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I, ________________________________, hereby submit this work as part of the requirements for the degree of:

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Between the Stadium and the City

This work and its defense approved by:

Chair: Michael McInturf

Jay Chatterjee
Between the Stadium and the City
an urban response to the current trends in stadium design

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Abstract

Despite possessing the ability to complement the urban condition, many stadiums are sited at the outskirts of major metropolitan areas, surrounded by acres of surface parking, completely removed and isolated from the urban environment. Recently, city leaders and designers have attempted to utilize stadiums as a catalyst for gentrification in blighted urban neighborhoods. However, the stadium remains empty and unused for a majority of the year, rendering itself no less isolated from the vibrancy of the urban environment than its suburban relatives. However, by employing the ideas of urban theorists who have offered advice as to how to create dynamic urban spaces, stadiums can take full advantage of their urban potential and be infused into the urban environment, becoming participatory within the dynamic urban condition as living components of the city.
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“Stadia are a vital component of new public space in the twenty-first century... They are the ‘new’ places of public assembly. They complement, and to some extent have replaced, the cathedral square, the souk, and the piazza. But all these new typologies are essentially inward looking: the public space is privatized and there has been no imperative to provide well-designed public space - attractive, seductive, and inviting. The urban qualities of the areas in the immediate vicinity of many stadia have been remarkably disappointing. Surrounded by carparks, there has been no visible effort to improve the immediate environment... The stadium typology can be anti-urban, as the venues are usually designed to be ‘secure’and to exclude all those who do not have a legitimate reason to enter... A challenge to stadium designers is to improve urban design in the vicinity of stadia, and to implement the new generation of stadia, which must function as living parts of their cities.”

Rod Sheard
The Stadium: Architecture for the New Global Culture
Part I: Thesis Argument

1. Introduction
2. A Place for Sport
3. User, Architecture, City
4. The Space Between
5. A Participatory Architecture
Introduction

What follows is an exploration into a process of design that leads to an architecture that becomes participatory within the urban environment, rather than rejecting it as a negative force on design like so many sports facilities, iconic pieces of architecture for their respective cities, do. It begins by examining the role of the stadium in modern society and presenting the sociological, economic, and political arguments for them to embrace the heterogeneity of the urban condition within the cities that they have come to identify.

This ultimately leads to the discussion revolving around the intricate interactions between the user, the architecture, and the city, a topic that has been discussed at length within the written works of several notable urban theorists: Jan Gehl, in *Life Between Buildings*, categorizes human activity within the urban environment and describes how architecture and design can influence the frequency and volume that these different types of activities occur; Jane Jacobs, in *The Death and Life of Great American Cities*, expands on Gehl’s category of necessary activities through her call for mixed uses in the urban environment; Karen A. Franck’s and Quentin Stevens’ *Loose Space: Possibility and Diversity in Urban Life* is an extension of Gehl’s optional categories, and William H. Whyte goes into more depth concerning Gehl’s category of social activities and the designer’s role in affecting these types of activities in *Social Life of Small Public Spaces*. Furthermore, each of them, along with Kevin Lynch in *Image of the City*, describes the design methods by which people begin to identify with their built surroundings and the way by which architects can utilize different design techniques to ensure that a relationship develops...
between the user, the architecture, and the city.

There are several existing urban spaces that have been designed with the intent to produce this type of relationship. James Oglethorpe’s picturesque squares of Savannah, Georgia, are not only extensions of the spaces within the private buildings that surround them, but they also create a unique interaction between the urban environment and those who are traveling through the space, both in automobile and on foot. Pioneer Courthouse Square has been dubbed “Portland’s living room” as designers implemented the region’s central transit hub into the heart of Oregon’s largest city, creating a space where dynamic interaction occurs between a variety of users, architectural elements, and urban components. And The FußgängerZone Innichen in Innichen, Italy, intended to bring together several separate entities of a village into a cohesive urban environment, removes automobiles from the streets, creating a pedestrian-friendly environment and giving designers the opportunities to introduce elements that encourage different types of interaction between the users, the architecture, and the city.

After summarizing the research conducted in analyzing the writings of the aforementioned urban theorists and the several examples of urban design projects that encourage architecture to become participatory within the urban environment, a design methodology begins to present itself as it becomes apparent that the participatory nature of the architecture within the urban environment will emulate from the space between the stadium and the city. This methodology will ultimately lead to the design of a stadium that is not only located within the urban environment, but also encourages an interaction and a relationship to develop between the user, the architecture, and the city.
The stadium, as a place for sport, has existed in culture for several centuries. Homer, the ancient Greek poet, refers to a “running place” in his ninth century B.C. literature. The Greek term stadion, precursor to the modern version of stadium, however, does not appear until the fifth century B.C. in the works of Herodotus (Herodotus was also the first to use stadion as a unit of measurement, referring to the length of the track, approximately 600 feet). These earliest stadiums were constructed into the landscape and topography of the site, with only enough seating for dignitaries and people of stature within the community, forcing much of the public to stand along the hillside. Thus, David Gilman Romano, author of Athletics and Mathematics in Ancient Corinth: Origins of the Greek Stadion and archaeologist at the University of Pennsylvania, argues that the word stadium might be derived from the Greek word stadeion, meaning “to stand.”

The ancient stadium in Athens, Greece, restored for the 2006 Summer Olympics, was originally constructed with limited seating for dignitaries, while the public would have sat on the hill that surrounds the oval track.
from the Greek verb “to stand” and that stadium literally meant “the standing place.” The stadium was usually constructed in close proximity to an altar, leading many historians to argue that the original Greek stadiums were built with religious and reverential intentions. At one ancient site, archeologists uncovered a bronze statue dating from 490 BC, depicting an ancient Olympic runner with the words “I belong to Zeus” inscribed on the athlete’s leg.

While the Greek stadium intended to provide a sacred, rural experience, the Roman form was decidedly more secular and urban. The great Roman coliseums were derived from the circular shape of the amphitheater rather than the rectangular shape of the Greek running tracks. They used substantial facades to place much more emphasis on the entertainment value of the intense and violent action that was taking place, rather than the acknowledgement of the surrounding environment that the Greek form provided. Furthermore, the statues of mythic gods that had adorned the Greek stadiums were replaced, in Roman coliseums, with statues of civic leaders who used the architecture to display their individual powers and achievements.

Likewise, the modern stadium has experienced a steady evolution over the years. Rod Sheard, in *The Stadium: Architecture for the New Global Culture*, looks at “Five Generations of Stadia Design” throughout history. The First Generation emerged towards the late 1800s, as sport, particularly baseball in America, was beginning to gain greater public interest. This encouraged designers to create stadiums whose sole purpose was to accommodate as many spectators as possible, without regard to quality facilities or spectator comfort.
resulted prompted investors to support greater infrastructure improvements that accompanied stadium construction, such as the electric streetcar that offered fans convenient transportation to and from games. In the late 1950s and throughout the 1960s the world experienced the television age. Almost everyone could afford a television set and, as networks began broadcasting sporting events, fans could become spectators from their own homes. Thus, there was a sharp decline in the numbers of people attending live athletic events. Simultaneously, the 1950s saw the exodus of baseball’s Boston Braves, New York Giants, and Brooklyn Dodgers to Minnesota, San Francisco, and Los Angeles, respectively. The response was the Second Generation of stadiums, which placed a greater emphasis on spectator comfort and improving the facilities in the venue in order to create a unique identity that was capable of captivating an audience of their home teams, their own citizens, and beyond. This approach can be seen in the design of the Astrodome, completed in 1965, in Houston, Texas. Here, a massive air conditioning system, a space-aged plastic floor playing surface, a massive $2 million scoreboard, and the stadium’s proximity to the Johnson Space Center reinforced perceptions of Houston as an emerging high-tech city, attracting spectators who wanted to experience its grandeur in person.

The Astrodome also included a presidential suite, a precursor to the stadium club level. This commodity was first fully integrated into the design of Pittsburgh, Pennsylvania’s Three River’s Stadium and was extremely prevalent in other Third Generation stadiums were designed to give spectators a wholistic experience beyond watching the game, evident in the introduction of the stadium club.

10. Sheard, 0.
11. Trumpbour, 2.
12. Trumpbour, 2. 
14. Third Generation stadiums were designed to give spectators a wholistic experience beyond watching the game, evident in the introduction of the stadium club.

DINING AND REFRESHMENTS
The goal of this generation of stadium design was to place more emphasis on the total spectator experience beyond watching the game by providing a comfortable, clean, and safe alternative to other family-oriented leisure activities, such as Disneyland. And in order to accommodate the precise needs of the spectator, team owners were no longer satisfied with multi-sport facilities as the spectator requirements for football were different from those of baseball. Hence, American cities, such as New York, Kansas City, and Cincinnati, were forced to build separate facilities for each of their professional sports teams.

The result was Fourth Generation stadium designs that attempted to capitalize on the growing marketability of the stadium as an icon for the city. The contemporary and futuristic designs of this generation contrasted the aging image of the nineteenth century came to a close, these cities looked to modern inventions as a symbol of progress, constructing lavishly decorated railroad stations and industrial factories for a more modern identity. Furthermore, the 1900s, particularly in the United States, saw the development of the skyscraper as a symbol of capitalism and urban progress. With a few notable exceptions, many of these tall buildings blended into a larger skyline that seemed indifferent from city to city. Additionally, most of these buildings were constructed for private enterprise, thus their doors were largely closed to the general populace.

Consequently, designers are beginning to explore a new generation of stadium design and construction: the Fifth Generation. These stadiums are using the iconic status of sports facilities for the purposes of gentrification in blighted urban areas.

It is arguable that Cincinnati, Ohio was much more identifiable via Paul Brown Stadium, a Fourth Generation stadium, rather than Carew Tower, which had symbolized the city for much of the twentieth century. It is arguable that Cincinnati, Ohio was much more identifiable via Paul Brown Stadium, a Fourth Generation stadium, rather than Carew Tower, which had symbolized the city for much of the twentieth century.
This practice is most commonly seen through the emergence of “retro” baseball stadiums, such as Oriole Park at Camden Yards in Baltimore, Maryland. This was one of the first stadiums to embrace the idea of urban gentrification through stadium design as its designers saw the integration of the stadium into the wider urban fabric as a renaissance for the derelict urban environment.

The stadium generated new and increased economic activity in the area through the amount of tourism that the new stadium attracted. Its nearby hotels, restaurants, and retail spaces provided accommodation for the 1.6 million spectators that come to Oriole Park every year.4

As the evolution of the stadium continues to progress, the public and the teams are demanding new, state-of-the-art facilities, creating a unique situation. Many team executives are threatening to relocate their franchise should a new facility not be constructed to replace existing facilities that are deemed obsolete. And construction costs for these new stadiums are skyrocketing, particularly if they are to be located in the urban core. Many professional sports stadiums easily cost several hundred million dollars to build, or even higher as the new stadium for the New York Yankees being constructed in the Bronx has an estimated cost of over one billion dollars.5 Some money does come from private investors, however, a large portion of stadium construction funding is publicly subsidized. And while there is some dissent, the public is willing to, at least, partially fund many stadium projects because they, like city leaders, do not want to see their beloved team leave, taking with them what sports has represented throughout the decades and the national identity that the stadium provides for the city.

The problem arises when the architecture of these new sports facilities fails to provide a greater good for the community. Many civic leaders tout the construction of a new stadium as an opportunity for the city to redefine itself on the national, or even international, scale, yet it often fails to do so because it fundamentally rejects the city and what it stands for. For example, as Oriole Park at Camden Yards has led to new destinations to develop and thrive within downtown Baltimore, beyond the directly adjacent warehouse building that houses team offices, ticket windows, restaurants, and retail spaces, the stadium presents to the city a substantial façade that disrupts any participation that the stadium may potentially have with the surrounding urban environment. And while there can be a tongue-in-cheek argument that the stadium provides for the city.

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18. Sheard, .


20. Sheard, .
that the mantra of Houston has been promoting suburban sprawl through its lack of zoning regulations. It is highly unlikely that Houston, as a city, would be willing to accept that label as suburban sprawl continues to deplete the planet’s resources, exploiting large amounts of land and forcing individuals to use valuable fossil fuels. However, Reliant Stadium, completed in 2002 and host of Super Bowl XXXVIII, fails to address the issue as it is located on the outskirts of Houston’s metropolitan area, adjacent to the Astrodome and surrounded by large amounts of surface parking. Furthermore, many of these stadiums remain spatial voids within the city as they remain empty and unused for a majority of the year.

Frank Deford, a senior writer for Sports Illustrated, notes that the early examples of stadium architecture were the equivalent to Trumpbour. Having no interaction with the surrounding urban environment, many sports facilities sit empty and unused for a majority of the year.

“the village green where we could all come together in common excitement.” Now, they have become “incidental attachments,” having little or no interaction with their host city beyond the ever-important blimp image that shows the skyline with the stadium juxtaposed in the foreground. There is no physical, psychological, or social connection that allows the user to experience the stadium as an inclusive component within the urban environment. This shows that architects and designers have only begun to fully explore the urban potential of sports facilities. However, by analyzing the ideas of respected urban theorists and existing examples of architecture that do instigate a connection between the user, the architecture, and the city, a method is discovered by which the architecture of a sports stadium can fully take advantage of the iconic stature it has garnered over the decades and become a participatory symbol of what the city stands for and what it represents, perhaps leading to the creation of a new generation of stadium design.
A connection between the user, the architecture, and the urban environment is achieved through the quality design of public spaces within the urban environment. For many urban theorists, the quality of an urban space is measured by its ability to allow different people to perform a variety of different activities within a common environment, or the amount of diversity and heterogeneity that it supports. Jane Jacobs, in her influential *The Death and Life of Great American Cities*, states that diversity is the “essential phenomena” of the urban environment. She continues, arguing that diversity “permits and stimulates” more diversity, further adding to the vibrancy of the city. However, Jacobs quickly notes that diversity is not caused by the presence of people; it is merely supported by the presence of “so many people, so close together, [with] so many differences.” Rather, she says, it is the role of the architect and the urban planner to create diversity by allowing for these differences to exist, while supporting them through design.

In his seminal work entitled *Life Between Buildings*, Danish architect Jan Gehl argues that architects have the greatest ability to stimulate diversity in the urban environment by designing opportunities for three different categories of human activity to exist: necessary activities, optional activities, and social activities. According to Gehl, necessary activities are those that will be performed regardless of the conditions of the exterior environment, built or natural, such as going to work or going to the grocery store. Optional activities, Gehl goes on, are those that do depend on the conditions of the exterior environment, such as recreational play and casual events. Gehl’s final category, social
activities, develops from the presence of people performing the two previously mentioned types of activities. Diversity in the urban environment results from the simultaneous existence of these three types of activities, and the architect has the ability to provide, through design, opportunities for these types of activities to exist.

Jacobs, again in The Death and Life of Great American Cities, calls for mixed uses within the urban environment, which is an extension of Gehl’s argument for the architect’s need to support necessary activities. “The district, and indeed as many of its internal parts as possible, must serve more than one primary function, preferably more than two.” Jacobs specifically mentions retail spaces, living spaces, and office spaces, all working together to support diversity in the urban environment.

Economically, mixed uses in the urban environment generate and sustain a constant flow of people, continuously instilling within the urban environment an economy of providing goods and services, operating businesses, and inhabiting people. Socially, they allow for a greater interaction between different people performing different tasks. These economic and social benefits lead to a greater diversity within the city, an element that Jacobs continues to explain as one of the most important contributors to a vibrant urban environment.3

Architects have the ability to provide opportunities for necessary activities through program, such as by providing architectural spaces for working and living. And if these different programmatic elements are placed in close proximity to one another, than a pedestrian characteristic can develop in the urban environment.

Different programmatic elements must be designed so that they are in close proximity to one another, encouraging pedestrian interaction between different users.
environment, creating not only an interaction between the user, the architecture, and the city, but also between the different users of the space. Therefore, it is the relationship between these different programmatic elements and the quality of the space between the buildings that stimulates diversity in the urban environment.

Many optional activities take place in this space between the buildings throughout the city. Gehl promotes the idea of “when in doubt, leave space out” as a mechanism to encourage designers to include such spaces, in the form of open space, in the urban environment. However, he says that the degree to which optional activities develop depends on the quality of the space, or the “looseness” of the space as described by Karen A. Franck and Quentin Stevens in their book *Loose Space: Possibility and Diversity in Urban Life*. According to the authors, space becomes loose as people within the space use their spatial recognition and creativity to perform activities that are different than those that the architect intended; they combine their physical environment with their own body, image, thoughts, and actions to create new spatial experiences. The best examples of loose spaces, they argue, such as everyday urban spaces (sidewalks, vacant lots, parks, etc.), have no true clarity of function, allowing for a greater variety of optional activities to develop. However, designers, they state, try to regulate the use of potentially loose space by introducing such elements as walls, fences, and ledges. But people will ultimately make the space loose, Franck and Stevens argue, through their recognition and creativity. Thus, the authors note, skateboarders see many types of architectural barriers as new challenges to conquer.¹

As a result of people performing necessary and optional activities within the urban environment, Gehl states that social activities will develop.² An analysis of social activities and the presence of people in the urban environment can be found in William H. Whyte’s *Social Life of Small Public Spaces*, a comprehensive study of urban spaces in New York City. One of the most common social activities that Whyte witnessed during his study was the act of people watching: people simply watching other people go about their day, both as individuals and in groups, talking, walking, playing, eating, reading, and any number of other various activities that the space allowed for.³ This, then, led Whyte to claim that, in order for people to perform these social activities, there must be ample amounts of space for people to sit and gather within the space.⁴ an argument that resonates with Gehl.⁵

⁴ Whyte, 24-39.
with Gehl’s assertion that architects can affect the possibilities of social activities occurring simply by designing in such a way that people are in close proximity and contact with other people. While Whyte does not specify what types of sitting spaces they must be because “people will sit where there are places to sit,” proclaiming that steps, planters, and fountain edges are excellent examples of places to sit within an urban space, as long as they are designed properly to encourage sitting (such as not being too high or too narrow), Gehl uses the example of angled benches, which juxtapose people against one another and forces them to interact with one another. Whyte also recognizes that people are willing to adapt to adverse conditions, effectively making some non-sitting places sittable, creating unique spatial relationships other than those intended by the architect, an argument that concurs with the observations of Franck and Stevens. Whyte concludes his study by stating that people like to be in urban spaces where they can still feel some sort of protection from the elements (weather, traffic, etc.), but still be able to soak in the action of the urban environment.

Beyond protection from weather and traffic, people performing activities within the urban environment also require protection from those whom Whyte describes as “undesirables,” or those members of society who pose a potential threat to the normally accepted social behavior of the urban environment.

Jacobs claims that people performing necessary activities as a result of the presence of mixed uses are “proprietors of the urban environment.” These people feel a sense of ownership to the space and a duty to protect it from barbarism and crime.

Jacobs uses the North End of Boston, Massachusetts as an example to illustrate this, noting that the constant presence of strangers shopping, working, and living amongst each other and their sense of belonging to the space has potentially thwarted numerous criminal actions. Franck and Stevens, using the example of optional activities as encouraged by loose space to illustrate how a safe urban environment is achieved, contend that what is considered socially appropriate behavior changes from person to person, time to time as society evolves. Their point is argued on the basis of a “freedom for whom to what” versus a “freedom for whom from what” standpoint, an extension of French sociologist Henri Lefebvre’s argument that everyone has a “right to the city.” Additionally, they claim that there is a distinct difference between

References:
1. Gehl, 10.
activities that pose a danger to the greater public and activities that are simply unpleasant. The authors argue that allowing for activities that might be viewed as "shocking" or "disgusting" only increases the overall tolerance and acceptance of a society, further contributing to and embracing the diversity of the urban condition.

Gehl cites a famous quote regarding social interaction from F. Van Klingeren: "one plus one equals three," which illustrates the cyclical nature of how the amount of people and activities grow exponentially from the presence of other people and activities in the city, contributing to the development of a safe urban environment. Gehl states that the presence of people performing necessary and optional activities attracts people into the urban environment to perform social activities. This increase in population creates a safer environment and encourages more people to perform necessary and optional activities, which, again, leads to an increase in social activities and an increase in overall safety within the urban environment.

Beyond demonstrating the different types of activities in the city and how the architecture of the urban environment can influence the development of these activities, urban theorists also attempt to prescribe the manner in which architecture must maintain a relationship with the surrounding urban environment in order to become a participatory component. Jacobs asserts that this relationship is achieved by the use of three characteristics of the design of urban environments that architects should strive for: urban blocks and streets must be short to provide for interaction and choice among and between the users; buildings must vary in age and condition so that a diverse group of businesses can come into the area; and the architectural program must provide for a concentration of people in order to make all of the previous characteristics economically feasible. According to Jacobs, these three design techniques and the manner in which they work together to promote diversity and participation in the urban environment is the “most important” of her arguments in The Death and Life of Great American Cities.

Whyte uses the architecture’s relationship with the street, which he calls the “rivers of life” within the city, as a means to illustrate how urban architecture can become engaged with the urban environment. He contends that many of the “megastructures” of the urban environment (shopping centers, corporate headquarters, etc.) reject the urban environment by
fronting the urban condition with barriers, such as walls and level changes. He uses Bryant Park in New York City as an example of an urban space that rejects the street with fences and plantings, creating an environment that thrives with crime. However, Fountain Square in Cincinnati, Ohio, he says, and its unique relationship with the street and the rest of the urban environment creates one of the better examples of urban architecture in the country. 19

Kevin Lynch, in *The Image of the City*, describes the manner in which the architecture of the urban environment is understood by the user, creating the feeling that the separate elements are interacting and participating with each other, with the users, and with the city to produce a single image. He argues that people begin to recognize and assemble their visions of the city based on five elements: paths, edges, landmarks, nodes, and districts.

After describing the five elements individually, he describes the ten characteristics that should be similar to each element: singularity, form simplicity, continuity, dominance, clarity of joint, directional differentiation, visual scope, motion awareness, time series, and names and meanings. "These are the categories of direct interest in design, since they describe qualities that a designer may operate upon." These characteristics, like the five elements, must work together in order to create, what he calls, an "imageable city." "It is the total orchestration of these units which would knit together a dense and vivid image, and sustain it over areas of metropolitan scale." 20

Lynch also recognizes that each individual within an urban environment has the capacity to inform his surroundings with his own meanings and connections. This is what Lynch distinguishes...
James Oglethorpe recognized the need for a relationship between the user, the architecture, and the city long before any of the above urban theorists wrote about it, and used the method of design to stimulate this interaction throughout his plan for the city of Savannah, Georgia in 1733. One of the earliest still-surviving examples of urban public spaces in the United States, the twenty-one historic squares of Savannah have been touted as some of the best public spaces in the nation. Each square is approximately 200 feet in dimension from north to south, however they vary from 100 feet to over 300 feet from east to west. Despite this carefully prescribed manner in which the squares are laid out and designed, what allows the squares and the buildings surrounding them to become participatory components in the urban environment lies in the details of their design.

Through design, architects have the ability to influence the degree to which architecture can become participatory in the urban environment by influencing the amount of diversity that it supports. Jane Jacobs’ call for mixed uses and Karen A. Franck’s and Quentin Stevens’ argument for loose space are extensions of Jan Gehl’s categories of necessary and optional activities, respectively, while William H. Whyte’s study of urban spaces in New York City illustrates how Gehl’s category of social activities are influenced by design. And as Gehl, Jacobs, Franck, Stevens, Whyte, and Kevin Lynch all describe design techniques that can nurture a relationship between the user, the architecture, and the city, they each acknowledge the ability of the users to recognize the capabilities of the architecture, creating new spatial experiences and unique spatial relationships. For them, it is simply the role of architecture and design to encourage this interaction to develop, rather than to restrict it by rejecting the diversity and vibrancy of the urban condition, a design concept that is successfully illustrated in several urban spaces throughout the world.
Each square is bound to the north by a narrow one-way street running east to west, and to the south with a narrow one-way street running west to east. Additionally, each square is typically intersected at the midpoint of each side by larger two-way streets. This creates eight access points and eight intersections at each square, none of which contain a stoplight. As the squares are placed directly in the middle of the major traffic ways, vehicles are forced to go around rather than through the middle of the ward that each square serves. John Berendt notes in *The Midnight of the Garden of Good and Evil* “traffic is obliged to flow at a leisurely pace.” This dynamic is unique, creating an interaction between the urban space and the vehicles that travel through them, preserving the safety of the pedestrians who have the right of way along the wide sidewalks that surround and go through the squares.

Because each square is so easily accessible by both pedestrians and vehicles, they are also extremely visible throughout the urban environment. As a person leaves one square, another square immediately comes into view. Allan Jacobs, in *Great Streets*, contributes the “imageable” and recognizable quality of Savannah to the squares’ visibility:

> “Once seen it is unforgettable, and it carries over into real life experience. See it in person, on the ground, and it is not difficult to draw. See it in plan, on a map, and you will recognize it on the ground.”

Everyday, thousands of tourists are drawn to the beauty of Savannah’s squares. However, the city is also a living urban

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1. “Squares of Savannah.”

2. “Squares of Savannah.”
environment with its 140,000 permanent residents using the squares as a part of their daily lives. Originally, the Oglethorpe plan called for the lots surrounding the square to the east and west be used for public and institutional purposes, while the northern and southern lots to contain private and residential spaces. Although building uses around each square have evolved to not strictly follow this as buildings change owners over time, the tradition of combining public and private uses within each square still continues as no square is solely residential and very few are solely public/institutional.5

The Savannah College of Art and Design has played the biggest role in ensuring that the practice of mixed-use development is carried out in each square. SCAD has purchased over 50 buildings throughout Savannah squares and restored them as college offices, classrooms, galleries, student housing, and even athletic facilities.6 SCAD has taken this opportunity to truly make the city their campus, greatly adding to the life and vibrancy of the urban environment.

Because the buildings surrounding the squares are generally shallow and bound by narrow alleys to the rear, this places more emphasis on the manner in which the front of the buildings meet the urban environment. Many have ornate entry sequences and large porches that lead the visitor from the square, across the pedestrian-friendly street, and into the building. This also happens in the reverse direction, as the squares become extensions of the buildings that surround them, inviting and catering to visitors as an outdoor foyer. This is extremely evident in the squares’ ability to host numerous social events throughout the year, attracting...
residents and visitors alike. Troup Square is the setting for the annual “Blessing of the Pets,” while Johnson and Wright Squares play host to musical concerts throughout the summer months. However, the largest event is the annual St. Patrick’s Day celebration throughout the squares of Savannah, noted as being the second largest in the United States. Additionally, the squares can be rented out for weddings and corporate luncheons, while private gatherings, block parties, and neighborhood gatherings are also common occurrences in the squares.

However, the most common activity to take place in the squares is the casual social interaction that takes place every day between users young and old, black and white, tourist and Savannahian alike. As thousands of people cross the squares every day on their way home, to work, to school, and to play, they are forced to interact with each other. And unlike many urban environments, this forced interaction is rather polite as many residents, proud of their city’s rich heritage, are willing to answer questions from tourists.

This interaction is complemented by the pristine beauty of Savannah’s squares, planted with magnificent live oak trees that provide ample shade in Savannah’s semi-tropical climate. Water features also provide a cool respite from the heat and humidity that can be commonplace in Savannah, while monuments and statues in the squares fuel conversation and reflection about the city within and between different users. Each square also features convenient seating options for users to casually enjoy and actively participate in the urban environment.

Heralded as the city’s “living room,” Pioneer Courthouse Square in Portland, Oregon serves as another example of an urban space where every social sect converges, forcing the users, the space, and the city to become participatory with one another in the urban environment. Since its inception in the 1960s, the space’s design included programmatic elements that encouraged constant activity. First and foremost, designers of the space integrated the downtown plaza into Portland’s Tri-Met regional transit system, making it the central hub for downtown travelers. This brings thousands of visitors to the space every day.

Accompanying the transit system are also the central offices for Travel Portland, the city’s official visitor’s center, which provides vital information about Portland’s area attractions.

However, the greatest contributor to the vitality of this urban space is the presence of everyday people who use the space for...
a wide variety of necessary, optional, and social activities. These activities are greatly mitigated and influenced by the design of terraced sitting spaces within the square. From the southwest corner to the northeast corner, the topography of the site drops several feet, which the seating arrangements navigate in a variety of unique and intimate configurations, encouraging interaction between different users and the space. Additionally, a sloping path that cuts across the terraces provides a handicap-accessible means to use the space, as well as a gentler path between the two extreme elevations. This encourages people traveling through the downtown area to use the space as a shortcut along their path of travel, further adding to the interaction and the participatory nature that the space serves within the urban environment. As one citizen notes, “Everyone walks through here at least once a day.”

Pioneer Courthouse Square is integrated into Portland, Oregon’s regional transportation system, bringing thousands of visitors through the square every day.

Additionally, the seating configurations are inspired by the designs of amphitheater seating and surround a large expanse of open space. This allows people to gather within the space and become spectators to and participants in the over 300 events that the space is programmed to host each year, from art exhibitions and civic demonstrations, to markets and festivals. The seating configuration also provides an acoustically appropriate environment for the built-in lectern from which both civic leaders and citizens can allow their voice to be heard throughout Pioneer Courthouse Square.

Beyond the design of the sitting spaces and the role of the transit system in supporting the vibrancy of Pioneer Courthouse Square, the plaza is also served by many other designed and natural elements, as seen by the following diagrams. The amphitheater-style seating allows for people to become spectators and participants in the square’s activities, while the path allows people to pass through on their way from one point to another within the city.
intentional amenities. The integral chessboards are a popular attraction for men on their lunch breaks, as well as on weekends, sometimes drawing crowds of passer-by who want to soak in the urban activity. The water feature provides a respite space for local professionals to mindlessly surf the internet or feverishly finish a presentation before an afternoon meeting. And finally, the outdoor eating spaces that are surrounded by shady trees allow users to enjoy the offerings from one of the many street vendors who operate within the square, or a brief morning pick-me-up from the nation’s top grossing Starbucks, located on the northwest corner of the plaza.

Having such a central downtown location within Portland, Pioneer Courthouse Square is not immune to the social ills that regularly plague urban environments. However, many observers credit the square’s design and its ability to attract over ten million visitors each year as a deterrent to any urban crime that may occur there. Jennifer Polver, director of the Pioneer Courthouse Square nonprofit management group, notes that “the square is the psychological anchor of the city and it takes the village to keep it functioning.” It is here where Portlanders and visitors are able to experience and participate within an urban space that architecturally responds to and connects to the “contained chaos and harmonious coexistence” that is the urban condition.

Finally, the FUßgängerZone Innichen (FUZI Pedestrian Zone) in Innichen, Italy is a project that addresses the issue of separation and disassociation between the user, the architecture, and the city, encouraging the harmonious coexistence between the three by creating a wide range of useful spaces that each have their own character and atmosphere, stimulating activity in the urban environment.

Besides cleaning up the tourist village, the design concept of the FUZI Pedestrian Zone created new spatial possibilities for activities and events in the city center. Designers, first, reduced vehicular traffic to an absolute minimum, reviving the original pedestrian character of the village. This allowed them to redesign the ground plane of the village, as well as to remove the barriers that once separated pedestrian traffic and automobiles, creating a cohesive urban space. This transformed the village’s streets and squares into useful urban public spaces, creating the base layer; the first of five layers, for the entire project.

The second layer, the functional layer, is created by the individual identities and characteristics of five different typological

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The FUZI Pedestrian Zone in Innichen, Italy, removes vehicles from the city center, reviving the original pedestrian character of the village and allowing for new spatial possibilities to develop.

- **Function**: A series of raised platforms throughout the village provide for outdoor eating spaces and other areas of intrigue during the tourist season, yet are transformed into flower boxes during the spring and autumn.

- **Base**: The interaction between the five layers of the FUZI Pedestrian Zone helps to create a wholistic urban environment.

- **Terraces**: The central park, the third typological space, serves as an intimate space for smaller events, as well as an urban playground in the village center. The church square includes trees, benches, and water features to invite village patrons to meet and interact with one another within the fourth space typology. Finally, zones throughout the village. An elongated spine that is sunk into the pavement, enforcing the linear character of the space, accents the first typological zone, the main boulevard that runs through Innichen. Additionally, the irregular facades of the surrounding buildings create unique and original undulating spaces along the boulevard. These facades are then lit from below, intensifying the spatial character of the street and the squares. A different ground plane material denotes the rectangular space that is used for outdoor exhibitions and performances and marks the second spatial typology. The central park, the third typological space, serves as an intimate space for smaller events, as well as an urban playground in the village center. The church square includes trees, benches, and water features to invite village patrons to meet and interact with one another within the fourth space typology. Finally,
the large central square serves as the fifth typological zone and is programmed with the necessary infrastructure to host and organize larger events.\textsuperscript{11}

The design of each of these typological spaces required a high degree of sensitivity to the rich history of the village and its surrounding environment. This is achieved through the exclusive use of local materials throughout the project, inserting the new design into the existing landscape. Dark green serpentine used on some ground planes is taken from a local quarry and responds to the surrounding forests, while the use of local gravel for the cemented surfaces emanates the color of the nearby mountains.\textsuperscript{12}

A series of platforms throughout the village creates the third layer of the FUZI Pedestrian Zone. These terraces are slightly raised from the base layer, creating the illusion that they are floating above the space. They are lit from below, further adding to this effect. The different platforms create areas of intrigue throughout Innichen, serving as concentration points of activity, as do a collection of urban green spaces that compose the fourth layer of the project.\textsuperscript{13}

Finally, the fifth layer is created as a response to the highly pronounced tourist season during the summer and winter months. Prior to its redesign, the village seemed overcrowded during the peak holiday season, while it appeared deserted and empty during the spring and autumn. Now, during the low season, some defined spaces are flooded with water to form small water features and ponds, breaking up and reducing the scale of open space in the village. Also, some terraced platforms that serve during the low season water features and terraces are flooded throughout the village to reduce the scale of the space proportionately to the amount of people.\textsuperscript{14}

During the low season water features and terraces are flooded throughout the village to reduce the scale of the space proportionately to the amount of people. In the summer the water features are drained to provide for greater amounts of open space and in the winter one is frozen to form an ice skating rink. The terraces are converted to flower boxes.

\textsuperscript{11} Krauel, 62.
\textsuperscript{12} Krauel, 66.
\textsuperscript{13} Krauel, 165.
\textsuperscript{14} During the low season, water features and terraces are flooded throughout the village to reduce the scale of the space proportionately to the amount of people.
as outdoor eating spaces during the summer are replaced with flower boxes during the autumn and spring, augmenting the space to the number of visitors. Furthermore, to provide a unique activity for those who come to the village in the winter for the ski season, the central square is flooded with water and frozen to create an ice rink. 14

By embracing the urban condition, rather than rejecting it, the architects of these examples of public space have succeeded in creating a participatory architecture within the urban environment that allows one to recognize the potential of the architecture and develop new relationships between the user, the architecture, and the city by concerning themselves with the design of the space between. Beyond being visually pleasing, the design of these spaces illustrate the manner in which the architectural elements, as argued for by Jan Gehl, Jane Jacobs, Karen A. Franck, Quentin Stevens, William H. Whyte, and Kevin Lynch, influence the way people, architecture, and the city interact within the urban environment.

By embracing the urban condition, rather than rejecting it, the architects of these examples of public space have succeeded in creating a participatory architecture within the urban environment that allows one to recognize the potential of the architecture and develop new relationships between the user, the architecture, and the city by concerning themselves with the design of the space between. Beyond being visually pleasing, the design of these spaces illustrate the manner in which the architectural elements, as argued for by Jan Gehl, Jane Jacobs, Karen A. Franck, Quentin Stevens, William H. Whyte, and Kevin Lynch, influence the way people, architecture, and the city interact within the urban environment.

Thus it is the goal of the following design investigation to explore the methodologies by which the series of spaces between the user, the architecture, and the city can, through the design of a minor league baseball stadium, initiate and sustain a relationship between the three, creating an architecture that is participatory within the urban condition. This relationship is first mitigated through site analysis. An analysis of the site and its relationship to its surroundings, both immediate and on a metropolitan scale, will inform which design techniques must be employed by the architecture in order for the stadium to develop a relationship with the urban condition.

After analyzing the site, it is necessary to define the architectural program. While the program must include the essential components of a stadium (seating, concessions, playing surface, etc.), the program must also embrace the urban condition by promoting and supporting diversity in the urban environment. In Life Between Buildings, Jan Gehl states that this diversity is the result of different people performing necessary, optional, and social activities. Jane Jacobs expands on necessary activities in The Death and Life of Great American Cities through her call for mixed uses within the urban environment. Loose space, an extension of optional activities, is a concept explored by Karen A. Franck and Quentin Stevens in Loose Space: Possibility and Diversity in Urban Life. William H. Whyte provides support for social activities in his Social Life of Small Public Spaces, a study of New York City’s public spaces. The inclusion of mixed uses, loose space, and public gathering spaces into the program will allow the stadium to become a participatory component in...
the urban environment even when the stadium is not used for its primary purpose of athletic events. Kevin Lynch, in *Image of the City*, along with Jacobs, then describes how the designed nature of these architectural elements can work together to create a cohesive image of the urban environment. Despite these prescriptions, each acknowledges the ability of the user to instill their own meanings into the city, creating new and unique spatial experiences within the urban environment.

After looking at and analyzing examples of urban architecture where these principles are carried out and the architecture is, in fact, a participatory component within the urban environment, it becomes evident that the design of the space between the user, the architecture, and the city is the most important element in stimulating this interaction. The manner in which the design techniques operate in the space between the architecture and the city, which allows the architecture to become a participatory component in the urban environment.

It is the design techniques utilized in the space between the architecture and the city which allows the architecture to become a participatory component in the urban environment.

The city of Columbus, Ohio continues to grow and establish itself as a premier American city.
affiliate, the Columbus Clippers. The stadium, as a typology, continues to play a significant role in society, particularly as civic leaders use them to redefine the image of their cities on a national, and even international, scale. However, many of these facilities fail to achieve their goals as they are physically removed from and reject the urban condition. Many are placed towards the outer perimeter of the urban environment, contributing to the ongoing problem of suburban sprawl and the rapid consumption of the planet’s resources. Others are disjointed from their host cities by fronting the urban environment with large, impenetrable barriers that make them no less isolated from the urban condition than those in the suburbs, even though they may be placed in prominent downtown locations.

Thus, there continues to be a lack of design techniques in stadiums that allow a relationship to develop between the user, the architecture, and the urban environment. However, by utilizing the programmatic elements and design methodologies that come from noted urban theorists in the treatment of the space between the stadium and the city, as well as applying the learning from existing examples of urban architecture, it will allow for Huntington Park to become a participatory component within the urban environment of the Arena District and the greater fabric of Columbus, Ohio.

Part II: Design Process

1. The Arena District
2. Site Analysis
3. Program Layers
4. Between the Stadium and the City
Columbus, Ohio has taken great strides in recent years to establish itself as a premier American city: a city that acts, looks, and feels like the 15th largest American city. Among all of its latest efforts to transform itself into a major urban area, such as a new science museum, a downtown intersection reminiscent of New York’s Times Square, and a revitalized campus at the Ohio State University, no project has seen the amount of time, money, or energy put into it by the city and its citizens than the Arena District.

In 1834 the Ohio Penitentiary opened as a source of civic pride for the city of Columbus as it stood on Spring Street “in the imposing and massive grandeur of its severe and stately front – a silent and frowning warning to the observer of the majesty of the law and the consequences which are sure to follow and
overtake those who insult or violate its imperial dignity and sovereign mandates. This spurred more growth at the city’s north end as the Columbus Buggy Company opened on what is now Nationwide Boulevard and by 1890 was the largest buggy company in the world. And as a response to the increase of train traffic that brought freight and visitors to this important industrial and commerce center, the Columbus Union Depot hired famed Chicago architect Daniel Burnham to design Union Station, which opened in 1897.

During the late twentieth century, Columbus’ central business district began to push north, replacing the blighted urban environment that the area around the Ohio Penitentiary had become: the Columbus Buggy Company was forced to close in 1913 as they could not compete with Henry Ford’s Model T.

The Columbus Buggy Company, now the site of the Buggyworks development, was once the largest buggy company in the world.

The Ohio Center was part of the urban renaissance that took place at the north end of the city during the 1970s.

Designed by Peter Eisenman, the Greater Columbus Convention Center allowed the city to host national and international conventions and events.
Union Station closed in 1977 after the formation of Amtrak; and the Ohio Penitentiary closed in 1984 after years of fires, riots, and decay. Thus, the city of Columbus viewed the construction of several projects as vital to the future development of the city’s north end. One Nationwide Plaza, the national headquarters for Nationwide Mutual Insurance Company, was completed in 1976; the Ohio Center and the accompanying Hyatt Regency Hotel were completed in 1979, and as the convention industry continued to grow in Columbus, the Ohio Center was expanded with the 1993 completion of the Greater Columbus Convention Center, designed by Peter Eisenman.

However, the 22-acre site of the Ohio Penitentiary continued to sit empty as it was detached from these urban revitalization efforts. In 1994 a portion of the prison’s structure sat empty, unoccupied vehicles, forcing the city to demolish the surviving buildings. With the exception of parking lots and a few isolated bars, this land continued to sit vacant and desolate. At the same time, Columbus was being bypassed by numerous concerts and sporting events for other cities because of Columbus’ lack of an arena facility. In 1997 Columbus voters were presented with a ballot initiative that would raise taxes to fund the construction of a new arena. Within days after the levy failed, Nationwide Insurance announced plans to privately develop the 20,000-seat Nationwide Arena on the site of the Ohio Penitentiary attracting the National Hockey League’s newest franchise, the Columbus Blue Jackets.

After a tour of seven other emerging cities and their arenas, project leaders determined that Nationwide Arena must be “something completely different.” Rather than build an arena isolated from the city’s surroundings, officials developed a holistic plan to transform the entire area into a lively neighborhood. The objective was simply create an extension of the city’s urban fabric that fits with its surroundings. The Arena District was born.

Award-winning planning firm MSI of Columbus completed the master plan for the new Arena District. They made the intentional gestures of connecting the area to downtown through the High Street corridor to the east and the Scioto Riverfront to the south. Nationwide, then, hired four local architecture firms, 360 Architecture, Acock Associates, David Benjamin Meleca

[[Chippas, 6-10.]

[[Chippas, 49-50.]

[[Chippas, 53-54.]

[[Chippas, 6-8.]

[[Chippas, 50-54.]

[[Chippas, 6-10.]
The master plan for the Arena District called for connections to the existing downtown and the expanding riverfront. Nationwide Arena, a 20,000-seat sports and entertainment facility, serves as the focal point for the area.

“ nationwide arena, itself, is the crescendo.” The design incorporates several techniques that allow the arena to connect with its surrounding environment. Part of the arena is underground, which brings the overall proportions of the facility down to a more human scale. Furthermore, the concourse areas have a much lower roof elevation than the seating and rink areas, fronting Nationwide Boulevard with an architectural scale that better fits with the surrounding environment, and providing the interior of the arena with natural light through a clerestory. The architects also used generous amounts of exterior glass and gentle overhangs over the sidewalk to extend the design into the urban environment.

“The arena was designed to serve as a catalyst — breathing new life into downtown Columbus and creating an urban residential, business, and cultural renaissance.” The Arena Grand Theater was designed to emulate the movie palaces that were located downtown in the early 1900s. Elaborate staircases and balcony seating combine with modern amenities, such as a club lounge, to create a unique urban experience. Lifestyle Community Pavilion, the first indoor/outdoor concert facility in the nation, brings live music to the Arena District throughout the year. During the summer months, fans fill a lawn and enjoy the concert with the city’s skyline in the background, while in the...
Beyond work and play, the Arena District also provides people a neighborhood in which to live. Burnham Square Condominiums offers pleasant views of the city skyline and includes building materials and architectural elements salvaged from the Ohio Penitentiary. Arena Crossing Apartments incorporates an old bridge, which once served an Ohio county road, as a link between the Arena District and the North Market. The Buggyworks, built on the former site of the Columbus Buggy Company, features loft-style living, as well as office and boutique retail spaces. While office workers come and go on the clock, residents bring continuous vitality to the area.

"Taking cues from the best urban neighborhoods in the world, the architects dreamt of a place where people strolled brick sidewalks, dined alfresco under the stars, and gathered for big special events." Brick pavers that once provided the foundations for the area’s turn-of-the-century streets now add "detail, texture, and a bit of history" to the pedestrian paths of the Arena District, bringing pedestrian activity back to the city. These paths are surrounded with animated billboards, kiosks, graphic elements, and architectural details that energize, engage, and stimulate Arena District visitors.

Public gathering areas and green spaces were also key elements to the master plan of the Arena District. McFerson Commons links the activity of the Arena District with the expanding riverfront development, including North Bank Park, the Santa Maria museum, and the Ohio Bike Trail. The Commons also

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Chippas, 60-61.

Chippas, 68-69.
serves as a “backyard playground” for the urban neighborhood.10

Battelle Plaza, located just outside of Nationwide Arena, serves as the main gateway into the Arena District from Front Street. Besides flooding with activity on nights of events at Nationwide Arena, the plaza serves as the staging area for many citywide events and festivals, such as the Columbus Marathon.

Architects and builders took care to preserve the historic pieces of architecture that still remained from the eighteenth and nineteenth centuries. The Ohio Moline Plow building, placed on the National Register of Historic Places, has been redesigned and now provides office and restaurant space for the Arena District. Furthermore, an arch from Burnham’s design of Union Station was preserved and now graces the northern gateway of McFerson Commons.

The Arena District continues to provide the urban environment of Columbus with life and activity. Recognizing the area’s urban potential and the need for a new facility to replace aging Cooper Stadium, the Franklin County government, owner of the Columbus Clippers, has selected the Arena District as the site for the team’s new stadium. Specifically, the eight-acre site is on the northwest corner of Nationwide Boulevard and Neil Avenue, located between the Buggyworks and Nationwide Arena. An analysis and understanding of the site, its characteristics, and its relationship with the surrounding environment is vital to creating a participatory architecture within the Arena District.


Being in an established urban area, the topography of the eight-acre site is relatively flat, however, it does contain some change in elevation as it slopes downwards eight feet from the northeast corner to the southwest corner. This provides unique opportunities to design and mitigate the relationship between the site and the street. The two major streets in question are Nationwide Boulevard, which runs east and west, and Neil Avenue, which runs north and south. Nationwide Boulevard is a two-lane road that is paved in brick pavers to the east of Neil Avenue and conventional asphalt to the west of Neil Avenue. At the intersection with Neil Avenue, it does widen into three lanes to provide for a left-turn lane. Neil Avenue, however, is a four-lane road that is paved solely in conventional asphalt. Between Broadbelt Lane to the north and Spring Street to the south, Neil Avenue contains a raised median that is planted with trees, reducing the scale of the larger road. At the intersection with Nationwide Boulevard, Neil Avenue widens to five lanes, also accommodating a left-turn lane.

Overall, the Arena District has a distinctive architectural character, emulated in the height, materials, and use of its buildings. Most of the buildings, particularly those along Nationwide Boulevard, are between three and five stories high. This allows the urban environment to have an overall scale that is much more in tune to the pedestrian, rather than the automobile. And, since Nationwide Boulevard is made of brick pavers, vehicles also move at a rather pedestrian pace, allowing the architectural scale of the Arena District to cater to pedestrians and those in automobiles in a similar manner.

The exterior facades of the buildings are composed mainly of
The proposed site sits at the northwest corner of Nationwide Boulevard and Neil Avenue, located between the Buggyworks and Nationwide Arena.

The eight-acre site is bounded to the north by Broadbelt Lane and the Lifestyle Community Pavilion; to the east by Neil Avenue and surface parking; to the south by Nationwide Boulevard and a proposed mixed use development; and to the west by Hanover Street and the Buggyworks.

brick, along with large amounts of glazing infill for natural light and views. This extensive use of glass, as well as other contemporary details such as architectural steel, creates the feeling of a traditional urban neighborhood that is also able to cater to the needs of the modern user in the twenty-first century.

All of these architectural characteristics can be seen on the main attraction of the Arena District, Nationwide Arena. The building fronts Nationwide Boulevard, as well as its surrounding plazas, with an elevation that is only 4 stories high. This is achieved by separating the volume of the concourses from that of the spectator seating and playing surface. The former is the component that is four stories tall and fronts the street and plazas at a pedestrian scale, while the latter, six stories high, is sunk into the site, needing only to rise above the roofline of the concourses.
Nationwide Arena reaches out to embrace the urban condition through a series of overhangs that extend over the sidewalk. Also, the extensive use of glass on the facade provides a visual connection between the interior of the arena and the life on the street and sidewalks.

Composed mainly of brick, the Arena District has a relatively retrospective character to it. However, several contemporary design details throughout the neighborhood allow it to fit into the twenty-first century. This discrepancy is only visible from a distance and also creates the opportunity for clerestory windows, bringing natural light into the arena. Composed of brick, the exterior facade of Nationwide Arena also features large expanses of glass that bring additional natural light into the concourses, while also allowing users inside to openly view the activity that is taking place in the rest of the Arena District. Other contemporary design details, such as the large tower that marks a main entrance and the architectural canopies that allow the arena to extend into and reach out to its surrounding environment, further complement the architectural character of the Arena District.

The sociological atmosphere of the Arena District is created through the various building uses throughout the urban environment. The many restaurants, bars, and retail spaces provide a sense of activity and character throughout the district. The major programmatic zones of Nationwide Arena are separated into distinct volumes, allowing the concourse to present the street with a pedestrian scale while the playing surface is sunk into the ground. This also provides for a clerestory that brings natural light into the arena.

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The major programmatic zones of Nationwide Arena are separated into distinct volumes, allowing the concourse to present the street with a pedestrian scale while the playing surface is sunk into the ground. This also provides for a clerestory that brings natural light into the arena.
complement Nationwide Arena, Arena Grand Theater, and Lifestyle Community Pavilion, which provide the area with lively entertainment options. Furthermore, the several residential buildings provide the Arena District with a constant vitality.

Vehicles enter the Arena District primarily from the north via Neil Avenue and Interstate 670. Front Street, High Street, Nationwide Boulevard, Spring Street, and Long Street also offer vehicular access for visitors coming from other parts of downtown Columbus. Once within the Arena District, vehicular activity, while possible, is quite limited. The many stoplights and stop signs within the relatively small area discourage motorists to use the Arena District as a throughway to other parts of the city. Although a large surface parking lot is currently at the northeast corner of Nationwide Boulevard and Neil Avenue, most visitors of the Arena District park in one of the parking garages that are at the periphery of the urban environment. This further removes vehicles from the central populated spaces within the Arena District. However, there is currently no plan to replace the existing surface parking lot with a larger garage structure (although it was a part of the original master plan), providing more direct parking for those vehicles entering from the north along Neil Avenue and replacing the current situation which requires them to travel through the heart of the Arena District to access a parking facility.

A wide variety of mixed uses within close proximity to one another provide for a constant vitality within the Arena District.

Most of the pedestrian access to the Arena District and the site at the northwest corner of Nationwide Boulevard and Neil Avenue occurs from the east along Nationwide Boulevard, crossing High Street and Front Street from the many downtown hotels and convention center. The City of Columbus is attempting...
View from site looking east along Nationwide Boulevard.

View from site looking south along Fial Avenue.

View from site looking north along Fial Avenue.

View from site looking west along Nationwide Boulevard.
to encourage more pedestrian activity to the south by means of developing North Bank Park along the Scioto River, which connects to the riverfront development that already exists closer to the downtown area. From the north and west, pedestrian access is quite scarce as they are forced to cross Interstate 670 to the north and travel through a notoriously unpleasant neighborhood on the other side of the railroad tracks to the west. However, as the Buggyworks development continues to become established, access to the site from the west will become more prominent. Likewise, views from the site to the north and west are rather undesirable. While immediately to the north and west there is the Lifestyle Community Pavilion and Buggyworks, respectively, beyond those are railroad tracks, blighted urban neighborhoods, and interstate highways. On the other hand, the views to the east and the south offer more pleasant images of the city of Columbus. To the east, the development and activity along Nationwide Boulevard frames the towering One Nationwide Plaza and Hyatt Regency Hotel. To the southeast, framed by a new residential tower and the AEP building, is a magnificent view of the city skyline, although this view is obstructed by the development along Nationwide Boulevard as the viewer moves closer to the southeast corner of the site. And directly to the south, Neil Avenue provides a forced perspective towards North Bank Park and the still-expanding riverfront development along the Scioto River.

By utilizing the analysis of the Arena District and, more specifically, the analysis of site at the northwest corner of Nationwide Boulevard and Neil Avenue, some of the overall architectural gestures of the project become evident. For example, to present a cohesive image of the entire urban environment, brick should be a primary building material, yet it can be used in a contemporary manner, as well as in conjunction with other contemporary details that respond to the existing architectural character of the Arena District. The stadium should emulate the human scale of the Arena District by having an overall height of no more than six stories. The project should also cater to pedestrian activity and the main pedestrian access points, as well as provide for and allow safe and efficient vehicular access. Furthermore, the desirable views to the east and south should be accentuated, while the views to the north and west should not. These methodologies, along with the development of the stadium’s programmatic elements, will only add to the project’s ability to become participatory component within the urban
The program for the new home of the Columbus Clippers that is to be placed within the Arena District at the northwest corner of Nationwide Boulevard and Neil Avenue will play a major role in its ability to become a participatory component within the urban environment. Just as it is in the FUZI Pedestrian Zone, the program for this project is separated into five programmatic layers: parking, retail space, office space, stadium, and public space. And also just as it is in Innichen, Italy, the true participatory nature of the project will come from the architectural treatment of the spaces between these programmatic layers that mitigate the relationship between the user, the architecture, and the city.

Per the original master plan for the Arena District, the surface parking that is located at the northeast corner of the intersection between Nationwide Boulevard and Neil Avenue will be removed.
and replaced with a parking garage facility north of Broadbelt Lane and east of Neil Avenue. Also, the surface parking lot that serves the Lifestyle Community Pavilion will be expanded into a garage facility to accommodate the additional people that will populate the baseball stadium. Both of these new parking facilities will keep vehicular traffic accessing the Arena District via the north to the periphery of the urban environment, respecting the pedestrian characteristic that is desired.

Along Nationwide Boulevard east of Neil Avenue is an existing mixed use development that provides the Arena District with retail spaces and office spaces. The presence of the second and third programmatic layers for this project will extend these mixed uses westward, across Neil Avenue and in closer proximity to the stadium facility. Not only will they add to the continuous vibrancy and diversity of the Arena District, but also they will ensure that stadium remains a participatory component within the urban environment beyond the 72 days per year that it will host a baseball game.

The stadium facility, itself, is the fourth programmatic layer of the project and contains the necessary elements of a minor league baseball stadium. This layer includes seating for 10,000 fans in both the form of traditional stadium seating arrangements and luxury stadium boxes. Outfield lawn seating will also provide a unique spectator experience. Fans will require access to ticket counters, stadium retail shops, and concessions via concourses, while the players will require access from the playing field and team dugouts to locker rooms and medical facilities, separated from the paths of travel by fans for privacy and security. Team management personnel will be provided with office space to conduct their business during regular working hours, particularly when the team is not in season. Finally, the stadium facilities will allow for television and radio broadcasts of the games to occur by providing the press corps with the proper amenities to perform their duties.

The fifth and final layer is the implementation of public space throughout the project that will mitigate the relationships between the four previously mentioned programmatic layers. The public space will present itself in various forms, such as plazas and squares, paths and green spaces. These spaces will be designed according to the ideas of loose space, allowing for markets and festivals to take place within them, as well as casual public gatherings and other activities. Within these public spaces many different design techniques will be utilized to ensure that it remains a vibrant urban space throughout the year. Water features will provide a psychological cooling effect during the summer, and they can be frozen during the winter to provide for an urban ice skating rink that will be supported by the resources at Nationwide Arena. Terraced plazas will provide for ample sitting spaces, while also navigating the gentle topography of the site. These sitting spaces, as well as outdoor eating areas to be supported by new and existing restaurant spaces, will be designed so that users have the option of interacting with the urban condition, or remaining more private.

While the inclusion of all of these programmatic elements into the overall design concept will add to the vibrancy of the Arena District, it is the architectural treatment of these elements and the...
The program for this design investigation will place the stadium facility within a larger mixed-use development that ties into the existing development within the Arena District. The relationships between the stadium and the mixed-use spaces will be mitigated through a series of public spaces. These public spaces, such as paths, plazas, and urban green spaces, will ensure that stadium remains a participatory component within the urban environment throughout the year, even when the stadium is not used for baseball games.

The ultimate methodology for this design investigation concerns itself with exploring the manner in which the program of the stadium will interact with and encompass the program of the surrounding urban environment and its users, creating a unique relationship between the user, the architecture, and the city.
The first step in the design methodology of creating a unique relationship between the user, the architecture, and the city through the design of a stadium is establishing the connections between the stadium and the surrounding urban environment. The central node for a baseball stadium is at the location of home plate and by drawing lines across the site, between the stadium (via home plate) and key moments within the urban environment, a series of potential connections are created. A similar approach has been taken in the design of Nationwide Arena as the geometry of McFerson Commons is created by lines that connect a main entrance into the arena with the city of Columbus, framing a view of the downtown skyline. Additional lines can be generated between Nationwide Arena and the rest of the Arena District, and while they do not influence the geometries of the existing architecture, they begin to interact and intersect with the lines connecting the new stadium to the urban environment, creating a potential geometry for the project. Furthermore, the sport of baseball provides another potential overlapping geometry for the project. Baseball is a unique sport in that it is one of the few sports that is not rectilinear, such as soccer and football, but rather radial. Therefore a series of concentric circles begin to emulate from home plate and extend into the urban environment. Again, a similar technique can be seen in the design of Nationwide Arena. Here, concentric circles extending from a large turret that marks a main entrance into the building actually cuts away from the pure geometrical form of a building across the street, creating an interaction between the building and the arena. As the two sets of concentric circles, one extending
The interaction of the linear connections between the new stadium, Nationwide Arena, and the urban environment provide a potential geometry.

The other geometry is created through interaction of the radial geometries inherent in baseball and a design element on Nationwide Arena.

The manner in which the two geometries interact will influence the architecture of the stadium and the surrounding buildings.

The architectural treatment of how these two geometries interact with one another throughout the entire program creates an interesting solid – void relationship that will be evident in the design of the project. For example, the linear connections between the stadium and the urban environment will begin to influence the architecture of the stadium facility, providing points of entry into the stadium and framing views of the city. The linear geometry will also provide physical connections between different entities within the Arena District, such as between the new stadium and Nationwide Arena. Furthermore, the radial geometry will influence the architecture of newly introduced programmatic elements.
such as the mixed use spaces, the parking facilities, and the public space, ensuring that the stadium maintains an architectural dialog with its surroundings.

However, as the anchoring component of this project, the architectural techniques employed in the design of the stadium itself will be the most important factor in maintaining this dialog. The first decision to be made about the stadium will be the orientation of the field. Since the majority of seating at minor league stadiums is located around the infield, home plate will be located toward the northwest corner of the site, allowing the outfield to open up to the urban environment and allowing the seating to provide a visual and audio barrier between the stadium and the railroad tracks and interstate. Furthermore, this orientation will allow the city skyline and the rest of the urban environment to become a

The stadium's orientation provides spectators sitting around the infield an expansive view of the Arena District and a view of the Columbus skyline in the distance.

As the stadium is pushed towards the western edge of the site it begins to engage with the adjacent building, proving a unique space for luxury box-seats and conventional stadium seating.

The program challenges the boundaries of the site as some outfield seating is placed on the rooftops of buildings that are on the other side of Nationwide Boulevard, providing spectators with a unique viewing experience.
backdrop to the activity that is going to take place on the field as the game is viewed from the seats surrounding the infield.

Also, baseball is a sport that is not contained within a set of boundaries like other sports, evident in the very nature of home runs and the fact that it is the goal of many baseball players to hit it “out of the park.” Therefore, the program for the stadium will question and challenge the preconceived notions of how a stadium should interact with the urban environment. As the stadium is pushed towards the western edge of the site, it will begin to engage the surrounding buildings, particularly the Buggyworks. Not coming to the building at a right angle, some of the seating will be removed along the right field line as it meets the building. Here, the building will serve as spaces for luxury box seating and media production, while the seating that was removed will be replaced with seating on the roof, providing a unique spectator experience. This technique will be utilized further as some outfield seating will be located on the rooftops of buildings that are on the other side of Nationwide Boulevard, an approach similar to that of Wrigley Field in Chicago, Illinois where bars and restaurants around the stadium provide rooftop seating for patrons to watch the game. This will also ensure that valuable land resources are not being overtaken by a particular component of the stadium program that will only used during a limited number of days throughout the year.

The technique of challenging the boundaries of the site emphasizes the space between as the stadium program begins to expand into and encompass the urban environment. This space between will consist of the quality design of public spaces that

Terraces, plazas, and outdoor dining will provide a unique view of sunken field.

A new public plaza will replace an existing parking lot, supplying the urban environment with a public gathering space and creating a postulation-oriented connection between the new stadium and Nationwide Arena.
will mitigate the relationship between the stadium and the city. The stadium will be sunk into the ground eight feet, allowing the public spaces immediately surrounding the stadium to become prime viewing areas for a baseball game. Two public spaces on either side of the stadium will also provide entry plazas into the stadium from Nationwide Boulevard and Neil Avenue. And as players hit home runs, these public spaces will become an integral part to the game.

As the field is located towards the western edge of the site, much of the eastern half of the site along Neil Avenue will be available for a larger public plaza. Here a series of terraces will gently navigate the topography of the site and also provide sitting space. The inclusion of water features will also add points of concentration in the space, as well as cause a psychological cooling effect on hot summer days. Additionally, a restaurant within this plaza will provide a continuous use for the space, while its outdoor seating areas will engage the outfield wall of the stadium to offer diners a view of the game. This plaza will be an extension of the new plaza that is to be located on the other side of Neil Avenue, which will replace the existing surface parking lot adjacent to Nationwide Arena. This even larger space will serve as an urban gathering space for people who visit, work in, or live in the Arena District. It is also a space where markets and festivals can take place, or where public art exhibitions or other civic events can be held. Together, these two spaces will provide a pedestrian-oriented connection between two buildings that will anchor the Arena District.

Essential to this connection is the architectural treatment of Neil Avenue, where a broad crosswalk, created by the linear connections established earlier, will provide a direct connection between the two spaces. Similarly, as the program of the stadium expands across Nationwide Boulevard, architectural consideration will be paid to the street. Here, the brick paving that exists on Nationwide Boulevard will be extended westward across Neil Avenue to give a pedestrian characteristic to the space. Furthermore, during game days, any vehicles moving along this section of the street will be in danger of being struck by home runs. Thus, automatic bollards will be introduced into the street to restrict vehicle access and transform the street into an extension of the plaza that is located on the eastern half of the site during games.

This idea of adaptable space is important to ensure that the public space will be required to navigate the vehicular circulation along Neil Avenue and Nationwide Boulevard.
the stadium remains a participatory component within the urban environment beyond the 72 days per year that it will host baseball games. The playing surface will be artificial, allowing the general public to utilize the field without threatening the integrity of the game. This will also allow for the proper infrastructure for an ice skating rink to be installed on the field during the winter without destroying a natural surface, providing the city with the opportunity to perform activities in the urban environment throughout the year.

While the presence of the five programmatic layers will add to the vibrancy and activity of the Arena District, the architectural treatment of these elements and the relationship between them is what will determine the participatory nature of the stadium within the urban condition. This relationship will first be realized by recognizing the overlying geometries of the project, then using these geometries to influence the architecture of each programmatic layer. Furthermore, just as the sport of baseball challenges the idea of boundaries, the entities of the stadium will also challenge the boundaries of the site, engaging with the surrounding buildings through spectator seating. And as the stadium engages the urban environment, the design of the space between will become that much more important in the project’s efforts to create a stadium that is participatory in the urban environment by establishing a relationship between the user, the architecture, and the city.
What the preceding investigation attempts to show is
the manners by which cities may utilize an iconic piece of
architecture, such as a stadium, to further add to the vibrancy
and diversity of the urban condition by creating an architecture
that becomes participatory in the urban environment, rather than
rejects it. For decades urban theorists have argued that, through
design, architects have the ability to influence the degree to
which architecture can become participatory within the urban
environment by influencing the amount of diversity that it supports.
Jane Jacobs’ call for mixed uses and Karen Franck’s and Quentin
Stevens’ argument for loose space are extensions of Jan Gehl’s
categories of necessary and optional activities, respectively; while William H. Whyte’s study of urban spaces in New York City
illustrates how Gehl’s category of social activities are influenced
by design. And as Gehl, Jacobs, Franck, Stevens, Whyte, and
Kevin Lynch all describe design techniques that can nurture
a relationship between the user, the architecture, and the city,
they each acknowledge the ability of the users to recognize the
capabilities of the architecture, creating new spatial experiences
and unique spatial relationships. For them, it is the role of the
architect to encourage this interaction to develop through design,
rather than to restrict it by rejecting the diversity and vibrancy
of the urban condition. This design concept is illustrated in the
architecture of several examples of urban spaces throughout the
world.
The squares of Savannah, Georgia show how public spaces
in the presence of mixed uses can lead to a vibrant and dynamic
urban environment, while Portland, Oregon’s Pioneer Courthouse
Square demonstrates how a quality designed public space in a downtown area is able to be used for a variety of different activities and events throughout the year. And as sports facilities, particularly baseball stadiums, are used for a limited amount of the year, the FUZI Pedestrian Zone in Bolzano, Italy offers adaptable design features to reduce and enlarge the scale of the space, responding to the pronounced high and low tourist seasons.

While the most recent generation of stadium design is using the iconic status of sports facilities for the purposes of gentrification in blighted urban areas, such as Oriole Park at Camden Yards in Baltimore, Maryland, many of them disrupt any participation that the stadium may potentially have with the surrounding urban environment by not being incorporated into the larger urban fabric of mixed uses and quality public spaces. Instead, these facilities, many of which are publicly funded, remain empty and isolated from the urban condition, turning large impenetrable facades towards the city and restricting any participation it may have with the urban environment.

The design methodology presented here does not presume to offer a totalistic solution to the problem of stadiums rejecting the urban environment; it merely demonstrates the mechanisms that the architect, only one component of a vast system of people that bring a sports facility to fruition, can utilize to create a stadium that is participatory with the urban environment. By acknowledging the work of respected urban theorists who have offered insight into the urban condition and learning from existing examples of urban architecture that create a relationship between the user, the architecture, and the city, stadium designers, civic leaders, team owners, and the diverse citizens who populate our cities can begin to recognize that, as the stadium becomes one of the most important public spaces for cities in the twenty-first century, the challenge is to improve the quality of the space between the stadium and the city and integrate this new generation of stadium design into the wider urban fabric as a living parts of the city.
Bibliography


