I, Barrington C Pope, hereby submit this original work as part of the requirements for the degree of Master of Architecture in Architecture (Master of).

It is entitled:  
IRL: creating cyberspace in meatspace

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Committee chair: Aarati Kanekar, PhD

Committee chair: Michael McInturf, MARCH
IRL:
Creating cyberspace in meatspace

A thesis submitted to the
Graduate School
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by

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Abstract

The creation of a monolith concerning internet culture and technology on Cleveland’s historic mall presents a number of cultural and architectural questions. This thesis will address the emergence of technology and internet based culture as new drivers for architectural form and meaning. The relationship between architecture and historic legacy has significant impact on our cultural conscious. Cleveland’s historic malls, conceived by Daniel Burnham as part of the national City Beautiful movement; have become an integral part of the City’s urban and social atmosphere since their inception in 1903. The transformation of Cleveland from an industrial powerhouse to a struggling rust-belt economy has created a unique juxtaposition of underutilized public space within established cultural icons and institutions.

A relationship between new program and existing city form and landscape must be handled both elegantly and deliberately. Decisions being made will have a concrete effect on the importance of history within the future of the city. E-sports, competitive electronic gaming, is an industry experiencing tremendous growth along with increased exposure and profitability. Integral to technology, e-sports represents the future of non linear architectural space. Providing a facility for such a unprecedented program does not come without challenges. Creating such a place within the cultural and historical legacy of Cleveland’s Malls offers a number of additional theoretical and physical challenges.

By embracing the existing infrastructure of classical American cities, architecture can operate for not only the future but the past and present as well.
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Glossary

**cyberspace**
Umbrella term describing the goings on and constructs of computer networks and online environments. Originates from William Gibson’s 1984 novel Neuromancer.

**e-sports**
Broad term used to describe the community and action surrounding the competitive playing of video games.

**IRL**
In Real Life, referenced on the internet as the opposite of cyberspace interaction

**LAN**
Local Area Network, a type of computer network on which users can share data

**meatspace**
opposite of Cyberspace, pertaining to the relationships and constructs occurring in the corporeal world.

**meme**
A cyber-pidgin of sorts, cross cultural joke, story, or experience that is shared by a portion of the internet community.

**social media**
Websites and cyber ventures such as facebook, twitter and, reddit; which seek to digitize news and social interactions into far reaching technology.
Early History

When embarking on a quest to understand the history of Cleveland one must start well before the city itself was even founded. In the century prior to America’s incorporation, the Ohio territory was central to the struggle between European influence and settlement and the existing Native American cultures. The powerful Iroquois tribes from present day Upstate New York waged a series of wars spanning well over a decade during the mid 17th century. These ‘Beaver wars’ fought for control over the lucrative fur trade in the Ohio territory. Backed by English and Dutch interests, the Iroquois waged war against the less organized Algonquin tribes under influence of French colonists.1 The Beaver Wars would represent the first in a series of colonial struggles between Natives and European powers over control of Ohio’s resources. Following the Iroquois domination of smaller local tribes, Ohio became vastly depopulated, consisting mostly of trading routes connecting the populated east with the fur rich west.

Following American independence from the Crown, the Ohio territory fell under jurisdiction of the eastern states of Massachusetts, Connecticut, and Virginia. Present day Northeast Ohio fell under the jurisdiction of Connecticut and became known as the Connecticut Western Reserve.2 Eastern states were eager to sell off their western land claims to private investors as a method for alleviating debts incurred during the War for Independence. It was here, in the years following American independence that Cleveland was first approached with permanent intent. Long seen as a wild and uncivilized region, settlers and investors from the east were eager to seek out new opportunities in the lands west of the thirteen colonies.

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The Connecticut Land Company was founded in 1795 with the intent of surveying and populating the newly opened Western Reserve. Not surprisingly the first surveying team to reach Cleveland was lead by Moses Cleaveland. Cleaveland, a member of the Connecticut assembly that ratified the U.S. Constitution; was a prominent investor in the company and was chosen to lead based on his fame and leadership experience. Cleaveland left Upstate New York in early June 1795, and continued west across water ways until eventually reaching the mouth of the Cuyahoga river on July 22, 1795. Owing its name to the Iroquois word for crooked river, the 85 mile Cuyahoga traverses a U-shaped course across much of the surrounding region. For a brief moment surrounding Cleaveland’s arrival, the Cuyahoga river represented the western boundary of United States territory, while the land to the west was not legally acquired from Native Americans until the Treaty of Fort Industry in 1805.

Cleaveland was tasked with surveying a city to serve as the seat for this newly opened territory. Understanding the potential importance of a navigable inland river, Cleaveland chose the mouth of the Cuyahoga as the ideal location for a new settlement. The surveyors laid out Cleveland along the lines of a New England agricultural village, as that is what they were familiar with. The surveyors first task was the delineation of a ten acre “public square”. The square was bisected by Ontario street and Superior and parcels were mapped and prepared for sale. However, the new city would remain uninhabited for years following Cleveland’s initial survey party. Early settlers had particular difficulty settling around Cleveland, as the presence of swamps caused widespread sickness among.

At the end of the 18th century, the population of Cleveland was recorded as consisting of a single individual, Lorenzo

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3  Miller, Carol Poh, and Robert Anthony Wheeler, 16
Initial population growth in the Western Reserve was slow, due to a number of factors. The vast majority of land in the region was owned by wealthy residents in Connecticut, who were perfectly satisfied acting as landowners from their homes in the east. In fact, the majority of early migration to the Western Reserve would not occur until 1800, when the area became incorporated as part of the United States, paving the way for formal settlement and governance. Throughout the first decade of the 1800’s Cleveland was not even the center of life in the Western Reserve, dwarfed in population by neighboring Newburgh and Warren, Cleveland was little more than a meager settlement.

The first indication of Cleveland’s long-term prospects came when Cleveland was named a port of entry by the federal government. The young settlement was to handle trade from Canada and regulate lake and river traffic, creating a need for new government apparatuses in the young settlement. However, despite its status as a federal port of entry, the population failed to grow as a result of unhealthy living conditions; owing to the presence of untamed swamp land residing to the east of the Cuyahoga river. By 1810 the population measured only 57 residents, despite modest growth in the surrounding township to 300 inhabitants. By 1812 the communication Moses Cleaveland had foreseen was finally becoming a reality, with roads linking Cleveland to Buffalo and Pittsburg opening and a ferry crossing the Cuyahoga making regular runs. As a consequence of these new routes of trade being opened, Cleveland became increasingly viable and important in the region. Cleveland saw its first real growth in the shadow of the War of 1812, becoming a trade center for soldiers stationed nearby. Soon a bank was established and a bridge was built linking the east and west banks of the Cuyahoga River. Cleveland had become dependent on Lake Erie for the majority of imports, with ships frequently leaving for Detroit and Buffalo.

Perhaps the most important factor in the growth and development of Cleveland in the early 19th century came in the form of the Ohio and Erie Canal. The Canal, linking the Ohio river to Lake Erie was an economic goldmine for the state of Ohio and especially Cleveland. After years of deliberation, in 1825, Cleveland was chosen as the northern terminus for the proposed canal. Playing host to the terminus of the canal meant big business for Cleveland. Already a bustling town one the lake, Cleveland would now serve as the point of departure for countless agricultural products bound for the east coast via Buffalo. Cleveland would also serve as the point of arrival for manufactured goods and services bound for markets further inland. Construction of a new harbor and docks allowed for the dredging of the swamp that had caused health problems for the city for decades.

Construction of the Canal brought with it a large number of immigrant workers, Irish in particular. This immigration would set a precedence of a large foreign born population, owing in part to Cleveland’s working class makeup. By 1845 roughly half of Cleveland’s population was foreign born, and staggering growth ranked Cleveland as the fastest growing city in Ohio. During this time many cultural institutions were established, including [in 1934] First Presbyterian Church [Old Stone Church]. As the economic viability of the Ohio and Erie canal began to decline with the advent of the Railroad, Cleveland was facing its first potential economic crisis. Without the canal, Cleveland would have been little more than a small village on the Cuyahoga, rather than the regional commercial center it had become. Politicians were faced with the reality that they needed to diversify Cleveland’s economic base or the city would certainly flounder. The Railroad provided the Cleveland with

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7 Van Tassel, David D., and John J. Grabowski, 28
the economic opportunities it desperately needed. Quickly becoming connected with Cincinnati, Columbus, and later Pittsburg, New York, and St. Louis; Cleveland soon became a regional railroad hub. By quickly adopting the railroad, Cleveland was able to transition its economic base before the Ohio and Erie canal had outlived its usefulness. Building on the success of the Canal and Railroad, the City saw an increase in manufacturing; supported by available land, low costs of goods, and a strong workforce. This workforce, mostly comprised of foreign born laborers led to the continued diversification of Cleveland’s settlement. By 1860, only 33 percent of residents were born in America, while 33 percent were German born, and 22 percent Irish born. During this rapid population growth [10 percent in 1860, highest among American cities], private institutions were no longer able to address urban social problems. Government institutions were established including: A poorhouse, hospital, centralized school system, and public utilities.8

8 Miller, Carol Poh, and Robert Anthony Wheeler, 41

Ohio and Erie Canal At Mouth of Cuyahoga River Figure 1.3

Industrial Rise

Cleveland’s rise to industrialization began in the years surrounding the Civil War. At the outset of the War the City boasted a population of 43,417, a number which would soon double in the ensuing decade. Iron ore from Lake Superior began passing through Cleveland in the years leading up to the War courtesy of a new canal in Sault St. Marie. Wartime industry afforded the construction of lumberyards, oil tanks, factories, and storehouses. Cleveland’s centralized location along the rail lines made for an ideal manufacturing center. “Cleveland must rise, if at all, by manufacturing” Cleveland Leader, 18609

Throughout the industrial revolution Cleveland continued to steadily increase its manufacturing output. As industrialists like John D. Rockefeller built their industrial empires on the shores of the Cuyahoga, class divisions were becoming more and more apparent. While high society enjoyed a posh lifestyle along Euclid avenue, laborers [mostly foreign born] became increasingly disenfranchised. Living in a number of segregated ethnic neighborhoods scattered across Cleveland, these European immigrants represented a number of mainly central European ethnicities. The German and Irish laborers from Cleveland’s first economic boom were joined by large amounts of Hungarians, Czechs, Slovaks, Poles, and Russian Jews. The flats surrounding the Cuyahoga river became rapidly industrialized, while downtown began to grow along superior east of public square. The rapid industrialization led to the population of Cleveland doubling roughly every ten years. Municipal government had much difficulty keeping city services at pace with such rapid growth, and as a result poverty became a chronic problem for what had become [by 1890] the fifteenth largest city in America.10

9 Johannesen, Eric, 50
10 Miller, Carol Poh, and Robert Anthony Wheeler 65
in 1893, city planning and parkways entered the nation’s public conscious. Cleveland quickly set aside 1,200 acres to be turned into parks. However, by the late 1890’s the industrial triumph of the past decades was beginning to take its toll on Cleveland’s environmental health. Over 50 million gallons of raw industrial sewage flowed unabated through the Cuyahoga and into Lake Erie. The city was choked with smoke and industrial discharge raising serious health concerns.

Cleveland continued to reap the economic benefits of its industrial success, and by 1900 was one of the largest manufacturing centers in the Nation. Steel and Iron produced in Cleveland helped shape the landscape of America. During the first decade of the 20th century downtown saw the construction of numerous multi story office buildings. Concentrated along streetcar lines, the commercial downtown was easily accessible from newly constructed “streetcar suburbs”. As upper and middle class residents moved farther out from the central city, only the less desirable residences remained. This stratification was further exacerbated by a staggering influx of immigrants, primarily Hungarians, Eastern European Jews, Poles, and Italians. As the ethnic segregation was reaching critical mass in Cleveland’s working class neighborhoods; employers and public groups began offering English classes in an attempt to help newcomers assimilate to American life.

Serving as mayor for the first decade of the 20th century, Tom L. Johnson helped to shape the landscape of Cleveland forever. Johnston oversaw the creation of the West Side Market, a city institution to this day. Serving as a venue for culinary exchange among the numerous ethnic groups that call Cleveland home, the West Side Market personified the cultural diversity of the city. But perhaps Johnson’s most noted accomplishment was the establishment of the Group Plan of 1903, which changed the shape of downtown Cleveland forever.  

World War I brought increased industrial output, along with migration of southern African Americans north to fill jobs vacated by young men leaving for service. Prosperity continued on the cultural front, with the establishment of a thriving theater and entertainment district just east of downtown. The Cleveland Orchestra was incorporated, and a sprawling neoclassical art museum was constructed at Wade Oval. Cleveland was culturally booming, and the group plan was becoming more and more a reality with the construction of public hall, city hall, and municipal court buildings. Cleveland was second only to Detroit in automobile construction, and leading the nation in production of iron and steel. Consolidation of transport enabled for the construction of a centralized union terminal, Terminal Tower. Funded by the Van Sweringen brothers, the Terminal Tower would become the icon center of Cleveland for years to come. Situated on the southwest corner of public square, the terminal served as a hub for regional transportation and suburban railways. As a result, the majority of building and commercial growth for the ensuing decades would occur along superior in close proximity to Terminal Tower.

With this growth Cleveland soared to over 900,000 residents by 1930. Despite this meteoric urban growth, the suburbs surrounding the center city saw even faster economic acceleration. Soon Cleveland’s suburbs began to outpace her, in wealth, growth, and quality of services. Lakewood and Parma, two of these streetcar suburbs, voted against annexation by the city, effectively stalling Cleveland’s growth and fixing the city’s borders on the west and south. As the city grew into its final borders, attention was turned from growth to retention. It was now a race against the clock to keep population and ultimately businesses in Cleveland.

References:
11 Johannesen, Eric, 65
12 Van Tassel, David D., and John J. Grabowski, 44
The great depression would hit the city hard all but stopping construction and economic growth. The depression saw the construction of exclusively public work projects, owing much to government assistance programs of FDR’s New Deal. Cleveland Municipal Stadium was constructed on the growing popularity of spectator sports across the country. The Cleveland Indians were recent World Series champions, and were quickly outgrowing their home at League Park on the near east side. On the heels of the stadium construction, the mall was gearing up for an even greater undertaking, the 1936 Great Lakes exposition. Spanning two years, the exposition marked that last time Cleveland’s historic mall would be utilized to its full potential. However, despite these social successes, the city was slowly decaying as migration to the suburbs increased. It is during the depression that the Cleveland’s government first showed signs of trouble. As America went to war in Europe and the Pacific, Cleveland became key to wartime industry. Cleveland produced everything from trucks, planes, and small arms during the war. Through the course of the war, foreign and native whites of means began leaving the city for residences in the suburbs. Southern blacks and Appalachian whites flooded to the urban center in droves, attracted by factory jobs opened up by the war effort. This shift drastically changed the ethnic and economic make up of Cleveland neighborhoods, Hungarian neighborhoods became Puerto Rican, while Jewish and Slavic areas were inhabited by the city’s growing black population [which had long been confined to the near east side through rent pressure and marginalization].

Economic decline

This shift to suburban development would have disastrous consequences for the city. In the years following World War II, $1.7 billion was spent on postwar expansion, $1 billion of which was in the suburbs. Suburban housing and building dwarfed central city by a margin of 4:1. In 1955 Architectural Forum commented.

“Every metropolitan area is plagued by the paradox of suburbs siphoning off tax income, In Cleveland this parasitic situation reaches and extreme . . . Suburban chauvinism in Cleveland is more than a political and financial problem. It is a social problem.”

The unique social, political, and economical climate had, for the past century, increasingly alienated the working poor from the working class. This class division was only becoming increasingly evident as those with means began to almost exclusively move to the suburbs. What was left in Cleveland past the 60’s and 70’s was a crumbling economic base, declining industry, and a climate of political unrest as government agencies began to greatly lose effectiveness. During the 60’s Cleveland began the largest single urban renewal program in the nation at the time, encompassing the demolition and redevelopment of seven distinct neighborhoods located on the city’s east side. However, the state of the local economy coupled with the scale of investment necessary created an equation such that only government subsidized housing developments were the only projects capable of being constructed. This replacement of slums served to only delay the inevitable, with no real new development or investment coming.

13 Johannesen, Eric, 77
14 Miller, Carol Poh, and Robert Anthony Wheeler, 99
On an urban scale, Cleveland conjured up one of the most ambitious plans for Urban Renewal, the Erieview Plan. Masterminded by I.M. Pei, the Erieview plan called for a mass redevelopment of land located to the northeast of downtown. However, while the plan and redevelopment gained modest success in its partial implementation [Pei’s plan called for the overwhelming repurposing of the entirety of downtown west of E 6th], the remainder of Cleveland’s urban landscape was neglected. The decline in Cleveland began to reach critical mass, the city’s public school system was quickly declining; while residents displaced by urban renewal began to concentrate in neighborhoods on the east side. As manufacturing, the city’s once vaunted backbone, began to decline; unemployment became a serious problem. With the effective tax base of the city demolished during max suburban exodus, city services, already at a bare minimum reached rock bottom. The city was unable to adequately stop crime, prevent vandalism to vacant properties, and attract new investment.

The immolation of the Cuyahoga river, served as a representation of the state of things in Cleveland. Pollution and waste ran unchecked in the streets, and what little industry was left in the city acted virtually unregulated by a weak and ineffectual government system.

Present optimism

Monikers Believeland, Cleveland+, and the Comeback City, would represent the optimism of Clevelanders and politicians alike for the City’s eventual comeback. However, optimism did little to abate the en masse exodus of middle class families to the suburbs. By 2010, the population had declined to blow 400,000, well below the 900,000 peak 60 years

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15 Van Tassel, David D., and John J. Grabowski 113
earlier and nearing the City's population of the late 19th century. While the population of the city continued to steadily decline, the county and surrounding municipalities absorbed the majority of population. These shifts in regional population signify a transition as the vast majority of regional residents began commuting to work by private automobile and train rather than bus and walking.

Cleveland is now a city, experienced by most residents in the brief moments between their office and transportation home to the suburbs. There is noted lack of activity downtown in the hour in which standard offices are not occupied. Despite this decline in downtown population and use, many established cultural institutions have managed to remain viable in Cleveland. Playhouse square, one of the nation's oldest and most established performance centers, continues to attract good numbers with a variety of Broadway quality shows and plays. Cleveland Orchestra, taking up residence in the stately Severance Hall on the City's East Side, is well regarded as one of the premier orchestras in the Nation and World. Near Severance Hall, Wade Park is host to the Cleveland Museum of Art, home to one of America's most established and prestigious institutions. These renowned public institutions put Cleveland in an interesting situation in regards to potential and the current state of the City. Save for maybe Detroit, Cleveland, enriched by the presence of established institutions and cultural infrastructure unprecedented for a city with a current declining population of less than 400,000. Whereas, most contemporary cities of Cleveland's current size lack the established cultural and social communities only a former industrial powerhouse could provide. In the years following industrial decline, Cleveland has made many attempts to diversify the local economy. The greatest hope for supplanting the void left by declining industry is the rise of business in the service sector. Representing healthcare, banking, and related fields; The vast majority of recent economic growth has occurred in this sector. Cleveland Clinic, one of the World's leading medical centers, is rapidly expanding its facilities locally, nationally, and globally. The Cleveland Clinic is quickly becoming the largest non-government landholder in the City with the construction of an expansive medical campus on the city's East Side. The success of medical care and providers in Cleveland has led to a boom in the local financial and insurance sectors, both well established already in the regional economy. Cleveland's longstanding designation as headquarters of the Federal Reserve district number four [including Ohio and parts of Western PA and Eastern Kentucky] further strengthens local prominence. Recently, much excitement has been generated by a potential renovation of the current convention center and the construction of a Medical Mart [for the display and sale of medical technologies and services] on the Downtown Malls.

Rapid industrialization and population trends have afforded Cleveland one of the more interesting and storied applications of architectural practice in America. From the landmark Terminal Tower, Rock and Roll Hall of Fame, and civic monuments; to the ethnic boarding houses and Steel Mills, Cleveland affords a unique blend of Architectural styles and precedence representing well over two centuries of growth and development. To better understand the cultural and historical context surrounding my site, it is important to first understand what architecture means to Cleveland. Only by truly understanding the full extent of the architectural implications of my actions can I make a truly informed decision with the City’s best interest at heart.

The story of Cleveland’s architecture really begins out of necessity rather than luxury; as with most of the newly settled frontier villages across the modern Midwest. Lacking modern amenities days in every direction, these villages began as little more than clusters of cabins and storehouses. Rugged life in early Cleveland, caused by sickness causing swamps and harsh winters on Lake Erie, fostered concentrated development of wood structures in the immediate vicinity of Public Square. This meager settlement would become the mainstay for Cleveland’s first two decades of existence; neither significant nor unprecedented for the region. At the time, building occurred purely of necessity, with excess profits and ingenuity being exported to investors further east. It was not until construction of a Harbor, roads linking with Pittsburgh and Buffalo, and designation as a National port of entry that Cleveland’s civic potential was theorized. With increased trade and transportation came warehouses, commercial interests, merchants, investors, and laborers. Now becoming a regional shipping and manufacturing center Cleveland afforded greatly on the moderate industrial growth of
the early to mid 1800’s. Presently, the vast majority of building stock from this era has been lost to the memory of history; owing in part the propensity of flammable wood structures, and the value of land so near to downtown. Of the few buildings from this time that still exist, it is difficult to get a real picture of what building was really like in early Cleveland. It however, can be declared that Cleveland; in the early years of the 1800’s was not at all unique architecturally. Pittsburgh, Detroit, Cincinnati, and Chicago were all developing as similarly charged and constructed villages; not out of style or progress, but rather necessity. It is this early American pragmatism that best exemplifies Manifest Destiny in the Midwest; American buildings for American progress. Much research could be dedicated to early developments in Cleveland building, however; such research would be virtually fruitless as the cultural memory has continued on long after fires, demolition, and replacement removed them. As the buildings that shaped early Cleveland were gradually replaced and added on to; they became part of history. A few typological examples were ‘preserved’ as history lessons. The Lorenzo Carter Cabin, presently located in the flats on the east bank of the Cuyahoga, serves as a monument to Cleveland’s first purported settler. Representing little more than a late 18th century home, the Cabin stands testament as the only pre 1800 structure remaining in the region. In fact, much is evident in that the oldest surviving structure in Cleveland is believed to be a modest tavern 5mi east of downtown, constructed in 1824.¹

Cleveland in the early to mid 1800’s was a product of a growing settlement; barebones worker housing and services, with labor intensive stone construction reserved only for the most wealthy residences, churches, or civic buildings. The construction of the Ohio and Erie Canal in the 1820’s and 30’s brought new purpose to the young settlement on the Cuyahoga. As stated previously in this document, the Canal would prove to become the first in a series of factors leading to Cleveland’s growth. From a standpoint of architectural purpose and transmission, however; the construction of the Canal represents a watershed moment in Cleveland’s place within the Nation. Save minor naval skirmishes with the British during the war of 1812, Ohio, and Cleveland in general had gained little national prominence and as such, their actions were of little importance to the established and industrial cities of the East and North East.² Now, with the completion of a canal effectively linking Cleveland not only with inland Ohio cities, but; also with the entire western frontier via, the Ohio and Mississippi rivers, the balance of power was shifting. In a matter of years North East Ohio was transformed from an introspective outpost digesting culture from larger settlements to the east; to a central hub in National commerce and industry. With this shift came the development of distinct industries and communities within the city. Waves of German and Irish immigrants settled in Cleveland forming distinct neighborhoods and construction cultural institutions and churches. One of the earliest German churches was built in the 1840’s on present day Mall B.³ Through economic diversity and progress Cleveland was quickly become a viable city for builders and investors alike. By 1850, parishioners had raised enough capital to construct the Old Stone Church. Now a Cleveland icon situated at the northern edge of Public Square, the Old Stone Church represents the first in a series of cultural landmarks that would be constructed across Cleveland.

As a result of the success of the Canal, industrial foundries and warehouses began construction along the banks of the Cuyahoga river. Once rife with pestilent swamps, these lands were dredged and became suitable sites for storehouses and manufactories. While the commercial development surrounding the Canal may seem formulaic and rhetorical, I

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¹ Johannesen, Eric, 144
² Van Tassel, David D., and John J. Grabowski, 188
³ Cleveland Memory Project. <clevelandmemory.org>
contest that its development is pivotal to Cleveland’s history and urban form. It is here in the 1840’s that Cleveland began to take the form of what it is today. Sure, public square was laid out by Cleaveland and his surveyors 50 years prior, but; it was this development of industry that had the real impact on the city’s future composition. The location progeny of industry that would one day populate the ‘industrial valley’ would become both a boon and a blight on contemporary Cleveland. This industrial quandary however, is a discussion for a later section as we are still firmly rooted in the Antebellum Midwest. By the dawn of the Civil War, Cleveland’s unremarkable upbringing was reaching critical mass; poised for an Industrial explosion that would help shape the understanding of Midwestern Identity for generations to follow.

**Industrial necessity and outgrowth**

Creating untold hardship and the greatest loss of life on American soil in the history of our proud nation, the Civil War caused dramatic changes in our economic composition. Mobilization of armies and materials created increased pressure on the manufacturing capacity across northern cities. Cleveland’s fledging industrial capacity and position as a crossroads for the Ohio and Erie Canal and railheads, made the city a prime location for new wartime industries. In the years surrounding the Civil War Cleveland began to grow into a city with services rivaling the nicest Eastern cities. Located in-between the rich coal fields of Ohio and Pennsylvania and the Iron ore rich Lake Superior region, Cleveland was at a crossroads to national industry. This industrial proximity created the real need for large scale warehouses, refineries, and support facilities to process, package, and transport the raw materials entering Cleveland on a daily basis. As Cleveland built up more and more industrial and civic institutions, the need for matching infrastructure was apparent. a noted local historian stated observed of Cleveland “the era of the laying of her foundation as a city was passed; her institutions were firmly established; she was no longer an experiment buy a sure success . . .”. As, Cleveland began building upon her foundation the need for prominent buildings and formal representation of institutions became apparent. Hotels, City Hall, and Office blocks would soon join Cleveland’s stately Churches and Mansions already dotting the mansion. As corporate and personal wealth began to grow, mid century urban context was gradually replaced by much more expressive and permanent fixtures of the city’s progress. As with New York and Chicago, the 1880’s became a time of great architectural innovation and prosperity in Cleveland. Looking back on the previous 20 years in 1900, the Cleveland Architectural Club stated:

“Cleveland’s architectural history, up to 1885, was written in the commonplace two, three, four, and five story...
business and office buildings; the frame house, many times contractor designed; the city church, and the public buildings that distinguished western architectural idea up to that time. Isolated examples, in each of the above line, stood as monuments to the good taste in architectural ability of their designers, but these were not oases in the predominating desert of architectural nothingness.”

Similar to my own findings, the Cleveland Architectural Club’s understanding and frankness regarding pre 1880’s architecture helped to set the stage for the impressive monuments to come. This period of architectural significance was dominated by the construction of impressive commercial blocks; stout and formidable, these masonry monuments stood as a testament to Cleveland’s prosperity and permanence. The late 1880’s were rounded out architecturally with the construction of a large number of educational institutions. As industrial money began to be reinvested back into the Cleveland a number of schools, both collegiate and secondary were sponsored and constructed. It is during this time that the majority of Western Reserve University [Now CWRU] was constructed on Cleveland’s east side, as well as a number of large private and public secondary schools. These stately educational institutions, designed mostly in the neo-classical style, further represented Cleveland’s rise to prominence in the region. The establishment of these schools served as landmark institutions alongside the multitude of ethnic churches dotting Cleveland’s landscape. In a time where the majority of office and commercial buildings rarely reached over five or six floors, these imposing monuments, often topped with spires and towers reaching upwards of eight to ten floors served as neighborhood landmarks. However until this point, with the exception of a few exemplary buildings, Cleveland had failed to innovate and capture the

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4 Johannesen, Eric. 166
5 Van Tassel, David D., and John J. Grabowski, 120
architectural spirit alive in larger cities to the east and west. This was about to change with the construction of one of the landmark buildings in Cleveland’s history, the Arcade.

The Cleveland Arcade is perhaps the first important landmark in Cleveland, garnering international attention for its innovative design, economic viability, and aesthetic developments. Constructed just one block east of public square, the Arcade opened in 1890 and was funded by a consortium of the city’s most prominent businessmen, including John D. Rockefeller, Marcus Hanna and Charles Brush. Intended to embody revolution in indoor markets, and taking homage from the bazaars of east; the Arcade exists as a melding of a light court and a commercial street. The Arcade passes one entire city block North to South, with two monumental Romanesque arches framing the entrances on either side. The Arcade must mitigate a level change of twelve feet between its two entrances as well as the construction of a 300’ glass covered five story shopping arcade. The technology used in the construction of the Arcade was quite innovative for the time, utilizing both skeletal iron framing in addition to the standard load bearing masonry. The main North and South entrance arches and sidewalls were constructed of bearing masonry, while the remainder of the arcade was constructed with a skeletal iron frame. It is rumored that no local engineer was ambitious enough to bid on the unique ‘three hinge’ trusses that were required for the glass atrium roof; as a result, the contract was awarded to the Detroit Bridge Company. The Arcade, additionally, had a significant lifestyle and social impact on the citizens of Cleveland at the time. Deemed by contemporary scholars as ‘Americas first indoor shopping mall’, the Arcade offered a place for purchasing a myriad of goods and services under one roof. The Arcade also served as a passage connecting city blocks with sheltered indoor space; something unprecedented in America at the time.
Utilizing the architectural precedence of passage, by creating a building as something to be experienced and passed through, rather than simply a monument to be admired.\(^5\)

Following the success of the Arcade and similar smaller iron and masonry framed buildings Cleveland was quickly approaching the age of Skyscrapers. One of the first and arguably the most influential skyscraper in Cleveland was the seemingly modest Society for Savings Building; constructed in 1890 by Burnham and Root. Considered at the time to be the first modern skyscraper in the state at the time, the building stood at a 152ft with ten floors. Cleveland would continue to keep pace with the development of modern skyscrapers over the ensuing decade, not leading, but clearly accepting the growing trends in American architecture at the time. It is around this time that public square, once defined by the impressive spires of the Old Stone church to its North, was rapidly being enclosed by tall commercial buildings. Public Square has always been the heartbeat of life in Cleveland, architecturally and culturally. Abraham Lincoln’s casket laid in state for a period at Public Square, striking workers marched on Public Square as well as countless political rallies. The construction of Skyscrapers in the vicinity of Public Square served to further solidify its prominence as the foremost public gathering space in the city. As these buildings began to popup on block after block, backed by eager industrialists and investors, government officials in Cleveland saw the need for a codified plan for future development of their great city. Realizing that unregulated construction and growth would ultimately hurt the cohesion and strength of the great city’s downtown, a plan was formulated based on that of many other great American Cities.
By 1900, Cleveland was already in the top ten of Americas most populous cities and was one of the nation’s leading Industrial and commercial centers. At the same time there was a growing need for nearly every major civic building in Cleveland to either be rebuilt or relocated to a more prominent location. The group plan was formed based on the principles laid out by the City Beautiful movement, first realized at the Worlds Columbian Exposition of 1893 in Chicago. After much thought and consideration, the City hired Daniel Burnham, one of the key players in the design and execution of the Columbian Exposition. Certainly ambitious for the time, the group plan sought to replace less developed land north and east of public square with impressive government buildings flanking pristine malls. Additionally the group plan aimed to redevelop the long neglected lakefront and create an established City Civic Center. The Cleveland lakefront is a long argued issue in local politics, planning, and architecture. 1900 was no different; in fact, the lakefront was home to one of the more disreputable slums in the city, centered around the rail yards and swamplands that once inhabited the area. It was mayor Tom Johnson’s aim to the first real success of progressive city planning in Cleveland. Mayor Johnson, a staunch and influential figure in the progressive movement sought to streamline municipal government by creating a central functioning ‘Civic Center’ for the city of Cleveland.

legislation at the state and local levels was passed and the Group plan commission was approved Burnham got to work with a group that included himself, John Carrere, and Arnold Brunner. Beginning in 1902 and submitting the final

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proposal in 1903, Burnham and his colleagues visualized an idealized Cleveland, based upon the successful principles from the Columbian Exposition. Seen as the first and largest implementation of the City Beautiful, all eyes were on Cleveland for the implementation and continued support of such an ambitious venture. Before venturing further into understanding Cleveland’s group plan, I must take a step back and fully understand the principles and precedence for the Columbian Exposition and the City Beautiful movement.

Based on Beaux-Arts interpretation of antiquity, the city beautiful movement sought to reshape the landscape of the American city. Consistent style and cornice height would reinforce uniformity allowing the buildings and objects to stand as monuments within the field of the city. Transportation would be hidden along with municipal and physical boundaries, allowing for a uniform aesthetic to flow seamlessly across the urban fabric. It is interesting to note that in their haste to build over the slums and bordellos located on the Mall’s proposed site, the city fathers neglected to fundamentally understand the relationship of the proposal to the existing and established public square. Located one block adjacent to public square, the new Group Plan failed to engage only successful civic venue in the city. While this failure of opportunity is certainly something I lament; it is out of the scope of my project and it therefore must remain as-is for another time.

The main concept of the mall, a strong North South Axis was also known as the Court of Honor, paying homage to its namesake at the 1893 exposition. Flanked by a multitude of government buildings extolling the virtues of progressivism; the mall was to stand as a symbol to the next great American city. A perfect storm of necessity, feasibility, and capital would lead to perhaps the most ambitious implementation of city planning outside of our nation’s capital. A new library and a federal building were constructed at the base of the Mall, existing in the space between public square and the new axis. City hall and a new court house were to follow, designed in 1907; following the strict guidelines of the Group Plan. However ambitious the 1903 plan was, it’s implementation quickly showed the reality of municipal construction. Not until the mid 1920’s were the majority of buildings on the mall constructed. The difficulty of implementing such an ambitious plan were clear, especially within the constructs of bureaucracy. By the 1930’s the Group Plan was already a distant memory, as smaller buildings began to encroach on the rigid plan devised only 27 years before. Therein lies one of the fundamental problems my project will need to address, respecting the design principles devised by the Group Plan while proposing architecture that also supports Cleveland’s needs for the future.

This idealized American city was certainly ambitious, seeking to create a nostalgic style fitting of our nations rise to prominence. Emphasis was placed on park and landscape, promoting vast expanses of green spaces framed by these monumental buildings placed on axis. Inherent to the style is the concept of beautification, covering what was once undesirable with spanning civic virtue. The construction of monuments to democracy, civic responsibility, and scholarly pursuits would erase the unsavory elements that may have existed in America’s developed city’s beforehand. Public space fielded by public buildings, while enticing has a number of drawbacks.

When not in use or poorly maintained these public spaces can become a vacuum, devoid of all activity and purpose. Without direct intervention these unviable public spaces can quickly become wasted space, or even blight. This former can easily be argued for the malls in downtown Cleveland. A number of renovations and restructuring of the spaces below

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Moore, Charles, 122
Mall B have left the surface with little to no grass left; owing much of its surface to pavers and concrete retaining walls. The once powerful access, visually obstructed by Cleveland Browns Stadium, has at its center scant patches of dead and dying grass. Is this really the civic space Burnham and Johnson had envisioned; one of emptiness and successive formal compromises. A space that has become so convoluted that even nearby federal employees hardly acknowledge its existence; and is only known for being a folly on the roof of a 50 year old parking garage. This is not our civic legacy; and nor should it be!

Indeed, the most significant building in Cleveland exists not on the mall but rather as the anchor of Public Square. Cleveland’s Union Terminal, ubiquitously known as Terminal Tower, was for the better part of three decades, the tallest building in the Nation outside New York. Following the implementation of the Group Plan, a grand train station was planned, located along the northern edge of the mall. The grand terminal would serve as the crowning technological terminus of the Malls and frame the entry to Cleveland’s revitalized lakefront. However, all did not go according to plan, as the Van Sweringen brothers the primary progenitors of the project had other plans. The brothers owned large portions of the regional passenger and freight railways that intersected Cleveland. Backed by a small fortune, the Van Sweringen brothers were able to construct the new train station south of Public Square, in conjunction with their rail lines; rather than the intended lakefront station located on competitors rail lines. Ultimately constructed in 1930, the Tower complex represented what could be considered an alternative to the Group Plan style of Urban design. While the Group Plan devised classical organized and uniform buildings surrounded by picturesque parks and avenues, the Terminal tower sought to create palpable density in the urban core. Further strengthening Public Square’s dominance as the center of downtown, the Terminal tower would quickly
become the central icon for the city. Over 1000 buildings were razed to allow for the construction of the complex, a necessity given the amount of excavation needed in locating a major rail station entirely underground. Above the new union terminal stood an impressive 52 floor office buildings, constructed in the Beaux-Arts style. The Terminal Tower also represented part of a larger complex, Tower City Center. Tower City represented a revolution in modern vertical office space located right at the center of downtown Cleveland. The cohesive central collection of high-rise, uniform office and commercial space led to the final nail in the Malls coffin. Any hope the Group Plan Commission had for a shift in Cleveland’s planning was virtually negated by the construction and success of Tower City. By providing a point of departure for regional and national transportation as well as dense commercial space, Tower City’s success became the center of urban life in Cleveland. The Tower itself would become so engrained in Cleveland’s cultural conscious that not until Cesar Pelli’s 1991 Society Center [Key Tower] would City zoning allow any building to exceed Terminal Tower’s height.

**Transition to modern**

In the years following the construction of Tower City Center, the great depression greatly reduced construction of commercial and industrial ventures across America. While building was not halted entirely, it was greatly reduced to large publicly funded projects and buildings. One of these public project was the 1936 Great Lakes Exposition. Perhaps, one of the most important events in Cleveland’s cultural history, the Exposition coincided with the celebration of the 100th anniversary of the City’s incorporation. Celebrating the industrial triumph of the powerful Great Lakes region, the exposition would run from 1936 to 1937.

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Johannesen, Eric, 175
and play host to well over 7 million visitors. The exposition, taking place on the Mall and newly revitalized lakefront, would showcase modern architecture, technology, and transportation. The exposition also led to the construction of numerous long overdue public improvements, including the lakeshore expressway, construction of an underground exhibition hall on Mall C, and demolition of the last remaining buildings on the expansive Mall. Marking the final construction of the Group Plan, the Great Lakes Exposition can be seen as a spiritual successor to the 1893 exposition that brought about the Group Plan Commission in the first place. Planners and architects of the Great Lakes Expo wished to do for modern architecture what the 1893 fair did for the City beautiful and Beaux-arts sensibility. In praise of their architectural aspirations, the designers of the expo stated their intentions, “[to] establish a trend in modern design just as did the buildings of the Columbian Exposition and the Century of Progress.”

The Exposition also represented, for the first time, the connection of downtown to the lakefront. Long neglected and mired in Industrial waste and shipbuilding, Cleveland’s lakefront had been seldom seen for the City’s first century of existence. The Expo also represents, from present retrospective, one of the few times in Cleveland’s history that the Mall was actually used to its intended potential. Through my findings, it can be argued that since the Expo closed its doors in 1937, the mall has failed to achieve optimum used since, going through a series of unsuccessful remodels and redesigns.

Present Day

As the legacy of the Great Lakes Exposition still lingers today, a number of modern and postmodern buildings have left their imprint on Cleveland. As much a part of the urban
landscape as the Beaux-Arts commissions of Burnham and the Terminal tower, these modern obelisks have entered the architectural discourse of modern day Cleveland. Architects such as I.M. Pei, Frank Gehry, Marcel Breuer, and Ceasar Pelli have left their mark on the industrial giant.

Often, the construction of new buildings would come at the expense of older, historic structures. Such was the case with the construction of the 1980’s BP Buildings, located on the eastern edge of Public Square. Originally intended to exceed the Terminal Tower in both height and size, the City was quick to act; limiting the height of the completed tower to 658ft, well over 50ft shorter than the landmark Terminal Tower. Construction of the buildings would also require the demolition of two historic Burnham and Root buildings located on the site. This erasure of historic form has helped to shape the eclectic facade of public square. Perhaps, it is this lack of unity and temporal inconsistency that makes Public Square so unique. Flanked by the Old Stone Church, Tower City Center, Key Tower, and the BP Building; Public square has representation from every era in architecture from 1850 onwards. This dichotomy of old and new is an ever-present theme in Cleveland’s established urban center; owing much of its construction to great economic success in the late 19th and early 20th century’s. In the years since construction, buildings have been gradually expanded and replaced, but not too much as to negate the City’s industrious feel.

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12 “Cleveland Skyscrapers” Cleveland Skyscrapers. Web. Winter 2011
e-sports history

Arcade Culture
Video game competition has its roots in the arcades of the 70’s and 80’s. Ever since people have been playing video games; there has been a need for playing at a higher and more competitive level. Local game competitions began forming, sponsored by local businesses and arcades. As game consoles became widespread in the late 80’s and early 90’s, game publishers would often run high score contests in publications. Gamers across the world would submit videos of gameplay, attempting to beat record and achieve fame. Established communities developed around the readers of these publications and frequenters of local gameshops. Tabletop and role-playing games were equally popular during this time period, experiencing a great deal of crossover between arcade and console games. As the personal computer swept over the world in the 80’s, it became evident that computers and not consoles would become the industry leaders in gaming. It would still be another decade, following a major video game crash in the mid 80’s and a gradual return in the mid 90’s; that console games would take play a major role in e-sports again.

LAN party
Local area network [LAN] is a network upon which a number of computers and devices in close proximity can communicate. In contrast to broadband [large area, multiple networks] internet structure, LAN’s do not typically communicate with computers or users outside of their local network. LAN’s were central to the success of early e-sports, as they did not require large scale infrastructure in order to communicate with other gamers and viewers. Through LAN’s, multiple computer in a common location can be connected together free from the latency problems that often occurs when communicating across different geographic locations and ISPs. A LAN operates in the same manner as circulation space within a building, connecting
multiple spaces and functions. LAN parties have become increasingly popular with increased ownership of PCs; allowing for groups of gamers to get together and play with little planning or equipment. For the longest time LAN parties have acted as the basic level of gamer interaction in meatspace. However, LAN parties offer a unique type of personal interaction between users. Typically hosted by a group of friends [clan] these events are seen as an extension of existing friendships. LAN parties provide real life interaction surrounding video game culture and socialization; a slumber party for gamers, geeks, and computer nerds. In recent years, LAN parties have grown to become some of the largest gatherings in the electronic world. DreamHack, a seasonal LAN hosted in Jonkoping, Sweden, set the world record last winter with over 12,750 computers present.¹

LANs have also become vital to the exchange of data, media, and hardware between users. A variable technology bazaar, any computer on the LAN is able to quickly and freely download any shared files on any network computer. As a young man, I would look forward to my clan’s bi-monthly LAN in which we would exchange the latest Manga downloaded from Japan, StarCraft video from Korea, or CounterStrike competition from Ukraine. It was exciting to see what my fellow gamers were viewing and likewise I was eager to trade my newly acquired Star Wars: Holiday Special [a particular rare and cheesy entry into the saga which garnered much ire and intrigue].

As the internet became more and more widespread and robust, LAN parties did not lose their luster; on the contrary, they were strengthened by the ability to communicate with other LANs and to broadcast to a wider audience that may desire to be in attendance. LAN events represent the very grassroots of e-sports activities, often happening with little notice and taking on a very casual atmosphere. Any number of message boards or social media sites will have

BYOC [bring your own computer] tournaments and events, often with modest prize pools or as qualifiers for larger tournaments/events.

The dawn of e-sports
As games like Doom became popular with younger generations they became part of the everyday life for young men [and women] across the globe. Classmates would vie to beat the game faster or with a higher score than their counterparts, and fledgling message boards and IRC servers would be abuzz with players figuring out new ways to beat these games. The real jump between the Doom and early console era and the first rise of e-sports was the integration of the internet as the vehicle of transmission. Prior to the internet, competition had relied on word of mouth, print publications, or in person tournaments. With cross server play and LAN support gamers could now play with their friends whether they were down the street or across the country. Small tight nit pockets of game enthusiasts would grow to international communities with greater reach and variety than ever before.

Among the first games to capitalize on this international phenomenon were Counterstrike and StarCraft. It is difficult to write academically on much of this history as scholarly works covering this topic are nonexistent. I however, can speak from personal experience having been a dedicated player of both Counterstrike and StarCraft from their inception. In light of personal experience; the vast majority of what I am able to say on the topic of contemporary e-sports is colloquial. That is; digested by the masses from forums, wikis, tournament websites, and word of mouth. This is not to say that e-sports lacks a cohesive story, but rather, that the story of e-sports has yet to be written. Arguments erupt daily on forums over the future of e-sport [there is no governing body or codified rules for e-sports], trying to decide what
direction the community should take with regards to rules, exposure, and regulations. Concurrent with the rise of LANs and increased exposure is the strengthening of cohesive cultural groups within the internet.

Brood War reigns supreme
The release of Starcraft and its expansion Brood War shortly thereafter would serve as a landmark in the world of e-sports and competitive gaming. The fledgling international competition that had developed around quake and counterstrike would grow to become full-blown international competitions and tournaments under the international success of Brood War. Counterstrikes popularity, while immense and long lasting, failed to achieve a true widespread international popularity. The culture and gameplay of FPS games have historically lent themselves more towards western culture, where guns and violence are often celebrated rather than subverted. As a result, titles like Brood War, with their futuristic gameplay and immersive story, achieved broad appeal. Starcraft gained popularity across the world with grassroots game communities developing particularly in North America, Europe, and South East Asia. The development and commercialization of e-sports that came with the rise in Starcraft’s popularity also demonstrates the impact cultural investment and sponsorship can have. In South Korea, Starcraft would rise to cult status, garnering millions of fans and being broadcast on as many as three national television channels simultaneously. Multiple professional leagues were formed and professional gamers formed a union and often garnered six figure salaries and multimillion dollar endorsement deals. In Korea, professional e-sports are regarded as highly conventional professional sports such as soccer, baseball, or football. I will discuss the cultural underpinnings to e-sports commercial explosion in Korea in a later chapter. Even twelve years after its release, Starcraft is still being played...
professionally in Korea, only growing in popularity and production value over the years. A number of professional leagues have risen surrounding over a dozen professional teams, holding monthly leagues for large prize pools. Owing in part to Korea’s mandatory military service period; the Air Force has formed a professional team; allowing servicemen to complete their tenure on a pro gaming team. The league format has diversified to hold team leagues as well as the standard individual tournaments. Often hosted in large stadium and outdoor venues, the finals for these leagues frequently attract well over 50,000 live spectators and millions of broadcast viewers.  

Diversification
As the internet dissolved international boundaries and facilitated cross cultural and national boundaries in communication and collaboration; forums and communities began to develop online surrounding local and international tournaments and competition. These forums and message boards allowed for the further growth of the international community, as competition that were previously only viewed by domestic audiences were now shared via the internet with viewers across the globe. The venerable Korean Starcraft leagues were now viewed and analyzed by western pro gamers and fans alike. WCG [world cyber games] was formed around the dawn of Y2K as a form of international competition for e-sports; holding qualifiers in nations worldwide leading up to the main international destination tournament held annually. WCG acted as an Olympic games of sorts, allowing qualified gamers to compete against the best other nations had to offer.  

As the demand for international competition in e-sports became palpable, a number of upstart national and global tournaments were held. Still, at this time [particularly in the Korean dominated Starcraft community] there was a distinct separation between the Koreans and the foreigners [term used to describe any non Korean pro gamer]. While much could be written on the hundreds of successful Korean tournaments, I have chosen to focus primarily on North American and International tournaments as they have the most relevance to my intended program.

Global and regional rebirth
Central to the recent success and globalization of e-sports is the rapid development of broadband internet throughout target markets. the availability of high quality premium Video on Demand (VOD’s) and live streaming over the internet has allowed content to reach markets not traditionally served by conventional terrestrial cable. College students and young adults are much less likely to view content on the evening news than they are to log onto the internet for instant updates. The instant availability of content at all hours has become pivotal in the success of internet culture. The ability to have unfiltered and potentially anonymous exchanges of information creates an environment free from the traditional barriers of culture integration.

As the current king of e-sports, StarCraft II represents a unique blend of game; one forged to be the perfect title to go global for years to come. Achieving a delicate balance of exciting gameplay, Impressive graphics, and developer support; StarCraft II is a prime example of a game that can anchor a community, both IRL and online. Building upon the existing and growing international community surrounding Brood War, Blizzard [the game company behind seminal e-sports titles WarCraft and StarCraft] reached out to the community and carefully developed a game with the

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community in mind. This integration of the community within the development process is indicative to the transparent and cooperative nature of internet based enterprise. While the internet has also given a great deal of leeway and anonymity within forums; a certain degree of accountability has also been amplified compared to traditional corporate business practices. In years past, corporations would hold focus groups or rely on surveys and research firms to understand target demographics and better target and develop products. In technology enterprises the need for formal focus groups and market research are supplanted by direct community involvement from day one. The concept of a beta or alpha release [build] of a particular application or piece of technology has been integral to the success of e-sports ventures. Leagues and developers will run open and closed betas as a means to introduce specific community members and ask for their feedback in improving the product. For example, StarCraft II was in an open beta [access were available to all community members] for well over four months, during which numerous changes were made to the functionality and balance of the gameplay. This dialogue is very important to the community, as it fosters a sense of ownership and makes members to feel as a part of a greater effort.

StarCraft II has espoused the establishment of dozens of professional and recurring leagues across the globe. Large overall tournaments have seen widespread success in Korea, Europe, and North America. In America, there exist a number of online and LAN tournaments; with the most popular being MLG [major league gaming]. MLG hosts between six and ten events annually with competition ranging from PC to console and arcade games. Hosted in large urban convention centers, MLG is attended by thousands of spectators during its typical weekend spanning events. As e-sports continues to further endeavor into the

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mainstream, deliberately designed space is becoming a real need. Only by understanding the relationships and inner workings of the community I intend to design for can I present a solution that is even remotely applicable.

Class warfare: changing types of gamers
As e-sports has continued to evolve so too has the changing demographics of people that play video games. Video games have become an incredibly powerful force within the American economy, saturating nearly every level of society, from the elderly to educational games for toddlers and preschoolers. It is estimated that over 65% of American households play video games, with over ten billion in revenue annually. While it is not my intent to distill experience and game culture to a series of dry statistics, I feel it important to establish an understanding of the widespread popularity of video games nationwide. Common misconception paints the average gamer as a 14 year old adolescent male in his parents basement. However, this simply couldn’t be farther from the truth; in actuality, the average gamer is 34 and has been playing video games for well over 12 years. Interestingly to note as well that over 40% of all gamers are female and that games deemed appropriate for all ages outsell so-called violent video games by a factor of 3:1. With well over 2/3 of our population playing on average eight hours video games weekly, video gaming constitutes a considerable share of American’s entertainment budget.

However, as with most types of media with broad appeal, a significant degree of specialization and segregation has occurred within people that play video games [gamers]. There exists a gradient of gamers; subject to preference, time invested, and income among others. Understanding the differences among the vast number of gamers my thesis may encounter is vital to creating a successful program. For the sake of clarity and brevity, I have dissected the gaming industry into a number of different classes [based on personal research, popular opinion, and pertinence to my thesis].

Sideline Gamers:
Non gamers represent a unique contradiction within the game community. Often former gamers or busy professionals, sideline gamers still immerse themselves within game culture and competition. However, for whatever reason, they rarely play games or purchase software. Sideline games quite often transition into watching e-sports competition, drawing on their past game experience and understanding to enjoy the competition.

Casual Gamers:
Casual gamers make up largest portion of the gaming community and range in age from toddler to the elderly. Casual gamer see gaming as just that, a casual interest; playing less than a few hours a week, these gamers purchase games infrequently and define their life by activities outside of gaming culture. e-sports and casual gaming may seem oxymoronic however, they are immensely important to each other’s success. While gaming at a professional or competitive level takes a huge investment of time, casual gamers are the optimum target for forming a large viable viewer base for e-sports events. As is the case with competitive sports [baseball, hockey, football] casual fans form the vast majority of viewers filling seats in stadiums and arenas across the globe. Appealing to casual gamers and the otherwise uninitiated can ensure the economic viability of large scale eSport events for years to come.

Recreational Gamers:
A combination between casual and social gamers,

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recreational gamers tend to play mainly multiplayer and team based games; often performing the majority of their activities in the company of friends. Recreational gamers have tendency towards less intense console games and older, more established pc games.

Income [social] Gamers:
Social gamers compromise much of the buying power within the game industry, and are typically in their late 20’s and 30’s. They purchase based on image and advertising, using their disposable income as a tool to obtain new software and technology. Income [social] gamers often loosely fit into any number of the other classes of gamers. Income gamers promote the viability of a retail portion to an e-sports program, vying to purchase memorabilia and high tech gaming hardware to add to their collection.

Sports Gamers:
Sports gamers tend to be heavily invested in a few titles rather than a broad range of genres. Most sports gamers actively follow any number of professional leagues or teams and are concerned with the branding of famous athletes and companies within game. Sports games have experienced some success on national television and form one of the more market viable avenues of competition and sponsorship.

Indie Gamers:
Indie gamers primarily interest themselves with offbeat titles, putting value in quirky/underground titles that often do not achieve mainstream success. The very nature of having a purpose built facility for gaming competition may be off-putting to a segment of indie gamers, making serving their needs a difficult question.

Retro Gamers:
Retro gamers wax nostalgic of simpler games from bygone eras; hoarding used Nintendo cartridges and salivating over vintage Pac Man machines. Retro gamers have found a great niche in today’s gaming market, as publishers have continued to develop storylines from older titles as well as re releases of classic games. Retro gamers also have significant cross pollination with established hardcore gamers, who despite moving on to newer and more advanced titles, still enjoy playing older more established titles.

Hardcore Gamers:
Hardcore gamers represent some of the most devoted gamers in the industry, devouring game titles for hours on end. Armed with multiple platforms and titles, hardcore gamers have adopted gaming as their chief pastime and interest. Game and internet culture have become part of hardcore gamers everyday lingo and interactions. These gamers embrace technology as an extension to their everyday life and are open and receptive to new forms of technology. These gamers form the backbone of regular clientele at pc labs across the nation, regularly frequenting e-sports tournaments and events.

Competitive Gamers:
Competitive gamers are an outgrowth from the Hardcore class, stepping up their dedication to focus on specific styles of games. Competitive gamers seek to master specific game titles, competing in online and LAN tournaments both regionally and locally. Competitive gamers will form a key demographic for any e-sports facility.

Professional Gamers:
Exhibiting the highest level of dedication to games, professional gamers are the most recent class to emerge on the scene. Rising out of the international success of CounterStrike, Warcraft, and StarCraft; professional gamers have made a living out of travelling the internet and the globe playing games. Dedicated to one specific title, these
gamers train for upwards of 60 hours a week and are often sponsored and salaried member of professional gaming clans/teams. Professional gamers are seen as celebrities within the community, garnering scores of fans willing to travel just to see their favorite pro gamer play.

Understanding Internet Culture

One of the driving factors in the progression of competitive gaming was the continued technological innovation in computer hardware and technology. The internet would soon revolutionize the way that video games were played; connecting players from across the globe instantly. Technology is the vehicle of e-sports and is absolutely vital to continued success and viability. Without vast technological infrastructure, connecting users around the world e-sports would fail to exist. Continuous with the development of e-sports, the internet began to grow into a generator of culture. Beginning with news groups in the early 90’s and developing through to the message boards and social media sites of present day, internet culture has become an integral part of e-sports culture and functionality. Internet culture is something that is not easily understood by its very nature is incredibly meta. Meta in internet terminology [derived from Greek, traditionally defined as being an abstraction of] refers to the current trends that phase in and out of style within the net-community. As is true with styles, tastes, and trends within meatspace; cyberspace as well has developed an ever-changing culture. However, while physical trends [fashion, television shows, etc...] often take months or even years to phase in and out of style, Meta culture on the internet can completely transform in a matter of days or even hours. Central to the concept of Meta culture is ‘meme theory’. Developed as an explanation to shared behavior and disposition within a group or culture, meme theory was first developed in the 1970’s by Richard Dawkins and further defined by Malcolm Gladwell. However, in the context of internet culture and parlance meme has been adopted to convey a slightly different and more specialized concept. Internet meme’s represent the most basic form of dynamic content; constantly changing and seemingly ownerless. The hivemind lurking forums, image boards, blogs, and social media sites form a semi anonymous collaborative generating content. This authorless form of meme has become central to the cultural identity of those who spend the majority of their social budget online. The difficulty in identifying and capitalizing on meme’s continues to evade corporations and mainstream media. Once a meme has generated substantial popularity and begins to enter the mainstream, its creators [lurking deep within the internet] have already created a successor and disowned the now mainstream meme. It is for this reason that the integration of technology within the architecture becomes of the utmost importance. Without hybrid integration of internet culture [memes included] the constant evolution of internet culture leaves the static building behind. The internet will quickly supplant TV as the primary means of delivery of content [via Hulu, Netflix, and Amazon to name a few content delivery platforms], further integrating internet and gaming culture with America’s favorite pastime, watching TV.

Precedence
Architectural Precedence

OMA: Seattle Central Library

Seattle public library serves as an excellent precedence for a number of reasons; the unified facade system, programmatic progression, and monolithic creation of space. Rejecting the notion of genetically programmed libraries, OMA has divided the library into purpose driven areas, finely tuned for their intended uses. By allowing the unique spaces to function appropriately and independently architectural conflicts are mitigated. In response to the vertical separation that can occur between departments in large libraries, OMA has designed the spaces to flow along with the catalogue system. The library has also re-appropriated what has traditionally been more rigid space within the lobby and created a public forum. Engaging the surrounding context and citizenry, the library responds both architecturally and socially to the question of information access. In providing platforms for interaction the library creates the infrastructure in which information will be shared across a multitude of formats and platforms.1 From a functional standpoint, I can seek to gain much from the facade program relationship that occurs in the Library. The space between the programmatic areas and the facade is reclaimed by the community, serving as seating areas, café’s, self checkouts, and un-programmed social space. By allowing the program and the monolithic facade to act in unison, the whole becomes greater than the parts.

Toyo Ito: Tower of Winds
constructed in 1986 in Yokohama, Japan Toyo Ito’s “Tower of Winds” has become a symbol for the city. Ito, along with nine other designers were approached with the challenge of reimagining an existing tower. The existing tower serves as an integral part to the climate control system of a large subsurface mall located on the site. Much like my thesis site, Ito was constrained by the necessity of working within a largely inflexible existing context. Ito’s design demonstrates the potential of architecture as a dynamic medium; reacting with environmental and contextual forces through the integration of technology. A proven manifestation of technology mitigated through architecture, Ito’s tower reacts to wind, sound, light and a litany of other environmental forces. Comprised by well over 1000 LED lights integrated within the structure’s skin, the architecture becomes dynamic, responding to external data. The cultural impact on the city was so profound, that when the interior tower was demolished in the early 90’s, Ito’s tower remained. Ito wished to have the lifecycle of the tower continue on into the night, permitting the active led’s on the exterior to react to stimuli 24/7. The unimpeded progress of technology has been transformed from a subverted series of wires and networks to an active monument within the existing urban context.

Usman Haque

Usman Haque, a U.K. based architect and installation artist who works with the relationship of architecture and technology, seeking understanding of the functionality of both the designed space and the programs and technology in cyberspace. Haque’s experiments often on the theoretical or proof level, seeking to understand the very relationship that perception can play within architecture. While my project has been dealing with the concept of cyberspace and meatspace; Haque has developed his on constructs, hardspace and softspace [closely related to the relationship of computer hardware and software]. Architecture [understood in terms of the relationship of computer hardware and software] can then be seen as an ‘operating system’ allowing users to create their own interactions and compositions within space.

In his project titled Remote, Usman Haque along with Neill Donaldson, Ai Hasegawa and Georg Tremmel seek to connect the digital and physical world. Creating two identical spaces, one in Boston [meatspace] and the other in Second Life [cyberspace, Second Life is an online virtual ‘world’ that allows users to interact and create] with connectivity through the internet allowing each space to have dominion over the other. Environmental factors such as temperature, humidity, light levels, and time occurring on the physical chair in Boston would affect the experience and disposition of the chair located in cyberspace; and likewise the chair in Boston would be affected by use data from second life. In Haque’s own words:

“The intention is to explore architecture that is resolutely “human” (in the sense of being inhabited, configured and determined by its occupants) yet context-free (because it does not have the privilege of geographic location).”

Beijing National Aquatics Center
The ‘water cube’ as it is more commonly referenced; first entered the hearts of Americans everywhere while cheering Michael Phelps on to a record eight gold medals at the 2008 Summer Olympics. Owing much intrigue to the seemingly whimsical facade, the Aquatics Center was constructed as a joint venture spearheaded by Australian PTW Architects and Arup among others.\(^5\) The water cube takes a distinctly monolithic program, the Olympic swimming pool, and uses transliteration to create a unique and functional construction system that serves as a unifying element. The program is entirely driven by man’s desire to experience water, training and competing to reach faster speeds than competitors; as such the building presents a means for all to experience water. The ability to influence the projection of the facade becomes important in the perception of such a massive structure, well exceeding 500ft in length. By creating subtle variations in the facade system through light and shape, the expansive nature of the building project is rendered comprehensible on the human scale. It is indeed the facade system and treatment of form that are of most pertinence to my project with regards to the Aquatic Center; providing insight on how such a rectilinear form can function within context and interaction.

Program and Functional Precedence

Convention facilities, where larger E-Sports events such as BlizzCon and MLG are held, are omnipresent in nearly every American city of significant population. Owing their roots to the neoclassical fairs and exhibitions of the 19th and early 20th century, these convention centers are often sprawling warehouses affording large, un-programmed space rather than dedicated program. While these convention centers have become the mainstay of large American E-sports events, they are not typographically significant to the architectural needs of such a program. Sprawling, warehouse like space, is neither conducive nor indented for the function of E-sports competition and related activities. In actuality, the function of the space is often of tertiary importance to event planners such as MLG. Location [market viability, accessibility] and availability are of primary and secondary importance. Due to the infancy of current professional E-sports events, space and experience are rarely considered factors in the planning of an event. Perhaps, the only exception to the generic event rule in E-sports is BlizzCon; planned thoroughly and consistently by Activision and Blizzard. BlizzCon, serving more as a product demonstration than a competition, is controlled to maximize marketability and exposure. Also, BlizzCon’s annual schedule affords for ample preparation time and consistent space used. Events like MLG and WCG, which hold numerous different events annually, need to be much more space neutral in their layout; giving little thought to the uniqueness of space or the impact of Architecture. This space ignorance is one of the main question I am addressing in this project.

Perhaps, the first true manifestations of contemporary E-Sports can be seen in Starcraft Crazy South Korea. During

MLG Dallas: Competitors play on banquet tables and chairs in the main convention hall. Figure 4.8

BlizzCon: an exciting blend of corporate marketing mixed with showmatches and product demos. Figure 4.9
the late 90’s South Korea was experiencing economic growth and changing culture brought on by increased contact with the west and modernization. As the consumer class began to grow exponentially, appetite for electronic media followed. Video games entered the cultural conscious of Koreans through a perfect storm of conditions. The rapid presence of state of the art technology within an established urban context led to the creation of PC Baangs. PC baangs (방) are essentially the Korean version of internet cafe. However, due to the rapid adoption of the internet, most Koreans became unaccustomed to playing games in their personal residences. As a result these baangs became incredibly popular across South Korea, creating the infrastructure for E-sports. Right around the time baangs were becoming popular and widespread, Blizzard released their popular RTS StarCraft [1998]. In the ensuing years StarCraft’s popularity afforded Seoul in particular to develop an infrastructure for competitive gaming. Spectator venues were developed, allowing for smaller audiences similar to American studios used in live Sit-com tapings. Not unlike Television studios, these facilities’ primary goal was to broadcast live matches on Television. For this functional reason, these venues consist of little more than barebones studios with television monitors and temporary seating. As there are typically at least two professional StarCraft leagues running concurrently at a given time, early rounds of the tournaments are less popular with spectators. This finals, however; are quite an imposing event, often garnering over 100,000 spectators for a single live final. Architecturally speaking, these leagues and venues provide very little in the way of precedence as the mostly occur within existing constructs [television studios, stadiums, and PC baangs].

Much like the PC Baang’s in South Korea, a receptive culture was found in newly capitalist Eastern Europe. The iconography of the militaristic soviet union carried over into
the adoption of more realistic FPS games. Counterstrike is unanimously the most popular game in Eastern and Northern Europe, sharing almost as storied a career as an E-sport as StarCraft in Korea. It is in Kiev, Ukraine that the only true programmatic precedent exists, the Kiev eSport Arena. Recently opening in 2010 the arena features over 16,000 sq. ft, the eSports Arena is the first truly dedicated facility to professional electronic competition. In its first year of operation the arena has garnered the adoration of much of the European eSports community, holding international competition multiple times weekly. It is interesting to note that all of the success the eSports arena [cyber sports in the Slavic lexicon] has experienced has been achieved with very little architectural intervention. The facility itself is little more than a warehouse constructed of masonry and open web bar joists. Owing more structurally to a big box store than an actual arena. The presence of a neon entryway and a slick black exterior are the only indication of the program held within. Even the program itself is unremarkable, simply a large competition space connected to a electronics store and entry vestibule, nothing more. The restrooms are standup metal partitions constructed within the warehouse itself, clearly an afterthought. While much has been done with paint and some well place graphics on the cavernous walls, the architecture itself isn’t doing anything.

This is where my designer senses get really piqued; a facility with a simple enough program and next to no architectural intrigue and innovation is perhaps the most successful of its breed in the world. Just imagine what a little bit of theory and good design could do to such an young and impressionable program. But therein lies the intrigue, how to make space for something that apparently can exist anywhere. Provided there is internet access, a keyboard and a mouse, eSports is pretty much placeless. How can I take something ubiquitous as sitting at a computer or watching

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6 "cyberarena.tv" Kiev Cybersports Arena. Web Winter 2011
a match on a screen and make the architecture work with it. At its core, computer gaming has but a few necessities; as previously stated, a keyboard, a mouse, monitor, tower, and an internet connection. The specifics of computer peripheral selection would constitute another paper in and of themselves and will be assumed to be constant along with monitor and computer selection. Assuming ubiquity of hardware the only other requirement for successful computer gaming is a limit on light over playing surfaces. Games are played by muscle memory and light is not needed to see the keyboard or controller; in addition excess light causes glare, making monitors difficult to see. What we are left with, as the ideal situation for the gamer, is essentially a dark room with a computer or game console. Seeing as how this is not so much an architectural typology but, rather the complete absence of a typology; additional restraints must be presented. To develop these restraints I must fully understand the needs of the Site and the needs of the Program/Users.
Outlining Technology and Architecture
As older generations age and younger generations take their place, a shift in society occurs. The impact of video games has produced real, measurable results in the changing lifes and expectations of those born into Generation X versus their Generation Y predecessors. There have been ten main cognitive style changes in learning and observing between Generation X and the Y [referred to by Prensky as the Games Generation].
- Twitch speed versus conventional speed
- Parallel processing versus linear processing
- Graphics first versus text first
- Random access versus step-by-step
- Active versus passive
- Play versus Work
- Payoff versus patience
- Fantasy versus reality
- Technology as friend versus technology as foe.

This distinct style change seen in just one generation of population is quite indicative of the effect video games and technology in general have had on our lives. Architecture, in deference to zeitgeist, must continue to adjust and evolve to meet the demands of today’s generations as well as future ones.

Technology continues to change the architecture we experience, affording new opportunities. Fluidity of locations allows for activities to occur in a number of disparate locations; complicating the concept of distinct places and architectural suitability. As a result, design must incorporate the concept of simultaneous multiplicity; engaging the possibility of any multitude of activities and concepts. While technology has increased the overall reach of commerce, architecture is still limited by the amenities of the region in which it is constructed. The need for established urban amenities further solidifies the suitability of such a
technology driven program within the urban core.

“A century ago, architect Daniel Burnham advocated the use of physical infrastructure planning to rejuvenate city life: “Make no little plans, they have no magic to stir men’s blood.” Today, electronic and physical planners can test Burnham’s dictum through bold visions for arranging space and place. The point of departure is arriving at a vision; the point of execution is translating bold visions into desired applications and design solutions.”

**Technology vs. Architecture**

One of the key issues concerning the rapid introduction of technology is overstimulation, which devalues our relationship with architecture and creates pretexts for future interactions. It is important to treat technology [and architecture] in such a manner that overstimulation and sensory overload are avoided, or at least mitigated. In high traffic or density urban and roadside areas, facades are plastered with dynamic media and advertisements, serving as little more than electronic marketing. Here, the architecture is devalued to the point of replacement, presenting the public front of consumerism and visual clutter rather than meaningful interaction and presentation. Perhaps, the most poignant example of this overstimulation occurs in Times Square, where zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement. Seeking to capitalize on the high volume of tourists and to reinforce the areas reputation for being the heart of American consumer culture, these zoning laws have actually made electronic facades a requirement.

**Technology and Architecture**

The first steps in creating a supportive and integrated relationship between technology and architecture involves the denial of technology as adornment. Simply placing screens, sensors, or cameras within our existing infrastructure does little to engage with our understanding of experience; but rather serves as a crutch, preventing cyberspace from truly manifesting itself within our world. The concept of technology and with it cyberspace is not one of an object being viewed, but rather of comprehensive integration. Online, data travels faster than the human eye and the connections are limited, while in meatspace humans are limited to our own senses and understanding. Realizing the strengths and weaknesses of both ‘spaces’ is vital to truly understanding the relationship. Much like architecture, technology has changed over the course of time, learning from past mistakes and improving with every passing moment. Y2K embodied our simultaneous fear and ignorance of technology’s dominance over our lives while shopping on eBay represents just how easy shopping can be. Computers have evolved from cumbersome racks which needed basements to perform simple mathematical computations to smart phones that fit in the palm of our hands. As architecture as evolved to favor certain styles and formal relationships, so too has technology. As civic architecture generally appropriates classical and robust forms, civic technology tends to be robust and inflexible;

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2 Eidner, Franziska, and Nadin Heinich, 18
limiting the actions of the public to maintain order on public infrastructure. Just as postmodernists reject the a contextual simplicity they perceive in modern architecture, Mac OS users favor style and uniqueness over perceived compatibility and utility. Technology is truly as diverse as architectural discourse, owing much to constant evolution and activity; blink and you will miss it. Much like symbols of past architectural styles, technology has a host of relics existing both online and on shelves. Retired formats, rendered obsolete by increased storage and data access rates; have no use in current computers in the same manner coal oven have been replaced and forgotten in homes across America.

Technology has much to offer the citizens of Cleveland, just as the citizens of Cleveland have much to offer technology. In creating a dialogue between the architecture, the citizens, and technology, all three parts in the system can be improved simultaneously. Users proving vital data that can be processed by technology and returned to the user through architectural intervention. The obvious and well established relationships between architecture and technology exist in the form of advanced systems. Monitoring HVAC, occupancy, environmental conditions and ideals, and security these systems can be quite expensive and are reserved for larger or more advanced projects. The citizen can then be placed into the existing system relationship by carrying a device that stores preferences for the system to read, interacting with a computer interface to adjust values, or through sensors accessing biometric data and adjusting accordingly. The relationship then presents a number of direct interactions that the architect must dissect for the entire system to act in congress.

**Architecture : Citizen**
The relationship of the architecture and citizen is as old as architecture itself; seen as a series of iterations extending from the primitive hut. I make no attempts to redefine or theorize a new level of understanding in the relationship of architecture with the public, however, the implications of such a relationship are of importance to my stance on technology and architecture.

**Architecture: Technology**
Perhaps, the most important of the triad to my thesis, architecture and technology have a long and storied relationship; stemming from the once static nature of architecture and technology’s perceived novelty and constant evolution.

**Technology: Citizen**
The relationship of technology and its citizenry is really much more of a sociology question, which is why its intricacies and foibles have largely been left out of this thesis. Of primary necessity to understanding the triad is how architecture can act as a mitigating factor within the dialogue between people and technology.

**Recombinant Architecture**
The concept of recombinant architecture, defined by Horan and Mitchell as “[to] identify and capture salient elements of digital places, which vary in scale and character but share space in both the physical and electronic worlds.” presents a number of principles for the design of technologically mediated spaces and places. Horan presents a spectrum of spaces and their basic relationship and position on technology. Unplugged spaces exist with minimal intervention while adaptive spaces have been altered to better suit digital technology. On the far end of his spectrum, Horan presents transformative design, purpose built for the demands of technology. Presented are a number of scales

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Horan, 6
on which digitally mediated spaces can be placed: 4

Behavioral setting:
Relationship of people and their immediate built environment
Key objective: achieving a sense of place
meaning derived from past experience, preference, values, and setting

Neighborhood/ Community:
shift from sense of place to community
technology must enhance the existing cultural infrastructure
[schools, libraries, civic interaction]

Regional:
Heavily influenced by the cultural context of the region:
ininfrastructure, performance, character
Technology must enhance existing benefits and create new opportunities.

Owing its nomenclature to process in which DNA can be spliced onto existing strands, recombinant design seeks to introduce digitally technology within our existing infrastructure. Recombinant design can be seen as consisting of four different principles, working in congress to create digitally mediated space.

Fluid Location
The first principle of recombinant design, fluid location, illustrates the cross cultural communication made possible through technology. Increased ease of global communication has led to the dissolution of many of the once fixed borders on location. Fluid location is concerned with the flow of activities along the path of technology, understanding the degree of integration required for each activity along the continuum.

Meaningful Places
The second principle, pertaining to meaningful space, concerns the cultural and historical implications new building has on our existing sense of place and community. The advent of faceless communication on the technology has led to the ability to communicate online, devoid of any context or identity. Care must be given to maintain a sense of place and meaning within the digital program, as to not rob society of what makes us unique.

Threshold Connections
Design of threshold connections encompasses the literal and theoretical relationship of the physical and digital. Referenced as inter-space, the physical go between of meat and cyberspace often drives the digital aesthetic of a project. The threshold determines the manner in which technology and architecture relate; whether through standard projections or screens or dynamic systems and data. It is at the threshold that the architectural experience is forged, singular or multiple, static or dynamic, projected or imputed. At the threshold, digital technology is at its most vulnerable; susceptible to over or under exposure, which can compromise the fluidity of the design.

Democratic Designs
The final principle of recombinant design is the familiar concept of democratic design. While democratic space is neither new nor unique to architecture, in combination with cyberspace, democracy fosters many unique implications and challenges. In its purest form, the internet is essentially the epitome of democracy almost to the point of anarchy, allowing for un sequestered free speech and unlimited access to information. Every user in cyberspace has an equal share of all the world has to offer, providing the ultimate experiment in freedom. As with any experiment, the internet can often run amok, spreading viruses or committing cybercrimes, the internet is not free from the trapping of
modern society. Democratic design means giving equal voice to both architecture and technology, allowing the user to influence the balance of the relationship.

In summation, the concept of recombinant design merely presents a series of principles in which to better develop and understand interventions of the digital world within our established culture. By engaging a wide audience and understanding the exiting constructs, an appropriate solution can be calculated. Horan and Mitchell conclude their investigation with a fitting warning: “We must be careful to avoid making a technoscape of mediocrity that fails to facilitate communication or community.”

Cultural Icon
In defining e-sports as the new cultural icon for the city of Cleveland a number of typological and contextual methodologies must be consulted. In defining the new cultural Icon, I must first understand the semiotic and complex nature which leads to such a definition.

In contemporary popular culture, the status ‘icon’ is often used to refer to those of such substantial celebrity that their very existence serves as a beacon of identity and experience. Iconic buildings, gain strength in meaning and presence through a much more dedicated and complicated process than singers, actors, and tabloid fodder. When mediating cultural form and iconography through architecture, deference must be paid to semiotics and the mediation of meaning within context. Many of the most Iconographic cathedrals spanning the globe have required years to develop a concrete and recognizable style, imbued with religious power and strength.

The concept of monumental iconography is perhaps best represented by the construction and meaning surrounding the Eiffel Tower. The tower engages in a dialogue between past and present, serving as a link between industrialization and romanticism. Originally constructed for an Exposition in 1889, the Tower was intended to serve as a memorial to the French Revolution and a testament to the progress and success of the Third Republic. In the ensuing century the tower’s meaning has been transformed to represent much of the hopes and fears of the world in addition to serving as a universally recognizable symbol for Paris and France as a whole. Images of Adolf Hitler taking in the sights at the foot of the Tower have entered the cultural conscious of a Europe dominated by fascism. The success of the Towers identity had been reinforced since inception, with the monumentality and symbolism being cemented before construction was even completed.5 The question then becomes, how can I embody the power and symbolism fostered by the Eiffel tower on a scale appropriate to my program, site, and typology. The answer must come through a thorough understanding of the history, context, and potential of my thesis.

My development of e-sports as a cultural icon can be seen as the definition of a new architectural typology, transitioned from the existing urban context in Cleveland. By investigation the transformation of architectural type, I will be able to better understand how my shifting typology can fit within the well established, classical order the group plan created. Architecture follows the general trends of the era in which it is constructed, leading to an evolutionary nature of architectural style and form. Central to the struggle of architectural evolution is the conflict between old and new. Public opinion often favors preservation or return to the tradition while use and necessity require the future. The shackles of the past are quite present in my thesis,

owing to well over a century of history near the center of public life and progress in the city of Cleveland. The Mall embodies Cleveland history and owes much to the trials and successes of the regional and local culture. At the time of its inception, the mall was seen as a neo-classical composition, reinforcing American industrialism, manifest destiny, and civic transparency. e-sports on the other hand represents seemingly opposite principles in contemporary society; technological integration and the dissolution of national and cultural borders.

Site and Context Strategies

Buildings cannot be treated as isolated object devoid of all context and meaning, such practice is irresponsible. As such, comprehensive understanding of the surrounding site and context is necessary to understand the appropriateness of an intervention. “Architecture exists in rapid evolution”, writes Doxiadis; “It is now in the process of evolution, as it has always been, but an evolution more intense and more rapid than ever before.”  

The site must be treated with purpose and reason, as there is much history and prominence in the area surrounding the mall. As it stands, despite being underutilized, the mall still holds a very significant place in the city of Cleveland. William Mitchell writes in his Mourner’s Eulogy to the Urban Requiem: “Traditional urban patterns cannot coexist with cyberspace. But long live the new, network-mediated metropolis of the digital electronic era.” This new mediation through technology has been at the forefront of world consciousness in the years following the Y2K crisis. Our complete integration and dependence on technology in our everyday lives became apparent in even the most banal tasks. According the Mitchell, our existing context will be characterized by “twenty-four-hour neighborhoods, electronically mediated meeting places, and flexible technologically summoned services.” The integration of technology will serve as a backbone, creating new transliteration between and within cities. Central to Mitchell’s argument is the idea that technology and architecture do not act as an interface, but rather as something to be occupied. By treating technology as something to be occupied and not simply wires that serve as accessory to existing space and form, the architect must treat technology as something that is integral to function and design. This dichotomy between cyberspace and meatspace drives the relationship that e-sports has on the Mall. Here physical actions within the building invoke computational responses, while computational qualities manifest themselves within the architecture. However, it is important to not get to involved with the technological relationship between form and function, as it is not of primary importance to my thesis. But rather, I simply wish to demonstrate the role that technology and architecture can play on the urban and site scale.

A good amount of research has been given to the history of Cleveland and the group plan [mall]. It is my firm desire to maintain the overall planning, strength, and clarity of purpose that has persisted on the site for well over a century. Through

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my site research, it has become evident that perhaps the greatest strength possessed by the formal symmetries and classical order of Mall B exist along the strong North-South Axis. Seen as an extension of Mall C [Fountain of Eternal Youth] and Mall A [Lake Vistas], Mall B continues the strong vertical circulation from public square to the lake. By reinforcing the strong north south focus of the Group Plan, deference is paid to the history of the site and location within the greater context. This strong North-South axis serves as the primary circulation and organizational spine for the monolith and the program contained within.

A building’s ability to have a dialogue with the surrounding city and region can be vastly improved through increased definition and flexibility. In the same way that industrial revolution cities were transformed by the advent of widespread use of electricity and fuel generation; freeing them from the depths of darkness, allowing for continuous operation and production at all hours. So too can the contemporary city be free from its present bonds of uninitiated spaces existing off the grid, divorced from cyberspace. Presenting itself to the city, the monolith represents an architectural dialogue between user, context, and program. Responding to the events of the city: wind, rain, ambient light, outside noise, barometric pressure, and any number of programmed stimuli; the monolith can react and imprint upon the surrounding context. The established order of the Mall, represents bygone thoughts of manifest destiny, civic robustness, and classical representation; all projections of the cultural conscious and ideology of their makers, can be replaced with a new dynamic identity. Existing within established social and functional patterns, the overall space will no doubt continue to function as it has for well over a century. Businessmen will walk the same path to work, lakefront visitors will take the same sidewalks, and park goers will likely favor the same lunch or relaxation.

8 Mitchell E-topia, 111
spots. However, the monolith can and will react to these existing patterns and provide sensory feedback to those who come into purview.

Program Strategies

When programming space for such a technologically dominated program, understanding the architectural question becomes key. Presently, e-sports events are occurring world-wide in common convention centers and television studios. How then does one design for a ‘client’ that has been perfectly content plodding around in basements, convention halls, and stark studios for the better part of two decades. In dissecting the primary functions of my program, a handful of diverse program types become apparent.

Office spaces, restrooms, and back of house storage fulfill rather generic requirements and are not phenomenally specific to my particular thesis. As a result these spaces should be treated in a similar manner to those more well established typologies, unless acting in conjunction with more dynamic or prominent program areas. That, is not to say that no deference should be given to the more utilitarian spaces in my thesis, but rather that those spaces should not take the front seat as drivers for the architecture.

Competition spaces, computer and game labs, and public spaces will become programmatic drivers for the thesis. The nature of such an program, a meatspace manifestation of program that has historically resided solely in cyberspace must be approached in a unique manner. Instead of the typical appropriated interfaces which fail to generate form or meaning within constructed spaces [walls of led screens or banks of nebulous monitors], hybrid space can simultaneously exist within meat and cyberspace. As Mitchell demonstrates, this hybrid space has been implemented on a primitive level in special circumstances. Golf simulators present an interesting blend of virtual reality and physical manipulation, where the trajectory of the ball and the golf course are simulated but, the club and ball are still very much real. While this level of simplicity would certainly not be fitting for a facility that espouses to be a beacon of internet culture; the basic principle remains true. Hybrid space, the relationship between the computer sensors and the golf club, begins a relationship in which both corporeal and technological existence are possible. Physical interaction is still achieved on a familiar level [swinging the club], while the notion of the golf course and having to walk to your next stroke are assumed by technology [the simulator].

This principle of hybridization can be applied to space in which the relationship between the internet and real life interaction is at the base level. In competition spaces and game labs [where the number of users and viewers online may well outweigh the physical number of occupants], the ability to interface directly between cyber and meatspace is of utmost importance. Whereas, storage and supplemental space would not directly benefit from complete integration of technology. This gradient of desired integration occurs along all of the program spaces, travelling from full integration [the front porch of the internet] to more conventional architectural constructs [restrooms and closets]. By parsing out spaces within the constructed monolith, programmatic suitability is achieved; allowing spaces that require similar architecture to coexist, while spaces needing unique or disparate integration can exist as separate entities.

Even within cyberspace dominated program areas, there still arises the need for corporeal interactions; whether the exchange of goods and services, or tactile communication, the benefits of physical interaction are well established. In such a digitally dominated program, physical relationships and understandings become even more important. As the

9 Mitchell E-topia, 123
amount of video conferencing, message board posts, and email communications continues to rise, the necessity of in person business is at a turning point. For users that are accustomed to communicating using only fabricated online names [commonly known as: nicks, screen names, and handles] the experience of in person contact has much inherent meaning. Users may communicate with likeminded individuals on a daily or weekly basis, becoming quite well acquainted without ever locking eyes or shaking hands. However, when that meatspace interaction does occur, it has that much more meaning. The notion of solidarity has yet to effectively break into cyberspace to the same extent as the power it holds over in person interactions. Internet protests and facebook groups have barley a fraction of the power and strength of identity experienced by their in person counterparts.

The place where cyberspace interactions have a leg up on their physical counterparts are in ease of access and freedom of expression. The barriers to entry have been dissolved in the online world, allowing for a much more efficient and concise form of communication, evident through the development of a litany of online jargon and idioms.

Building Strategies

When dissecting the building form and function in regards to the ultimate end user, visions of computer screens and peripherals are immediately brought to mind. The computer monitor, serving as the rigid impenetrable fourth wall, separating digital content from end users, has entered into urban and roadside architectural typologies. Standing guard on the side of interstates, adorning nearly every orifice facing Times Square, and professing our love for sports at stadiums nationwide, these LED screens project advertising, news, and fixed content over our everyday experiences. The question then becomes how to break that fourth wall and make the architecture and technology engage the user.

The gut reaction to developing this new e-sports facility as both a cultural icon and a technological discussion would be some sort of interactive obelisk in field. However, as Mitchell illustrates, simply employing video screens and interfaces within our existing buildings does not address the question of technology and it’s role within architecture. Interactive building elements can be subtly employed within dynamic surfaces, activated when desired and dissolved when not. Our environments must be digitally mediated rather than digitally saturated, as such saturation already exists within cyberspace. Instead technology should become an integral part of the architecture, whether tacit or highlighted. As such, the idealized form for such a facility would consist of unimpeded architectural expression, hinting subtly at the technology within.

This primitive form bears a striking resemblance in both meaning and function to the Monolith in Stanley Kubrick’s 2001: A Space Odyssey. Released in 1968 as a joint venture between the visionary filmmaker and seminal Science Fiction author Arthur C Clarke, 2001 transcends popular cinema
through deep philosophical subtext about man’s origins and destiny in the universe.\textsuperscript{10} By using 2001 as a template I am able to dissect and reassemble the relationship of man and technology. The Monolith appears four times during the film, further suggesting the relationship of man and technology.

The monolith first appears in the opening chapter “The Dawn of Man”, symbolizing the moment our primate ancestors first became sentient, setting in motion the evolution to modern man. Set in the prehistoric African savannah, a tribe of primates awakens to discover the monolith has appeared overnight, much to their initial confusion and excitement. Through a series of cautious and successively questioning interactions, the primates are ultimately able to come into direct contact with the monolith. Through contact with the monolith, the primates are able to realize their potential. Discovering tools for the first time, they are afforded dominion over rival tribes, prey, and their destiny. The ability to create has been given to them, stemming from the monolith.

As a metaphor, the monolith represents the introduction of technology upon the uninitiated; serving as a symbolic and functional element, the monolith’s purpose is not explicitly revealed to users. The monolith appears thrice more throughout the course of the film: when mankind first steps foot on the moon, in orbit over Jupiter, and finally as the “star child” the next stage in human evolution. In the final stages of human evolution into the “star child”, it is the monument that consumes the protagonist David Bowman, enabling him to achieve his place in the universe. The presence of the monolith, contrasted against overtly organic scenes begins to create a dialogue on the suitability of advanced technology in classical settings. The mall is indeed a classical setting, owing its layout, character, and purpose in

the city to seemingly forgotten principles of design. However, the affect classical planning had on the mall is unavoidable, as nearly every building surrounding the site was conceived as part of the group plan. It makes sense then, to take the position that the existing site context should be treated as the African savannah populated with tool-less primates. Free from any semblance of technology, the planning of the mall seeks to emulate a time in which emphasis was placed on experience and order rather than information and interaction. It is because of this classical planning that the monolith metaphor has immense pertinence to my thesis. The monolith represents an accelerated concentration of technology within a sacred vessel; owing much to the power of monumentality and semiotics of uniform purpose. By presenting a powerful and identifiable public front, the technology is able to exist in such a fashion that engages the site.

To the uninitiated [Our primate forbearers] the monolith simply represented something new, an element that was simply not present the night before. Their curiosity arose less from an understanding of what the object was, but rather what it wasn’t. Through exploration and interaction, utility was discovered and progress was made. Seeking to better understand the architectural intent of such a symbolic monolith, I return to Mitchell and his writing pertaining of digitally mediated environments. The monolith acts as a digitally mediated environment, ever present throughout the entirety of the films narration, lending assistance to evolving humans, until ultimately being activated and setting in motion the future of humankind and the universe. Much like the mediated spaces Mitchell extols, architecture and technology must work together, rather than as additions to one another. While some may argue of an ‘expressive’ architecture that provides a literal representation of the functions within. However, this times square representation of flashing lights and blazing graphics [which constitute some of the more exciting parts of e-sports competitions] serves as little more than empty ornament, blindly projecting whatever happens to be input at terminal A.

The concept of ‘smart buildings’ has been part of architectural lexicon for decades, conjuring up images of James Bond gadgetry and science fiction. The term ‘smart buildings’ is really somewhat of a misnomer as buildings are intimate object’s and claims to the sentience of manmade constructs can scarcely be backed up with little more than catalogued episodes of Star Trek: The Next Generation. As we stand, artificial intelligence is incapable of transcending its programming; rendering technology only as ‘smart’ as the constructs given. However, semantics aside, ‘smart buildings’ are in practice, technologically mitigated hybrid spaces; existing in both cyber and meatspace by bridging the gap between the relationship of man and machine.

The theoretical limit to this relationship is the dynamic and autonomous adaptation of form and space to meet our needs explicitly. This simply isn’t an option however cool it may seem, perhaps in a few decades. Buildings will function in much a similar fashion to advanced computers today, featuring multiple processors and ram channels to share user load and output. By distributing the dynamic load received and projected by the building among multiple parallel systems the technology within becomes much like the monolith from 2001; imbued and integrated rather than adorned or attached. This concept of parallel processing can also be used to illustrate the modern concept of miniaturization.

The concept of miniaturization can best be illustrated by an example; the development of fire control computers. Fire control computers, complex mechanical computers, were developed in the interwar years for naval warships
and their onboard guns. Serving as the primary target, fire, and stabilization machine for the massive naval guns on destroyers, battleships, and cruisers, these mechanical computers were some of the most impressive of their day. These multistory apparatuses used gears and dials to calculate the range, speed, and elevation necessary to create an adequate firing solution on an enemy target. These massive machines relied on the ratios of gears and levers to generate a series of successively more complex mathematical calculations that would solve for the desired values based on user input. The Mark I fire control computer, while revolutionary for its time, would soon be rendered obsolete by radar and modern targeting systems; affording for a smaller and more efficient apparatus. The Mark I mechanical computer weighed in excess of 3,000 lbs and was quite susceptible to rust, corrosion, and alignment malfunctions.

Through miniaturization the size of elements were able to be reduced and transformed into electrical impulses, allowing for quicker and more accurate value generation. It comes as no surprise, that miniaturization has affected much in our everyday interaction with technology; from widespread and pocket size cellular telephones, to the width of flat screen televisions.

Miniaturization also has important implications on the field of architecture and how space and technology can present themselves. Rather than having single, expensive installations of technology [light bulbs, monitors, sensors], miniaturization affords for the installation of multiple low cost versions that can act in common to accomplish similar goals, with much improvement. A series of smaller cheaper LEDs can provide much more quality, variety, and lifespan over a single light. Redundancy also allows for the possibility of failure or variation of use within the space, creating for a greater flexibility and cohesion within the architecture.

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11 "FIRE CONTROL FUNDAMENTALS"

12 Mitchell E-topia, 65
Thesis:
The creation of a monolith on Cleveland’s historic mall addresses the emergence of technology and internet based culture as new drivers for architectural form and meaning.

Process:
A look into the history of Cleveland reveals the roots of the struggle between economic influences and social needs. From the hardships caused by the Beaver Wars to the present day loss of its manufacturing sector, these struggles have resulted in depopulation and a need for Cleveland find new economic opportunities to attract society for its urban area. Although success of the manufacturing economy saw industrial age immigrants flocking to the city center, establishing communities, building churches and shared spaces. Today’s immigrants have all but abandoned downtown Cleveland with its industrial legacy. With the economic future of Cleveland depending on the innovations in Medical Services and Technologies centered around Cleveland Clinic and Case Western Reserve University, Cleveland’s resurgence depends on the ability of the city center to provide opportunities that appeal to today’s technology immigrants.

The architecture of Cleveland is fundamentally one of necessity rather than luxury. The great buildings of Cleveland have come with the waves of economic success; the Terminal Tower representing the rise of Rail, the old stone church, the BP building and the Peter B. Lewis building all represent the desires and successes Cleveland residents. Individual buildings have overall fared better than city planning efforts. The Group Plan, the Arcade, Public Square, the Expo, City Beautiful, the Mall, represent efforts that have prospered and collapsed in neglect, a
situation that has left Cleveland an industrial "town" with moments of architecture. This cycle of vision and demolition gives Cleveland its eclectic Public Square and provides an opportunity to reclaim former Mall space and introduce a building that provides yet another vision of Cleveland. A building for a new type of immigrant. A building that provides an opportunity for social interaction, that acts as a home for a virtual global community and a place for the local community to interact with technology globally.

The new workforce, the technology immigrants and technology natives of the 21st Century have their own cultures and traditions. eSports represents a new form of societal interaction not limited to gaming, as gaming constructs are being used in everything from entertainment to marketing, to defense and education. We are teaching our children to be gamers: The future will be populated by gamers.
Panorama from Mall C looking North to Lake Erie

Panorama looking east on Mall B to existing Conv. Ctr.

Panorama looking west on Mall B
Methodology

Collage: Looking at images of Cleveland, a historical perspective led to the identification of the site. I was able to identify moments of architecture in the city and identify chose the Mall,
Designs:
Wanting to preserve the original lawn, the initial designs were an underground structure. This design honored the original site. Its non-descript /nonexistent façade was in keeping with the current state of eSport venues. I detailed this design with dedicated game-specific spaces and technology access. While it met the criteria as a world-class gaming venue, it did not visibly enhance the urban space.

Figure 6.7
Formal relationship between space in neoclassical, monolithic, and modern form.

Study showing the relationship of dynamic text media with the body in space

Figure 6.8
View showing the monolith’s location on Mall B [looking North]
View showing the monolith's location on Mall B [looking North]
Sequencing the interior scenes of the monolith it is evident that the relationship of interior function to exterior skin [monolith] is of primary importance.

The skin reacts independently to each of the multitude of uses contained within. Circulation has been highlighted with a deep red allowing for a definite path of movement through the construct. Items depicted in red are part of larger systems, anchoring the cyberspace experience within the building.

First [top] and Second floor plans

Figure 6.14
In detailing the facade of the monolith technological unity are the primary motivators. The construction must serve as a platform within which the technology and function of cyberspace will be dictated upon the landscape, but also the framework in which the landscape and use will imprint the architecture.

Series of studies displaying the potential functions of the monolith facade

Figure 6.15

Structural and system detail diagrams depicting how the monolith will be constructed

Figure 6.16
<table>
<thead>
<tr>
<th>Program</th>
<th>Sq. Ft.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Exhibition</td>
<td>15,000</td>
<td>Presentation and seating space for ~2,000</td>
</tr>
<tr>
<td>Entry</td>
<td>400</td>
<td>Entry area provides access to main exhibition and CyberStore</td>
</tr>
<tr>
<td>PC Bang</td>
<td>2,000</td>
<td>60 PC station and support spaces</td>
</tr>
<tr>
<td>Console Den</td>
<td>2,000</td>
<td>40 console game stations and support spaces</td>
</tr>
<tr>
<td>Bar/ Longue</td>
<td>500</td>
<td>seating and counter supplementary to main exhibition space</td>
</tr>
<tr>
<td>Press</td>
<td>250</td>
<td>Dedicated press area</td>
</tr>
<tr>
<td>CyberStore</td>
<td>750</td>
<td>Gaming and technology merchandise</td>
</tr>
<tr>
<td>Broadcast/Game Booths</td>
<td>500</td>
<td>4-8’x8’ Isolation Booths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-10’x10’ Broadcasting booths</td>
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<tr>
<td>Technology support</td>
<td>300</td>
<td>Routers/ Switches, replacement computers, consoles, and peripherals</td>
</tr>
<tr>
<td>Offices</td>
<td>250</td>
<td>2-12’x10’ Offices</td>
</tr>
<tr>
<td>Briefing room</td>
<td>300</td>
<td>Tournament briefing and meeting room</td>
</tr>
<tr>
<td>Restrooms</td>
<td>1000</td>
<td>Mens and Womens Restrooms (sized by code)</td>
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<tr>
<td>Storage/ BOH</td>
<td>500</td>
<td>Storage for furniture, merchandise, and misc.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23,750</strong></td>
<td></td>
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<tr>
<td><strong>20% Grossing Factor</strong></td>
<td><strong>28500</strong></td>
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Basic program areas contained within the monolith.

The construction of the monolith as a series of structural bays skinned by technology allows for great flexibility of space. The basic program holds true, giving way for a myriad of different spatial configurations depending on occupancy and use. The integration of interior space with the dynamic exterior skin reduces the need for fixed walls dividing space, instead allowing space to be defined by computer controlled facade systems.
Conclusion

Cleveland architecture, developed around moments of progress and failure has created an atmosphere punctuated by statements of architectural expression. As Cleveland moves into the future, the relationship of technology, architecture, and history must be addressed in a manner fitting the local culture and economy. With increased viability in the technology and medical sectors, Cleveland is quickly becoming one of the Nation’s leading crossroads of information. The internet, embodied in the cultural relationships established through esports, has long acted as an ethereal entity, separate from the “real life” interactions of our daily lives. Internet culture is becoming the culture of our world through social media, advertising and increased efficiency and demands for services. The internet must now manifest itself upon our architectural expression, creating a dialogue between cyberspace and meatspace; in which both man and technology can exist in mutual support. By creating a monolith for technology, architectural unity is achieved while providing a monolith that both interacts and integrates with the surrounding context. Honoring the classical understanding of Cleveland’s historic Malls while simultaneously providing physical space for historically non corporeal program to manifest.

In essence there no longer exists IRL and Online but, rather one hybrid experience tailored by the conversation of architecture, technology, and culture.
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Print sources


Web Sources


Film Sources

Kubrick, Stanley (Producer and Director). (1968) 2001: A Space Odyssey [Film] Los Angeles: MGM.