Olympic Visions: A Comparative Analysis of Olympic Legacy Plans

David Broughton dabr2307@colorado.edu

University of Colorado Boulder Undergraduate Honors Thesis

Honors Thesis Committee

Dr. Sven Steinmo

Dr. Douglas Snyder

Dr. Karen Ramirez

Table of Contents

Abstract	3
Introduction	4
Brief History of the Olympic Games and Olympism Movement	4
The International Olympic Committee	5
Background	8
International Olympic Committee and Sustainability	8
Defining Olympic Success	10
Olympic Venue Repurposing	11
Literature Review.	13
Methodology	18
Narrative Method and Historical Institutional Analysis: Legacy Plans	18
Further Chapters	
Barcelona 1992	22
London 2012	35
Rio de Janeiro 2016	
Analysis	
Conclusion	
Bibliography	

Abstract

Olympic host cities over time have increasingly combined Olympic mega events with projects of infrastructural and urban regeneration planning in anticipation for revitalizing city areas to bring in revenue, modernize poor areas, or to provide much needed infrastructure to underserved populations. How are Olympic Legacy Plans implementation impacted by national political events and political climates? This paper makes an institutionalist argument towards how effective and ineffective planning by three Olympic planning committees contributed to the success or failure of implementing each nation's respective Olympic Legacy Plan. By using institutionalist theory, this paper identifies that effective institutions in Olympic mega-event planning involves careful coordination between state and local officials, stable economies, and meticulous attention to funding initiatives and sustainability planning as essential to achieving an Olympic vision for any given host city.

Introduction

Brief History of the Olympic Games and Olympism Movement

Historically, the Olympic Games have centered on the principles of inclusivity, competitiveness and facilitating international cooperation through Olympic sport. In addition to fostering this ideal, the International Olympic Committee (IOC) and their respective host sub-committees mutually agree to discuss, plan, and prioritize specific financial and social legacies and goals by hosting Olympic Games. Oftentimes, countries who seek an Olympic bid will aim to improve their economy through restructuring the city's image in a way that capitalizes on the city's marketability and often encourages higher levels of tourism and highlights marketable parts of the city's image. Additionally, many bids believe that hosting the Olympics can provide a boost to the local economy via increased revenue surpluses and improved image of the city and its respective country framed as a tourist destination (Wilson 2015). However, many Olympic bids rarely result in the vision a city wants from hosting the Games. Oftentimes, lack of funding, political turmoil, disorganization of the Olympic committee or other issues can tamper with the lasting outcome hosting an Olympics can have for the country who wishes to host. This issue is the heart of why the Olympic Movement's structure needs further examination. The backbone of the Olympism Movement is the doctrine that international sports can be used to facilitate international cooperation through sport, in the spirit that friendly competition can promote peace and mutual understanding between nations. This doctrine has been essential in countries securing bid approvals from the International Olympic

Committee, who governs the planning and structure of a city's Olympic vision and encourages spending for the construction of Olympic venues, athlete villages and other infrastructure that is necessary to receive the "Olympic seal of approval". However, these construction projects have had a direct impact on the profitability and sustainability of previous Olympic Games and have historically had the biggest impact on overall Olympic profitability and the permanence of Olympic venues after the Games' conclusion.

The International Olympic Committee (IOC) has sought to recognize and prioritize host countries that value universal rights to play sports and have democratic ideals inserted into its purpose and mission statement. The IOC has tended to favor countries with democratic ideals, high GDP levels, and who recognize universal human rights for all citizens. Additionally, the IOC requires bidding hosts to submit a "vision statement" which outlines a city's goals from hosting. This includes financial targets, such as renovations to existing infrastructure, merchandise and image marketing strategies, and projected long-term economic growth expectations following the conclusion of the games. However, many cities often overspend during the planning phase, channeling funding from public sector streams of income such as tax revenue and sponsorships. However most budgets average merely \$1 to \$2 billion in costs on paper. In practice, costs tend to be much more, and can be attributed to IOC regulations requiring host cities to construct brand-new venues and provide public funding, resulting in higher overall costs. As a result of this, most hosts have not profited from the Games consistently throughout Olympic history. The only exception to this had been the 1984 Los Angeles Olympics, who have managed to circumnavigate planning costs and the 1992 Barcelona Olympics who had a clear post-Olympic vision via boosts to tourism. Under these costs, previous Olympics have

traditionally always constructed new venues to house Olympic stadiums, such as Olympic pools, Track and Field and other venues. However very few of these monuments have tended to remain after the Olympics' conclusion. For example, the 2016 pool stadiums from Rio 2016 were constructed for swimming events throughout the Olympics, and the Rio Organizational Olympic Committee (ROOC) had plans to revitalize the venue as a new educational facility. However, the plan failed due to further escalated debt accrued from hosting the Olympics, including a lack of surplus revenue, profit and the correct structures needed to manage the upkeep of venues, such as pool construction workers to manage upkeep and the replacement of pool infrastructure needed to endure permeability of the venue.

This paper will analyze the sociopolitical structures needed to assure the permanence of "Olympic Legacies" as tangible, sustainable, lasting impacts to host cities as a result of hosting an Olympic Games (MacAloon 2002). MacAloon defines this term in the context that Olympic legacies have an impact on a city's image, but lacks a definition to a hard and tangible legacy in terms of infrastructure. Historically, legacies have been referred to in terms of the lasting impact that media coverage, a city's vision, or the public's view of a host city has impacted people's understanding of the host city after a games conclusion. China, as an example, structured its image to frame its vision of its Olympics as a modern utopia that seeked to "revolutionize" the public's view of the Olympics, which until then, had been losing popularity. China, after finishing its construction, had completed the "birds nest stadium", with estimates totaling about \$2.3 billion US dollars. Annual expenditures on Olympic infrastructure has increased every year due to inflation. How a country chooses to frame its image directly can also have an impact on

sustainability. Barcelona 1992 chose to frame its image in a way that encouraged tourism, by highlighting aspects of its beaches, people, food, and other qualities directly linked to tourism.

Few studies have examined the political structures of governments who have hosted in comparison to economic and social factors that have had lasting impact on city hosts. By comparing historical Olympic data gathered from individual country's Official Olympiad reports, I would hope to synthesize the data into a framework that will provide a model for how a host country can likely retain their Olympic venues through strategic planning with the IOC.

Background

International Olympic Committee and Sustainability

The International Olympic Committee is the sole authority of the government of the Olympics, and it standardizes the rule to which a host country must fulfill in order to receive an Olympic bid. The committee is composed of volunteers who designate the location of future events, broadcasting rights of the games, Olympic branding approvals, and other rights that can only be bestowed by the Committee. The IOC is also responsible for the bidding process, in which it analyzes potential bidders and chooses one strong candidate to host any specific future Olympic Games. The IOC is also privately funded and relies on contributions from commercial partnerships and revenue earned from the Olympics. As a result, the IOC negotiates a percentage royalty that it will take from host countries through talks with a country's National Olympic Committee, a minor committee composed of volunteer intermediaries between the host city and the IOC.

The IOC initially consisted of a small group of volunteer members who seeked to create an organization that was non-discriminatory and would help cultivate Olympism among its members, athletes and viewers across the world. However, these associations with the IOC have not always existed. Pressure from the sport federations and the national Olympic committees along with athletes themselves have contributed to change in the structure of the organization, which has now become a complex system with multiple additional stakeholders, even including corporate sponsors and professional sports leagues (Chappelet and Kubler-Mabbott 2008). These internal changes were also prompted not only by external public pressures created by criticisms of the IOC as a closed, unelected body but also by charges of its blind eye towards corruption and doping, which increasingly led to calls by public bodies for greater accountability. The

adoption of Agenda 21 as a result of developments in the 1990s made the environment the third pillar of Olympism, and the utilization of terms, such as "legacy" and "sustainable development" made it clear that the IOC was evolving in response to public pressures in civil society (IOC 2012b). Since then, corruption has become a topic upheld in the IOC's mission statement in which it does not support the mismanagement of funding nor supports doping of any kind.

In terms of sustainability, the IOC published its first sustainability executive report in 2017, conglomerating a list of goals and achievement targets that were expected to be reached by 2020. Sustainability has always been a hot topic in the Olympics due to the levels of waste associated with hosting. Billions of dollars are often wasted in costs for the construction of Olympic venues, roads, electric lines, transportation, and other factors of infrastructure that do not yield permanent infrastructure after a Games' conclusion. The statement is derived from the general Olympic Agenda in which two recommendations pertain to the IOC's sustainability roadmap, including Recommendation 4 and 5. These statements outline the goals to improve overall sustainability of the Games and "include sustainability within the Olympic Movements daily operations". These goals should be mentioned to provide context into how the Olympic Movement has shifted its view of sustainability to reflect its successful outcomes to be achieved by 2020. Analyzing these factors will provide a benchline to examine how sustainability has been developing in the Olympics since 1984. This year holds significance as the first time an Olympics held a net positive profit as the result of surplus revenue in Olympic History. This year also set the standard that following Olympics could follow to potentially avoid financial pitfalls by choosing to host in future Olympics.

Defining Olympic "Success"

The term "success" has been used in the context of Olympic bidding to refer to bidding awards granted to states who have beat other bidders to secure a future Olympic event. However this has not been applied in a context that includes the ability of Olympic venues, infractures, national image, or other factors that have a lasting impact on a country's physical legacies nor its remembrances by the public. Olympic bids have generally caused deep endebtedment of host cities, often due to IOC requirements of levels of spending and investment needed to approve an Olympic bid. However examining cases such as Los Angeles 1984 in which hosting cities vied to create their own standards for investment costs have led scholars to analyze Los Angeles as a separate case for revenue surplus. Limited spending on venue construction and refurbishment resulted from the Southern California Committee for the Olympic Games (SCCOG) ploy to negotiate with the IOC its terms of investment spending. By doing so, California had a bargaining chip to negotiate venue costs, improvements to existing infrastructure, and other expenditures that would be essential to cutting costs during construction (Wilson 2015). Los Angeles managed to gain a net surplus of revenue totaling about \$232.5 million and gained nearly 100 new or refurbished venues by using the surplus for construction. Success will therefore be defined in terms of levels of indebtedness, and an emphasis on sectors of each economy that had benefitted from the Olympics, such as tourism, marketing, media, and other categories. Success will also measure whether Olympic venues were sustained or repurposed after conclusion.

Olympic Venue Repurposing

The Repurposing of Olympic venues tends to vary depending on the country and the regional committees agreement constructed during planning. Depending on levels of expenditure set aside for revitalizing old venues and the vision of the impact hosting will have on a local city often directly impacts whether governments will repurpose, modernize, or abandon an Olympic legacy. In China, the Olympic Stadium built to house the track and field events 10 years later resulted in abandoned buildings with no success in repurposing. According to one reporter by CNN, the images of a dilapidated stadium brought this vision of abandonment to the general public and was blamed due to China's lack of planning towards how the venue would be transformed after the Olympics (Street 2018). While China had plans to repurpose the venue into apartment housing, specifically due to complaints from residents who vacated the property to make room for the stadium's construction, China promised it would build a plan to revitalize the venue following the conclusion of the Beijing Olympics in 2018. However no funding was ever put towards the actual construction of the project and as a result, became forgotten. This trend has been commonplace in many countries around the world. The Rio Olympic venues had been reported to be abandoned and were covered in new articles such as ESPN and CNN. Finding all of the reasons as to why Olympic venues tend to fail is the object of this research, in hopes that creating a framework of local and regional sociopolitical factors can create a holistic view of how Olympic venues fail, during what stage they fail, and how bidding country's can find ways to avoid failure and model repurposing through acknowledging proper conditions that may reduce the risk of failure.

Literature Review
Recents studies on the Olympic games have focused on political, social and economic
factors that drive the Olympic bidding process, and ultimately whether a host city secures an
Olympic bid. Studies have largely focused on the potential economic impact the Olympics has

on countries who bid and examine the systems that affect the bidding process, which include factors such as distance from Olympic venues, weather, economic growth (Maennig, W., & Vierhaus, C., 2019). Methods of data collection have included survey data, public opinion polls, and examination of official Olympic documents and financial statements. In addition, academic articles and journals have examined the influence that the International Olympic Committee (IOC) has in the ultimate decision of an Olympic bid, but not its role in assessing the political climate of a vying country. I've noticed that very few of these studies have identified *political* structures, notable institutions as a factor of pre and post Olympic development and success, which is the main factor I will be examining in my thesis. Political environments and the role institutions play in Olympic planning not only have an effect on the bidding process, but also may have effects on Olympic profitability and legacy after the games conclude. The Rio 2016 Olympics for example struggled at cementing institutions that could adequately plan and implement Rio's Sustainability Plan, an issue it faced in planning. Therefore, the factors I will be examining more closely in my research will be focused on how aspects of political events and the role each host country's respective governmental or central governing authority for the Olympic Games played a role in the final Olympic plan's outcome. By examining the host country's decisions on construction, spending, and other factors, I can examine how host country's respective Olympic sub-committees handle non-favorable political events that threaten the implementation of their Olympic visions and influences that visions' real outcomes. I will be examining the history of social, political, and economic factors that have influenced a country's viability to host an Olympics, and how political events and institutions could be a large contributing factor influencing vision outcomes.

Thematically, studies of the Olympics have developed over time, particularly the IOC has gradually awarded more non-democratic states, such as Russia, Brazil, and China. According to Hoberman, this activity ignores the "issue of politics" that lingers in the spirit of the games (Hoberman 2008). Hoberman emphasizes the idea that through the lack of attention that the IOC spends on addressing the political histories and advocating for the advancement of human rights. He therefore argues that in order for the Olympics to be a platform for advancing human well-being, the IOC needs to be held accountable. While Hoberman introduces how politics needs to be addressed, not ignored, his position falls a little on the extreme. He goes so far to call the IOC's behavior corrupt, citing instances the IOC was solely motivated by profiting from the games, not examining the histories of countries that have spotty political records. Other scholarly research has examined the Olympics effects in international globalization, as referenced in Chalkley & Essex's study on the origin of the Olympics and the goal of facilitation interglobal transparency through sport (Chalkley & Essex, 2000).

From an economic perspective, some literature has examined the profitability of the Olympics through examining tourism revenues, levels of infrastructure, investment costs, property rentals, and other factors. Through regressive analyses and comparative analyses Baade & Matheson concluded that hosting the Olympic rarely results in economic profitability (Baade 2016). However, in a few specific cases, specifically in the 1984 Los Angeles Olympics and the 1988 Seoul Olympics, both cities managed to obtain a profit from hosting. Largely due to the administrative policies that both host cities implemented and argued for against IOC recommendations. In the 1984 Los Angeles Olympics, the city government implemented policies aimed at cutting infrastructure and investment costs, such as building a new Olympic venue to

house athletes and a stadium to host events such as running. Los Angeles helped pave the way for the formation of Olympic legacy planning for other games, however Los Angeles 1984 had little political issues to deal with regarding planning, which was likely a contributing factor to its successes in profiting from its games. These cases therefore, serve as a good case study for how the Olympic games can be profitable under very specific conditions, but have given little insight into how political events affect planning outcomes (Feddersen, A., Maennig, W., & Zimmermann, P. 2008). In addition, countries who recorded larger GDP growth and income per capita were more likely to bid and held a greater chance at profiting from Olympic revenues. However, these economic perspectives lack the influence of governance on structuring economic policies affecting pre-Olympic investment, a factor that could be attributable to a country's political structure and quality of governance.

From a social perspective, scholars have examined many factors and their influence on both bidding and using the Olympics as a platform to address social issues. Hiller & Wanner (2008) decided to focus on the role that public opinion plays on the bidding process. The study found that while public opinion is important in gauging approval in Olympic investment, such as through improved roads and venues via infrastructure, public opinion overall has an insignificant role in local government planning and investment decisions. Other research has focused on the role of temperature, democracy score, life expectancy, infant mortality rate among other social factors, which have provided conclusions such as temperate climates, democratic states, and states with higher life expectancies more likely to secure bids for any given Olympic event, possibly due to the democractic ideals structured in the IOC for its requirements host countries must follow to gain a bid.

Lastly, certain political factors have been identified as essential to the institutions involved in Olympic planning, such as profitability, public opinion, and other factors that interbridge social and economic lenses. One study conducted on the Sochi 2014 Olympics examined levels of corruption, levels of suppression of political freedoms, and Putin's level of involvement in planning the Olympic games (Makarychev 2016). Through a discourse conducted on a leader of the anti-Putin movement, the study involved examination of official documents and interviews which conglomerated estimations of corruption and doping resulting from Putin's structuring of the Olympics. In Makarychev's review, Over \$500 million in Olympic revenues were spent improperly or embezzled according to one estimation. This case provides a strong suggestion that political stability and quality of governance, aspects of strong national institutions, are one of the most potent factors affecting profitability, and measures of the levels of social liberties which were likely manipulated by the government to structure Russia's media image as fair and honest. However, this case's scope on spending only focuses on levels of corruption, not so much the social or economic impacts that resulted from high spending and corruption, as Russia is already measured as a fairly corrupt state under Transparency International's 2018 analysis.

Overall, economic, political and social factors all influence a variety of measures that ultimately alter the quality of the Olympic Games for a specific host country. Particularly, political factors in relation to the economic and social outcomes of Olympic vision decision-making is a factor that has often been overlooked in each of the studies examined. Arguably, quality of institutional governance has the most influence in economic, social, and political spheres of factors impacting a country's success in meeting its goals when hosting an

Olympics. Referring to the methodology of historical institutionalism, provides insight into how institutions "structure social and political behavior" and would provide insight into how governing bodies involved in Olympic planning influenced the social and political outcomes of planning resulting from political events. Ultimate authority over decision making in areas such as infrastructure, media framing, and censorship have significant importance in how a game is built, maintained and dissolved. Decisions handed down from the IOC directly determine the rules and regulations host cities must meet in order to gain approval to the expenditure phase of Olympic planning. Therefore political events and their influence on the implementation of an Olympic Games, and how governments and institutions respond to those events are factors that need further explanation in regards to how countries gain or lose from hosting, and also perhaps in other studies, its impacts on citizens and relations with other countries involved. The IOC has regulated general rights norms and quotas countries must demonstrate in order to even be considered for a bid.

Methodology

Narrative Method and Historical Institutional Analysis: Legacy Plans

This thesis seeks to explore historical narratives gathered from past Olympic Games since 1992. By examining the IOC and the Games' respective governments, Olympic subcommittees, governmental structure, and other appropriate institutions, we can examine the implications a country's legacy plan, the outline of a set of goals, funding initiatives, physical constructions,

infrastructure, and other goals, we can create a historical narrative that outlines why some Olympic legacies and visions have been successful and why others have failed. Particularly, examining the institutions responsible for planning and implementing these legacy visions is crucial to understanding how some Olympic Games have been very successful and why others have not. Institutions simply put are sets of rules governing social behavior. The framework for this essay uses a form of institutionalism, which examines the way institutions structure social and in this case political behavior and how that behavior influences Olympic outcomes (North 1990). More specifically, the framework of historical institutionalism will be used to identify and examine how specific institutions influence the political outcomes of these Olympic visions and will seek as Steinmo describes as "alternative explanations to the political outcomes, in this case of Olympic legacies (Steinmo; Thelen 1992). The comparative framework will mainly compare the agreement between the IOC, a country's official planning committee, and the local planning committee of the host city. Mainly, I will analyze the agreement made through the Olympic convention which incorporates each of these committees into a single intermediary meeting which decides all financial, marketing, sourcing and funding initiatives during the planning phase. By doing so, we synthesize a historical narrative that outlines the planning initiatives set for each Olympic Game individually and then identify institutions that have influenced the execution of each Olympics vision and outcomes. Successful outcomes will be identified if the Olympic Vision was executed as the organizational Olympic Committee for that Games had envisioned, via the implementation of new infrastructure, its repurposement, and other factors outlined in its Olympic Legacy Plan. However an Olympic failure will be measured by a planning committee's failure to fund, implement, or sustain the urban legacies outlined in their

legacy plan. Examining the cases in this way provides an avenue to examine how the institutions surrounding Olympic mega-events are influential in impacting legacy outcomes.

Cases will be chosen by Games who's legacy plans depended on consultation from previously implemented legacies that found success in implementing their Olympic vision. Barcelona 1992 and its Olympic model, was one of the first examples of a "successful" Olympics due to its ability to create a detailed legacy plan that emphasized Barcelona's strengths, such as passions for sports, and how those strengths were used to sustain their legacy visions. London 2012 noted Barcelona's success but created a new model that emphasized London's need-based population and sought to implement policies aimed at urban regeneration and revitalization of poor city areas. Lastly, Rio 2016 sought to mimic Barcelona's urban repurposing model and aspects of London's regeneration model by emphasizing sustainability and regeneration of its crippled city infrastructure, such as sewage treatment facilities and transportation. Each of these cases had models that resembled each other, with an emphasis on urban regeneration and venue repurposing as pillars of their Olympic vision and all had varying outcomes even though each plan had many similarities. It is the differences in institutions and the political events surrounding these cases that allows for the analysis of how institutions impacted the outcome of each vision for each of these cases. Additionally, these cases have a wider breadth of accessible resources in which examining legacy planning was possible, including more data on facts, figures, committee planning, revenue data, and other figures essential to these legacy plans specific purposes.

The examination of legacy plans consisted of some primary archival sources, including official IOC documents, urban regeneration plans, and urban sustainability plans released by the

Olympic Organizations collective public databases or by public archives. Additionally, the use of secondary sources, such as scholarly articles, books, and newspaper articles aided in providing context to expenditure data, governmental policies, and neighboring political events that influenced or impacted the process and outcomes of legacy planning. Research on this topic, due to limited sources, will mainly consist of secondary source analysis and content analysis of archival or historical records of Olympic events and official Olympic documents.

Lastly, the examination of the role of political events and their impacts on institutions and planning will provide analytical conclusions as to why some Olympic visions were easier to implement than others. However counter theories and explanations to these outcomes will also be examined and compared with conclusions formed. Rival hypothesis have mainly focused on statistical and observational theoretical frameworks of analysis that examine economic and social impacts on local communities of Barcelona, London, and Rio. However little research has utilized historical institutional analysis comparatively between Olympic mega-events or has utilized a narrative method to analyze political outcomes. Therefore the use of historical institutional analysis will provide a macro-scale examination of Olympic planning initiatives and its respective outcomes of urban regeneration, revitalization and repurposing in a comparative context.

Further Chapters

Barcelona 1992

In 1991, after the collapse of the Soviet Union, the Spanish government was faced with additional rising pressures stemming from increasing separatism in Catalonia, a region of Spain harboring a separate ethnic identity of Spaniards who sought greater autonomy in the Northern

region of Catalonia. As a result, when Spain won the 1992 Olympics, it was conveniently useful to rally Catalonians through hosting the games in Catalonia's Barcelona. Additionally, Barcelona's success in securing the Olympic bid completely changed the city's economy and infrastructure through investments in constructing modern beaches, marina, shopping centers, and Olympic venues of which were later repurposed after the Games conclusion. Previous studies on the Barcelona Olympics have focused mostly on its economic successes. Donato notes that the number of venues constructed is indicative of Barcelona's physical Olympic legacies and notes that the oversight of the management of the venues is directly responsible for their permanence, such as the creation facility oversight firm Barcelona Promocio (Donato 2017). However little attention was given to the political problems that surrounded the 1992 Olympics and the implications that could have occurred without close cooperation between local and national governing bodies during the planning stages. Analysis of Hargreaves study on Catalonian Nationalism during the games reveals that there was a close relationship built between the local host city planning comittee and the national planning comittee and the implications this coordination had on eliminating the threats of nationalism and terrorism that threatened the Games success. In addition, the analysis of Barcelona's urban regeneration model was directly impactful to the financial legacy Barcelona obtained.

One political issue surrounding Barclona's bid to host the 1992 games revolved around a fear of Catalonian autonomy in molding the Games as a way to promote its separatist attitudes as an independent nation separate from the centralized authority of Madrid. This separatist nationalism of Catalonia is directly responsible in due part to the dictatorship of Francisco

Franco, who ruled Spain during WWII and into the postwar period, until his death in 1975. During this period, Franco suppressed Basque and Catalan culture which sought autonomy from the "one nation, one state" vision Franco sought to build. Through methods of censorship, violence and the use of the military, Franco ruthlessly ruled Spain until his death, after which in 1975, Spain began transitioning to democracy under the administration of Felipe Gonzalez (1974-1997).

The greatest legacy of Franco and its impact on the 1992 Barcelona Olympics were increased divisions between independent-spirited Catalonia and the central authority of Madrid. John Hardreaves study of Catalonian Nationalism in his work "Freedom For Catalonia" mentioned how hosting the Games would provide Spain with a "morale booster" as it transitioned over to democracy (Hargreaves 2000). Considering Spain's history with autocracy until Franco's death, Hardgreaves notes that Madrid rallied behind Barcelona as the prevailing host city for the Olympics due to the poor performance of the Spanish football teams performance at the 1982 World cup. Hardgreaves concludes that the Spanish central authority of Madrid saw hosting in Barcelona as an opportunity to show the world that Spain was now a "fully mature democracy in the European Community".

It is important to note that there was a strained relationship between Catalonia and Madrid due largely from the view of Central Spain as a strongly centralized fascist authority during the Franco dictatorship which sought to create a strong centralized authority in Madrid through any means, including executions exiles, and imprisonment if necessary (Alland 2006, 55-56). Alexander Alland's study of Catalonian nationalism notes that strong divergent conceptions of "nation and the state" resulted in the creation of ideas of anti-centrist Catalonian

separatism against Madrid. During the games, this resulted in the creation of two separate visions for the Olympics between Madrid and Catalonia. Hargreaves analysis of Catalonian Separatism during the Games identified Madrid's desire for a united Spanish state with Madrid having autonomy over planning and decision making during the Games. However, Catalonia sought greater independence from Madrid and recognition of Catalonia as an independent Republic and sought to "Colonize" the Games by using the event as a platform for achieving greater Catalan autonomy.

In particular, the central government of Madrid wanted a united image of Spain as a matter of improving the democratic image of Spain and increasing its national sense of "prestige" noted by Hardgreaves (Hargreaves 59). This implied that Barcelona's success in securing the bid resulted from general agreement that Barcelona could improve Spain's international image to Europe through improving its national image, which until then had been stained with memories of Francoist autocracy. This seems to have been its primary motivating factor for Madrid's funding Barcelona in which Hargreaves notes "would have been counterproductive for the central government given its objectives to withhold the necessary resources" or funding towards Catalonia for the Games (Hargreaves 61). However the local authority in Barcelona wanted to use the Games as an opportunity to promote Catalonian autonomy through its use of flags, language, culture, symbols, and other representations of Catalan identity. The compromise seems directly responsible for the successes that occured in planning between how Madrid wanted to structure the Games and how Barcelona sought to avoid that. For example, the Catalan Olympic Committee (COC) had created a set of demands regarding the representation of Catalan culture during the Olympics. Requests included the use of Catalan as primary language of address, fair use of the four official languages during the games "French, English, Spanish, and Catalan," Catalan flags to be present in all installations and buildings employed by the Games, and the Catalan flag to fly with the Olympic flag. These requests proved too separatist for the main Barcelona Olympic Committee (COOC) to approve and resulted in a series of negotiations over weeks leading up to the start date that led to the final agreement that resulted later.

However these issues were solved through cooperation between the national Olympic authority centered in Madrid and the local Olympic authority in Barcelona. For Madrid, that desire was a united Spanish state with Madrid as the central authority. However, Catalonia sought greater independence from Madrid and recognition of Catalonia as an independent Republic. In particular, Spain wanted a united image of Spain as a matter of "prestige" noted by Hardgreaves, which seems to have been its primary motivating factor. However the local authority in Barcelona wanted to use the Games as an opportunity to promote Catalonian autonomy through its use of flags, language, culture, symbols, and other representations of Catalan identity. Both sides compromised as a result of a series of ongoing negotiations between the Madrid central government and the Catalan Olympic Committee formed in Barcelona. Pujol's inability to implement his full vision of a "Catalan Olympics" resulted in the compromise of some of his demands to promote Catalan separatism through Olympic planning, such as the use of Catalan in every public address during each day of the games. Instead, the negotiations yielded Catalan as primary language of address, fair use of the four official languages during the games "French, English, Spanish, and Catalan", Catalan flags to be present in all installations and buildings employed by the Games, and the Catalan flag to fly with the Olympic flag.

Additionally, terrorism was another political factor that threatened Barcelona's Olympic vision. The political violence perpetrated in Catalonia by Euskadi ta Askatasuna (ETA), a Spanish Basque terrorist organization, created security issues regarding the protection of planners, organizers, athletes, among all of the residents of Barcelona. The group originally sought to increase its ethnic autonomy in the Basque region of Spain through political participation in the Basque Nationalist Party (PNV) in protest against Franco's oppression of Basque and Catalan culture. However after Franco's death, many members of the organization had begun carrying out terrorist attacks which the CIA notes was to "provoke a rightist coup" that would hopefully revive the group's support for separatism in the Basque community. Around the time of the games, the central government in Madrid began employing greater counterterrorism measures. According to Ramon Spaiij's account in" Terrorism and Olympic Security", there was an ETA led arson attack on a hotel near the Olympic Village two-months before the Olympics began.

The CIA report documented an additional 15,000 national police and civil guardsmen were added to the regularly staffed 12,000 police force members in greater Catalonia. Additionally, increased monitoring and communications were ensured through the use of police helicopters.

Additionally, the threat of terrorism that threatened the security of the Games for athletes, planners, and organizers was handled by Spain's strong central government in coordination with Catalonia. Government intervention to sequester and eradicate the recent violence that was occuring, such as the ETA arson attack of 1992 in greater Catalonia resulted in increased cooperation between the national and local governments of Spain and Barcelona respectively. The increases in national police and civil guardsmen ordered by the national government

contributed to increased security in Catalonia and Barcelona. A CIA report of the state of ETA showed that Prime Minister Felipe Gonzalez had shown "ruthless resolve" to eradicate ETA through limiting Basque autonomy to defuse Separatist movements, the creation of counterterrorism police units, funding for these units, and the creation of anti-terrorism laws to encourage amnesty and reduced sentences for confessing ex-ETA terrorist members. In this case, the strong response of Madrid in promoting counterterrorism measures during the Olympics contributed to ease given to Olympic planning and overall security during the planning and implementation stages of the 1992 Barcelona Games.

Analyzing both political issues reveals that it was likely the cooperation between the central authority of the Games, Madrid and the local authority of Barcelona, that allowed for Games to overcome political issues of separatism and terrorism, and implement the planning intiatives that would leave Barcelona economically and socially "successful" in terms of its ongoing legacies from 1992. In this sense, the presence of a strong national authority presiding over the Games' implementation in the host city, in this case Madrid over Barcelona, helped adresss the issues of separatism and terrorism threatening the success of Barcelona as a whole, allowing this Olympic Games the coodinated efforts needed to implement the visions of its "Barcelona Regenration Plan" discussed below.

Previous cases that have examined Olympic legacies have focused primarily on physical legacies, such as Olympic stadium venues, infrastructure, and other physical lasting structures that have contributed to Host city's successes in gaining from hosting the Olympics. In Barcelona's case, we will be examining the lasting economic and social legacies that resulted from Barcelona's vision in its Olympic plan in conjunction with the IOC. Donato's study

conducted a comparative analysis of the relationship between investment, the number of sports facilities built, and the types of management used to utilize old Olympic venues. Three important factors have relevance to Olympic sustainability in the Barcelona Olympic Committee's plan, which include the number of newly constructed venues, total financial investment, and the method of venue management. According to Donato, about 85.5% of the total Barcelona Olympic Committee (BOC) budgetary investments was used on infrastructure, which comprised the percentages seen in Figure 1 below. Venues only comprised 9% of investment in 1992, however, roads and transport had the largest amounts of total investment (Donato 2017). Economic and social factors, notably in city planning and Spanish culture, can be attributed to the success in Barcelona's Olympic planning. It is this large percentage of investment towards infrastructure, noted in Hargreaves analysis of the relationship between Madrid and Barcelona that was the vision of both the Barcelona Olympic Committee (COCC) and the Catalan Olympic Committee (COCC) for the 1992 games.

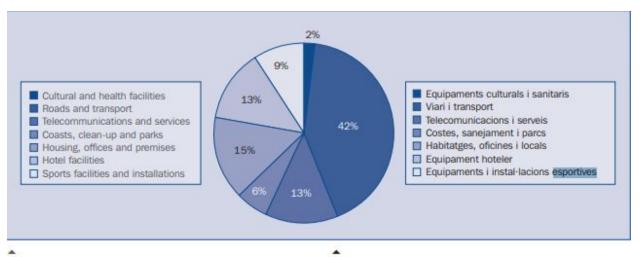
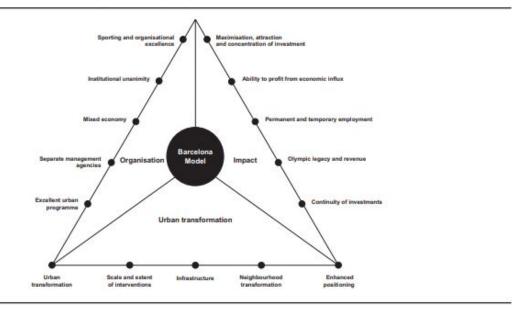


Figure 1. Financial investment for the Barcelona 1992 Olympic Games (Source: Brunet, 1994)

Figura 1. Inversió econòmica per als JJOO Barcelona 92 (Font: Brunet, 1994)



ource: Brunet 1994 and 2009.

In addition, Frenan Brunett's illustration of the "Barcelona Model" analyzed Organization, Impact, and Urban transformation planning as its three pillars of Barcelona's 1992 Olympic vision for its games. These factors are given special attention as their impact was largely observed through Barcelona's success in focusing its investment funding on urban construction, venue construction, sports programming, and facility management. The result was a carefully organized and constructed plan for the repurposing of roads, water systems, power lines, sports venues, and other facilities into useful structures for a variety of uses. This model will be the comparative model used to compare the visions of Barcelona to its succeeding games of London 2012 and Rio 2016, as both of those games counseled Barcelona when creating their own individual models and visions.

Additionally, Donato cites Brunett's 2011 study of the Barcelona's Olympic Planning Committee Olympic model, which he terms "The Barcelona Model" (Figure 1), composed of

economic, tourist-commercial, environmental, socio-cultural, psychological and political-administrative factors. Brunett notes a many various points as key to Barcelona's success in achieving its Olympic vision of a revamped urban reconstruction of Barcelona.

- Barcelona had excellent sources of investment funding from sponsorships and licenses, television rights, ticket sales, and other revenue.
- 2. Barcelona placed special emphasis on its vision for urban transformation and sports development
- 3. Barcelona was able to capitalize on its leftover Olympic constructions by repurposing constructions in ways supportive of its unique economic strengths as a city.

These three observations will therefore be the comparative qualities that the cases of the Barcelona 1992, London 2012, and the Rio 2016 Olympic games will be compared. The first factor comprises investment and revenue data. Money and investment in particular is central to the planning and execution of the joint Olympic committees. According to the "Official Report of the Games of the XXV Olympiad Barcelona 1992" Olympic Organization Report (Figure 2), 58% of the 1983 budget expenditure data collected in Spanish pesetas totaled 42,640 million (billion) pesetas, about \$650 million in 2016 US dollars*. Within revenue from investments however, Barcelona received a total of 7.25 billion pesetas. Of this amount, the largest income source came from broadcasting rights, which totaled 32.5 thousand million pesetas.

Sponsorships, Ticketing and Interest/Other income comprised 2, 2.45, and 2.5 thousand million pesetas respectively. From this data, we can see that Broadcasting Rights played a critical role in revenue building in Barcelona's plan. While this figure was very large, it is important to note that it is fairly common for Olympics to receive a bulk of revenue from television broadcasting and is

to note in the official report that the LA Olympics brought in the equivalent of 42,225 million pesetas or about \$281.5 million in 1984 dollars.

Additionally, Barcelona's vision of its Olympics centered on its planning of how it would modernize and renovate its current infrastructure, and market the sense of "Olympism" responsible for Barcelona's affinity for sports. This was demonstrated through various local and municipal initiatives. Special attention was given to the existing infrastructures within the city, including parking, marina, roads, and telecommunications towers concentrated in the downtown areas of Barcelona and surrounding suburbs. In anticipation of hundreds of thousands of visitors, Barcelona sought to expand its existing infrastructures and avoid unnecessary costs, prefering to repurpose existing construction instead of building new ones. Of these constructions included the building of 5000 new parking spaces to offset crowding, and the enlargement of all airport terminals by 9400 sq. meters. Additionally, existing construction on the subway line was expanded to include a new line called "Line 2" and the plan included a finish to subway construction between 1985 and 1990. These factors likely contributed to the modern railway system that Barcelona is famous for today in addition to the expanded construction of the Olimpic Pier in the Olimpic Pier Marina attraction today. Barcelona also has a history of sport culture, dating back hundreds of years. The "Olympic Report of the XXV Olympiad" reports that administrations such as the Gonzales administration have administered policies that have promoted sports participation. There has also been the creation of a government body called the Ministry of Education, Culture, and Sports (MECD), to provide oversight and encourage sport nationally. The founders of the original gymnasiums integrated with sporting programs began around 1868 from donors who sought increased interest in Catalonian sporting culture. Since

then, the number of sporting programs has been increasing, such as the creation of the famous Club Natatio and other venues. This fact likely contributes greatly to the report's conclusion that up to 30% of Catalonians regularly practice some sport today.

Initial budget of the Organising Comittee ⁸	Expenditure			Income		
In thousands of millions of pesetas 1983 value. Source: Olympic Office: Prefiminary Project for the Candidature, 1984.	Organisation of the Games Staff Purchase of goods and services Equipment	10.26 21.15 11.23	42.64	Own income Tickets Accomodation at the Olympic Village Programmes, posters and lithographs	2.45 1.20 0.15 2.00	42.43
	Sites (participation quota) Competition venues Training facilities complementary (Press) complementary (Accomodation)	7.92 2.97 0.97 0.94	12.80	 Sponsorship Broadcasting rights Provision of service Interest and other income 		
				Participation in income	0.40	14.20
	Actions in specific areas Basic costs Conversion costs	0.00 10.34	10.34	Lotteries Pools Coins Postage stamps	2.10 8.10 3.00 1.00	
	Unforeseen		7.47	Transfers and subsidies From the private sector From the public sector	3.00 8.00	11.00
			Sale of assets		5.62	
	Total		73.25			73.25
	Pro memoria Quota from the public administrations:		14.94	Pro memoria Collateral from the public administration direct investment quota	1	14.9
	General budget for the Games		88.19			88.19

Figure 2: Initial Budget of the Barcelona Organising Committee. Olympic Office: Preliminary Project for the Candidature, 1984.

Lastly, Barcelona's legacy, its infrastructure as described in Sonanella's reference to Truno's 1995 study on Barcelona's Olympic venues describes the sporting facilities left behind as Barcelona's greatest inheritance (Solanella 2017). Most importantly, Sonalella notes that

sporting infrastructures should be located in areas that have both a shortage of and greater need for urban regenerations impact on territorial balance. In the Olympic Report, the Horta and Montjuic areas were chosen for the most crucial locations for the construction of the Muntaner 213 Velodrome, or biking arena in Horta and the construction of the main Olympic Arena in the neighborhood of Montjuic. Montjuic, according to the report, had a previously constructed stadium that had deteriorated from lack of use. The stadium, then known as the Estadi Olimpic de Montjuic, had been renovated during preparation to remodel and create the Montjuic Olimpic public park to accompany it. These two areas are of note due to their prime candidacy as locations that had a great need for urban regeneration described by Sonanella, and confirmed through construction of new facilities during the construction years (1983- 1989). After construction and the conclusion of the games, these venues resulted in the Mutaner Velodrome into a training course for cyclists and the Estadi Olimpic Stadium as a public football venue.

1992 Barcelona Venue Repurposing						
Venue Name	Olympic Venue Type	Repurposement				
Estadi Olimpic Lluis Company Stadium	Athletic	Football				
Avinguda de Miramar	Water Polo/ Diving	Public Pool				
Carrer d'Aristides Maillol	Football	Football Stadium				
Passeig Olimpic 5-7	Gymnastics/Volleyball	Concert Venue				
Avenida de Joan XXIII	Judo	Basketball Stadium				
Muntaner 213	Track Cycling	Training				
Montmelo Circuit de Catalunya	Road Cycling	Test Circuit				
Port Olimpic	Sailing	Shopping Pier				

Figure 3 "The '92 Olympic Venues" Michael Leafe

London, England 2012

The London 2012 Olympic legacy was seen largely as a success story. The London Olympic planning committee succeeded in its plans to build all Olympic venues, had minor yet insignificant security issues, and the highest medal count Britain had seen for its athletes previously. The main mission and running theme surrounding the Games therefore was regeneration and was even nicknamed the "Regeneration Games". This theme had a centralized focus of providing new housing, business development, and infrastructure to disadvantaged areas of East London, containing historically poor boroughs (neighborhoods) of London's Newham and Docklands areas in particular. Up until the end of WWII, East London had been a designated slum neighborhood, harboring the poorest of London's citizens. It had also been firebombed as part of the German air assault on London during WWII. Since the conclusion of WWII, East London has slowly been redeveloping with the insertion of various financial industries within Canary Wharf. Even moreso, East London has specifically seen increased urban development

following the 2012 Olympics through various urban development projects and gentrification through the construction of the "Queen Elizabeth Olympic Park" and "East Village". As noted later, the construction of these two aspects of the "London Plan" focused on revitalizing an impoverished area of London and represents the legacy of "regeneration" the London Olympic Planning Committee sought to create. However the lasting impacts of these Olympic constructions are still unfolding, as the London plan emphasizes gradual implementation of the construction of new buildings, housing units, parks etc. between 2012 and 2030. Therefore, Adam Smith's regeneration study of London's urban planning between 2000 and 2012 outlined three themes associated with measuring London's success (Smith 2014 p. 1933-34):

- 1. "London's success could only be determined over the long term"
- "Legacy success could only be claimed if regeneration was achieved in wider East London, rather than merely in and around the Olympic Park"
- 3. "The project should be judged on whether it delivers social and economic change, rather than merely physical transformation"

Due to the nature of these factors of success, the effectiveness of the urban revitalization of East London currently could only be measured by the effectiveness of physical transformation in all of East London and whether any social or economic changes have already taken place. This is to ensure that even while the regeneration of East London is still occurring, this case study can still provide an overview of the economic and social impacts the Olympic Park and East Village could have on greater East London as a whole.

London's regeneration planning operated on three levels: local, city-wide, and national. Among these the most crucial was the national level, which had power in directing urban policymaking to appropriate smaller city and local sub-committees. The DCLG, a national planning policy institution for the Olympics of Britain's national government was the main source of funding towards the Thames Gateway Development Corporation (LTGDC) which according to Smith's research on London's regeneration planning, was formed to regenerate large parts of East London (Smith 2014). Acting under the authority of the LTGDC, then mayor of London Ken Livingstone emphasized East London was the only area that could meet IOC requirements and leave a positive impact on an economically crippled area of London. The nomination of a site in Stratford of the Lower Lea Valley was critical to the revitalization of East London due to its immense size and proximity to the city's center. Additionally, this area had ongoing urban initiatives to reconstruct transportation and housing constructions but had lacked the funding necessary to complete its projects. Therefore, by combining these factors, the urban regeneration plan constituted a construction proposal that would use the Olympics to construct new railways between the area and downtown London, new housing units, roads, parks, tourist attractions, and various businesses.

One of the attributable factors of why London succeeded in creating its own Olympic vision could be attributed to the lack of political and organizational dissonance experienced by planners from members of Parliament, organizers, and funders. Generally speaking, all groups directly impacted by the venue, housing, and infrastructure construction were in favor of revitalization, including most London inhabitants, business owners, and political parties, due to the increased international media attention and potential profits that tourism and infrastructure

could bring to the national and local economies. However, not all plans for London resulted in positive outcomes. One outcome noted by Giulianotti emphasized the lack of mobility in London during the Olympics as conducive to the undermining of London's goal for a positive media image. Analysis of Giulianotti, Armstrong, Hales & Hobbs 2015 study of mobility in the London 2012 Olympics highlights two specific and recurring issues faced during the games, transportation and resulting housing vacancies. Giulianotti notes transportation mobility during Olympic events caused sharp increases in inefficiencies in traffic, in a large part due to elitism. The creation of 30 miles of fast lanes on highways surrounding the Olympic staging areas, the velodrome, and the main Olympic stadium were reserved only for VIPs, Elite Committee members, celebrities, fostering resentment for reaching events in hours of traffic on normal traffic lanes (Giulianotti 2015). Lack of sufficient parking, huge crowds, and crowd funneling into public transportation also resulted in inhibitions to mobility during events. The mobility issue was one of the most commonly reported issues throughout London in 2012. So did issues in mobility affect the outcome of London's success in hosting? Arguably, increases in mobility restrictions such as increased traffic, priority status to VIP Olympic officials, lack of parking, and other issues discussed in Giulianotti's study while important in sociological studies of local communities impacted by the Games, are a hallmark of any Olympic Games or mass sporting events in general. These issues may have had a social impact on quality of transportation and the overall experience for visitors and Londoners alike, but little impact on urban planning and the resulting success outlined in Smith's identifications of "success". While London may have been a more opportunistic case study for examining the impact of mobility issues at large, overall mobility issues had little impact on London following the deconstruction of unused stadiums and the return of thousands of visiting tourists after the Games' conclusion. Gentrification however, seemed to be a more persistent and long-running issue facing London's ability to fulfill its terms of success outlined in the "London Plan", specifically in terms of the impact urban regeneration had on local residents.

The other issue was the vacancy of housing around Olympic Park constructions.

Giulianotti noted that Olympic preparations in the district of East London's Newham, required that over 400 residents and 200 businesses owners vacate their homes and businesses on the Clays Lane Housing Cooperative to make way for the construction of the Olympic stadium and surrounding roads (Giulianotti 2015). Displaced persons were not compensated for this removal and the action represented the first "fundamental shift" in political control over the local lands in East London during this stage of planning. Paul Watt's 2013 interviews conducted in the Newham Borough's Clays Lane and Carpenters Estate areas of the Greater Lea Valley Project centralized around the socioeconomic impact gentrification had on its residents. Older, more long-term residents in Newham reported a greater sense of belonging and community, resulting in overall discontent at the city's gentrification process of "revitalization" for the construction of the Olympic Park. However younger residents reported less discontent due to community and more frustration at rising housing costs associated with the construction of new housing units surrounding their residences located near the Olympic Park construction areas (Watts 2013, 113).

Analyzing Watt's research into the social impact of the Newham borough community's experience of gentrification however yields a couple of observations. First, while some residents reported being impacted by gentrification, this population constituted only a small number of residents affected by the Olympic constructions. Many local urban planners of Newham in

association with the ODA regarded the construction of Queen Elizabeth Olympic Park as a regeneration project that would bring about improvements to the "quality of life" of residents of poor areas such as Newham and were aware of the conflicts between local residents, businesses owners and the urban planners responsible for the gentrification (Poytner 2016, 118). Yet within this study, only about 400 residents within the Clays Lane housing cooperative were displaced due to construction and housing costs. Therefore while insight into gentrification proved to be an ongoing issue between locals and urban planners, the construction continued despite this small community's disapproval. The construction of the Olympic Park's greatest attraction, the Westfield Mall in one report provided "at least 2,500 new job positions and drew over 800,000 visitors a week since opening in September of 2012" (Washington Post 2012). These positions were even reserved for locals inhabiting areas affected by construction, in an attempt to offset the costs associated with increased rent, property and other city taxes.



Figure 4: Map of Stratford

Examining London's case for its "regeneration games" yields a successful case for a well-structured and organized Olympic mega event. London's urbanization and construction planning authority, the Olympic Delivery Authority's (ODA), the main state institution for the delivery of East London's regeneration's main task was the construction of the Olympic Park, construction of new housing, transportation, and other infrastructure within the Lower Lea Valley and and emphasis on the improvement of quality of life for a particularly underprivileged population of London through regeneration. If these plans were not met, the mission statement for London's urban planning would not have been met. London presents an interesting case due to its lack of political issues that affected its decision making regarding its use of funding towards revitalization and analysis yields a few conclusions regarding why London's efforts at executing its vision of regeneration was successful.

Firstly, there were no main security issues reported that constituted trouble for planners; mobility while hampered, was not enough of an issue to impact the ODA's success in buying and securing land in the Lower Lea Valley, such as the Carpenters Estate and Newham areas.

Additionally, the impact gentrification had as a result of regeneration efforts in these areas only afflicted a small community of people, who while weren't compensated, did not contest the issue enough to turn the political issue into a social movement capable of challenging the Olympic planners ambitions. Therefore, it could be argued that London's success in executing its vision for its Olympics was due to the lack of a political issue large and divisive enough in scope to undermine the regeneration project of the Olympic Park. This in part could be attributed to London's strong construction and funding institutions, notably in the ODA's connections to local contracting organizations in the Lower Lea Valley area. Gaining approval for approving

construction was given by the London Olympic committee to the ODA, which was strong enough to contact contractors and foresee the construction implementation, making the ODA a strong institution in London's regeneration planning. Comparing London to Barcelona's case, London lacked a political issue large and threatening enough to the London's Parliament, such as separatism, that could undermine the authority of the ODA from executing its regeneration plans. While citizens impacted by gentrification in the Newham area for example, were impacted by the policies, most were able to overcome rising rents, taxes, etc through newer, higher paying jobs or through relocating to cheaper areas of London.

Secondly, the London Olympic Planning Commission had general overall support by both political parties who saw the event as an opportunity to truly improve a disadvantaged area of London and incorporate the plans for its Olympic Park into the fabric of London's metropolis. The London Delivery Authority, the ODA, had a special role in implementing regeneration planning from the Thames Gateway Development Corporation (LTGDC), which gained national funding from public and private funds, such as taxes, sponsorships, and non-profit fundraising through local initiatives. This source of crowdfunding, allowed the London Planning committee to fully implement their Olympic vision, which due to its extent, is still unfolding now. The ODA also played a role in creating assurances for residents displaced by gentrification through promises of new jobs and a revitalized urban community with the Olympic Park in the coming years of construction. The institutions, in this case the ODA and LTGDC through this crowdsourcing of funding and the ability to address concerns of gentrification by the construction of Queen Elizabeth Olympic Park and cemented their Olympic visions, proving that a strong institutional authority with support and funding can be an important factor in the success

of implementing and Olympic vision. Mike Raco even noted the account of the former Mayor of London Ken Livingstone's vision for London's primary goal, "I didn't bid for the Olympics because I wanted three weeks of sport. I bid because it's the only way to get the billions of pounds off of the government to develop the East End (Livingstone, 2008, p. 1)" (Raco 2010, 2075). In sum, the regeneration of London's East End constituted a united effort to holistically transform this area into a model neighborhood through mass spending. The Olympic event allowed for a mass coordinated effort that otherwise could have been more fragmented and slowed.

Third, the London Plan was coordinated and written very gradually over the course of a decade. It is the first official city regeneration plan to have been coordinated over an extended pre-bid period of time. While time itself is not a factor of success, the ability of London's ODA to use its time effectively and utilize its outreach to effectively plan and implement the London Plan likely contributed to the highly detailed and well-thought implementation of that plan. Other countries such as Rio, had little ability to plan effectively due to time constraints of transitioning FIFA infrastructure for example, into Olympic infrastructure that would pass IOC requirements in enough time, in this case 1.5 years. Smith noted that the plan for a London Olympics has been envisioned since the rise of the London Thames Gateway Development Corporation (LTGDC), a coordinating body that had begun its plan since 2004. Over 8 years of planning had resulted in first the vision and then implementation of Queen Elizabeth Olympic Park with various Mayors of London being involved in the coordination efforts, including Ken Livingstone, Boris Johnson and others. This coordinated effort to avoid the pitfalls of other Olympics such as the financial

troubles of Athens 2004, likely allowed Britain to take the long term planning approach to constructing its vision for the Olympics.

Lastly, the construction of London's Olympic Park is still an ongoing project. While the Olympic Games occured in 2012, the full plan is not scheduled to be completed until at least 2031 as part of London's more "long-term" vision for revitalizing East London. The implementation of housing units, high speed rails, wide-scale landscaping, parks, and the "Olympicopolis", a vision for an area for museums, universities, and other cultural institutions were included as part of the wider "Local Plan" for the Lower Lea Valley. Additionally, plans for an "International Quarter" will be composed of gardens, apartments, and other attractions to encourage tourism and residence in the new area. All of these developments are still ongoing and therefore it is too early to call the extent of the social and economic impact the London Plan will have on the Lower Lea Valley. However, examining the detailed objectives of the London Plan stands out in comparison to other countries' vision plans who have tended to have a more short term plan constructed after securing an Olympic bid, as opposed to London's Planning years before actual bid acceptance.

Rio, Brazil 2016

The recent 2016 Rio Olympic Games can be considered a widely regarded example of a failure to accomplish an Rio Olympic Committee's central goal, to use the funding and media attention as a platform for widespread infrastructural improvements, secure revenue to pay off outstanding debts, and as a kickstart for a improved Brazillian economy. Brazil's vision for its Games revolved around achieving successes in providing much needed roads and water treatment facilities as part of its regeneration model and yet the results of building a sustainable infrastructure worthy of that vision was rather lacking and left much to be desired. In examining Brazil's Olympic vision, it was found that Brazil faced many issues that undermined the ability of its state and local government to effectively coordinate on political issues address those issues in effective and lasting ways, leading to a messy mega-event faced with issues of security, environmental degradation, health, and financial turmoil and protest. However while the Brazillian government was faced with a variety of issues and failures, the Rio 2016 Games is still widely considered to be one Brazil's greatest achievements to date, becoming the first ever South American country to host a Summer Olympics. Brazil's vision mainly focused on providing regeneration to waterways and lakes and to provide new water and sewage treatment facilities.

Additionally, the plan outlined transformations to government-provided transportation, sustainable venues, and environmental conservation and clean-up target goals.

A vast amount of literature on the Rio Olympics has focused on issues regarding its state prior to the official Olympic start date in 2016. However little has been published on the impact Rio's legacy plan has had on the city and its residents following the end of 2016, due largely to the only recent coverage this topic has been making, such as in Scott Davis' recent photographic news article detailing the state of Rio's Olympic venues in January, 2020. However, analysis of Rio's vision could be examined via the olympic.org's official report detailing Rio's vision of sustainability in an Olympic official report gathered in 2014. Rio's strategic plan and vision for the goals of hosting the 2016 Olympics according to the official Sustainability Management Plan (SMP) outlining Rio's physical legacy goals states a central mission to "deliver an excellent Games, enhance the global image of Brazil, and promote *sustainable* urban and social transformations. Specifically notable were the implementation of a new transportation infrastructure, including a new bus system labeled Bus Rapid Transit (BRT), expanded metro/subway systems, and a renovated train system (p.19). However, closer examination revealed that 2 out of 4 of the newly proposed BRT line systems were still being built around the time the report was published, reflecting the "slow pace" Barnes 2014 New York Times article on Rio's preparations examined in relation to other past Olympic Games, notably worse than Athens constructions in 2004. Additionally, all proposed rail systems had not been built at the time, with most being reported to be "in progress" or to be completed by late 2015, a noticeably late completion date.

Regarding Olympic venues, the plan also detailed the construction, number, and use of venues but did not detail its repurposement. Notably, a total of 36 venues would be used during the Games, more than double the amount used in Barcelona and London respectively. Of these 36 venues, 16 were previously constructed and would be renovated, 9 would be used temporarily, and 11 new venues would be constructed, with an emphasis on the temporary venues' ability to be disassembled and reused (p.28). Tracking these venues however is very difficult due challenges in gaining access to the Olympic Committee's new version of the Rio SMP document, which accounts the objectives and life cycles of each venue. Yet drawing comparisons of Rio's regeneration plan with Barclona and London's visions reveals Brazil's struggle to implement effective policies that could speed the construction and preparations for 2016, as revealed by the delays in venue and transportation construction and the obscene number of venues Rio intended to use for events. Additionally, plans for the urban renewal of Port District, Maracana Stadium, and Olympic Park (Passeio Olympico) the Olympic Park were successful following the lead up to the Olympic Games, boasting parkways, new sidewalks, sewage treatment facilities, parks, railways, entertainment, and other features that were all completed between 2012 and 2014 (p.35-37).

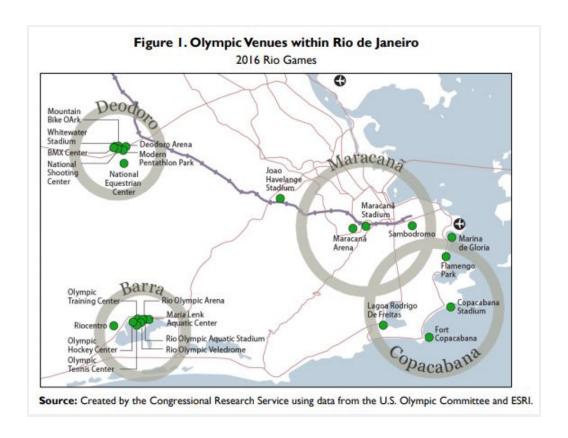


Figure 1: Regions of Rio & Guanabara Bay

Lastly, the construction of new sustainable environmental facilities built for the purpose of cleaning up polluted and infected areas was detailed in the Environmental Conservation outline of the sustainability plan, all of which were studied to examine the amount of environmental impact the facilities would have and methods to make the facilities sustainable and minimize negative impact, such as pollution (p.39, 41, 46). Of note were the plans for the clean-up of Guanabara Bay via improved sewage treatment facilities, construction of reservoirs for sewage treatment at *Praca de Bandiera* which is a link to other water treatment facilities in Barra, and the deployment of eco-barriers designed to catch improperly disposed human waste from Guanabara Bay by using stream currents. Examining these plans however reveals a couple

of flaws regarding organization. Outlined in the plans above were water treatment facilities to manage sewage pollution for improper disposal of human waste into Guanabara Bay. However the plan did not outline any mention of testing or treating the waters of the Bay to clean bacterial and viral contaminants. As reported in Dendura's analysis of Rio's pollution issues during the 2016 Olympics, while the eco barriers provided a solution to filtering loose waste and trash from the main bay area, it did little to treat the cause, bacterial and viral counts in the waters (Dendura 2019, 28). As confirmed by the SMP Plan, there was no outline as to how the water would be treated and whether testing on the Guanabara Bay would be conducted to take account of bacterial and viral contamination.

All of these observations help paint a picture of Rio's management of its "Green Games for a Blue Planet" vision. While the vision for Rio's Olympics were a target of regeneration and environmental sustainability through much needed water treatment and transportation infrastructure, the government ultimately failed to create a lasting legacy of that vision. The images of the venues today conducted by Business Insider's report by Scott Davis reveals a hollow legacy of mismanaged or forgotten venues: A demolished and rusting Media Center, abandoned venues including the Maracana Stadium, used for main events, stagnant water in the abandoned Aquatics facilities, deserted golf courses and unoccupied apartments in the former Olympic Village (Davis 2020). In addition, while Rio's policies on producing a sustainable Games constitutes plans for a well-planned regeneration vision, the execution is lacking. In the example with the Guanabara Bay, officials implemented policies that cleaned visible debris but did little to address the issue that was the source of the pollution, improper disposal of waste

directly into the Bay area. If the government had better oversight and had instituted policies aimed at curbing pollution directly instead of treating the aftereffects, the sustainability vision for curbing water pollution may have been fully realized.

Reasons as to why Rio failed could be attributed to a variety of factors, specifically varied economic, social and political issues that made planning for Rio particularly difficult, and undermined the ability of the Brazillian government to create institutions that could support their sustainability goals listed in the SMP. Economic issues that influenced the Olympic policymakers ability to implement the Games included the impact of the 2016 recession on the market and the debt accrued from hosting the Fifa World Cup in 2014. The main social issues facing Rio mainly involved public health, being the outbreak of Zika-Virus and media pressure to address pollution issues and health threats to athletes competing in water events. Finally, political pressures from Brazil's largest corruption scandal in history, the Petrobras Scandal contributed to the distrustful image the public had towards the government and contributed to the crippling economy. Combined, these issues created a climate of economic uncertainty, driven by Brazil's pride at producing the image of an up and coming world economic actor via a "BRIC nation" (O'Neil 2001; Nobre 2016, 5). yet leaving the country in a weakened economic and political state rife with problems.

Between 2015 and 2016, Brazil slumped into a wide-spread economic recession, resulting in a contraction in the total economy, and causing rampant unemployment. At the beginning of 2016, Brazil's GDP growth rate shrank by 3.6%, slightly lower than the 2015

shrinkage of 3.8%. This contraction of the economy was persistent for 8 consecutive quarters, increasing the unemployment rate to 12.6% by January 2016 according to CNN, leaving over 13 million Brazillians out of work. The cause was a decrease in exports to China, who's growing economy required less commodities from Brazil. Additionally, since Brazil is a mostly commodity-based economy reliant on oil and agriculture, prices of goods are vulnerable to instability due to competitive world prices. As a result, in 2016, Brazil's commodities of oil, sugar, coffee, and metals all dipped in value. Lastly, the media attention of the Petrobras scandal undermined investors' trust in the Brazillian investment market, causing investment to plunge 12% and the value of the Brazillian real to fall about 12%. Secondly, the previous legacy of hosting the 2014 World Cup left Brazil in a state of debt. Eduardo Nobre's 2016-2017 study of the World Cup's legacy on Brazil revealed that The Brazillian Federal Bank issued public loans to fund stadia and that the Brazillian Development Bank (BNDES) opened a credit line with lower than market interest rates, giving municipalities and states tax exemptions when they did not directly fund for the stadiums themselves (Nobre 2016;2017,13). This resulted in loans and tax exemptions resulting in over 84% of total expenditure of the \$10.4 billion spent for construction and infrastructure costs for the Fifa World Cup, likely perpetuating Brazil's cycle of debt and contributing to the cause of the recession. All of these drops in value across the economy likely contributed to Brazil's desperation to implement its Olympic vision of a "revitalizing" Games, in an effort to gain public enthusiasm and support for boosting Brazil's international image and likely contributed to Brazil's franticness to create an image of a sound and impressive South American economy which it emphasized as a part of its mission statement for its Olympic bid.

Additionally, regarding health crises during 2016, the largest proved to be the outbreak of Zika Virus, a novel virus originating from Uganda which spread through mosquito bites and was found to cause "microcephaly" or brain shrinkage and death of babies born from pregnant females who harbored the virus. The IOC in collaboration with the WHO recognized the threat Zika posed to athletes and provided a statement to the world warning pregnant women should not travel to Brazil during this time, in an effort to curb infections. However the outbreak contributed to the general unease harbored by athletes and officials planning for the Games who were already concerned about issues with water quality and being able to train for aquatic events safely without contracting other viral or bacterial infections. Hamilton's study of the Zika Outbreak during this time suggests, even with international academics urging the IOC to move or cancel the Games for safety concerns, urged that the Games would continue as planned (Hamilton 2017, 523). As a result, the WHO released a second statement in June 2016 stating the Games would continue as planned, outlining that the threat of further outbreak was limited and that containment measures were put in place, meaning containment of infected individuals and testing provided by the state. The overall outbreak of Zika threatened the welfare of Brazil in ensuring it could host a successful Games, and Brazil as a result of this was adamant at ensuring everything would be okay to continue as planned. The Library of Congress's Report of the 2016 Games outlined the Brazil Committee's Plans to fumigate public areas, reducing mosquito population and quelling fears of outbreak, likely in an attempt to preserve its vision and avoid financial pitfalls of postponing or canceling the Games entirely (p.6). Additionally, the outbreak put further financial strain on hospitals and medical officials. Secondly, international pressures to

contain pollution were wide and numerous. As noted earlier, the contamination of human faces brought an international image of underdevelopment to Brazil's current state of the Guanabara Bay and concerns were raised over the athlete's abilities to train and compete in polluted waters. The widespread media attention pressured Brazil into developing measures to improve its water quality, as stated, by implementing barriers to catch waste and investing in water treatment facilities. This international pressure likely contributed to the rushed construction of these facilities and pollution containment measures, preventing the government from delivering the image of environmental sustainability outlined in its proposal.

Lastly the discovery of the Petrobras Scandal created specific conditions that undermined investors and citizens' trust in the Brazillian Government to use funding for the Olympics as proposed, sparking civilian protests and contributing to the overall economic stagnation faced during the 2016 recession. The Petrobras Scandal undoubtedly crippled the Brazillian economy in late 2015 and its legacy lagged into early 2016 and after, causing a dissolution between the world's perception of Brazil economy and the government's perception of their ability to deliver IOC expectations, and undermining confidence at Brazil's ability to deliver its Olympic regeneration promises. After a federal investigation into corruption charges from high level Petrobras Oil Company officials from overcharged contract deals, and it was revealed an estimated \$2.1 billion was pocketed by officials since 2004. An account of one economist revealed that the scandal was the largest corruption case in Brazil's long history of corruption and by one estimation would reduce Brazil's GDP by up to 0.75% due to the company's influence on the commodity market. This caused an international lawsuit that sought to charge

Petrobras for financial damages and caused investors to pull out. By one New York Times Article, oil was the central strategy to Brazil's economy and the company lost more than half its value in 2015. The overall implication of the scandal for 2016 yielded similar results to the other issues facing Rio, economic turmoil brought on by the mismanagement of institutions central to Brazil's economy.

The summation of issues that plagued the atmosphere of Rio 2016 reveals a few conclusions: (1) Poor planning and mismanagement of financial assets and funding by Brazil's economic institutions crippled the economy and foreshadowed the incoming financial hardship that the Brazillian Organizing Committee would have during construction. In a sense, Brazil overcommitted in financial arrangements, such as hosting the World Cup two years before it was scheduled to Host the Olympics, creating a narrow time frame to plan and implement the needed investments in facilities, roads, transportation and Olympic venues. This resulted in sloppy management of facilities that were more difficult to repurpose and manage, notably the Olympic venues. With economic woes posed by the recession, it was unlikely the Organizing Committee had the economic feasibility and a plan for funding set in place that could monitor and manage venues such as the Maracana Stadium beyond the scope of its purpose during the actual Olympic events. Additionally, the Petrobras Scandal undermined the sense of trust the international community and local civilians had for the Brazillian Government, plunging the country deeper into recession, increasing debt and decreasing overall GDP. (2) Brazil's sense of its need to present itself as a rising BRIC economy caused it to overcommit on producing regeneration and infrastructural promises. In short, Brazil had an inherent need to impress previous Olympic hosts

by being the first South American nation to host the Olympics. Its vision for a "Green Games Blue Planet" which outlined its sustainability and legacy goals could not be feasibly funded considering all of the financial pitfalls involved, and facilities like the Olympic venues, did not have the repurposing vision to the extent other previous Olympic hosts had, much less implemented.

Analysis

Analyzing the comparative qualities of these case studies including differences in vision, planning, implementation, and preparation reveal how the institutions that govern these factors also influence their outcomes in respective host cities and their Olympic Plans. Of note, in each case certain economic and political structures; joint state and local planning committees, sound corporations to crowdsource public and private funding, and non-corrupt bodies of authority were in place that made the handling of political issues more manageable for each planning committee in cases that were successful. These structures had profound influence on how the outcome of higher-authority decision-making was executed or ignored. regarding the use of funding, sustainability planning, and the regeneration planning and construction goals of each state were conceived and implemented, with special focus on goals each country had for improving physical aspects of its host city. Overall, this research identifies the presence of a strong collaborative state and local governing authority, good sources of funding, stable economies, and a presence of secure, non-corrupt institutions allows a hosting state an ideal institutional model for hosting an Olympics and achieving the city's Olympic vision. Therefore hosts with less stable institutions, institutions that don't control corruption, that inhibit economic growth, that fund spending through debt, and that lack a combined state and local authority therefore have a more difficult time implementing their legacy plan, as demonstrated by Rio.

In Barcelona for example, the close cooperation between the state authority of Madrid and local authority of Barcelona resulted in a partnership involving a series of compromises that led to the eventual agreement to recognize Barcelonian nationalism and grant Barcelona authority to represent itself independently during the Olympics. This compromise acts as the foundation for a strong Olympic governing authority through open collaboration between the

state and Barcelona, neutralizes the threat of separatism undermining Madridian authority over decision making, and gives each side political and economic leverage in the planning and implementation of Olympic events, venue construction and management, urban regeneration projects, and national representation of Spanish and Barcelonian culture. This sense of collaboration and cooperation within this governing authority is one factor successful Olympics create and use to govern. In London, this governing authority was the Olympic Delivery Authority (ODA) which was the collaborator between local level political issues and state level planning and construction. Since this authority was created in collaboration between both British political parties, the ODA had the authority to manage and facilitate Olympic Park construction initiatives whilst collaborating with local residents impacted by the political issues that threatened to undermine planning, such as the gentrification issues of London. However, Rio tended to lack a joint sense of local and state authority that could deliver planning initiatives efficiently. For example, while Rio planned on addressing pollution issues covered in the media to help facilitate and ready the Guanabara Bay in time for water events, little authority was given to local officials regarding sample testing or the purification of the waters beyond "trash barriers" that caught loose debris. The fault of that issue is local rather than national, as there was a lack of collaboration on pollution issues between Rio and local environmental management authority in the Guanabara Bay area.

In addition, good sources of funding allowed for more stable spending habits with legacy outcomes that were more ideal. In Barcelona and London, the presence of strong sources of public and private funding from government budgets, sponsorships, donations and other sources of local funding such as community fundraisers were healthier for implementing constructing

plans and sustaining those constructions through repurposement. In Barcelona for instance, venues were repurposed into event stadiums, concert venues, and other purposes that could be sustained due to appropriate funding for management corporations who used the venues for business purposes. London, while its legacy is still emerging, has plans for utilizing the Olympic Park as a housing and real estate business opportunity for local citizens and business owners to invest into. Rio however, lacked stable and sustainable sources of funding and opted for loans to fund its Olympics immediately following hosting the Fifa World Cup in 2014. This overextension of resources and lack of time to adequately fund construction projects through traditional channels, donations, sponsorships, and public and private funding only contributed to Rio's deteriorating financial climate coupled with its recession.

Having a stable economic climate also could have contributed to Barcelona and London's success. On average, London and Barcelona growth rates were between 3-5% before and during the Olympics and steadily remained throughout construction. This stability can be resultant in that true democracies with non corrupt and stable institutions tend to have more structures in place to ensure economic stability. For example, London as an advanced democracy with a market economy, has a diversified set of assets to ensure economic growth, such as a strong service industry, a prevalence of high skill labor, finance, steel, transport equipment, and oil and gas sectors of its economy. Rio's economy however was less diversified and was facing widespread recession with falling growth of about 1% per year and which affected every aspect of its economy. Rio's main industries are primarily commodity markets including agriculture, oil and some technological industries but have not outpaced traditional industries of agriculture and oil. Oil, being the biggest market was severely impacted by recession and scandal, undermining

Brazil's economic stability. This presence of economic instability is damaging many aspects of Olympic planning, especially in the crucial aspects of construction funding and management. As an analogy, imagine spending billions of dollars on a credit card with outstanding debt on vacation, it's simply not a smart choice.

Lastly, the presence of corrupt institutions undermines the authority of the state to effectively deliver policies it sets out in its legacy plan. As Rio demonstrated, trust in the local and state authority to deliver its promises of regeneration can be undermined if the governing authority exploits funding, contributing to economic pitfall. The Petrobras Scandal embroiled Brazil's main source of funding in the economy in turmoil due to lack of trust in investors contributing to funding the games and citizens lack of trust in the company to use money the way it was intended. Corrupt bodies such as this prevent investors from loaning out money for funding, which could have contributed to Brazil's need to take out loans to fund its construction projects. More stable and liberal bodies are more effective in controlling and mitigating corruption through checks and balances and systems of law that more effectively hold corrupt businesses, politicians, and employees accountable to the extent of the supreme governing authority of the state. In Barcelona and London, the prevalence of democratic institutions, such as the State Council in Spain and Parliament in Britain provide safe and accountable sources to stamp out corrupt institutions from obtaining power. Rio however, lacked an effective enough authority to do so at the time.

However some arguments to institutional influence and hegemony over Olympic planning and execution of that planning presents alternative theories. For one alternative theory, Rio could have failed because it was unlucky. The prevalence of political issues Rio faced,

Zika-virus, corruption, recession, pollution and other issues could have simply made it too difficult for Rio to address all the issues and construct its legacy plan effectively. While this could be the case, Rio ultimately planned for its Olympics and had the right to plan and construct for the event years prior to its implementation. London planned extensively for how it would deliver its vision of a revitalized East London through malls, housing cooperatives, subways, roads, and other constructions. However Rio had a plan but ultimately did not plan effectively. Hosting Fifa and the Olympics within two years is a great and troublesome feat that most host cities would probably struggle to fund and construct. This argument however just concludes in poor planning by Rio's part, using the Olympics as a platform to boost the economy only has short term effects as Meanigg's findings suggests.

Another counter reason could suggest that a united sense of identity and passion for sporting was responsible for Barcelona's success in repurposing its venues. Their citizens had great passions to effectively promote and sustain the venues in useful ways that created business opportunities for these constructions. Barcelona is known for its sporting culture which allowed the venues to remain in constant use. So why not Rio? While this argument poses local culture as central to physical legacies permanence, Barcelona is a notable exception. Barcelona as the wealthiest city in Spain, has the funding and institutions necessary to perpetuate the longevity of its venues. Most cities in the world however do not have such a comparable local culture with the appropriate institutions necessary to sustain them. For this, Barcelona could simply be a unique case. Yet even Barcelona had a plan for its repurposing of venues through this sense of culture, whilst Rio did not.

These four factors are influential to securing an Olympic vision. Strong political and economic institutions give the necessary structure for any given planning committee to not only plan but fully implement any given Olympic legacy vision. Specifically, the need for a strong governing body seems especially important, in that all successful cases must be able to organize their vision and its implementations effectively through delegated responsibilities, such as addressing issues on local levels, spending funding correctly, and making sure projects are completed on time.

Conclusion

Examination into the political institutions and structures surrounding the execution of an Olympic vision can look and feel rigid. Certain structures, sound economic and political

institutions of Government, oversight, collaboration, and funding boards provide an effective method of ensuring an Olympic visions execution and the sustainability of an Olympic legacy. Olympic legacies additionally can be wide and varied. Tangible legacies such as infrastructure construction and management are more common in regeneration planning. However as demonstrated, other legacies such as London's vision for its Queen Elizabeth Olympic Park provide more than just tangible legacies, but also intangible ones, such as its vision for serving a traditionally poor area of London and providing housing, jobs, amenities and other projects to not only construct something physical, but also to improve the livelihoods of underserved populations.

While the institutionalist argument does conclude institutions do have influence in creating political outcomes regarding vision implementation, it generally avoids more sociological arguments such as culture being a factor in decision making. Therefore there could very well be other explanations to how Olympic legacy research can be explored. Maenigg's economic methodology provides better insight into economic theories, including measurement of the profitability of Olympics and trends towards financial traps of hosting an Olympics (Maenigg 2017). Other research may explore further into the sociological implications facing Olympic planning. Studies such as Hargreaves examination of Catalonian separatism present unique socio-political arguments to why some Olympics fail, such as differences in goals due to cultural heterogeneity, issues with public opinion and support for Olympics, governmental regulations and limitations on construction and planning, political lobbying for unpopular legacy visions, and other topics. In addition, this research is largely archival, meaning there are little accounts of hard data with use of statistical, observational, or applied economic methods of research. Further

research could actually observe and interview the true outcomes of these Olympic legacies as they reveal themselves. Currently only Barcelona's legacy is apparent. London's and Rio's are still unfolding due to the extent of each plan and the recent conclusion of both Olympics. Field research would provide greater insight into the current state of legacy affairs, and how the planning initiatives described are unfolding and could be assessed to how those visions succeeded in implementation or have failed.

Bibliography

Addley, E. (2016, March 17). Why is Brazil's government in crisis? – the Guardian briefing. Retrieved from

https://www.theguardian.com/world/2016/mar/17/brazil-government-crisis-briefing-dilma-rousse ff-lula-petrobas

Alland A. & Alland S. (2006). Catalunya, One Nation, Two States. An Ethnographic Study of Nonviolent Resistance to Assimilation. Palgrave Macmillan, 55-56

Allen, J., & Cochrane, A. (2014). The urban unbound: London's politics and the 2012 olympic games. International Journal of Urban and Regional Research, 38(5), 1609-1624. doi:10.1111/1468-2427.12147

Amann, E., Baer, W., Trebat, T., & Lora, J. V. (2016). Infrastructure and its role in brazil's development process. Quarterly Review of Economics and Finance, 62, 66-73

Barnes, T. (2014,). Olympic committee official calls rio's preparations for 2016 games 'the worst'. The New York Times

Brazil infrastructure report - Q1 2016. (2016). (). London: Fitch Solutions Group Limited.

Brunet, F. (2011). Analysis of the economic impact of the Olympic Games. Multidisciplinary Research and Dissemination of Olympic studies. Barcelona: CEO-UAB

Burbank, M., Heying, C., & Andranovich, G. (2000). Antigrowth politics or piecemeal resistance? citizen opposition to olympic-related economic growth. Urban Affairs Review, 35(3), 334-357. doi:10.1177/1078087002218443

Calamity janeiro; brazil's olympics. (2016). The Economist, 419(8995), 31.

Cohen, P. (2017). London 2012 and the post-olympics city: A hollow legacy?. London, United Kingdom: Palgrave Macmillan.

COOB'92 (1992): Official report of the Games of the XXV Olympiad : Barcelona 1992. V.1. The Challenge : from the idea to the nomination. Barcelona : COOB'92.

Davis, S. (2020, March 5). What abandoned Olympic venues from around the world look like today. Retrieved from

https://www.businessinsider.com/abandoned-olympic-venues-around-the-world-photos-rio-2016 -8

Dendura, B. (2019). Olympic Infrastructure—Global problems of local communities on the example of rio 2016, PyeongChang 2018, and krakow 2023. Sustainability, 12(1), 141.

Donato, F. S., Andreu Camps i Povill, Eulàlia Dordal i Culla, & Anna Carné i Miguélez. (2017). The barcelona olympic games: Looking back 25 years on (3). (p. 122-128) Apunts. Educació Física i Esports, (129), 121. doi:10.5672/apunts.2014-0983.cat.(2017/3).129.09

Feddersen, A., Maennig, W., & Zimmermann, P. (2008, Mar). The empirics of key factors in the success of bids for olympic games. Revue d'Économie Politique, , 171-187. Retrieved from https://search-proquest-com.colorado.idm.oclc.org/docview/218352816?accountid=14503

Gillespie, P. (2016, August 28). Brazil falls deep into recession. Retrieved February 6, 2020, from https://money.cnn.com/2015/08/28/news/economy/brazil-recession/

Gillespie, P. (2017, March 7). Brazil is still in its worst recession in history. Retrieved from https://money.cnn.com/2017/03/07/news/economy/brazil-gdp-2016/index.html

Giulianotti, R., Armstrong, G., Hales, G., & Hobbs, D. (2015). Global sport mega-events and the politics of mobility: The case of the london 2012 olympics. The British Journal of Sociology, 66(1), 118-140. doi:10.1111/1468-4446.12103

Hargreaves, J. (2000) Freedom For Catalonia? Catalan Nationalism, Spanish Identity, and the Barcelona Olympic Games, Cambridge University Press, 58-62

Hamilton, B., Exeter, D., Beable, S., Coleman, L., & Milne, C. (2019;2017;). Zika virus and the rio olympic games. Clinical Journal of Sport Medicine, 29(6), 523-526

Hiller, H. H., & Wanner, R. A. (2018). Public opinion in olympic cities: From bidding to retrospection. Urban Affairs Review, 54(5), 962-993. doi:10.1177/1078087416684036

Kobierecki, M. M. (2017). Sports Performance and Shaping International Image of a China: Towards Beijing 2008 Olympic Games. Polish Political Science Yearbook, 46(1), 138+.

Retrieved from

https://link-gale-com.colorado.idm.oclc.org/apps/doc/A525404114/WHIC?u=coloboulder&sid=WHIC&xid=c7e38554

Library of Congress. Congressional Research Service. (2016). The 2016 olympic games: Health, security, environmental, and doping issues. Washington: U.S. G.P.O.

London 2012 Olympic Park Master Plan. (n.d.). Retrieved from https://www.designbuild-network.com/projects/2012olympic-park

Maennig, W., & Vierhaus, C. (2017). Winning the Olympic host city election: Key success factors. Applied Economics, 49(31), 3086-3099. doi:10.1080/00036846.2016.1254339

Maennig, W., & Vierhaus, C. (2019). Which Countries Bid for the Olympic Games? The Role of Economic, Political, Social, and Sports Determinants. International Journal of Sport Finance, 14(2), 110+.

Müller, M., & Gaffney, C. (2018). Comparing the urban impacts of the FIFA world cup and olympic games from 2010 to 2016. Journal of Sport & Social Issues, 42(4), 247-269.

Nobre, E. A. C. (2017;2016;). Sports mega-events and urban legacies: The 2014 FIFA world cup, brazil (1st 2016 ed.). Cham, Switzerland: Palgrave Macmillan.

North, D. (1990). Institutions, institutional change and economic performance. Cambridge, Cambridge University Press.

Però, D. (2007). Migrants and the politics of governance. the case of barcelona. Social Anthropology, 15(3), 271-286. doi:10.1111/j.0964-0282.2007.00020.x

Poynter, G. (2016). The london olympics and urban development: The mega-event city. London; New York; Routledge, Taylor & Francis Group.

Raco, M., & Tunney, E. (2010). Visibilities and invisibilities in urban development: Small business communities and the london olympics 2012. Urban Studies, 47(10), 2069-2091.

Ramón Spaaij (2016) Terrorism and Security at the Olympics: Empirical Trends and Evolving Research Agendas, The International Journal of the History of Sport, (p.457) 33:4, 451-468, DOI: 10.1080/09523367.2015.1136290

Shimizu, S. (2014). Tokyo - bidding for the olympics and the discrepancies of nationalism. The International Journal of the History of Sport, 31(6), 601-617.

doi:10.1080/09523367.2013.878501

Smith, A. (2014). "de-risking" east london: Olympic regeneration planning 2000-2012. European Planning Studies, 22(9), 1919-1939. doi:10.1080/09654313.2013.812065

Sobriety at the carnival; rio's olympics. (2015). The Economist, 415(8935), 33.

Solanellas, F., & Camps, A. (2017). The barcelona olympic games: Looking back 25 years on (1)/Los juegos olímpicos de barcelona, 25 años después (1). Apunts. Educació Física i Esports, (127), 7. doi:10.5672/apunts.2014-0983.es.(2017/1).127.01

Spain: Basque Terrorism and Government . (2011, February 18). Retrieved from https://www.cia.gov/library/readingroom/document/cia-rdp85s00316r000300110004-3

Sustainability management plan : Rio 2016 Olympic and Paralympic Games, march 2013, version 1 / Organising Committee for the Olympic and Paralympic Games in Rio in 2016. (n.d.). Retrieved from

https://library.olympic.org/Default/doc/SYRACUSE/30917/sustainability-management-plan-rio-2016-olympic-and-paralympic-games-march-2013-version-1-organising? lg=en-GB

The Lancet Infectious Diseases. (2015). Concerns raised over water quality at the rio olympics. Lancet Infectious Diseases, the, 15(9), 987-987.

The World Bank Data Overview. (n.d.). Retrieved from https://www.worldbank.org/en/country/brazil/overview

Watt, P. (2013). 'it's not for us': Regeneration, the 2012 olympics and the gentrification of east london. City, 17(1), 99-118. doi:10.1080/13604813.2012.754190

ZIMBALIST, A. (2017). Introduction: "Welcome to Hell". In ZIMBALIST A. (Ed.), Rio 2016: Olympic Myths, Hard Realities(pp. 1-12, 97-120). Washington, D.C.: Brookings Institution Press. Retrieved March 10, 2020, from www.jstor.org/stable/10.7864/j.ctt1vjqnp9.4