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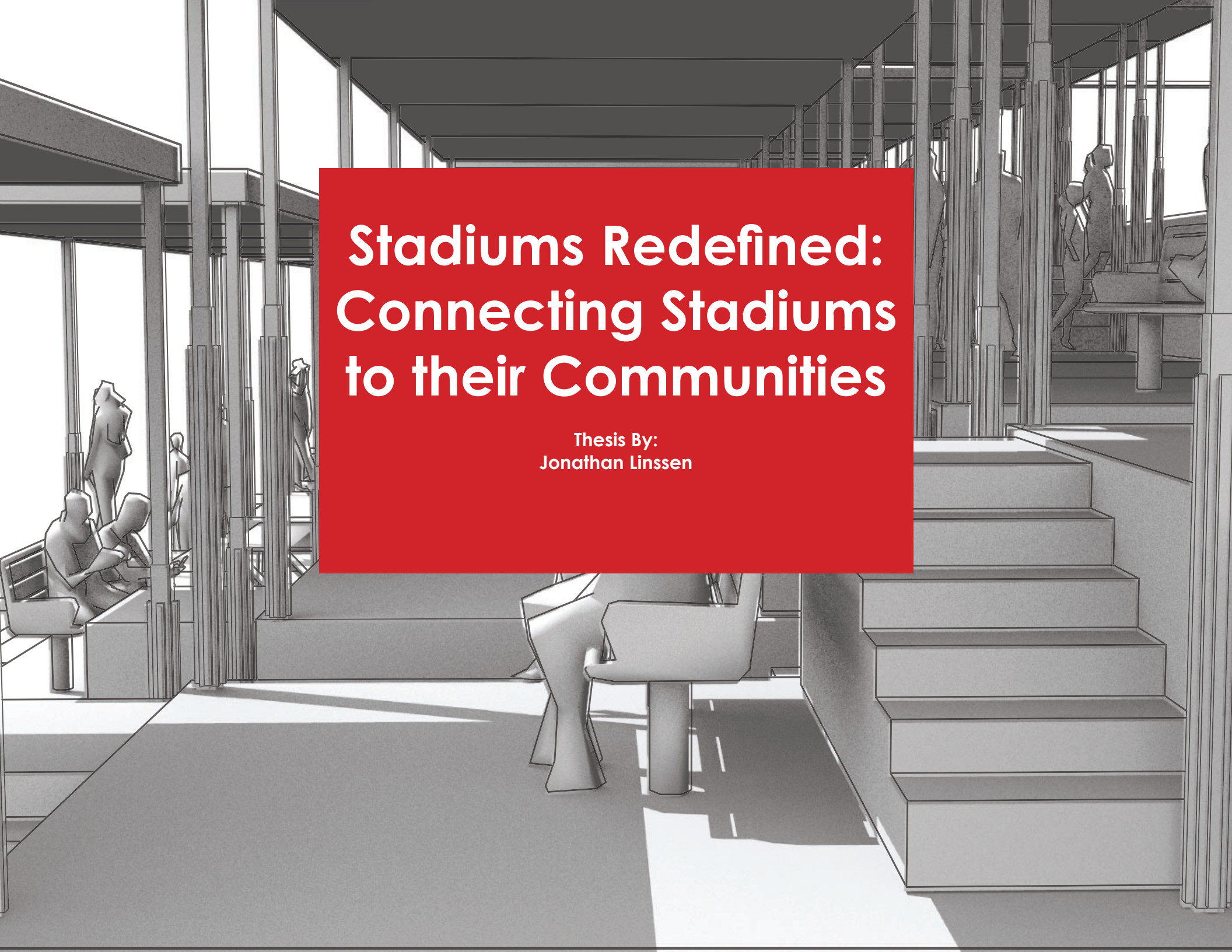
Stadiums Redefined: Connecting Stadiums to their Communities

Jonathan Linssen



Stadiums Redefined: Connecting Stadiums to their Communities

Thesis By:
Jonathan Linssen

Stadiums Redefined:
Connecting Stadiums to their Communities

Approval of Thesis Research
Project book is Presented to:

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by

Jonathan Linssen

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Chapter 1: Proposal

Abstract

Stadiums are currently overspecialized structures that have limited uses during offseason of the sports they are built for. Additionally, stadiums tend to be extremely enclosed, cutting off its surroundings and greatly limiting any interaction it could have with the surrounding community it is set into. The aim of this thesis is to create a new typology for stadiums by looking at how a stadium can become something that provides more to the surrounding community and transcend its current design limitations.

Often placed in urban areas, stadiums are often surrounded by communities that could have used the space taken by the stadium for various amenities to better suit the community. Instead of being a relatively empty husk on most days of the year, stadiums have the innate potential to provide more to surrounding communites in part to the shear amount of space it has available to itself. Through the activation of these spaces, new and varied programs can be added in to provide new amenities while also not impeding on the base function of the stadium during game days or the occasional concert that might be held there.

One such stadium here in Georgia would be that of old Turner Field in Atlanta. As of now, GSU has now bought it for use as a football field and they are starting to create new campus amenities for students around the stadium. This presents the golden opportunity for this stadium to be more, as it can be equiped with the capability to provide to the numerous students of GSU who would be living and going to classes directly next to the stadium.

Figure 1.1: Concept render merging the Roman Colusseum and Forum with a stadium

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Chapter 2: Background

Potential Impact

The impact of a typological evolution for stadiums would be massive, as it would give opportunities to both stadiums still in use and stadiums that have fallen out of use new life to them while also allowing them to fulfil new purposes to the communities around them. For instance, the Arena da Amazonia located in Manaus, Brazil is almost completely fallen out of use[13] yet it takes up a huge amount of space within the urban context of the city. With some adjustments to the typology, the stadium in Manaus could see new life that also acts as a form of revitalization to the community that surrounds it, giving this stadium that currently sits dead within a city a chance to give new life to that same city.

Figure 2.1: Shows aerial image of Arena da Amazonia[13]

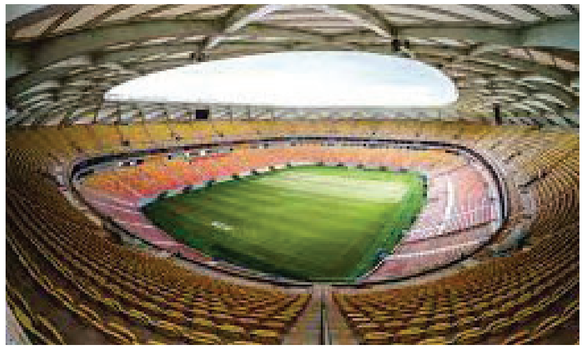

Figure 2.2: Shows image from the bowl looking at the field of Arena da Amazonia[2]

Figure 2.3: Shows aerial image of Oakland Stadium by BIG, shows integrated park space[6]

Figure 2.4: Shows exterior image of Washington Stadium by BIG, shows integrated wave pool that doubles as ice skating in the winter[15]

This would not be just applicable for abandoned stadiums that no longer hold games. Part of the importance of this typological evolution would be to preserve the normal functions of the stadium while enhancing it with additional functions, which can be seen during game day or during the offseason depending on the specifics and spatial needs of said function.

Transformative spaces, for one, is something that comes to mind that could be implemented into these stadiums. During game day, these stadiums would have such spaces stored away in most cases in order for the game to run unimpeded, but during the offseason, these spaces can be deployed in a number of ways to create new programmatic and experiential opportunities to visitors that may come see the stadium during this stretch of the year. New uses can include features like pop up markets (which could combat food deserts), affordable housing pods, clinics, and many more high impact changes that could bring new opportunites to surrounding communities.

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Chapter 3: The 4 Founding Principles

Principle 1: Mixing and Nesting of Scales

The focus with this principle is to create a structure that is intentionally designed to handle a variety of group sizes. This would help divide some of the massive spaces up within the stadium and help to facilitate impromptu uses within these spaces, as most stadiums, as of now, do not properly address differing scales and allow for the colossal scale of the structure to dominate the design.

The idea behind this is to help make massive segments of space that currently make up the typology of stadiums have more natural spaces within them that are fitting for the amount of people that will be inhabiting them. While a massive open space is good for large crowds trying to enter the building, what if there were smaller groups waiting on members of their party before going into the stadium? What about people who wish to rest in the plaza and take a moment to eat while getting some fresh air before the game? Breaking the scale of such spaces would help make these spaces more natural to a greater variety of people that enter them.

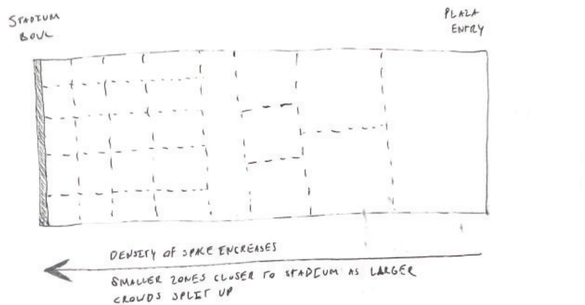

Figure 3.1: Shows sketch of plaza space being split for smaller groups as it reaches the stadium

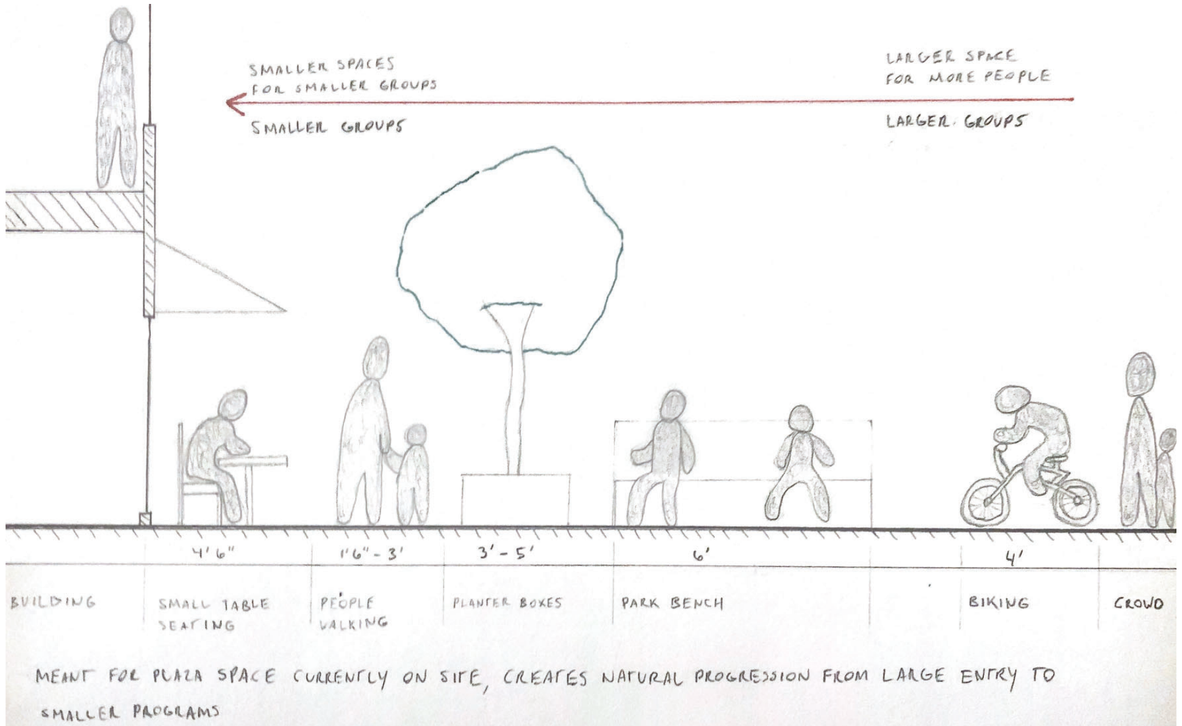

Figure 3.2: Shows sketch of setting with varying scales shown within it, acts as a zoomed in sectional look to a part of Figure 3.1

This sketch shows the thought process of how the plaza would be designed with various scales in mind. Larger groups move into a more open area and as they approach, that larger group naturally breaks into smaller groups centered around different smaller spaces close to the stadium.

Principle 2: Layered/Overlapping Program

The focus here is to allow a given stadium to have new programs placed within it while preserving the original program of the stadium. In some cases, these overlapping programs may not be accessible during larger scale events at the stadium (game day, concerts, etc.) while others will remain a permanent feature to the stadium, allowing for redesigned stadiums to have a more diversified program even during its usual event schedule seen during the sports season.

As seen on the right, each diagram shows how each configuration was generated from the Open Studio concept[5], starting from the left side of the diagram. Each subsequent diagram displays how the studio space was pushed and molded in ways for new overlapping spaces to be created in said configuration. The transformability of the space shown in the diagrams act as a perfect road map of how additional programming can be added into space thanks to its transformative nature, as each diagram shows a new layout that can be tailored to a unique program type.

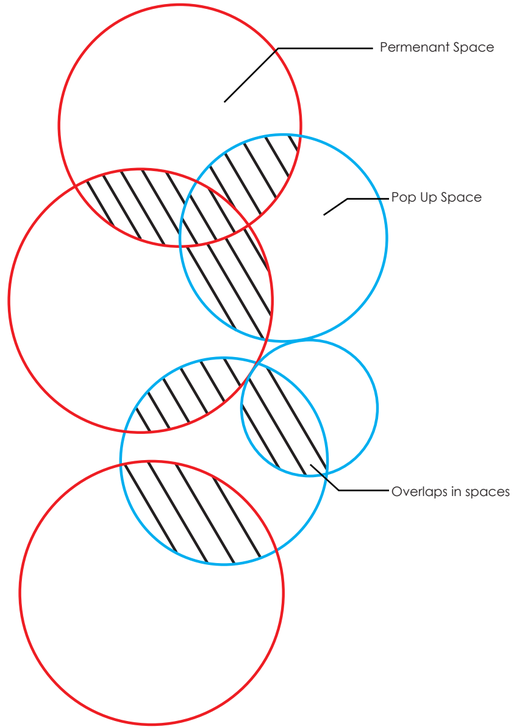

Figure 3.3: Shows diagram of how programs, both permenant and temporary, can overlap within a space

Form Diagrams of Wyly Theater Configurations

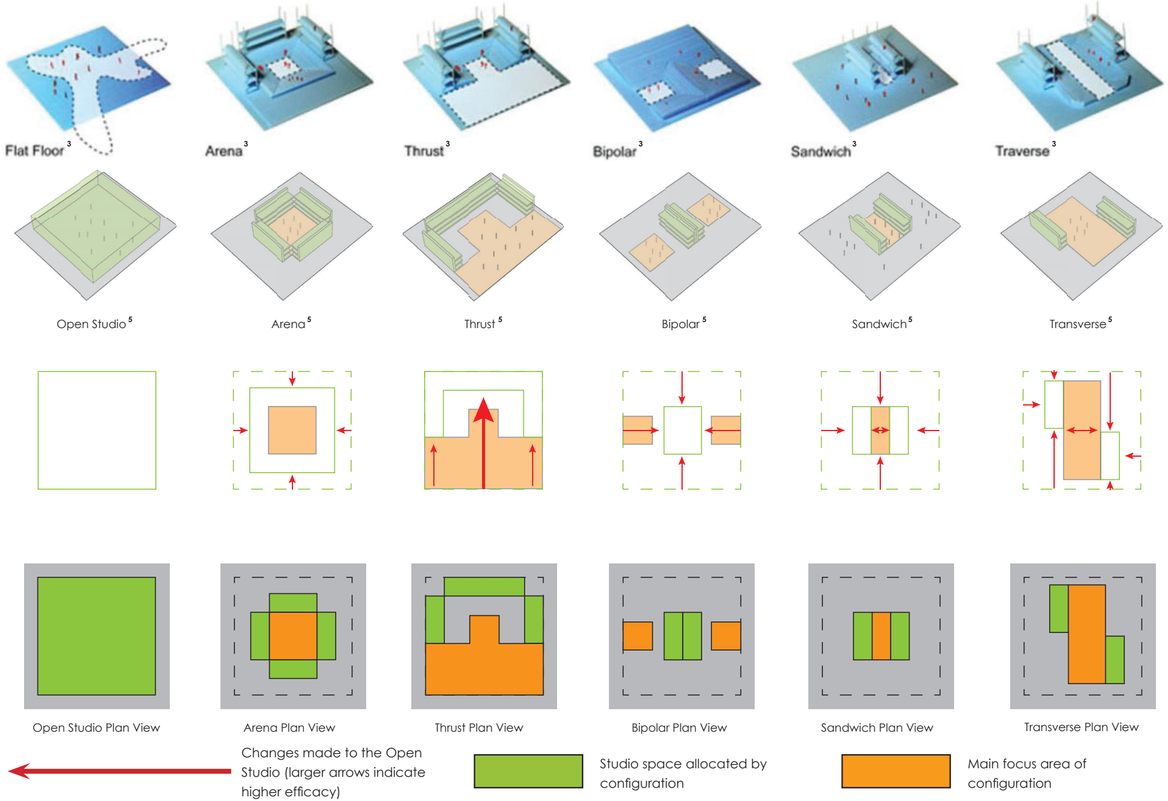

Figure 3.4: Shows diagrams of transformative space within Wyly Theater, showing how many possible layouts can be organized into a single space

Principle 3: Anticipating Impromptu Uses

The focus here is to give the stadium a more natural feel to how the spaces are used, similar to a park or a plaza. This will also allow for the space to appeal to a multitude of people with different wants (some may want to rest, others may want to skate on the terrain, etc.). Similar to the notions presented in Principle 2, the idea here to adjust spaces within the stadium to better fit the needs of people visiting the stadium. These changes are not as permanent as other changes and are meant to constantly be shifting and changing as people interact with these spaces.

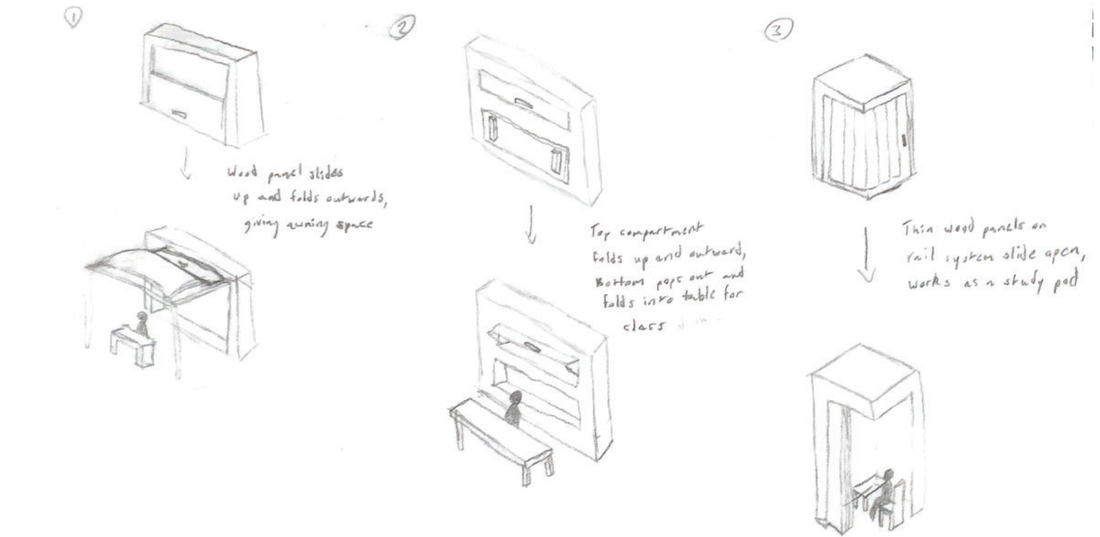

Figure 3.5: Shows sketch concepts of transformative components with varying programmatic specialties

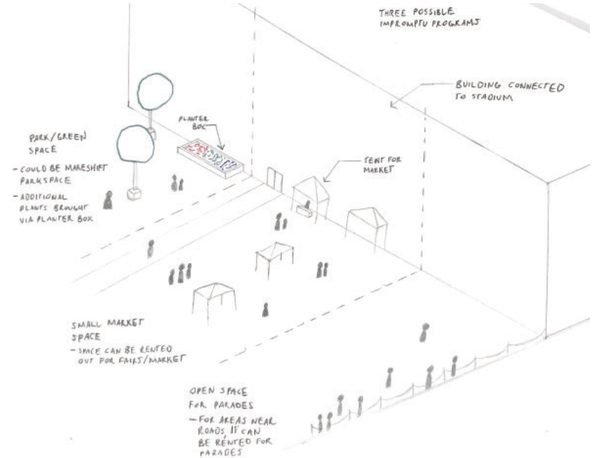

Figure 3.6: Shows sketch concept of one large open space being able to host multiple different uses within the given space

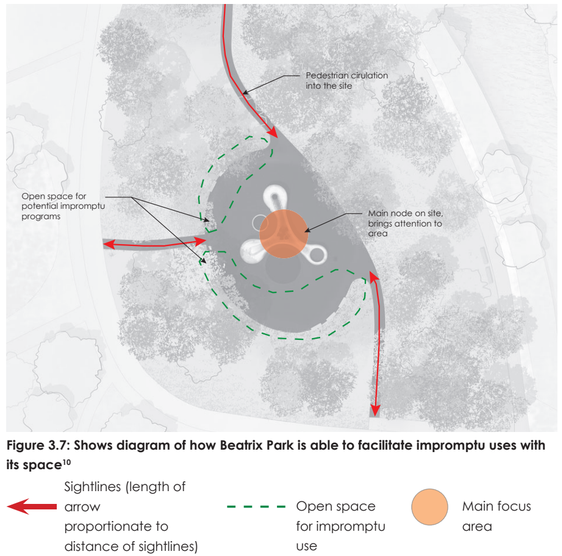

Figure 3.7: Shows diagram of how Beatrix Park is able to facilitate impromptu uses with its space[10]

Above, to the left is a sketch showing a few of the possibilities for a space that is prepared for impromptu uses. Communities with access to this space could use it in a variety of ways, whether it becomes temporary park space or rented out for events like fairs, parades, markets, etc. On the right is a diagram showing Beatrix Park, which has given space around its main node for such impromptu uses.

Principle 4: Multi-Directional Orientation

The focus here would be to create new ways for stadiums to change their orientation. As of now the main focus is on the field inside of the bowl, but what if it also had parts that focused on the boundary and its relation to the surrounding community? Or what if the focus point ot the stadium, being the field itself, lost its point of focus and instead the stadium bowl became the focal point during the offseason, showing a shift in focus that correlates with a shift in usage of the stadium itself?

This shift in orientation not only acts as a play on how stadiums usually operate, being that the attention is always on the field, but it also acts as a way to create a new experiential quality for visitors of the stadium while in the offseason, as it flips the traditional stadium focal points on its head.

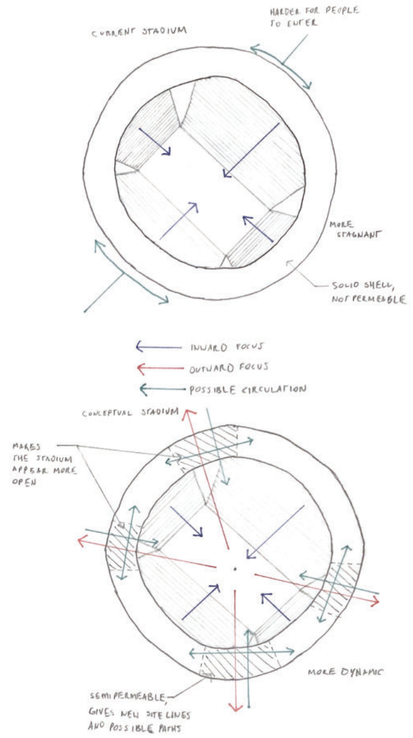

Figure 3.8: Shows sketch concepts of a modern stadium juxtaposed with a concept stadium

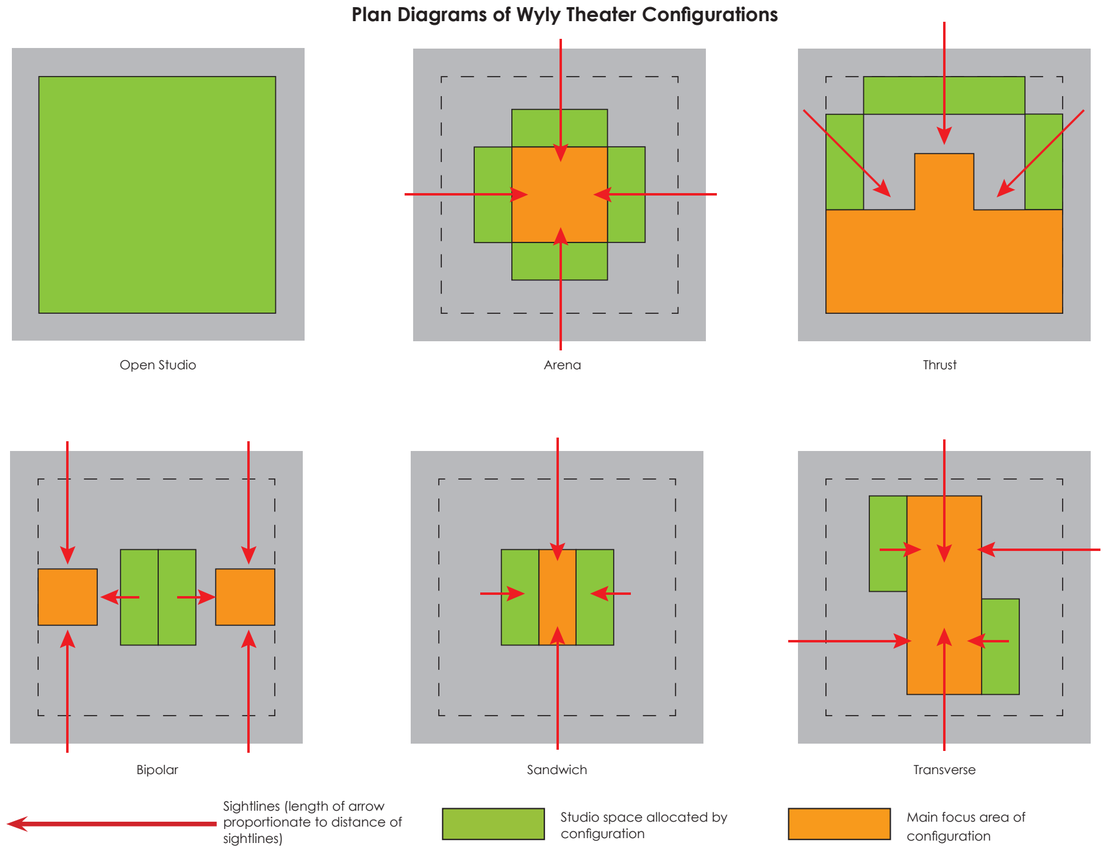

Figure 3.9: Shows diagrams of how the different orientations of Wyly Theater are able to introduce varying levels of orientation to the space

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Chapter 4: Precedents and their Connections to the Principles

Precedent 1: Barceloneta Market

Barceloneta Market is a location in Barceloneta, Spain, that, in addition to the market, has an open plaza space in front of it that is a part of the design[8]. This plaza space is designed in such a way as to create programmatic pockets that vary in size that are meant to break up the large scale of the plaza into smaller spaces that better accomodate differing group sizes that enter the space as they move towards the marketplace.

Figure 4.1: Exterior shot of Barceloneta Market[8]

These spaces are not only reinforced by differing colors of concrete being used within different areas but is also reinforced by how the trees are planted in the space, which help to create intimate pockets of space in the smaller zones and larger areas where the trees are not as densely packed.

Figure 4.2: Aerial view of exterior of Barceloneta Market[8]

Figure 4.3: Base image showing aerial shot of plaza in front of Barceloneta Market[8]

Figure 4.4: Shows Shape Diagram overlayed on the base image showing how the scale of the plaza is split up[8]

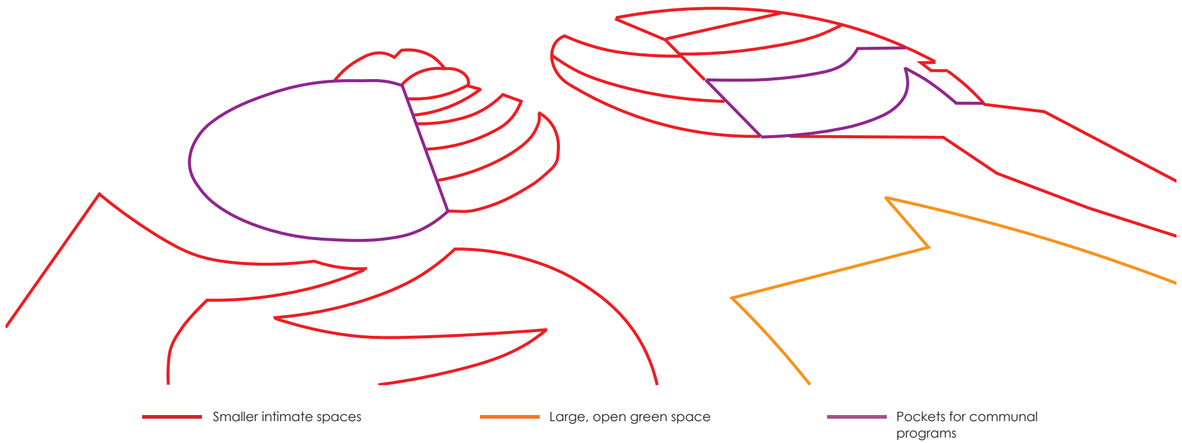

Figure 4.5: Shows Shape Distillation Diagram showing the designs of the shapes for the varying group sizes it plans to accommodate

Precedent 2: Wyly Theater

The Wyly Theater is a project in Dallas, Texas that has a stage space that can transform into a variety of different shapes and sizes according to what kind of shows are being held there[11]. Originally there were up to six differing designs for this stage set up on the first floor of this building[3].

Each orientation would take up the first floor, showing that on the first floor alone, there were numerous configurations that all overlapped eachother, yet were only accessable one at a time. Each orientation also had different ways that the audience would view the stage, with each configuration having different angles and sightlines that would be unique to that specific stage orientation.

Figure 4.6: Exterior shot of Wyly Theater[11]

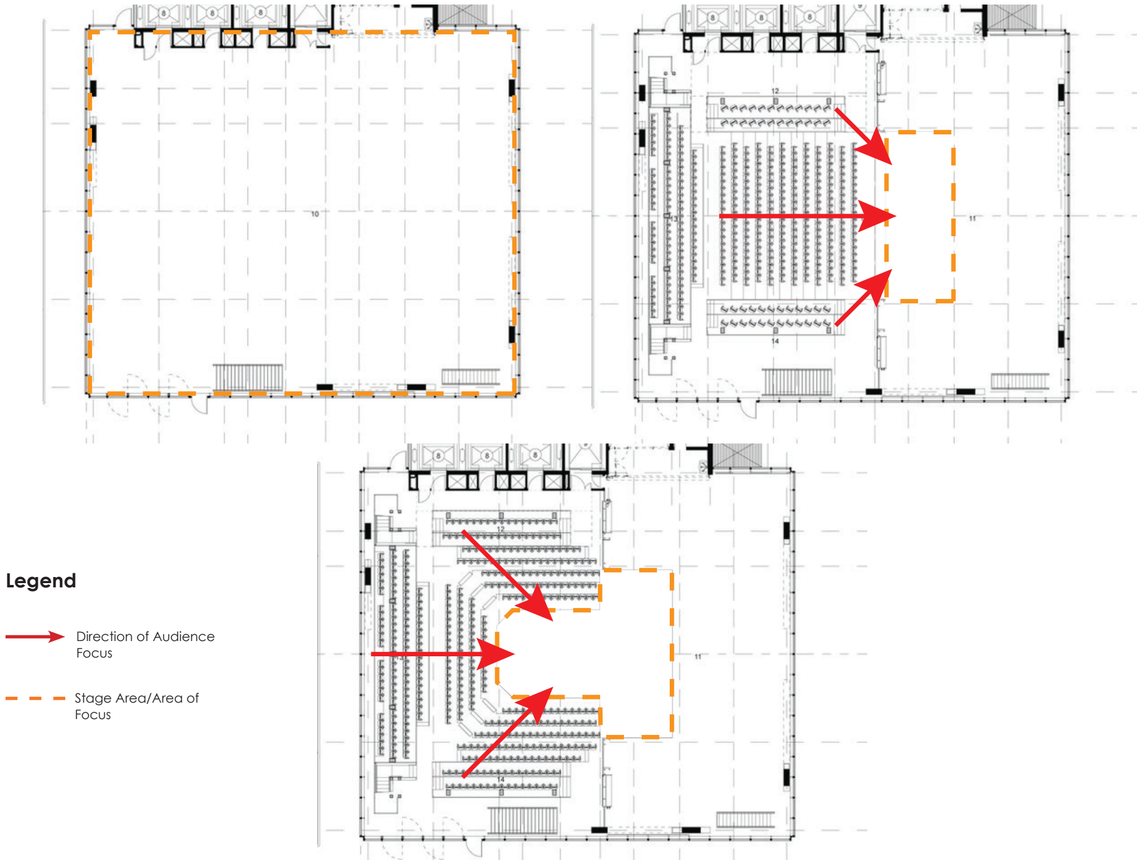

Figure 4.7: Diagram showing how each orientation provides new orientations in the given space[11]

Precedent 3: Beatrix Park

Beatrix Park is located in Amsterdam in the Netherlands and is a small park space with a playground situated in the middle of it[10]. Within this space are zones that offer space for varying uses that can be used however each individual wants to use them[10].

For the case of the spaces situated within the playground, it offers numerous ways for kids to be able to play and use said spaces for whatever games or competitions they want to have. As for the space surrounding the playground, benches are provided along with ample space for whatever possible use the parents of the kids at the playground need. In other words, the entire park is set up rather well for potential impromptu uses that may occur, regardless of whether said uses come from the children in the playground space or from the parents in the surrounding space.

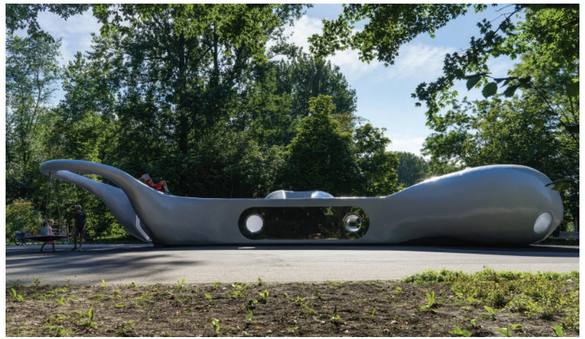

Figure 4.8: Exterior shot 1 of Beatrix Park[10]

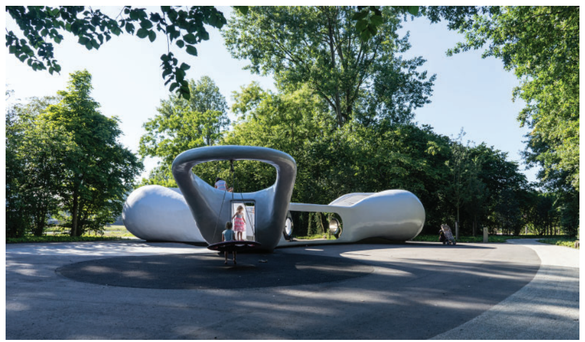

Figure 4.9: Exterior shot 2 of Beatrix Park[10]

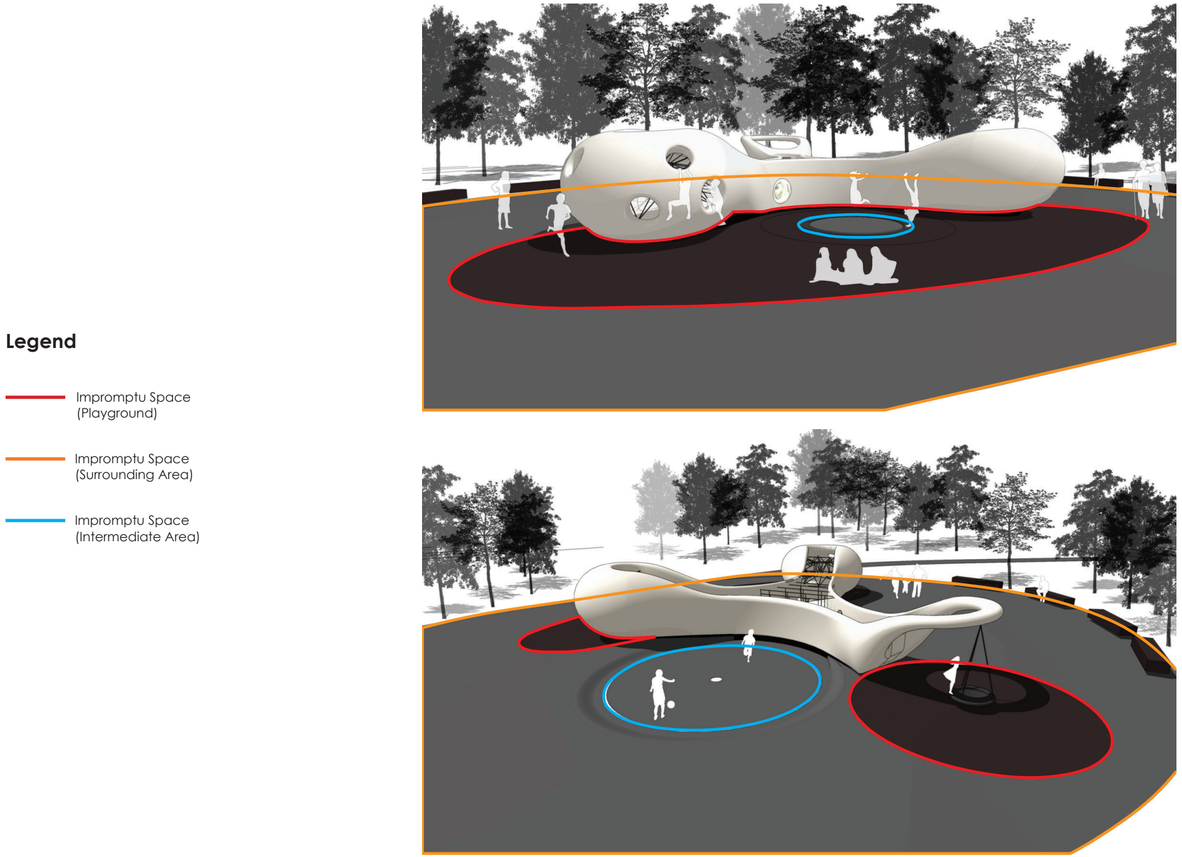

Figure 4.10: Shape Diagrams showing varying areas of impromptu uses within Beatrix Park[10]

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Chapter 5: Chosen Site - Why Turner Field

Why Turner Field?

Turner Field is a strong candidate for such a typological redesign due to its positioning within Atlanta and due to some of the development that is occurring around it. Looking at Figures 5.1 and 5.2, one can start to see that this stadium is situated in a spot devoid of affordable housing. In this island of no affordable housing sits the stadium, and I think this gives the stadium the opportunity to provide more affordable housing to this community.

On the next page are Figures 5.3 and 5.4, which show potential layouts for the development that is in planning for the area surrounding the stadium. As of now, GSU owns the stadium and is starting to add new facilites to the campus surrounding the stadium. Now that there will be an influx of students near the stadium, this gives an opportunity for the stadium to provide more amenities to the campus development planned to go around it.

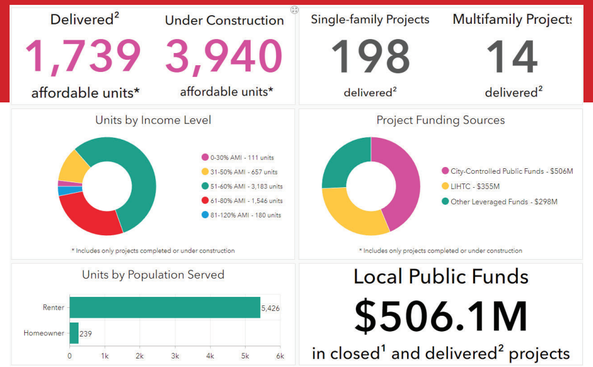


Figure 5.1: Graphs giving stats on affordable housing on site around Turner Field[7]

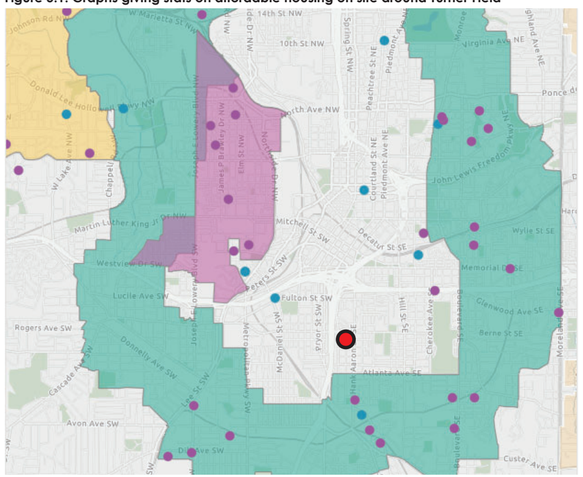


Figure 5.2: Map detailing stats about affordable housing around Turner Field (seen as red dot)[7]

Figure 5.3: Site plan for possible site development for GSU[4]

Figure 5.4: Site plan for possible site development for GSU[5]

In addition to being located in an area lacking affordable housing and student housing, the old Turner Field stadium is located in the middle of a food desert within Atlanta. This further gives rise to a potential typology that this stadium can evolve into, one where it can supplement the lack of housing and proper food while also preserving its use as a stadium as GSU begins to develop around it. The stadium would then be able to act better as a campus amenity during the offseason and would allow for it to still draw the attention of students and visitors alike as it would continue to be a popular node during a time that most stadiums would see a steep decline in overall usage.

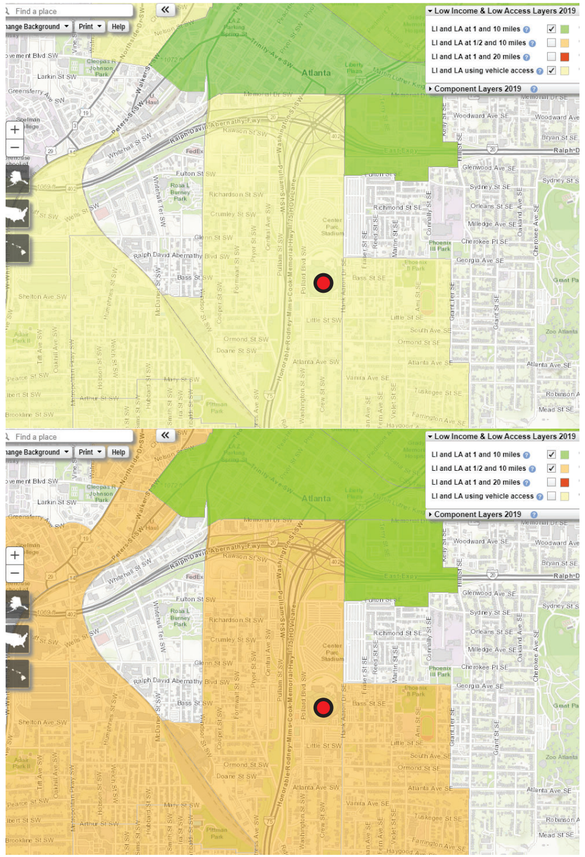


Figure 5.5: Food desert maps of the site surrounding Turner Field (seen as red dot)[1]

6

Chapter 6: Programming

New Potential Programming

Due to the location of the stadium being in a pocket devoid of affordable housing, being located directly in the middle of a food desert, and also being directly next to upcoming developments for the GSU campus, there are numerous things that Turner Field can offer as a part of this redesign. From pop up markets with fresh food to campus ammenities to housing, both affordable units and dormatories for students looking to live on campus, there is a wide variety of different programs that can start to fill up some of the space this stadium can offer during the offseason.

The main priority will be to create a design that will fix both the food desert issue and the housing issue, so both of those will be of higher priority. New ammenities for incoming students will also be looked at and placed within the stadium to attract more students, with such ammenities including things like an open gym and cafeteria to help make the stadium a more cohesive part of a student's given day.

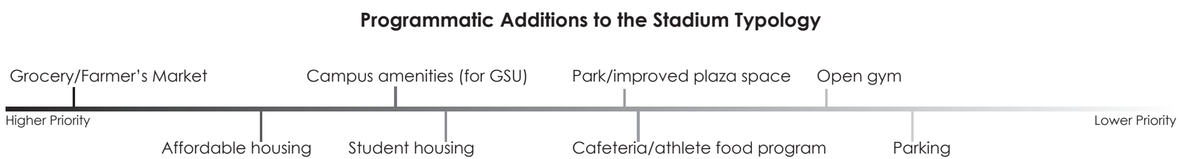


Figure 6.1: Program Diagram showing general priorities for additional programs to the typology

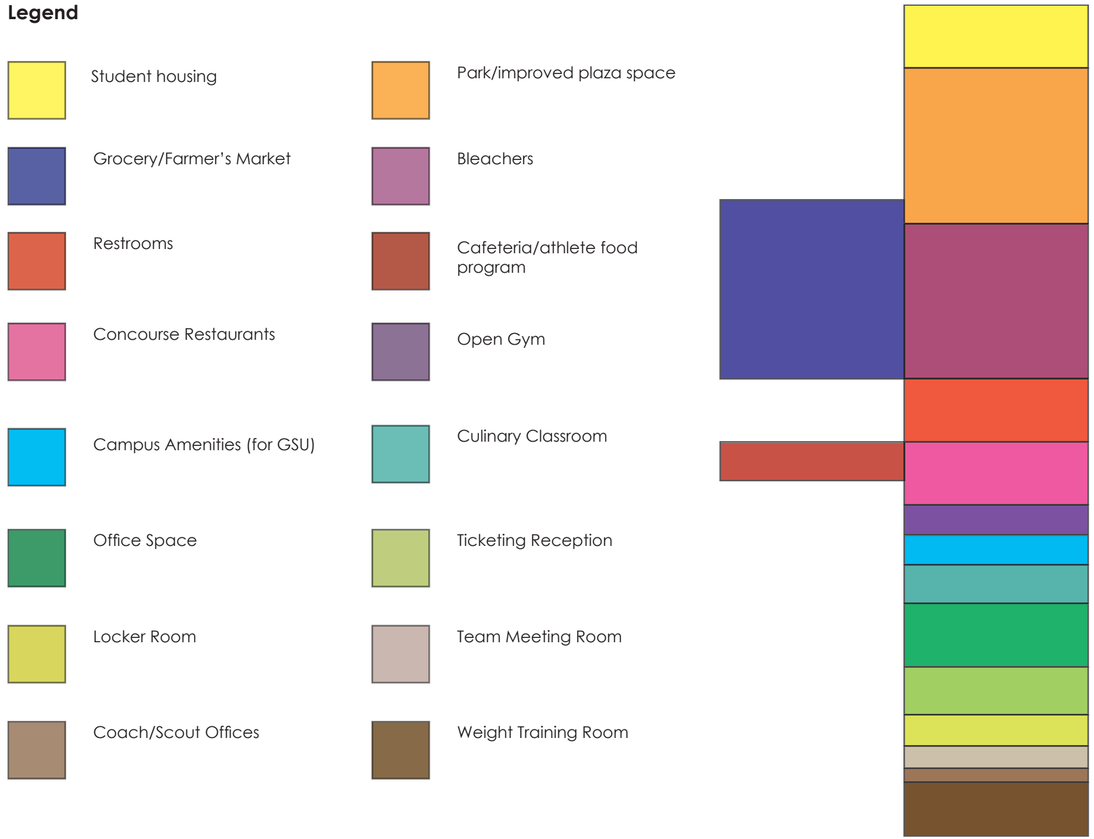


Figure 6.2: Program Diagram representing each unique program shown as a corresponding color with a size proportional to the amount of square footage it will take up within the stadium. Programs bumped out to the left are considered overlapping programs to the ones to the right of it

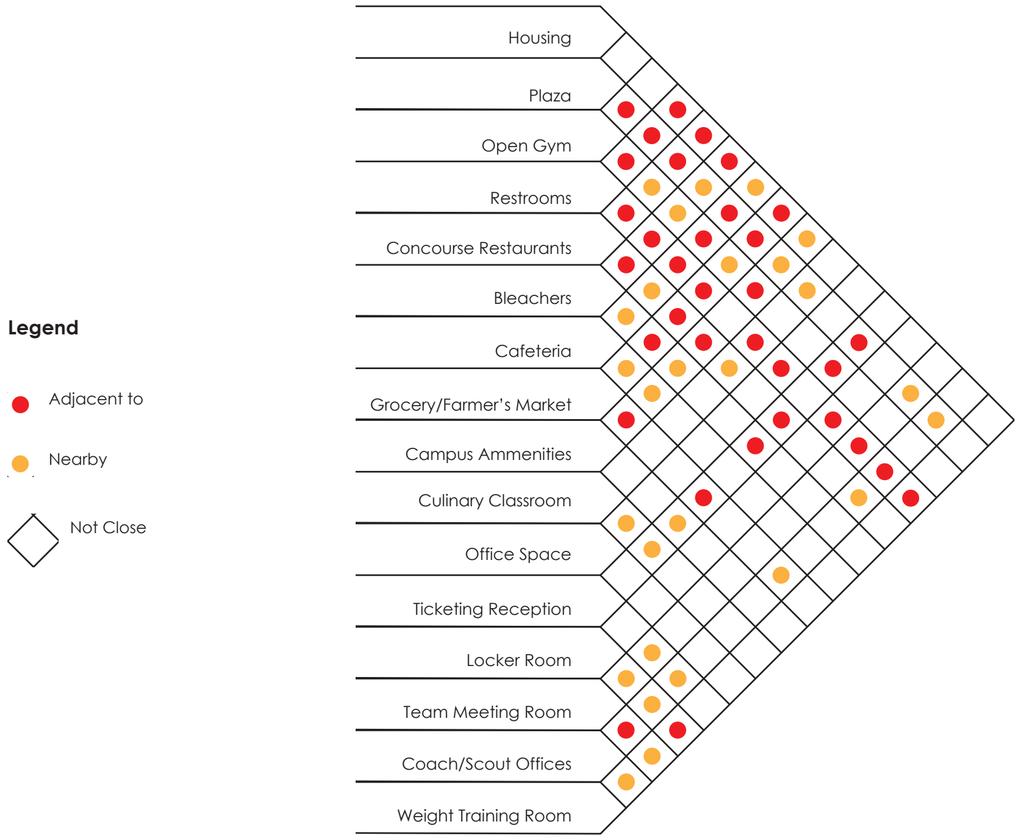


Figure 6.3: Program Adjacency Diagram, shows generally how close every program will be to eachother on site

There are two main portions of the stadium that are being used as focal points for the application of the prinicples and, by extention, the programming. The adjacency diagram in Figure 6.3 shows two main clusters for the programming that correspond to the two focal points, with some of the programming being used as a connective piece between the two. These two focal points come from the North Section and the West Section respectively, with the North Section holding the cluster that consists of the offices, culinary classes, player facilities like the locker rooms, weight training room, etc., and the ticketing reception while the West Section holds the cluster for most of the concourse restaurants, housing, open gym, cafeteria, etc. The programming that acts as a connective tissue between the two would be the plaza, the concourses, and the farmer's market (as it exists in both the plaza and the bowl of the stadium).

The clusters seen in each focal point also have a general specialization depending on the people that will commonly use those sections of the building, as the North Section offers much more for both players and operators of the stadium while the West Section offers more to visitors of the stadium or residents of the residential units within the stadium.

7

Chapter 7: Project Design

Site

The site offered some challenges in terms of design, but ultimately was left in the same orientation due to the incoming development from GSU. As seen denoted by purple in the diagram on the right, there is a large amount of development occuring for GSU's campus that is happening primarily to the north and east of the site, so keeping the plaza and main entry to the stadium on the north side felt crucial to the design. As it is now, the orientation of the stadium is well suited to work together with the incoming changes to the site around it.

On the following page is the site plan, followed by a diagram displaying residential areas and green spaces followed by a diagram of average vehicle circulation on site.

Figure 7.1: Diagram showing site development range adjacent to Turner Field, shows orientation of plaza and pedestrian entry into said space[12]

Figure 7.2: Site plan, Turner Field depicted in the middle[12]

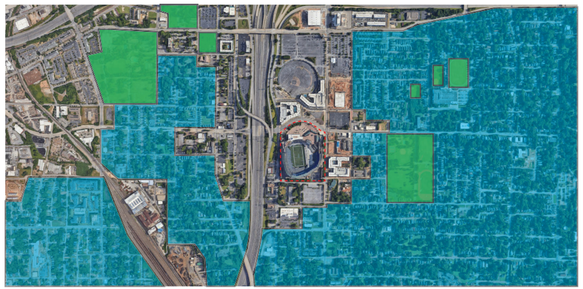


Figure 7.3: Diagram showing residential regions with green space noted[12]

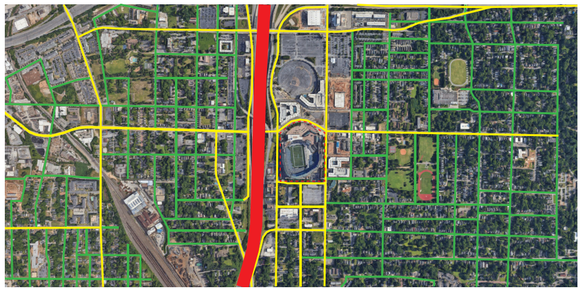
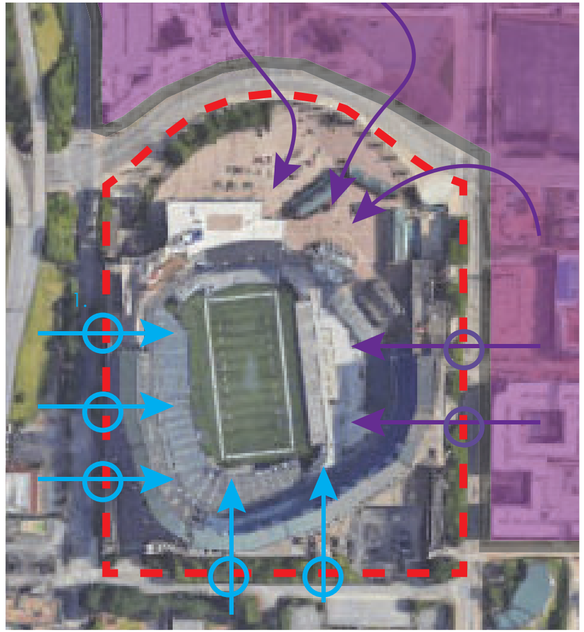


Figure 7.4: Diagram showing vehicle desity + circulation in and around the site[12]



Legend

- Site Boundary
- Pedestrian Circulation from outside of development
- Pedestrian Entry from development
- Pedestrian Circulation from development
- Pedestrian Entry from outside of development
- Area of GSU development

Figure 7.5: Diagram showing new entries (denoted by the circles) made around the stadium border to make the walls more permeable to pedestrians[12]

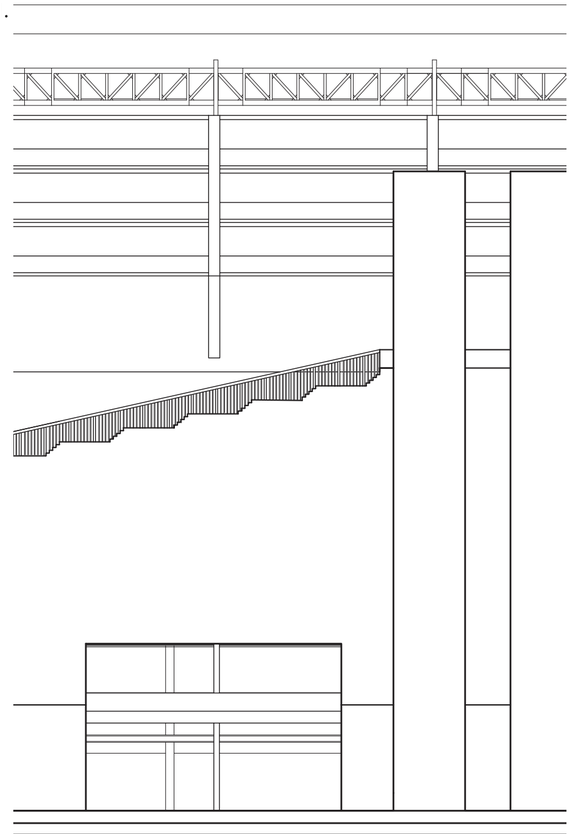


Figure 7.6: West Elevation showing one of the entrances (denoted with the blue 1. on the west side of the stadium)

In Figure 7.5 on the far left, entry ways into the stadium have been widened to help increase overall permeability of the exterior wall of the stadium to help with multidirectional traversal into and out of the site. The blue arrows show available entries on sides of the stadium not directly adjacent to the new development planned in the area by GSU, while the purple arrows show said entrances for the new GSU developments.

Figure 7.6 shows one of these openings along the western side of the stadium. These larger openings come from widening the previous gates (seen in Figure 7.7 on the right) that were there to create larger, more welcoming openings that will lead visitors into either a concourse or into the open gym portion of the stadium during the offseason.

Figure 7.7: Original west side gates, new entrances combine the two to create a wider entry/exit point for the first floor[14]

Section 1 with Accompaning Details

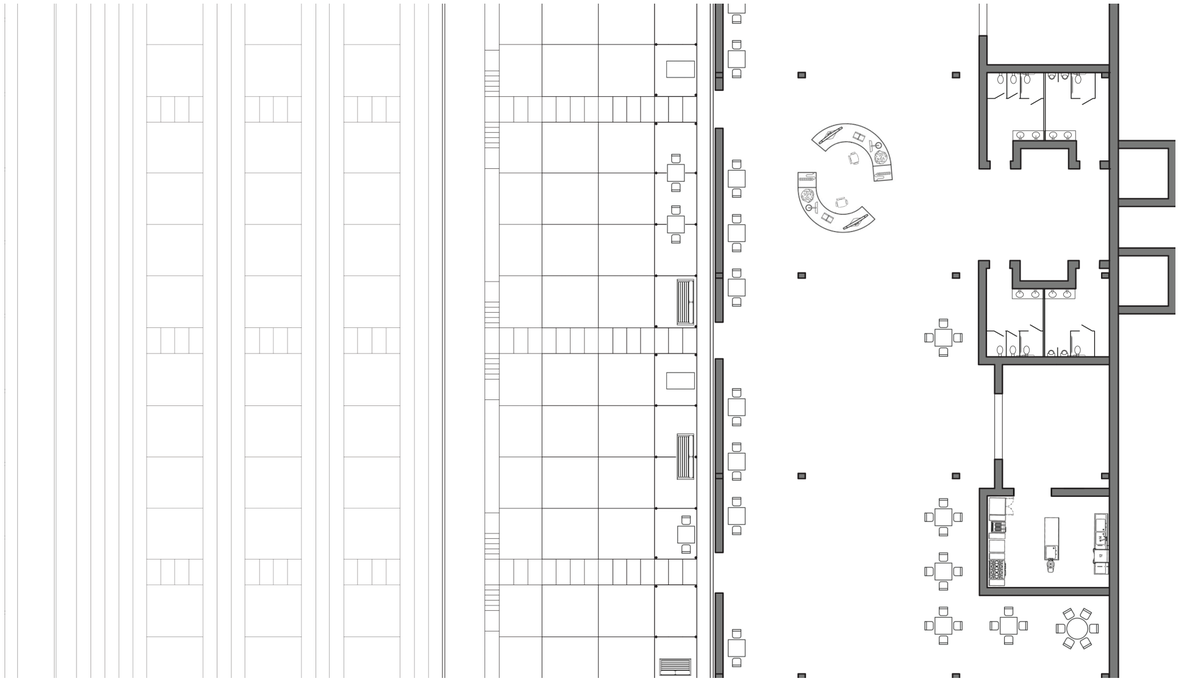


Figure 7.8: West Section (Section A) Second Floor Plan

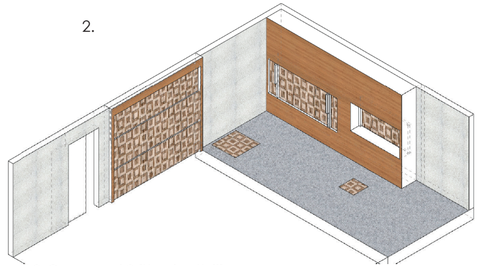


Figure 7.9: Component 2 (Housing Unit)

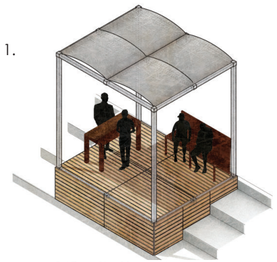


Figure 7.10: Component 1 (Pop Up Market)

Figure 7.11: West Section (Section A)

Component 1

This compent here was designed to act as a storage device for pop up awnings that could be used as impromptu market spaces. These spaces could also act as spots for small groups to meet up at and tailgate in the plaza, allowing these spaces to be adaptable throughout the day as different crowds move through the stadium plaza. Each component holds two units for the awnings, and each unit also has storage for collapsable chairs and tables people may use as well when the unit is in use.

This component acts as a response to the food desert problem seen on the site, and it helps to provide potential market space for pop up markets.

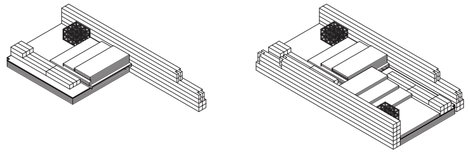


Figure 7.12: Diagram showing how Component 1 parts can stack together into small stacks

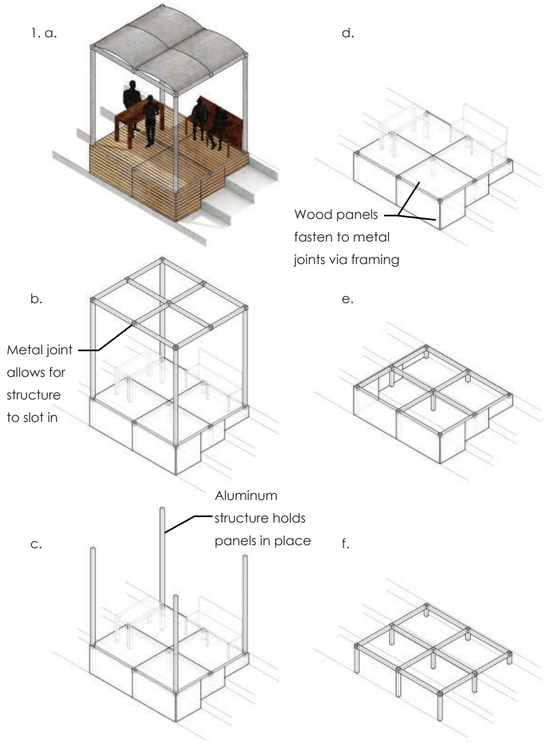


Figure 7.13: Diagram showing how Component 1 breaks down into parts

Figure 7.14: Render 1 showing the functions of Component 1

Component 2

This compent here was designed to act as a storage device for pop up awnings that could be used as impromptu market spaces. These spaces could also act as spots for small groups to meet up at and tailgate in the plaza, allowing these spaces to be adaptable throughout the day as different crowds move through the stadium plaza. Each component holds two units for the awnings, and each unit also has storage for collapsable chairs and tables people may use as well when the unit is in use.

This component acts as a response to both the affordable housing issue and also has the capability of acting as student housing. Unlike the first component, this one would be active all year round and would be a permenant addition to the stadium to help fix the housing issue in the area.

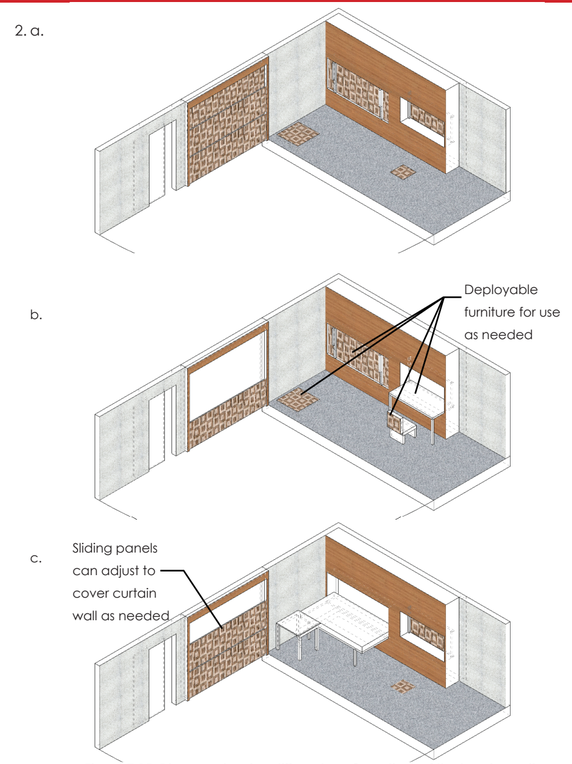


Figure 7.15: Diagram showing different configurations of the housing unit

Figure 7.16: Render 2 showing the functions of Component 1

Section 2 with Accompaning Details

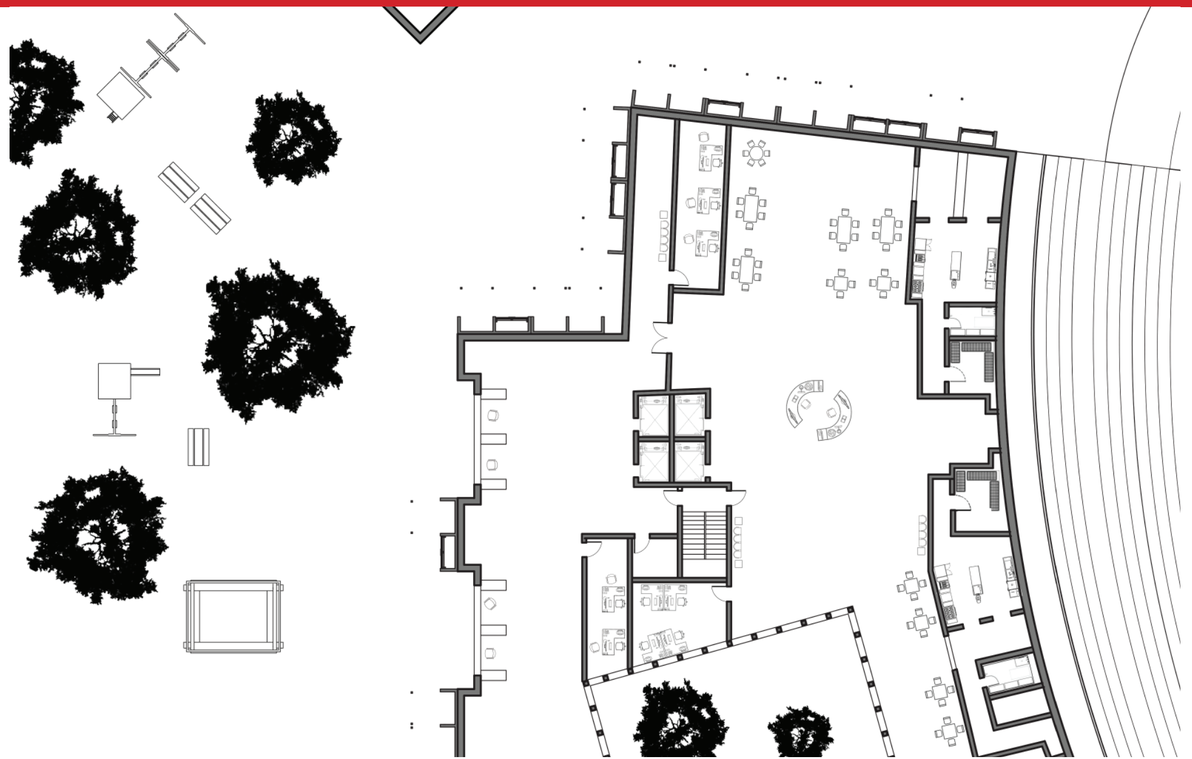


Figure 7.17: North Section (Section B) First Floor Plan

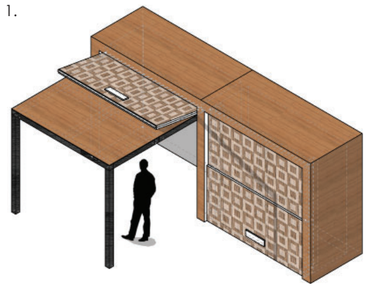


Figure 7.18: Component 1 (Pop Up Market)

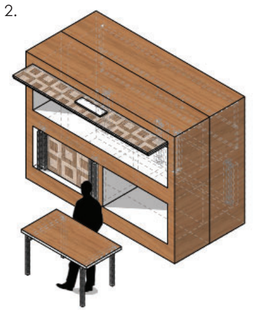


Figure 7.19: Component 2 (Culinary Station)

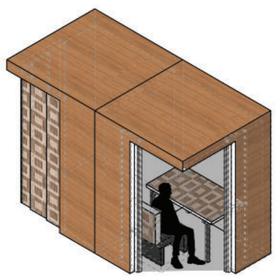


Figure 7.20: Component 3 (Single Pods)

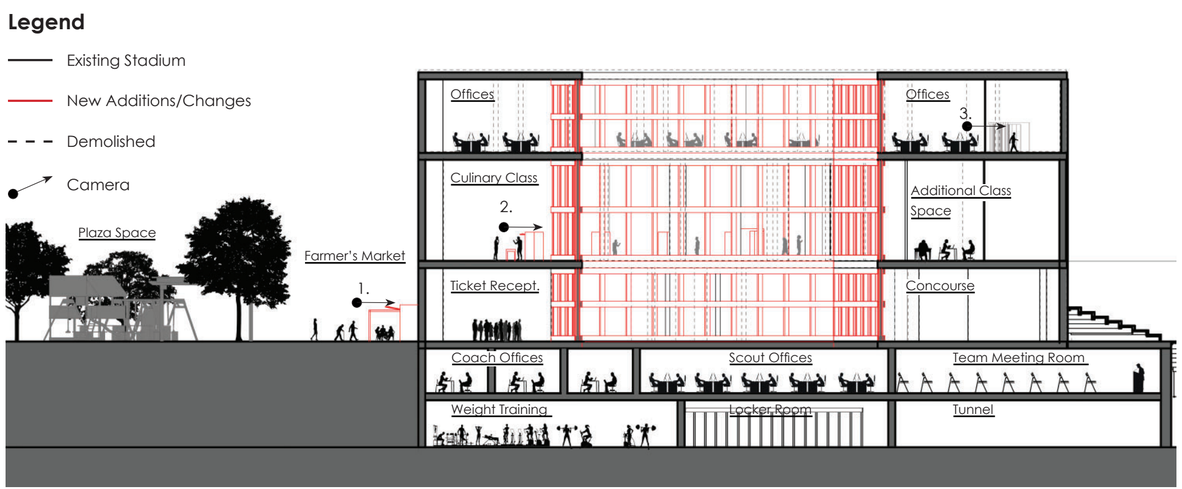


Figure 7.21: North Section (Section B)

Component 1

This component here was designed to act as a storage device for pop up awnings that could be used as impromptu market spaces. These spaces could also act as spots for small groups to meet up at and tailgate in the plaza, allowing these spaces to be adaptable throughout the day as different crowds move through the stadium plaza. Each component holds two units for the awnings, and each unit also has storage for collapsable chairs and tables people may use as well when the unit is in use.

This component acts as a solution to the food desert issue as well as possibly acting as a part of campus ammenties on site. Some of these booths can be a part of a pop up market within the plaza while some can be help desks for people and students trying to navigate the stadium, as well as be covered outdoor spaces some people could use as they enjoy the atmosphere of the plaza.

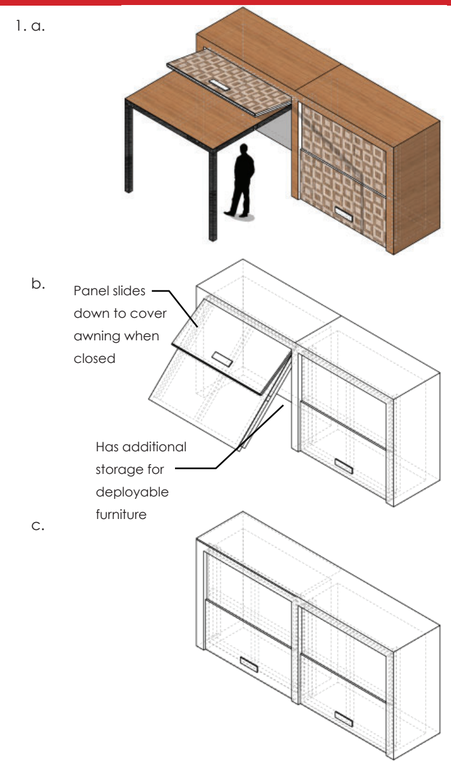


Figure 7.22: Diagram showing different configurations of Component 1

Figure 7.23: Render showing the functions of Component 1

Component 2

This component was designed for the culinary class, allowing it to act as both storage for utensils needed for class as well as a space each student can use to properly hone their craft when in class. Each component has two foldable tables as a part of it, allowing for two students to work within each component, and it also possesses a shared storage area for necessities needed for the culinary program.

This component is a part of the solution for the campus ammenities, as this component would see use within the culinary classroom for GSU within the stadium.

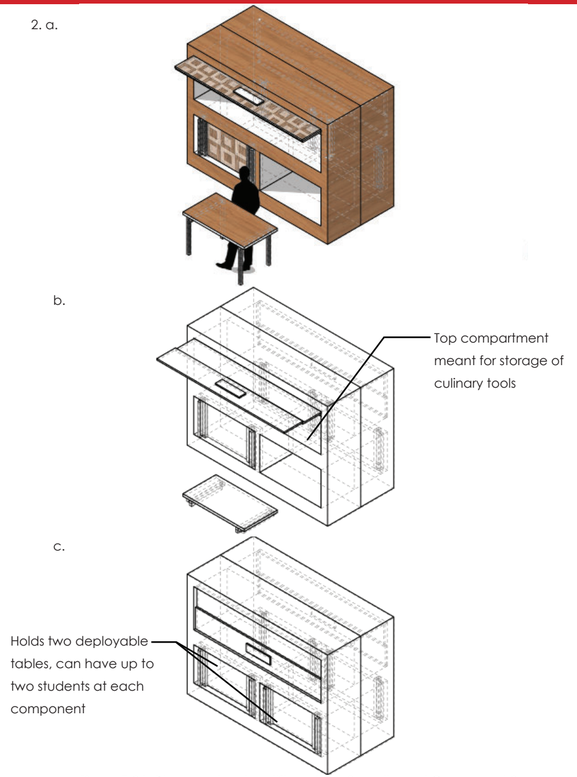


Figure 7.24: Diagram showing different configurations of Component 2

Figure 7.25: Render showing the functions of Component 2

Component 3

This component was designed for the office spaces, and it is meant to act as a private space for individuals that need to take a phone call, need privacy to focus on a specific task, or for those that just need a moment alone to relax while on break. Each component is comprised of two pods, with each pod having a collapsable desk and chair within it.

This component is an additional ammenty given to office workers of the stadium for quality of life purposes. These spaces add diversity to the spaces within the office and allow for phone calls or remote one-on-one meetings to be handled appropriately without disturbing the environment for other workers.

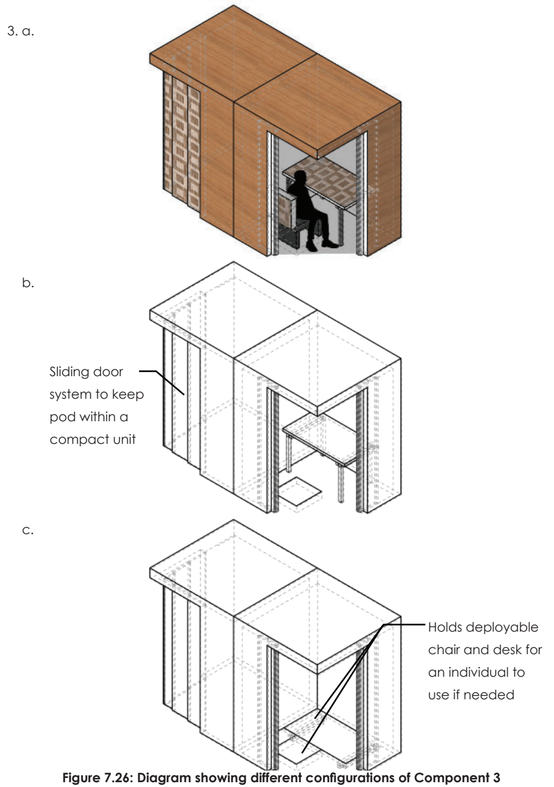


Figure 7.26: Diagram showing different configurations of Component 3

Figure 7.27: Render showing the functions of Component 3

Figure 7.28: Render showing the office spaces on the Third Floor

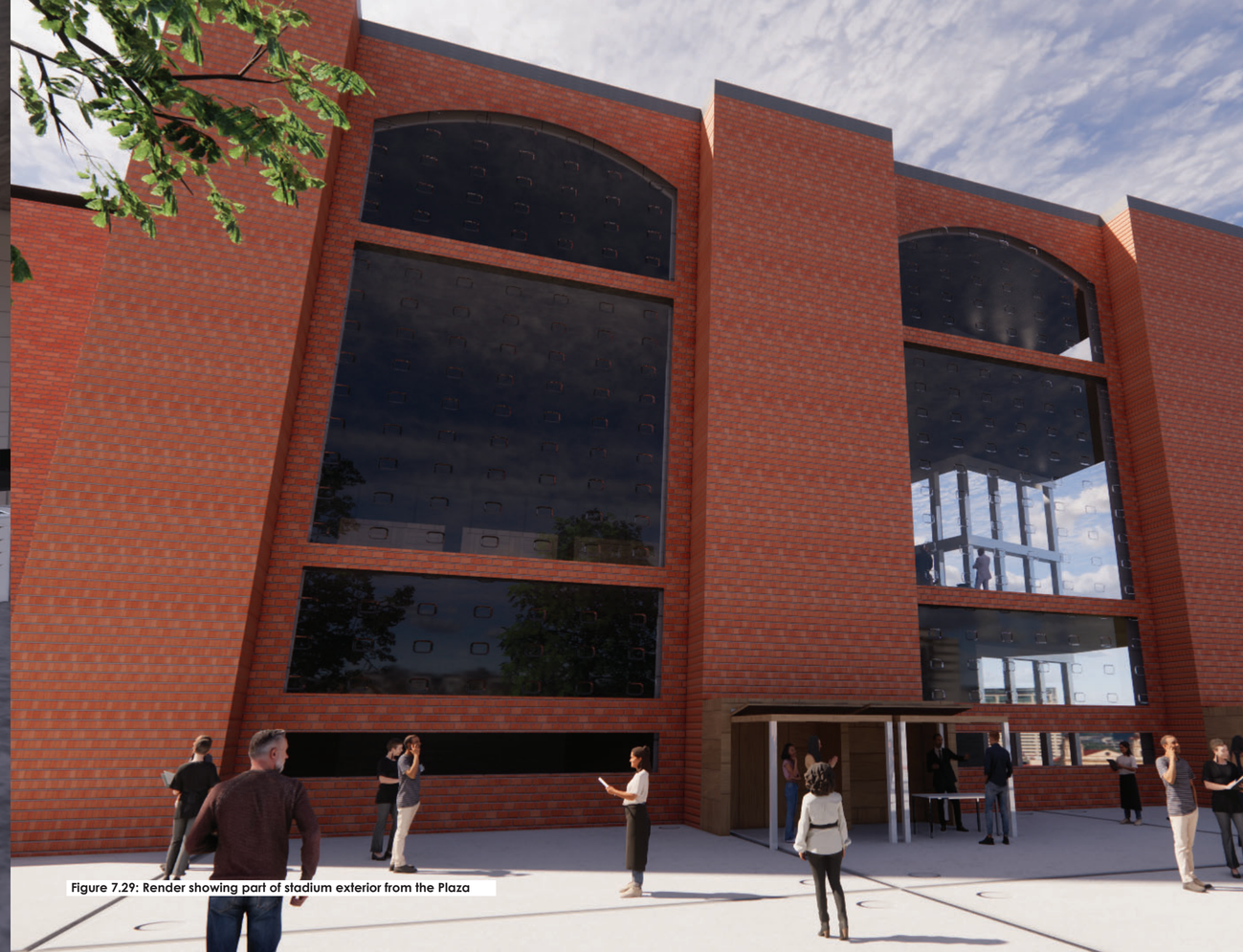


Figure 7.29: Render showing part of stadium exterior from the Plaza

8

Chapter 8: Findings and Reflections

Thesis Findings + Overall Reflections

Based on the findings, there appears to be solid evidence for the stadium typology to have more function to it during the offseason. Stadiums are rich in terms of the amount of space they have, so the ability to add more function to stadiums, especially during the offseason, will be based on how exactly this rich amount of space is used to its fullest extent. As seen throughout the design, the approach taken was through modules or components with transformative properties that can augment the space they are located in, which would allow for this additional function to occur. Something that would be interesting to see would be if more permenant approaches could work within a given stadium, would it be possible to take a preexisting stadium and add more permenant functions and programming to it while preserving the original function of the stadium?

While there is definintely a good bit of upside tied to this thesis, more work will be needed to done to make it a fully viable evolution of stadiums as they are today. One issue that arises from this thesis is the notion of cost and how much exactly it would be to maintain such a large scale project that is constantly shifting and transforming day to day. Another concern could be public interest. Even with the number of ammenities added to the stadium and with the added development coming to the immediate area surrounding the stadium, there is no guarantee that people will feel the need to go to the stadium outside of residents living in the units provided or students in need of one of the ammenities within.

To the next scholar that decides to look into the stadium typology and how it can be changed for the better, as I mentioned preveiously, I would recommend looking into the possibility of a more permenant option for some of the functions I placed within my design to cover all bases of potential stadiums may have. If one is interested in continuing this research, I would recommend continuing to diversify the transformable components within the stadium and really challenge what additional functions can be added through them. This is by far one of the most challenging parts to this thesis, but to accompany that challenge, I feel that it has the highest possible ceiling of potential when it comes to innovating the typology. Lastly, to those who wish to do a thesis on stadiums in general and are looking at the redesign of one in particular, my advice would be to start early on locating the plans and sections of the stadium, and to even try getting in contact with the archtects of said stadium to see if they would be willing to help send some older drawings over to you. Without having done that myself and without the help of Dane Hawthorne of SLAM Coll, there would still be numerous details of the stadium I would not have been privy to when creating the model and moving into the design phase.

Even after all of this though, there still feels to be a high ceiling for a typology redesign for stadiums, and the thesis works to display such potential ceiling. It has been, all things considered, a fun experience looking into such a specialized typology and looking to see how it can be influenced through the inclusion of additional functions to make it a typology that can move past such specialization and into a realm where it can provide more than just entertainment to the community it resides in.

List of Figures

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