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Post-Olympic Stadium: Life Following the Games

Louis Lim

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Post-Olympic Stadium: Life Following the Games
Thesis Summary:
The Olympic Stadium is the most essential architectural piece to the Olympic Games. It is the first facility to be designed and is the core for planning of the Olympic Complex. The current trend shows host cities planning for post-Olympic usage, but only in terms of program. This current model creates disjunction between the stadium and its city because the lack of planning for citizen connectivity and displacement of people preceding the games. Atlanta’s Turner Field Stadium transformed from Centennial Olympic Stadium after the Games to house the Atlanta Braves for twenty years and will soon begin another life as home to Georgia State Panthers. Usage of post-Olympic stadia have made a positive impact on their host city due to its adaptability following the games. Implementing an adaptive or transformative stadium design, enables the stadium to foster a variety of programmatic functions and downsize to a more suitable capacity. This proposed stadium model will allow us to reimagine the notion of a stadium as a true public space by retaining the citizens within city and reintegrating the stadium into the city’s urban fabric. Since the Olympic Stadium is the first to be designed, it needs to be the first response in being a remedy to preventing an urban void.
I would like to thank my entire family for being patient with me on this long journey. The immense support that you backed me with was superhuman. Steven, you are like the younger brother that I never had and you have always been there with help no matter how large the task. For all I know, you are my brother. Wes, thanks for all the support and meals that you have supplied me with. Nothing is stronger than a brother’s bond.

Most importantly, I want to say thanks to my mother. My success was provided by her support. Mandy, you came to America with a dream of a better life for your children. Both of your sons are college graduates now. You can now say that the dream is being lived. She was able to be a mother without a husband and I was able to be a son without a father. Mom, we made it...
This work would not have been possible without the academic support of the Kennesaw State University Architecture Thesis Committee of Kathryn Bedette and Dr. Mine Hashas-Degertekin. Each member has provided guidance through the thesis studio and allowed me to further my curiosity in the architecture world. I am especially indebted to Dr. Hashas-Degertekin, who took on the challenge and accepted me as her thesis student after returning from another committee. I will never forget that I got to help you with a flat tire in the parking deck.

I would also like to recognize Professor Elizabeth Martin-Malikian. As my professor and mentor, she has taught me a great deal about architectural education and life experience throughout the years than she may realize. Her passion and quirkiness for teaching can always be felt through the studio air. I was fortunate enough to be led by her on educational trips to New York, New Orleans, San Francisco, and Las Vegas.

Lastly, I would like to thank Professor Kemp Mooney for helping me unlock my creativity. Kemp’s creativity knows no barriers and always questioned the norm. My favorite quote from him is, “Why not?” His media art class was my favorite class throughout the pursuit of the degree. It allowed me to relax and learn a lot about myself, while keeping sane from studio. I will always remember your storytelling and how big your smile is while eating ice cream. Kemp Mooney you are a sweet soul.
CONTENTS

Section I: Theorem + Section II: Practicum
SECTION I

Design Theorem + Design Analysis
Chapter 01  Design Theorem
post + olympic + stadium

: a prefix, meaning “behind,” “after,” “later,” “subsequent to,” “posterior to.”

: an ancient Panhellenic festival held every fourth year and made up of contests of sports, music, and literature with the victor’s prize a crown of wild olive.

: a modified revival of the ancient Olympic Games consisting of international athletic contests that are held at separate winter and summer gatherings at four year intervals —called also Olympics.

: a place or venue for outdoor sports, concerts, or other events and consists of a field or stage either partly or completely surrounded by a tiered structure designed to allow spectators to stand or sit and view the event.
Foreword by the President of the International Olympic Committee, Jacques Rogge

For the Fifth Edition of Stadia: The Populous Design and Development Guide

Stadia are the homes of sport. Each one is designed to effectively respond to the special requirements of its use; be it sport specific, multi-sport, or multi-purpose. They can also be highly symbolic, reflecting the mindset of the times and the culture of the team, city or event with which they are associated.

For the Olympic Games, stadia are the visual icons and the backdrop to the memorable images of the competitions. The concept, the design, and the choice of materials, must guarantee the best conditions for the athletes. In the spirit of the Olympic Games, the Stadia should embody culture and art as well as sport.

Stadia design is continually developing to keep pace with changing technology and with the social, economic and environmental standards of society. It is clear that neither stadia, nor sport, can live in isolation: they have to be part of everyone’s life and society. The Stadia should be integrated into an urban development plan that respects the city’s post-Games requirements in order to ensure a responsible and positive legacy. Their design and construction must reflect the increasing importance of sustainability.

Designing and developing sports stadia, both new and the upgrading of existing, is a demanding task for architects and their design teams. I am grateful to the authors for their valuable contribution to this endeavour, by creating a new fifth edition of this established reference book.

Jacques Rogge
+ 1.1 Abstract

Legacy Creation

Olympic stadia are the most essential architectural piece to the Olympic Games. The Olympic Stadium is the first facility to be designed and is the core for planning of the Olympic Complex. The current trend shows host cities planning for post-Olympic usage, but only in terms of program. This trend disrupts the relationship between the stadium and its city because the lack of planning for citizen connectivity and failure to address people that have been displaced. Usage of post-Olympic stadia imposes a positive impact on their host city due to its adaptability following the Olympic Games.

Implementing an adaptive or transformative stadium design can enable the stadium to foster a variety of programmatic functions and downsize to a more suitable capacity. This proposed stadium model will allow us to reimagine the notion of a stadium as a true public space by retaining the citizens within city and reintegrating the stadium into the city’s urban fabric. Since the Olympic Stadium is the first to be designed, it needs to be the first response in being a remedy to preventing an urban void.

The Olympic Stadium is the focal point of the Olympic Games spanning sixteen days by hosting the opening and closing ceremonies within host cities. For many host cities, the Olympic Stadium is more than just an architectural piece that houses spectacle. They are symbolic of national strength and pride, but most importantly an integral piece within a city’s urban fabric. The stadium is often overlooked to be reintegrated within a city as a post-Olympic legacy for the local community. By understanding the significance of a stadium in relation to the city, how can we prevent these post-Olympic artifacts from desolation?

“Where the crowds gather, history is made.”

Spiro Kostov
1.2 Problem Statement

Context

The post-Olympic Stadium is one of the greatest gems to be conceived from the Olympic Games and the quality of life for the city following it depends on how we can reuse the stadium when the torch goes out. In this study, strategies for adaptability will be analyzed for application to an existing post-Olympic stadium.

The urban fabric is where the stadium makes a negative impact: the displacement of local residents preceding and the urban voids proceeding the Olympic Games. It not only creates a physical void, but also a social void. Neighborhoods can be divided and the local community can be displaced. This thesis seeks to create a stitching of the voids both physically and socially. The study will revitalize the stadium and present it back to the local community in a state that is more accessible and usable.

According to Hiller, the history of Olympic development is “strewn with untold instances of design, location, and financing issues that pushed ahead based on a sense of urgency about the imminent event that required quick action (2003).”

Another major problem is that the stadium are financial leeches if “limited booking for the stadium generates continuing losses, running at thirty-eight million per annum six years after the event” (Glendinning, 2006).
1.3 Displacement of Local Residents

Involuntary Move

Becoming a host city can bring a lot of stardom to an international city. It can also be the catalyst for an infrastructural upgrade consisting of updated transportation systems, building of new highways, and paving new roads. However, many problems come with the responsibilities of hosting an international spectacle such as the displacement of locals and creating urban voids because of an unused stadium.

One of the many problems associated with an Olympic stadium is the socio-physical impact that incurs when preparing for the Olympic Games. The displacement of people can be defined as when a household is forced to move by conditions impacting on the dwelling and its immediate surroundings according to Pitts and Liao (2009). The effects of displacement include, but are not limited to: removal of families, involuntary resettlement, and evictees without replacement housing. No international city is immune to displacing its local communities. A report from Centre on Housing Rights and Evictions (COHRE) points out that “the Olympics Games have displaced more than two million people in the last 20 years, disproportionately affecting minorities such as the homeless, the poor, Roma and African-Americans.” In addition to the locals being displaced, many cities have had issues correlated to the initial displacement such as written arrest citations, raised prices of housing, and drastically decreased the availability of public housing. COHRE (2007) listed Atlanta to be one of the cities to have experienced all of the above listed, in an excerpt from their principal findings detailed report page 113 titled 2.3 Atlanta:

“Approximately 30,000 poor residents were displaced from their homes in Atlanta by gentrification, the demolition of public housing, rental speculation, and urban renewal projects associated with the Olympics. Approximately 2,000 public housing units were demolished and nearly 6,000 residents displaced. African-Americans were disproportionately affected by displacements, housing unaffordability, and harassment and arrests of the homeless. The criminalization of homelessness was a key feature of the 1996 Atlanta Games: 9,000 arrest citations were issued to homeless people in Atlanta in 1995 and 1996 as part of the Olympic Games ‘clean up’.”

This is significant to the study because the alarming numbers are directly tied to my site of the Atlanta Olympic Stadium. There are approximately eight major neighborhoods that were affected during the timeframe of 1990-1996.
The Olympic Games are a prime example of what happens to a local area in terms of an “enhanced community.” The process of removing the undesirables and low-income dwellers are what the cities call clean sweep or city beautification. Most people know the displacement of people only to be the removal of families to make the existing land into a new project, this is known to be primary displacement, or the initial effects.

**DISPLACEMENT**

EXISTING HOUSING → DISPLACEMENT → REMAINING HOUSING + OLYMPIC STADIUM

Olympic Stadium
High-end Residential/Commercial
Low Income Families

GENTRIFICATION → “CITY BEAUTIFICATION” → COST OF LIVING RISES
Another major impact on a local community from an Olympic Stadium is whether the stadium is used after the Games. The main stadium has a variety of activities that it can house compared to other venues because they are sport-specific and lack the flexibility for arrangement of their interiors (Gold and Gold, 2007). Although there is a potential of post-usage, not all cities keep the facility operational due to their specific local problems. Both decisions of reuse or desolation result in city funds being exhausted. Gold and Gold (2007) points out that it is an estimated $100 million per annum of costs for maintaining venues until occupiers can be found. These unused stadia have been called “white elephants.” Soledad Mendez describes it perfectly in his thesis in 2010:

“a phrase originating from South East Asia in the 1880s when receiving a white elephant was both a blessing and a curse because the white elephant was sacred and because the animal had to be worshipped and fed it could not be put to practical use to offset the cost of maintaining it.”

White elephants have a negative impact on local communities because they can create voids within the city. Voids mean completely empty. In the city, they are called urban voids. Urban voids can lead to less denser populations and even become permanent. Many examples of desolate venue can be seen around the world including: 2004 Athens Canoe Center, 1936 Berlin’s Olympic Village, 1984 Sarajevo’s Ski Jump, 2008 Beijing’s Beach Volleyball Venue. As designers, it is important to realize that there is potential in reusing these venues for another purpose than its original intent.
One of the challenges for the Olympic Games is to design the stadium to accommodate a huge influx of people so that they can all be interacting with the spectacle at hand, which are the competitions. What happens if the stadium does not maintain the need for the same amount of people anymore?
The Colosseum of Rome was built for gladiatorial combat and not for races. It therefore took the form of a theatre in which rising tiers of seats, forming an artificial hillside, completely surrounded an area. The great stone and concrete drum fused engineering, theatre and art more successfully than most modern stadia.

By taking a look throughout history, we can see the tectonics of an Olympic stadium has many possibilities. Each stadium has a certain uniqueness embedded within its architecture by expressing form, space, and structure with its own character of individualism.
FORM

Top Right: The diagram shows the convergences of the arches and project to the centerline.

Bottom Right: Shows the overall shape, an ellipse, derives from a circle to give the Colosseum its iconic reference.

Sourced from: [Image Diagrams]: http://www.the-colosseum.net

Rome
A smaller enclosed stadium with column-free interior of exceptional architectural merit: the Palazzetto dello Sport for the Rome Olympics of 1960. It has a concrete shell roof resting on 36 pre-cast perimeter supports.

Athens
The U-shaped sunken stadium at Athens, first built in 331 BC for the staging of foot races, was restored and used for the first modern Olympics in 1896.
These defining elements are essential in designing an Olympic Complex. Each component serves a purpose to the overall design and is integral in maintaining a functioning role in not only the relationship 'A' to 'B,' but also 'B' to 'A.'

Table 2.4: Physical requirements of the Olympic Games, source: Solberg & Preuss (2004).

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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>OLYMPIC STADIUM</td>
<td>OLYMPIC VILLAGE</td>
<td>PUBLIC PARK</td>
<td>SUPPLEMENTARY VENUE</td>
</tr>
</tbody>
</table>
Fig. 2

The matrix on the next page shows that there is INDEED, post-Olympic usage of stadia.
<table>
<thead>
<tr>
<th>Year/City</th>
<th>Facilities WASTED</th>
<th>Facilities RECYCLED</th>
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<tr>
<td><strong>BARCELONA 1992</strong></td>
<td><img src="image" alt="Fig. 3" /> Before</td>
<td><img src="image" alt="Fig. 5" /> OLYMPIC VILLAGE / SUPPLEMENTARY VENUES</td>
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<td><img src="image" alt="Fig. 4" /> OLYMPIC VILLAGE</td>
<td><img src="image" alt="Fig. 6" /> OLYMPIC PARK</td>
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<td><img src="image" alt="Fig. 7" /> RUGBY STADIUM / BASEBALL STADIUM</td>
<td><img src="image" alt="Fig. 8" /> NEIGHBORHOOD / GT DORMS</td>
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<td><img src="image" alt="Fig. 9" /> OLYMPIC PARK</td>
<td><img src="image" alt="Fig. 10" /> GT FACILITIES / CENTENNIAL OLYMPIC PARK</td>
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<td><strong>ATLANTA 1996</strong></td>
<td><img src="image" alt="Fig. 11" /> Before</td>
<td><img src="image" alt="Fig. 13" /> OLYMPIC VILLAGE / SUPPLEMENTARY VENUES</td>
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<td><img src="image" alt="Fig. 12" /> OLYMPIC VILLAGE</td>
<td><img src="image" alt="Fig. 14" /> OLYMPIC PARK</td>
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<td><img src="image" alt="Fig. 15" /> BASEBALL STADIUM / GT DORMS</td>
<td><img src="image" alt="Fig. 16" /> GT FACILITIES / CENTENNIAL OLYMPIC PARK</td>
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<td><img src="image" alt="Fig. 17" /> OLYMPIC PARK</td>
<td><img src="image" alt="Fig. 18" /> GT FACILITIES / CENTENNIAL OLYMPIC PARK</td>
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<td><strong>SYDNEY 2000</strong></td>
<td><img src="image" alt="Fig. 19" /> Before</td>
<td><img src="image" alt="Fig. 21" /> OLYMPIC VILLAGE / SUPPLEMENTARY VENUES</td>
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<td><img src="image" alt="Fig. 23" /> RUGBY STADIUM / CONCERTS / MIXED-USE DEVELOPMENT</td>
<td><img src="image" alt="Fig. 24" /> MIXED-USE DEVELOPMENT / MIXED-USE DEVELOPMENT</td>
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<td><img src="image" alt="Fig. 25" /> OLYMPIC PARK</td>
<td><img src="image" alt="Fig. 26" /> GT FACILITIES / CENTENNIAL OLYMPIC PARK</td>
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<td>Year/City</td>
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<td>OLYMPIC VILLAGE</td>
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<td>After</td>
<td>MULTI SPORT</td>
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<td>ATHENS 2004</td>
<td>Fig. 27</td>
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<td>SUPPLEMENTARY VENUES</td>
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<td>BEIJING 2008</td>
<td>Fig. 33</td>
<td>Fig. 34</td>
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<td>MULTISPORT</td>
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<td>LONDON 2012</td>
<td>Fig. 40</td>
<td>Fig. 41</td>
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<td>OLYMPIC STADIUM</td>
<td>MIXED-USE DEVELOPMENT</td>
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<td>Fig. 46</td>
<td>Fig. 47</td>
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</table>
#### 1.6.2 Olympic Village Reuse

The Olympic Village is used to house the international athletes that compete in the games, as well as the athletic trainers and officials. Table 5.1 clearly supports the idea of Olympic facilities being used long after the games pass through.

The trend in the table 5.1 shows Post-Game usage by some form of housing. There is definitely potential shown here by looking at the design capacities if we apply some of the same principles towards the Olympic Stadium.

<table>
<thead>
<tr>
<th>Olympic Games</th>
<th>Area (ha)</th>
<th>No. of buildings</th>
<th>No. of living units</th>
<th>Design capacity</th>
<th>Largest occupant</th>
<th>Distance to Olympic stadium (km)</th>
<th>Distance to city centre (km)</th>
<th>Building type</th>
<th>Post-Games use</th>
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<tbody>
<tr>
<td>LA 1932</td>
<td>101</td>
<td>550</td>
<td>550</td>
<td>2,200</td>
<td>1,868</td>
<td>22 8 21</td>
<td>8 15 30</td>
<td>Prefabricated wooden ‘cottage’  Pitch-roofed brick bungalow</td>
<td>Demolished</td>
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<td>Berlin 1936</td>
<td>55</td>
<td>194</td>
<td>2,300</td>
<td>4,550</td>
<td>4,300</td>
<td>83 15 30</td>
<td>8 10</td>
<td>Army officer billet</td>
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<td>Helsinki 1952</td>
<td>13</td>
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<td>600</td>
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<td>3-4-storey brick apartment blocks</td>
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<td>2-4-storey brick apartment blocks</td>
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**OLYMPIC VILLAGE**

The Olympic Village is used to house the international athletes that compete in the games, as well as the athletic trainers and officials. Table 5.1 clearly supports the idea of Olympic facilities being used long after the games pass through.

The trend in the table 5.1 shows Post-Game usage by some form of housing. There is definitely potential shown here by looking at the design capacities if we apply some of the same principles towards the Olympic Stadium.
“General housing shortages prompted Olympic Villages to be integrated into social housing schemes with a trend towards mid- and high-rise apartment blocks. The Olympic Villages built during this period were located in the peripheral areas of host cities often linked by new roads and expanded public transport networks.

It is also observed that most village developments have been located within 6km to 15km from the host city’s centre, suggesting Olympic Villages have been used for, or created, urban expansion.”

Excerpt from: Pitts and Liao, p.84, 2009.
1.6.3 Strategies for Adaptability

The important idea to keep in mind is that the current trend does show post-Olympic usage of stadia, but the goal is to make certain that we have established plans incorporated for cities after the Games to ensure that we keep the physical legacies alive. This will establish a means to prevent the displacement of locals and creation of urban voids from white elephants. This portion of the research suggests prominent methods that apply to a stadium for adaptive reuse.

Downsizing is one of the most used methods to be applied for future use because it is pragmatic. The needs of a stadium during the Olympics and after the Olympics vary significantly.

Pitts and Liao (2009) mentions that good design can allow the shift of venues to new sports uses such as the Atlanta Olympic Stadium. In Atlanta, the Olympic Stadium once housed eighty-five thousand spectators, the stadium was reconfigured to be the new home of the Atlanta Braves; thus, the new stadium capacity downsized to max out at thirty-nine thousand spectators. They accomplished the transformation by removing the modular pre-cast concrete tiers for seating. In addition to reconfiguration, we can isolate components of the stadium to be reused by identifying elements as permanent or temporary.
Fussey (2011) points out the needs before and after the Olympic Games have passed through is a small portion in understanding Olympic legacy-mode. The relationship between the Olympics and spectacle are a fundamental aspect of the creation of ‘legacy.’ Economy, culture, tourism, and retail sectors all lead to significant local development. These four elements have become the mechanism for driving symbolic transformation of place, which all have an interconnectivity with the Olympic Stadium. The 2012 London Olympic model is an exemplary precedent as you may refer to Figure 1. A well-written article, London Olympic Stadium / Populous (2012) from ArchDaily explains in simple terms what London experienced. Populous Architects, analyzed some of the socio-economic problems could be rectified by challenging the concept of building permanence.

Clarifying that the needs during the games would be enormous compared to the needs succeeding the games, which are considerably smaller in the long term. The firm challenged the concept of building permanence by designing a new theory of ‘embracing the temporary.’ They accomplished this by re-examining four major components of the stadium: form, materials, structure, and operational systems. By doing that, a few ideals were derived such as minimizing physical weight, using less energy, and allowing less fabrication time. These ideals meshed together the mindset of using the three ‘R’s’ of reduce, recycle, and reuse. The important concept learned here is that there needs to be a changing or downsizing in scale of the facility. Now this led to a stadium that is compact, flexible, and lightweight. Pitts and Liao’s (2009) point of view lines up with Populous by asserting the utilization of temporary facilities can either eliminate or reduce the long-term burden of maintenance, and can also reduce environmental impacts.
The roof structure consisted of recycled materials along with meltdown scraps, making it significantly lighter and more eco-friendly.

PVC fabric provides protection from the wind and helps cover some spectators from the elements.

The 336 banners that skin the stadium are made of eco-friendly plastic and ink. The banners rotate 90° from top to bottom creating multiple access portals into the stadium.

The upper seating is a precast concrete bowl that seats 55,000 seats.

112 steel sections provide the needed support for the upper bowl.

The lower tier provides seating for 25,000 people.
Building on the idea of permanent and temporary, Mayor Eduardo Paes of Rio, Brazil understood that London’s Olympic Model had designs that allowed for the buildings to be taken down after initial use. According to Adele Peters (2016), Paes wanted to take this one step further by ensuring what he calls ‘nomadic architecture,’ which investigated some of the modular venues to be reconfigured or taken apart to rebuild into community centers and schools for the locals. This nomadic architecture is thought to ensure a temporary structure that will leave a legacy. The concept to learn here is that having a design that is temporary and can later host a variety different programs is essential to a physical legacy. In addition to downsizing, integrating new programs can be an excellent combination.

An example of what Rio’s goals are with their Future Arena that was showcased as the Rio Handball venue.
Future Arena

Rio de Janeiro

The box-shaped stadium is enveloped by rainscreens, which are made from horizontal wooden slats and punctured by letterbox-like openings. The facades don’t come all the way to the ground, revealing concrete ramps and staircases that provide access into the venue. Inside, seats are brightly coloured in the games’ chosen hues of green, yellow, orange and red.

Once the Paralympic games finishes in September, it will be dismantled and turned into facilities for more than 2,000 school children. Sections of the building will be form the basic structural elements for four state schools, each accommodating around 500 pupils.

“A first for the Olympics, the venue will make use of an innovative technique called ‘nomadic architecture’, thus ensuring that even a temporary structure can leave a lasting legacy.”

descriptions led by:

LOPES SANTOS & FERREIRA GOMES
+ OA OFICINA DE ARQUITETOS +
PAULO CASE P/A + AndArchitects
STADIUM CONVERSION

Permanent vs. Temporary.

Structure

Downsizing

Some of the components of the Handball arena are adaptive and can be reused. The screens can be taken down and formatted into small panels to become the skin of stand-alone structures. By designing a stadium to have tectonics that are permanent and temporary we can transform the stadium afterwards following the games. The structure normally reminds mostly unchanged, but many components can allow for adaptability.

PROGRAM FLEXIBILITY

New Amenities

School A | B | C | D

Establishing the a new program ensures post-Olympic usage following the games conclusion. The structure is to remain the same while separating the big box-like structure into four small schools each housing approximately 500 students. Schools in Brazil are scarce due to the fact that poverty affects a huge majority of the population. By turning the arena into schools, it allows the city integration to become more rich as opposed to maintaining its initial purpose of handball games because it is not a staple sport in this region.
A key feature of implementing an adaptive reuse project means that new program will be introduced. Integrating new program into an existing structure can yield positive results. This is a chance to attract more user groups than before such as people who only enjoy sports mildly.

Programmatic flexibility means that a space can have the potential for entertaining user groups in a multitude of ways. The Alfred McAlphine Stadium designed in Huddersfield, U.K. expresses this principle below in Figures 3a through Figure 3c from Sports Architecture by Rod Sheard (2001). This example illustrates the flexibility of a design, but for this study it needs to be applicable for a stadium venue that does not have current tenants. Perhaps a leading example is how the Arsenal’s former stadium has integrated residential living quarters with courtyards that connect into the central garden square. Allies and Morrison Architects’ project, Highbury Square is a unique landfill project that creates a new residential typology. This is a breakthrough precedent for this research in regards to a solution towards retaining citizens of a community after its initial use for the Games.

Highbury Square transforms an early and important example of a British football stadium, previously the home of Arsenal Football Club, into a residential community. It preserves the nature and memory of the original arena while developing a new residential typology which contributes to the rich, local grain of streets, avenues and squares.

The original East and West stands are converted into apartments with a new central garden set between them. New residential blocks replace the North and South stands. This unique example of urban infill creates a contemporary London square, complemented by a series of new and smaller residential courtyards which connect back into the garden through large portal gates.

Description above and Images for Highbury Square credited to Allies and Morrison Architects.
Permanent vs. Temporary.

Structure - Downsizing

The removal of the stadium seats allow for the floor plates to extend all the way into the interior of the former stadium. The majority of the roof structure stays the same and an interior circulation core stabilizes the converted dwellings.

Reconfiguration.

City Integration - Urban fenestration

The full enclosure no longer exists and opens up to the streets on all four corners. This is a common principle of urban fenestration, which allows for visual connections and circulation paths. Allowing penetration into the stadium by breaking the edge conditions fosters a better relationship of pedestrian to building.
Program Flexibility

New Amenities

Circulation + Livable Space + Courtyards

The scale of the different programs shift slightly in the reconfiguration. The circulation corridor shrinks about halfway due to the accommodation size. The stadium seating gets removed because it no longer serves its purpose and it converts into livable spaces that are flanked on both sides of the central corridor.
Summary.

The principle aim of this study was to investigate the impact of Turner Field Stadium to the host city and to carry out an analysis of problems and link them to potential solutions. This research points out that there is a need for more rigor to the engaged plans implemented by city officials. There is a gap of information provided from precedents that is lacking through history until current times for quality assessment. My hope is to help fill the gap and provide another possible solution to negate the positive global image that is created by hiding rather than providing real world solutions to real world social problems of the built environment. An output of this research has allowed me to define major problems and realize that every city has the same reoccurring problems with variance in vigor.

The scope of urban development due to the Olympic Games can be too broad in terms of problems to solve; such as physical, socio-economic, and environmental impact. This influence has allowed me to focus my design goals toward retaining citizens with their dwellings and to ensure a revitalized stadium given back to the people of the community.

Conclusions.

The first conclusion to this study is the realization of the potential for adaptive reuse design to be applied towards Turner Field. There is an abundance in choices of how to reuse a stadium following the Games. Obviously, it would be immature to implement the same design principles directly to each city, but at least acknowledging that each city has some of the same reoccurring problems would be wise to address.

Next, we can conclude that evidence of stadium reuse is becoming more of an addressed issue. This idea of adaptive reuse of stadia is linked to sustainable Olympic design and development. The environmental issues are directly linked to economic issues. Cities need to question whether being a host city yields the right amount of positive return and if the potential of not having a positive return at all is acceptable.

Lastly, the concept of downsizing or changing the scale of usage will make a huge impact due to ease of usability. Gold & Gold (2007) realized that the residents of the 1912 Games in Stockholm found it easier to create a festival that had integrated the stadium and city together-intentions of a multi-purposed stadium. The combination of these concepts leads me to believe that this is the methodology of sustaining the Olympic Stadium for an afterlife and contribution towards an integrated lifestyle and growth for the hosting community. Interlacing these concepts help challenge the existence of the Olympic legacy. Is this now a battle of permanent infrastructure versus temporary stadium? ...And does ‘legacy mode’ definitely mean convertible stadium?
CONCEPT DIAGRAM

Creation of voids of Urban Tissue

Voids become permanent

Unused wasted buildings

Lower density

Lower Population Density

Land Abandoned

Displacement of People

Olympic Games

Building Utilization

City Integration

Retaining Citizens

OLYMPIC MODE

POST OLYMPIC MODE

REM E D Y
2.1.1 Site Selection

Significance

The site chosen as for the study is located in Atlanta, Georgia at the intersection of Interstate 75 and Interstate 20. The potential for this site to becoming the new face of Atlanta’s neighborhood communities speaks immensely. This site falls in the neighborhood of Summerhill, which is a community that has seen much struggle throughout the past few decades. Both social and economical factors were influences for selection due to the history of infrastructure and stadia that were imposed. Turner Field Stadium is in the process of converting into the new home of the Georgia State Panthers as this study was conducted circa Spring of 2017. The continuous development of this site makes a statement that it would be the ideal site for engagement of new planning for stitching of the community back, both, physically and socially.
2.1.2 Former Uses

This stadium once housed the 1996 Olympic Games of Atlanta. It later converted to be the home of the Atlanta Braves the following year. The conversion was downsized from the Olympic capacity of an approximate crowd of 85,000 to reduction of 50,000. The last Atlanta Braves game was played here at the conclusion of the 2016 season.
2.1.3 Historical Patterns

Street Grid

Atlanta has gone through an incredible transformation within the past few decades that has impacted people on all scales of the metropolitan level. There was an actual street grid that used to exist before the installation of the Downtown Connector Highway. Following the highway, Atlanta Fulton Stadium was built to once again disrupt the existing street grid. Last, the construction of the Centennial Olympic Stadium added to the destruction of the multiple connections that the grid provided.
2.1.4 Existing Amenities

Sprawled

The site location is in close proximity to the Downtown area, but the amenities for the surrounding neighborhoods of the site are sprawled out. There are a few parks close to the site, which has positive benefits. On the other hand, there is a lack of retail and business districts to provide much needed jobs and availability of goods to the immediate area.
2.2.1 Site Voids

Scarring

This comparison of the figure ground maps show that the current site is surround by huge voids. The highway connector and the abundance in parking lots make up these voids.
2.2.2 Strategic Views to Site
**2.2.3 Atlanta Displacement**

Gentrification

**Neighborhoods**
1. Techwood / Clark Howell
2. Eagan Homes
3. John Hope Homes
4. Martin Street Homes
5. East Lake Homes
6. Kirkwood
7. Summerhill
8. Cabbagetown

**OLYMPIC RING**

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Housing Units</th>
<th>People</th>
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<tbody>
<tr>
<td>Techwood / Clark</td>
<td>1,195</td>
<td>3,375</td>
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<tr>
<td>Eagan Homes</td>
<td>112</td>
<td>340</td>
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<td>64</td>
</tr>
<tr>
<td>Summerhill</td>
<td>30</td>
<td>90</td>
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<tr>
<td>East Lake Homes</td>
<td>650</td>
<td>1,764</td>
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<td>Kirkwood</td>
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<td></td>
</tr>
<tr>
<td>Martin Street</td>
<td>30</td>
<td>90</td>
</tr>
</tbody>
</table>

+ Many more housing units = approx. 30,000 displaced people

**Alarming Facts**

+ Of the 1,000+ households (between 3,600-4,300 people) evicted during 1990-1996, only 44% received relocation assistance.

+ 9,000 arrest citations were issued just between 1995 and 1996

+ Eve of the Games: Federal court order to “cease and desist” arresting homeless people without probable cause.
2.2.4 Existing Site Conditions

The Summerhill community is one of five immediate neighborhoods that surround Turner Field stadium. The main street of Hank Aaron Drive runs directly into the Downtown Atlanta area and is intersected by Georgia Avenue, which is the busy street that runs East and West. The following diagrams point out a few potentials for design concepts. Park space could attribute more to the surrounding area for more open space and to soften up the massive hard surface area.
• Fulton Street is another major road as a connector from Summerhill to Mechanicsville
  • Celebration of arrival from Downtown area
  • Acts as a portal for the site

• Fulton Street is another major road as a connector from Summerhill to Mechanicsville
  • Celebration of arrival from Downtown area
  • Acts as a portal for the site

+ ATLANTA FULTON WALL
  • 22' - 0” High wall left as memorabilia

+ DOWNTOWN CONNECTOR
  • Noise levels project towards the site
  • Downtown Connector separated neighborhoods
  • 31' - 0” above Georgia Avenue

+ OVERPASS / UNDERPASS
  • An arrival gateway for Mechanicsville
  • Overpass is 51' - 0” above Georgia Avenue

+ EXISTING PARKING VOID
  • Main intersection with most potential has adjacent voids
  • Leaves front of site with no emphasis
  • Georgia Avenue is pulled away from the site towards the parking lot
  • Creates seclusion from neighboring residents

+ HANK AARON + GEORGIA AVENUE
  • Intersection of the primary roads
  • Access from all 4 surrounding neighborhoods

+ OLYMPIC GATEWAY
  • Fulton Street is another major road as a connector from Summerhill to Mechanicsville
  • Celebration of arrival from Downtown area
  • Acts as a portal for the site

+ Fulton Street is another major road as a connector from Summerhill to Mechanicsville
  • Celebration of arrival from Downtown area
  • Acts as a portal for the site
SECTION II
Design Theorem + Design Analysis
The Summerhill area has a rich history of development, but it has never benefitted the immediate neighborhoods. The concept was to make simple moves extracted from the precedent studies and site analysis. These design decisions were informed by the necessity of restitching both physical and the social void that has been placed on this local community.
Provide Program in Outdoor Spaces

Provide Affordable Housing Units

Program to Restitch the Social Void - Jewish/African American History
3.2 Program Distribution

Approaches from Different Urban Scales

Planning of the program was crucial to the success of the design. Making sure all approaches from the differing urban scales were addressed. The Atlanta Metropolitan Residents would be arriving most likely from a freeway scenario. The surrounding neighborhoods could arrive from any of the corners and there would be accessibility. The onsite community would be traveling the least therefore placing them above the program of retail, offices, and local amenities would allow for more room on the ground level. The ground level from the East side is the most exposed and busiet corner therefore a retail storefront scenario would be key. Anchoring the community is important so the local neighborhoods become a safer and livable urban environment.
User Groups

- **Usage by Onsite Community**
- **Usage by Onsite Community + Surrounding Neighborhoods**
- **Usage by Atlanta Metropolitan Residents**
+ 3.3 SITE PLAN

1. SHOPS (S,M,L,XL)
2. JEWISH & AFRICAN AMERICAN HISTORY CENTER
3. SPORTS MUSEUM
4. AMPHITHEATRE
5. ATHLETIC FIELDS
6. HARDWARE STORE
7. LAUNDRY
8. MEMBERSHIP GYM
9. DAYCARE CENTER
10. JOB TRAINING CENTER
11. BOYS AND GIRLS CLUB
12. SERENE GARDEN
13. COMMUNITY CROP GARDEN
14. HEALTH CLINIC
15. PHARMACY
16. CAFE
17. TECH LABS
18. GROCERIES
19. FARMERS CROP STANDS
+NEW ENTRANCE
+ATHLETIC FIELDS
+AMPHITHEATRE
+STREET RETAIL EXPERIENCE
+INTEGRATED OFFICES
+TERRACED AFFORDABLE UNITS
+ 3.4 SECTION DESIGN / RENDERINGS
Community Gardening
Providing a communal activity will help activate the space for all users. Planting beds were installed to provide a means for the local community to be able to make fresh produce readily available. The repurposed stands also provide opportunities for observation and spaces for gathering.

Athletic Fields
Open space in Summerhill has room for improvement. By providing open fields for kids to play and adults to engage in athletics is a healthy habit that needs to be reinforced. The open space is a great design tool to combat the hard surfaces of the multiple lots. It will also be a method of providing safety for the community by having the fields occupied more often times then not.

Amphitheatre
Having an open air amphitheatre is a great technique to providing activities for all users from the Atlanta Metropolitan area. The stage can be easily taken down to provide and gathering space or simply for observation space.


