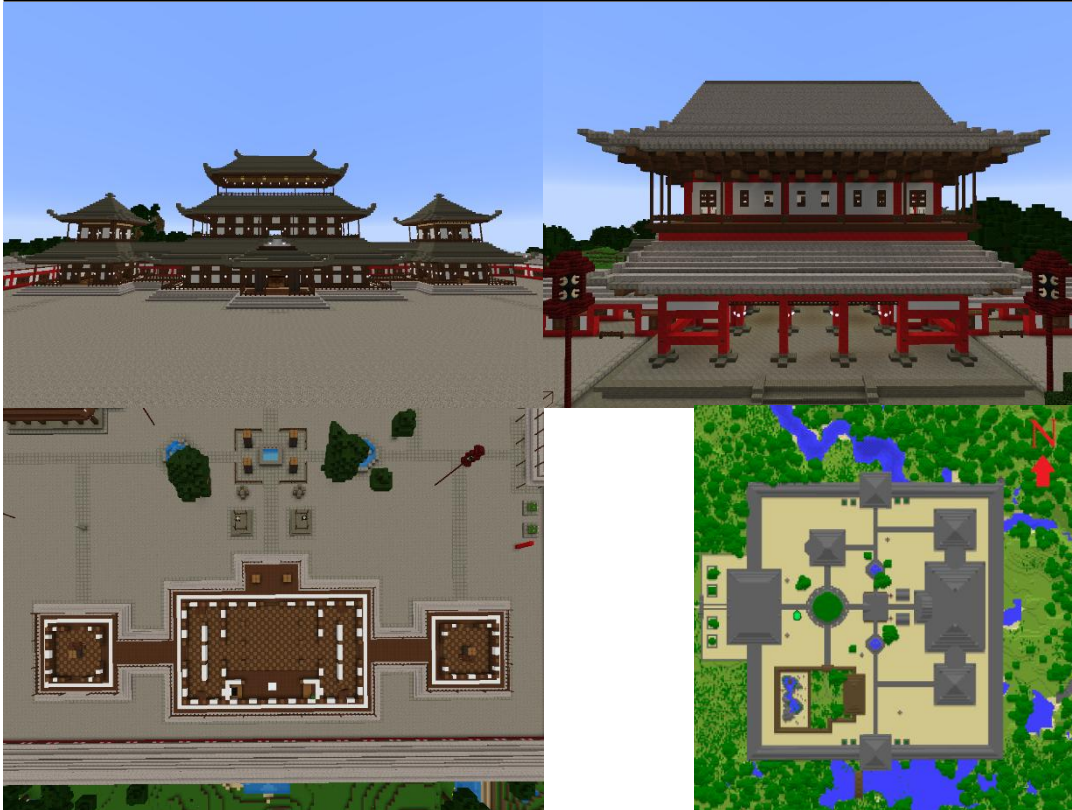
Our (my hypothetical team's) core values:

1. Don't use sets of reps, pick a number; 10, 100, 1000, and do that number of push ups or run that number of miles every day. Try to do more than everyone else.
2. It's not work, the word work makes everything stale. Do it so that you don't look like your parents when you are their age.
3. Don't be humble by just doing better than yourself. Try to be twice as good as your enemy. And if you don't have an enemy, make some. Great men are forged in fire.
4. Please keep your parents out of this team's business. It's between you and me if there's a problem.

My personal goals as a coach would be simply to keep my players doing something, anything athletic once class is done with. I would try my best never to be the coach that ruins the sport (whatever it is I'm teaching) for my new players. I would never want to be a mediocre teacher that is worse than my players. I also feel very strongly that no one should be teaching a sport who is not fully capable, and adept at, the sport they are teaching, but being proficient in the sport you play is only half of why I think only experts should be teaching kids. Being able to inspire your player by showing them right in front of their eyes what they could be if they worked at it. I remember when I started a parkour class at Accelerations Gymnastics Academy, the first person who introduced me was a 17 year old gymnast and wrestler named Jesse. 10 seconds in and he says, "watch this", immediately proceeding to run up several feet, and backflip off of the gym wall. That moment has kept me jumping around since.

Semester: 2
Course: World Architecture
Project: Design 1 – Japanese Buddhist Temple In Minecraft
Full Document:
http://users.etaown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/World%20Architecture%20Case%20study%201.

Finished project renders:



World Architecture Design 1: Japanese Buddhist Temple

Joseph J. Wunderlich
2/3/2015

Full project download (ver. 1.7.5): <http://www.planetminecraft.com/project/-the-crimson-temple/>

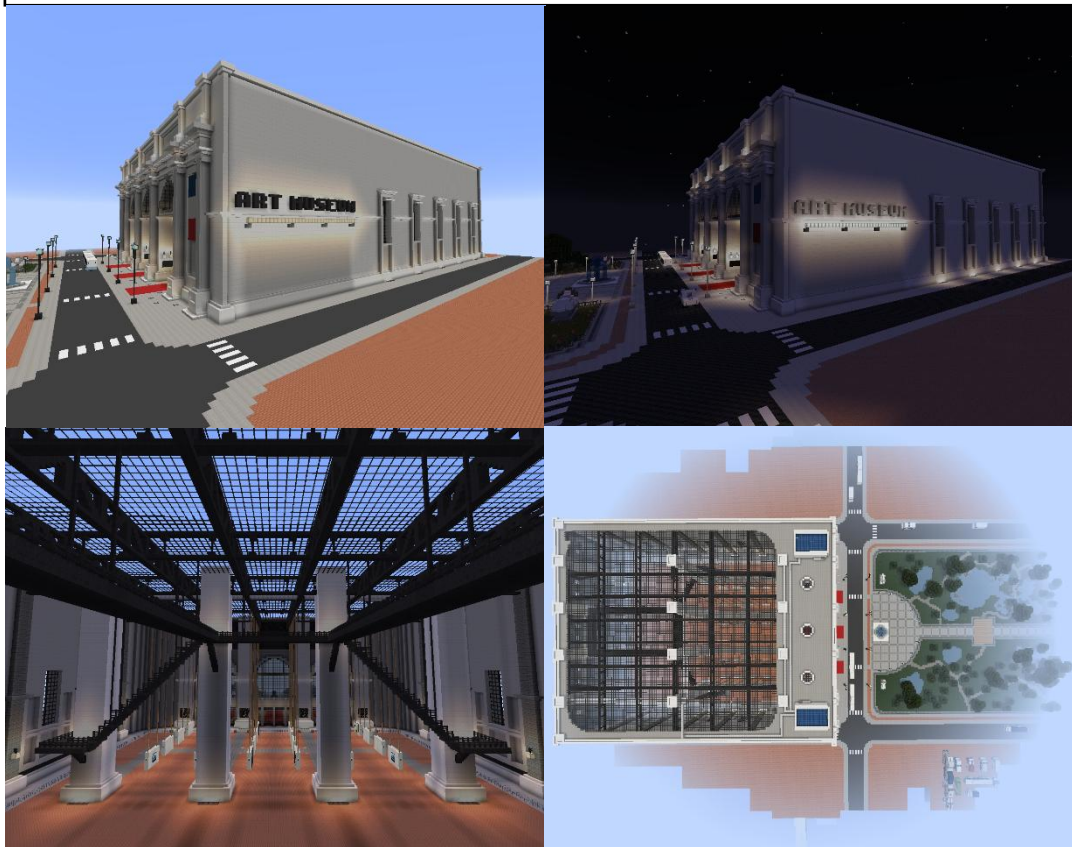
My design is of a traditional Japanese Buddhist temple that would have likely existed within the last 100 years or so in Japan as a new temple inspired by the past, but using my own plan. This is a historical prototype. Modeled in Minecraft.



It consists of a two story temple gate that connects a small outer courtyard to the main temple grounds that are separated by a large square shaped wall that can be walked through. As soon as you walk through the temple you are stopped by a spherical flower bed that functions as a 4 way roundabout. To the left of the main flower circle is an intricate 3 story pagoda shrine. To the left is a side entrance to the temple garden that can also be accessed through a side walkway closer to the main temple. Straight ahead from the main gate and flower bed is a tall open pagoda with a pond underneath. To the left and right are paths that lead to two fountains and continue beyond to identical side exits to the temple through the outer wall. Halfway between the fountains and the side exits are branching paths to two of the side buildings that connect to the main temple. Straight ahead from the pagoda ahead of the flower bed are several shrines once you approach the front of the temple. The main temple itself is three stories with an open, wallless view on the top floor. The two aforementioned side buildings that connect to the main temple are only 2 stories and can be accessed by walking along the ground level to them. This building, as well as the main gate have an outside walkway on each floor.

Semester: 2
Course: World Architecture
Project: Design 2 – Museum/Train Station in Minecraft
Full Document:
http://users.etaown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/World%20Architecture%20Case%20study/

Finished project renders:



World Architecture Design 2: Classical-Modern Art Museum Station

Joseph J. Wunderlich
4/10/2015

This design is of a French and American art museum that would be built as a public building for a major city client to hold a large collection of both painting and sculpture.



Figure.1 West elevation

My building's façade takes inspiration from the classical marble front of Union Station in Washington, DC, by Daniel Burnham [fig.1]. The interior of this structure is an open, bare-bones space with a ceiling consisting mainly of glass held up by a painted black steel frame inspired partially by the interior of the Pompidou Center in Paris, France, by Renzo Piano and Richard Rogers, as well as some slight credit to Le Corbusier, but not too much [fig.2]. Large marble columns reinforced with a steel beam scaffold core hold up the roof and walls, with the exterior of the building made primarily of solid marble and stone brick. The gallery portion of the inside has 24 hanging two sided canvases so that a painting may be displayed on both sides of each. A second floor catwalk allows for visitors to view the sculpture section of the building from a bird's eye perspective [fig.3]. Atop the roof are two large solar collector arrays (not functional in-game) that would be used to power large batteries to save energy. Ideally, if built, natural air would be able to flow through the building from large mechanical opening windows on both sides of the building, though moving machinery is not possible yet in Minecraft.

Outside the museum and directly across the street is a small park, taking up a slightly smaller lot. This garden is designed as a relief space before the bold front of the main building. This park has several rivers and trails for leisurely walkabout. An Ideal tourist spot.

Semester: 2

Course: World Architecture

Project: Metropolis (1927 film) Essay

Full Document:

http://users.eta.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/Metropolis%20%281927%20movie%29%20Essay.pdf

Metropolis by Fritz Lang

Joseph J. Wunderlich

March 12-15, 2015

Metropolis is a 1927 science fiction written and directed by Fritz Lang. It follows the general point of view of Freder, a young German man who is son of the ruler of a large futuristic city. Freder's father, Fredersen, operates in a building called the New Tower of Babel, a large tower with 5 points moving away from the center in a star shaped pattern. This building is inspired by the painting by Pieter Bruegel the Elder in 1563 which was inspired by the story told in the Book of Genesis in the bible of the same name. Maria, Freder's love interest mentions in the movie "Between the mind that plans and the hands that build there must be a mediator". I believe this refers to the story of the Tower of Babel being constructed by the workers, who were angered of their poor treatment.

The buildings that the working class live in are tall, repetitive, grey skyscrapers and apartments, reminiscent of Russia's cheap apartment complexes during WWII. These predictable, bland buildings represent the repetitive and machine-like labor that every working man has to endure in this city. This is only slightly exaggerated as the working class in Germany and all other nations involved in the war dedicated the majority of their working class to factory labor machining war planes, tanks, arms, and the like. In the movie as the workers first walk into the electric power plant/factory where much of the story takes place, all the men are seen hanging their heads and walking in a perfect formation in and out of the factory, down several elevators, and finally into a giant machine room. This room has workers moving non stop to keep what I can assume is the power running throughout the city. During the beginning of the movie, one of the head workers has trouble maintaining the system and the entire plant overheats, then killing many workers. This room looks sort of like the front of a giant truck, or perhaps the front

Semester: 2

Course: World Architecture

Project: Case Study 1 – Piazza San Marco + St. Mark

Full Document:

[http://users.etaown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS and TALKS/World%20Architecture%20Case%20study%202.pdf](http://users.etaown.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS%20and%20TALKS/World%20Architecture%20Case%20study%202.pdf)

World Architecture Case study 1: Piazza San Marco/St. Mark's Cathedral

Joseph J. Wunderlich

March 10-14, 2015

Piazza San Marco is the main square on the island of Venezia, Italy. In more casual terms, it is located on the belly of the fish geographically. It is recognizable by such landmark buildings as Saint Mark's Basilica, an Italian Gothic and Byzantine style cathedral in the town center, which began its construction in 1063 when the 30th Doge of Venice Domenico Contarini commissioned an unknown architect, likely greek, to design the church. (1). To the right of which is the Doge's Palace, a Venetian Gothic palace where the Doge of Venice would reside as the head of the Republic of Venice, as well as double as a courthouse. It connects to a prison via the famous Bridge of Sighs which passes over the Rio di Palazzo canal. The palace it is now a museum (2). In front of the Basilica is the San Marco Campanile, the town bell tower and the tallest structure in piazza (3). Surrounding the Plaza center on both sides are 2 shopping complexes that can be walked through on ground level. The above levels are currently empty (4). Between the two shopping centers there is a museum known as the Museo Correr, one of the 11 civic museums in Venice (5).

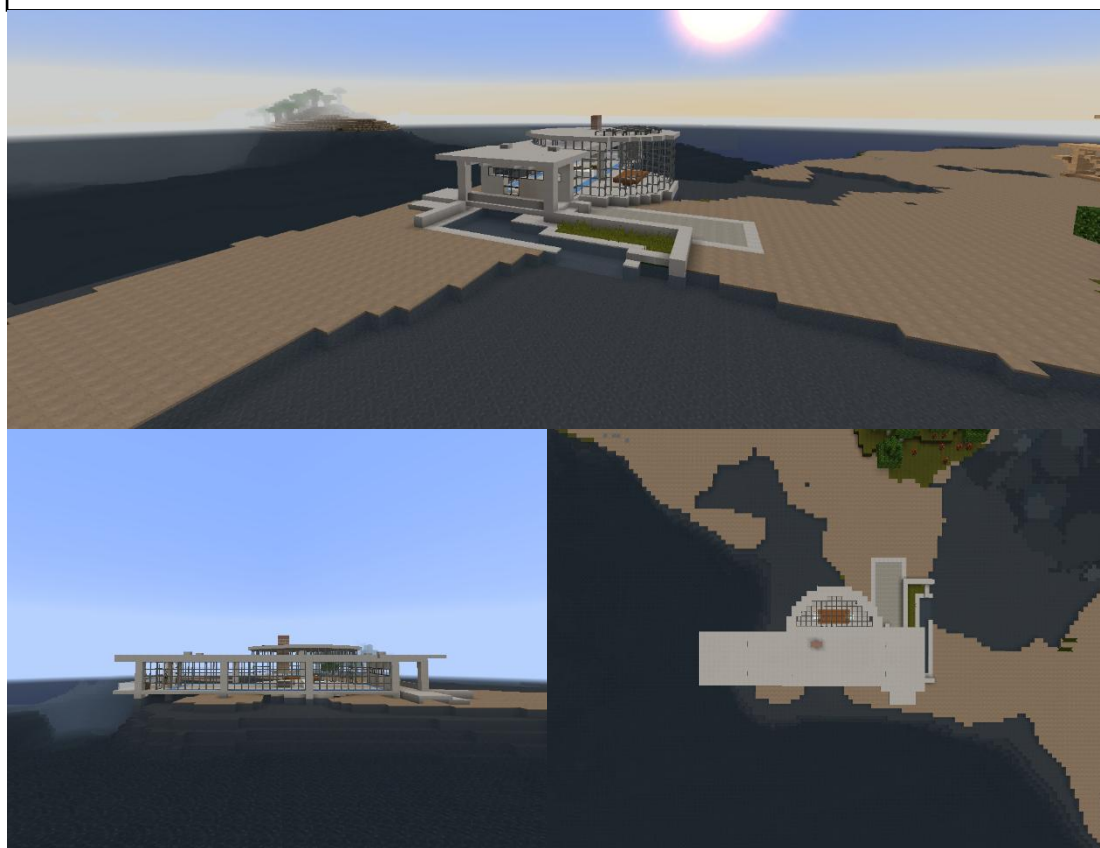


Semester: 2
Course: World Architecture
Project: Case Study 2 and Design – Farnsworth House

Full Document:

http://users.eta.edu/w/wunderjt/JOSEPH%20SCHOOL2/PAPERS_and_TALKS/World%20Architecture%20Case%20study%204.

Finished project renders:



Unit 4 World Architecture Case study + design: Farnsworth House

Joseph J. Wunderlich IV

May 4-5, 2015

For my second and final case study, I will review in great detail the famous Farnsworth house by the German-American architect Mies van der Rohe. Built in 1951 for the client Dr. Edith Farnsworth on River road in Springfield, Illinois, this is a minimalistic, modern, mainly glass house. The structure is built of steel, laminated glass, and Roman travertine on the floor and deck. The house is built near a large river and surrounded by a large grove of trees. As for the house's architecture, there is quite a lot to say despite there not being a whole lot to see. Two parallel planes of the house and porch compliment one another well by adding a level of separation from the house while still being a part of nature. I was drawn to this house by a curiosity about myself. I usually prefer more soft, round, smooth architecture, but I found this house very attractive and I wanted to know why. How could such a rigid, simple house be an acceptable place to live? Buildings of this style are meant to represent order, organization, refinement. Not exactly what you would consider homey in the traditional sense. It may be because the contrast it offers to it's natural surroundings. I can't help but be somewhat drawn to make the connection to falling water, as both houses are near, or in falling water's case, on top of a river, both are shaded by trees, both are long, asymmetrical buildings, and both blend in (somewhat) while still making a statement. (fig. 1)



Figure 1

New work to be added eventually