

Article

## Between Discourse and Reality: The Un-Sustainability of Mega-Event Planning

Christopher Gaffney

Escola de Pós-Graduação em Arquitetura e Urbanismo, Universidade Federal Fluminense, Passo da Pátria 156, Bloco D, Sala 541, São Domingos, Niterói, Rio de Janeiro 24201-240, Brasil; E-Mail: ctgaffney@id.uff.br; Tel.: +55-21-2629-5490; Fax: +55-21-2629-5491

Received: 22 July 2013; in revised form: 28 August 2013 / Accepted: 5 September 2013 /

Published: 16 September 2013

---

**Abstract:** The zero-sum nature of mega-event hosting encourages cities to escalate investment with an eye towards convincing event rights holders that a positive outcome will result. The discursive frameworks of “legacy” and “sustainability”, the global competition to attract events and the compressed event horizon make for mega-event preparation regimes that may seriously compromise long-term urban planning agendas in mega-event hosts. By examining the sustainable urban planning literature, the discursive frameworks of sustainability in the International Olympic Committee (IOC) and the discursive framing of the Rio 2016 bid, this paper will examine the Olympic Golf project being implemented in Rio de Janeiro. Through this case study the paper argues that unless mega-event rights holders change their candidacy and selection processes, these events will inevitably be detrimental to their hosts.

**Keywords:** sustainability; discourse; sports-mega events; urban planning; Rio de Janeiro

---

### 1. Introduction

“Matters of social justice, of economic development, of international relations, of democracy, of democratic control over technological change and globalization also have both short and long-term implications. For a given policy to be desirable, it must meet the constraints of sustainability in each of these dimensions; failure in any one is, in theory, sufficient cause for rejection” [1].

According to the United Nations, sustainable development, “meets the needs of the present without compromising the ability of future generations to meet their own needs” [2]. The Report of the World

Commission on Environment and Development marked the expansion of a discursive framework that sought to direct, encapsulate and justify models of development that would permit economic growth within the dominant mode of production while encouraging environmental protection and social equality [3]. Despite its cooptation by public relations firms and marketing agencies into a process of “green washing”, the progressively wide usage of the term sustainability during the 1990s can be considered an important victory for the environmental movement. It may be no accident that the term “sustainable development” gained significance in public policy debates at the same time as “globalization”.

The relative ease with which the term sustainability was applied to environmental issues was partly due to the universalizing characteristics of the “environment”. All humans are dependent upon the natural environment and the preservation of the world’s natural resources was easily understood as a goal that could unite individuals across political, economic and social spheres. Thus, what was good for globalization (read as the expansion of markets) could also be either marketed or misunderstood as sustainable practice [4]. Many of the political economy critiques of sustainability discourse focus on the use of the term to promote new forms of consumption that mask the realities hidden in the global consumption chains [5]. As the concept of sustainability became increasingly distanced from environmental matters and extended to the realms of production and consumption the term began to lose much of its early coherence. Transnational actors and capitalist interests widely incorporated “sustainability” as a benchmark requirement for their corporate social responsibility programs. A result of this process was that, “the capture of the discourse of sustainable development from the environmental movement by the transnational capitalist class [has] made it even more difficult to mount a radical critique of capitalist consumerism than would otherwise have been the case” [6].

Government and corporate organizations have been cited as notable proponents of the use and misuse of the term, claiming everything from coffee cups to foreign policy strategies “sustainable”. The emptying of a once powerful discursive element has forced companies, governments and planning agencies to disaggregate the concepts that formerly fell under this umbrella. In the context of urban planning, words such as resilience, robustness and durability have replaced sustainability. It could be that the discursive shifts in the sustainability debate work their way up from levels of collective consciousness, become incorporated into top-down frameworks, lose their original signifiers and then are reworked at local scales before filtering up again.

The implementation of sustainable practice ran into difficulty in the urban arena, where disputes and conflicts of interest are infrequently resolved through consensual frameworks. The sustainability consensus was built upon the idea that the natural environment should be preserved as an anthropomorphic universal. However, consensus cannot extend to the realms of housing, mobility, labor and social justice because one group or coalition always benefits at the cost of another. As Hayes and Horne identify, “most definitions [of sustainable development] emphasize the relationship between social organization, economic development and resource preservation in at least some form” [7]. The Brundtland Report implies that sustainability is a concept that focuses on long-term planning or the development of public policies that measure today’s actions in terms of future needs. The suggestion that there are sustainable public policies, especially in cities, that will be of mutual benefit for everyone is a trap that ignores the disputed and non-consensual nature of urban life.

The urban impacts of global sports events increased with the expansion of global markets in the late 1980s and 1990s [8–10]. The conceptual shift of urban managers towards ideologies of urban

marketing in a period of increased competition for increasingly mobile forces of capital ensured that sports mega-events, and the Summer Olympics in particular, could be used as top-down drivers of urban change. The Seoul Olympics of 1988 and the Barcelona Olympics of 1992 were both notable for their extensive urban interventions and the use of the Games to restructure space and social relations in their respective cities. The Barcelona Games in particular have been held up as a model for every other Olympic city to follow, even though long term urban planning results have been ambiguous [11]. For instance, the 1992 Olympic Stadium has no primary tenant and the city underwent significant gentrification post-Games [12].

The trajectory of urban planning regimes in Olympic cities is a rich and growing field of investigation [13]. Here, I will examine the ruptures between the discursive frameworks of the Rio 2016 bid and one element of the current urban reforms. I will then position this rupture within a discussion of urban planning and sports mega-events, suggesting that under the current mega-event planning structures, there is almost no way that a sustainable Olympic Games can be achieved.

## 2. Sustainability, Urban Planning and Mega-Events

The establishment of the The Olympic Partner (TOP) sponsor program in 1985 vastly increased the money that flowed through Olympic Games, while associating some of the world's largest corporations with the IOC. With the inclusion of Dow Chemical, GE, McDonald's and Coca-Cola, the TOP program also associated the Olympic Movement with some of the least environmentally sustainable businesses in the world. The increasingly close associations between the IOC and trans-national business interests ensured that a green wave would crash onto Olympic shores. Following the centennial Olympic congress in Paris in 1994, Environmental Protection was introduced as an "Olympic Pillar". The IOC's sustainability discourse has been refined over time, reflecting changes in corporatist attitudes towards the environment and sustainable development. The current framing of the IOC's position says that, "The IOC's role with respect to the environment is to encourage and support a responsible concern for environmental issues, to promote sustainable development in sport and to require that the Olympic Games are held accordingly" [14].

According to the IOC, the TOP Program, "offers the opportunity to further the IOC's sustainability agenda by working with partners to spread key messaging to the widest possible audience, and also helps the worldwide TOP Partners achieve their own sustainability goals" [15]. The IOC thus creates conditions for their "partners" to increase profits while helping to, "stimulate the economy and generate investment, jobs and innovations" [15]. As I will demonstrate, the sustainability goals of the IOC are too generically defined to have much practical application for host cities and instead attend to the marketing parameters of multi-national corporations.

Similar to the IOC, the International Federation of Association Football (FIFA) also has dedicated Corporate Social Responsibility (CSR) directives that deal with sustainability. The FIFA initiatives are less ambitious than those of the IOC, with the stated goal of "minimizing the negative impacts" of the World Cup [16]. This is a tacit admission that the FIFA World Cup has significant negative impacts on the environment. However, FIFA's five sustainability pillars are actually more attuned to the definitions of sustainable urban development than those of the IOC because they do not solely focus on the environmental impacts but rather on the ways in which society is organized and cities are

governed. In essence, the FIFA Sustainable Strategy expands its scope to include more sustainably structured systems, but has no way of guaranteeing or enforcing those practices. The intention to advance the establishment of governmental “best practice” before and during the games should ideally leave cities with a more robust governance framework for the future. FIFA’s sustainability directives are aimed at:

- (1). Accountability
- (2). Ethics and anti-corruption
- (3). Transparency
- (4). Respect for stakeholder interests
- (5). Respect for rule of law

They also identify five key areas for action:

- (1). Community involvement and development
- (2). Fair operating practices
- (3). Consumer issues
- (4). Labor practices
- (5). Human rights [16]

The wide ranging goals of FIFA’s sustainability program reflect a well-articulated concern with the problems that have been associated with the hosting of the World Cup since 2002. In the 2002 tournament, held jointly in Korea and Japan, twenty stadiums were built or remodeled with the majority having fallen into disuse. The hosting of the 2010 World Cup in South Africa brought to the fore issues of human rights and labor practices. That FIFA has included these elements into their sustainability documents is laudable, but in the years leading up to the 2014 World Cup in Brazil there is ample documentation to suggest that in each of the ten areas identified above, there have been egregious violations [17,18].

Problematically, neither the IOC nor FIFA have sustainability measures that include long-term urban planning, post-event venue use, social equity or democracy in their discursive frames. The ultimate measure of whether or not an urban planning regime is sustainable is if it increases social equity [19]. The negative impacts of sports mega-events on urban planning regimes and on the urban and social fabrics are well documented [20–22]. In almost all cases, cities and countries have violated human rights and the right to the city in the preparation and hosting of sports mega-events [23]. The inherent paradox of these events is, “between the top-down, elite nature of mega-events and the sustainable development agenda” [7]. These impacts and paradoxes have become the focus of innumerable protests throughout Brazil as it prepares to host the 2014 World Cup and 2016 Olympics.

While the sustainability measures of both the IOC and FIFA can be considered positive in some respects, they are inadequate to deal with the fundamental problem that the events themselves generate. Global mega-events such as World Expos, Olympic Games and large-scale football tournaments typically occur within a seven-year time frame that brackets the moment of host selection to event realization. In order to capture an event, mega-event planning processes must begin well before host selection and involve a number of actors that are external to the prevailing planning regimes of metropolitan areas. These coalitions create bid dossiers that are attuned to the interests of

stakeholders. While this would ideally include civil society groups, even in consolidated democracies such as Canada (Vancouver 2010) and Great Britain (London 2012), civil society groups are grossly underrepresented in the planning stages.

The presentation of candidate city bid dossiers to event rights holders carries with it a promise that if selected, the city or country will provide guarantees to execute the project as a whole. The contract with the host cities becomes law, thus obliging the hosts to deliver on the promises made in the dossier. If a candidate city or country is not selected to host an event, it is unlikely that proposed projects will be realized. This may indicate that mega-event projects are superfluous to the existing needs of the city or that without the mega-event there is no impetus to resolve the inevitable political conflicts that these projects call into being. Without significant input from civil society there will be no way to consolidate the potential gains that generating long-term city planning documents could generate.

As in competitive sport, there can only be one winner in the dispute for a mega-event. The zero-sum nature of mega-event hosting encourages cities to escalate investment with an eye towards convincing event rights holders that a positive “legacy” will result. The discursive framework of “legacy”, the global competition to attract events and the compressed event horizon make for mega-event preparation regimes that may seriously compromise long-term urban planning agendas in mega-event hosts. The tendency to exaggerate “legacy benefits” in order to position a candidature file within the discursive framework of the mega-event rights holder’s particular understanding of “sustainability” stimulates a double movement. One, it sells the mega-event project as viable within the constraints of a pre-established discourse that is external to the local context. Two, it works to convince local populations that the project has external merit and that the physical spaces of the city should be molded to this external vision. The lack of public stakeholder participation in the formulation of the bid document is immensely problematic for sustainable urban planning.

The basic questions to be explored in the case study are: what does sustainable urban planning mean in the context of sports mega-event planning agendas in Rio de Janeiro? What kind of sustainability is being proposed? Who will benefit from this? Where will the greatest impacts be felt?

### 3. Case Study

Rio de Janeiro is undergoing a series of urban transformations associated with mega-events [24]. These large scale interventions are based in concepts of strategic planning and city marketing that use econometrics to measure successful urban policies [25]. The idea of making cities competitive in the global marketplace steers public policies towards the “rentability” of public services in the short and medium-term. The problems inherent to these strategies have been amply discussed in the literature regarding sustainable urban development in Brazilian cities [26–31]. There are currently twelve Brazilian cities undergoing significant urban restructuring for sports mega-events. Rio de Janeiro is suffering the greatest degree of intervention as it will host the major infrastructural requirements in communications and national security for the 2014 World Cup as well as the 2016 Summer Olympics.

The 2016 Olympic Games have ushered in the largest series of urban changes in the recent history of Rio de Janeiro. The initial budget of R\$33 billion (US\$ 16.5 billion in 2010) has undoubtedly risen since October of 2009, but the Rio 2016 OCOG has not at the time of writing released a working

budget for the Summer Games. Since the announcement of the 2016 host city in October of 2009, the Rio de Janeiro city government has pushed through a revised master plan that was adopted to include the multiple Olympic projects [32]. This new master plan reflects the mayor's belief that, "Rio's plan is the Olympic Plan, and the Olympic Plan is Rio's" [33]. The improvised revision of the city's master plan has been accompanied by an extensive list of executive decrees that have "flexibilized" urban space in order for Olympic related projects to occur. These measures have undermined Rio's fledgling democratic institutions and reduced public participation in urban planning processes. These processes in Rio are consistent with the extraordinary and undemocratic public planning measures enacted in recent and upcoming Olympic host cities such as Vancouver [34], London [35] and Sochi [36].

In order to get at the ways in which Olympic discourse is structured and implemented, I will apply some techniques of Critical Discourse Analysis (CDA) to the Rio 2016 Bid Books. One of the premises of CDA is that the intentions and desires of individuals and institutions can be discerned through an analysis of the words and strategies used in communication [37]. The analytic techniques of CDA are complicated and diverse but generally aim to reveal discourse as an "articulatory practice" that seeks "to *conceal* the radical contingency of social relations and to *naturalize* relations of domination" [38]. Here, I examine the discursive content of the Rio 2016 bid books by counting the number of times that specific and interrelated words appear in the bid books. The broader literature on discourse analysis suggests that raw word counts are valuable data that can reveal the prejudices and partialities of authors and that the values a particular author (or group) holds can be discerned [39–41].

The analysis of the word count presented in Table 1 indicates that the concept of sustainability is present within the 2016 Bid Books, but that it has been somewhat eclipsed by "development" and "environment". However, because the word sustainable is frequently linked with the words "development" and "environment", if we were to combine the word counts for those three, they would be by far the dominant thematic. Interestingly, we can also discern the audience of this document to be a "client" as well an attempt to assuage the clients' potential concerns with security. The positioning of Rio 2016 at the service of clients speaks to the commercial nature of the event and raises more questions about the nature of social equity and urban planning. Who are these clients and what services are they engaging? If clients are being drawn to Rio 2016, then why is the financial burden of hosting the Games on the Brazilians? What is the nature of the security program being devised for these clients? What environment is being developed and for whom?

The Rio 2016 Bid Books reflect a preoccupation with infrastructure, a key component of urban development and one of the weaknesses of the previous failed bids (2004 and 2012) submitted by Olympic coalitions in Rio de Janeiro. We can also identify the full incorporation of the term "legacy" into the discursive frame. This term came into Olympic parlance after the Sydney Games in 2000. In the discursive fields that have emerged since Rio was announced as Olympic host, the term legacy (*legado* in Portuguese) has figured as a prominent feature of official discourse. The centrality of legacy has implications for sustainability as the term is used to justify all current urban interventions as being of indisputable lasting benefit for Rio de Janeiro. This is, of course, a problematic assertion and one that has been questioned widely in the media and in academic circles.

**Table 1.** Rio 2016 Bid Book Discourse Analysis [42].

Word	Book 1	Book 2	Book 3	Total
Citizen	2	1	8	11
Transformation	20	7	11	38
Education	27	11	5	43
Social	33	13	17	63
Culture	52	14	8	74
Sustain(ability)	84	21	16	121
Legacy	52	52	25	129
Infrastructure	54	30	57	141
Development	62	57	26	145
Client	43	27	84	154
Environment(al)	134	34	29	197
Security	30	14	186	230

If we maintain the demand that sustainable urban planning increase social equity through participatory means, the discursive framework of the Rio 2016 Bid Book is not particularly encouraging. The low word counts for citizen, education and culture are the negative counterparts of client and security. It may be that this discursive framing is more reflective of the intentions of the event organizers than we would care to admit. In what follows, we shall examine one particular urban intervention currently underway for Rio 2016 that will explore the relationship between sustainable urban planning as it is happening on the ground.

### 3.1. Rio 2016 Golf Project

The majority of urban development projects for Rio 2016 are occurring in an environmentally fragile region of the city. Barra de Tijuca and Jacarepaguá are two low-lying regions of Rio de Janeiro. They sit between two mountain ranges and the beach and are swampy marshlands with a high water table. The dominant residential landscape is one of high-rise closed condominium complexes that have limited access to public transportation. The region is dotted with large shopping malls and a sixteen lane highway system cuts across the marshes. Relatively undeveloped until the 1980s, the Barra de Tijuca region has absorbed the largest share of the city's residential construction in recent decades. This process has been encouraged by a series of urban administrations that have discouraged strict occupation guidelines while permitting the real-estate sector to pursue maximum profits at the expense of the environment. The result has been extreme environmental degradation in the region's lake systems and increasing pollution of the water table [43]. More, the absence of effective public transportation has created an apartheid residential landscape that greatly favors those who can afford an automobile and securitized housing. This in turn has worsened traffic congestion and furthered the socio-spatial divides that have long characterized Rio de Janeiro.

Golf will return to the Olympics in 2016 after a 114 year absence. At the time of the 2016 host city announcement, Rio de Janeiro had two private golf courses within the city limits and no public courses. Unlike the United States, Canada, and some European countries, golf in Brazil is the exclusive domain of the wealthy. There is no significant golf culture in Brazil and the existing courses in Rio de

Janeiro are located in some of the city's wealthiest areas [44]. Golf in developing countries is an extremely problematic practice in that it occupies and degrades land that could be used for greater social benefit, creates leisure opportunities for high income residents, leads to a rise in housing prices and an increase in road traffic and crystallizes socio-economic inequalities [45].

The desire of the city government and the Rio 2016 coalition to locate a golf course proximate to the Olympic Park and Olympic Village, in addition to the need for open land to build luxury hotels, encouraged the selection of an area known as the Reserva da Marapendi for the Rio 2016 Golf Course [46]. The Reserva da Marapendi was a 1,180,000 square meter Area of Environmental Protection (Área de Proteção Ambiental), established in 1973. The Reserva da Marapendi was one of the few remaining wetland spaces in the region and served as a significant lakeside biosphere reserve in a region that has suffered from waterway pollution and a significant loss of wildlife habitat [47].

After some high-profile legal battles over the site of the 2016 Golf Course that focused on the conflicts of interests between Rio 2016 stakeholders and land owners, the zoning laws for the Reserva de Marapendi were changed through an executive decree that was subsequently ratified by the Rio de Janeiro city council. Within the text of the law, we can identify the presence of "sustainability" as a discursive trope that justifies the degradation of environmentally protected areas:

[in] order to host the Olympic Games, it became necessary to modify some of the existing urban norms, with the end goal of reducing the financial onus on the municipal budget and on the construction of the infrastructure necessary for the realization of the Games. With this, we intend to guarantee not only the reduction of costs, but also the sustainability of the installations, turning them into an enduring legacy for the City.

[An]... installation of great importance for the realization of these events will be the Olympic Golf Course...that is characterized by being an ample green space with very low construction costs. In this context, to make possible its installation, it became necessary through this Complementary Legal Project, to include this activity (golf) in those permitted in the Area of Environmental Protection of Marapendi, adopting the Environmental Zoning laws to the reality of the area, which has already been altered by previous anthropoid activities, and also altering the boundaries of the Natural Park of Marapendi [48].

The narrative presented in this decree is that the environmental reserve had already been significantly altered by human activities, that opening up protected areas would allow the city government to reduce costs in the hosting of the Olympics, and that an Olympic golf course would bring a more enduring legacy for the city than the preservation of the natural environment. The citation of "previous anthropoid activities" intended to convince the reader that the area was not "natural" but had already been degraded by human presence. The altering of the park parameters becomes a necessary good because the "legacy benefit" will be the permanence of the golf course post-Games and a reduction of the social cost for constructing it. In short, one of the few remaining areas of environmental protection in the Barra de Tijuca region has been appropriated by the government, opened up for toxic land use patterns and handed over to a private development firm for recreational and real-estate purposes.

The conflicts associated with the development of the Rio 2016 Golf Course are not limited to the legislative realm. Once Rio 2016 and the City had announced their intentions to build in Marapendi,

a social movement called *Golfe para Quem?* (Golf for Whom?) emerged. Using social media sites, Golfe Para Quem? brought attention to the hidden movements behind the official discourses, eventually bringing to light the business relationships between the city government and one of the largest landholders in Barra de Tijuca [49]. Golfe Para Quem? also questioned the constitutionality of the project, citing federal laws that protect the Mata Atlântica biosphere to which the Reserva da Marapendi pertains [50]. They were able to raise public awareness through a series of on-site protests, pamphleteering and media campaigns. They were ultimately unsuccessful in stopping the project.

Another troubling element of the zoning modifications for the area was the shifting of the height limitations for buildings in the Marapendi region from six to twenty-two floors. This change will allow for the construction of four and five star hotels in the Marapendi Reserve as well as for the construction of covered parking garages of up to six stories. This is an indication that the region is being opened for real-estate speculation. The Rio 2016 Organizing Committee announced the beginning of the “cleaning” of the Marapendi Reserve with the following statement:

The work of cleaning the terrain that will receive the Rio 2016 Olympic Golf Course began after the emission, by the City Secretary of the Environment, of the necessary license to remove exotic vegetation from the area [51].

The development of the Barra de Tijuca area for Olympic events will undoubtedly increase the environmental pressures on the region. The golf study was chosen because it reflects some of the earlier notions of environmental sustainability and reflects the inadequacy of this term’s use in mega-event urban planning contexts. The public subsidization of a golf facility for the 2016 Olympics will not increase social equity. Much to the contrary, the Golf project will contribute to high consumption lifestyles that are linked with an industrial complex that involves, “construction, agriculture, entertainment, hospitality, marketing and advertising” [45].

#### 4. Conclusions

The most obvious contradiction within the discourse of sustainability and mega-event planning is that these are global consumer spectacles that have as their end goal the expansion of markets. The carbon footprint of the World Cup has never been accurately measured, but reports indicate that at least 18 tons of solid waste was collected after the opening game of the 2013 Confederations Cup in Brasilia [52]. If we multiply this by the number of games (16) realized during the Confederations Cup we arrive at approximately 288 tons of solid waste. The presence of an aggressive recycling program in many of the stadiums does little to disguise the fact that had the event not happened, the solid waste would not have been generated. Of course, solid waste is but one of a series of environmental concerns that the early sustainability proponents would be concerned with. The inherent fallacy of “sustainability” in the realm of mega events is revealed in the IOC’s guide to sustainability through sport:

“The OM [Olympic Movement] also works to facilitate peace by bringing people together in an environment that celebrates human achievement. By promoting peace, the OM lays the ground for a better, more sustainable future by creating the environment in which sustainable development can take place” [53].

The above quote demonstrates that the Olympics themselves create the conditions through which sustainability can be achieved. Of course, this sustainability is dependent on the continuance of the OM itself and its signature events, which not coincidentally, generate environments propitious for multi-national corporations to sell and recycle their own goods. The underlying fallacy of sustainability is that it justifies ever-higher levels of consumption through a discursive framework that masks the consumerist nature of the event. This same attitude was also evident in the case study, where the city government decreed that the elimination of an environmental protection area was necessary to reduce the costs of the event that the government had helped call into being. The case study is clearly one of weak ecological, democratic, urban and social sustainability. Though the Olympic Golf course is particularly poor, there do not appear to be broader attempts on the part of Rio 2016 to create more robust sustainable practices that will develop, “new lateral civic solidarities” or “attempt to find and develop innovative, deliberative or participatory democratic forms” [7].

The fundamental problem relative to mega-event planning is that the urban projects associated with them are planned outside the realm of sustainable development and democratic practice. The IOC has not yet been able to provide a solution for this problem. The global involvement of public relations firms, large civil construction interests, and consultancy networks ensures that the bid projects for mega-events are ever more articulated and produce increasingly homogenous documents. The discursive frames found in candidature dossiers are ever more similar, eliding the nuances of the urban and social fabrics in their hosts in order to appeal to the ideological imperatives of mega-event rights holders. The persistence of the same consulting groups in the preparation of Olympic candidature dossiers and in the realization of the games themselves has made for proposals so uniform that the decision making processes over host cities is exclusively based in technical criteria and not in the urban realities of potential hosts. However, if these technical criteria are almost exactly compatible and comparable, the decision to host games in one city or another is not based on the impacts that the Games will have on the hosts, but rather on the political and economic conditions that will guarantee their realization[54]. Thus, choosing a mega-event site is about expanding markets and not about sustainable practice.

Mega-event projects are typically of such a large scale and the processes used to develop them so distant from the people who will both finance and be impacted by them, that once the documents are signed and the clock has started ticking on their realization, there is frequently no chance give to those most affected by them to give input or to organize and react. As we saw in the discourse analysis of the Rio 2016 candidature file, the preoccupation is with satisfying clients by delivering a development product in a secure environment.

In order to engage the basic tenets of sustainable urbanism, a broad based, consensual planning procedure must be followed. As our case study demonstrated, mega-event planning actually requires that the existing urban plans be overturned in order to meet the demands of the upcoming event. The creation of states and cities of exception is especially damaging to urban development given the very narrow political and financial interests that are often behind the design and implementation of the new, mega-event planning regime. These exceptions to the rule of law exacerbate the existing void between the discourse and reality of sustainability in urban planning and mega-event planning [26,55].

This distance between discourse and reality is at the heart of the conflicts and manifestations that are unfolding throughout Brazil. The “Vinegar Revolt” of 2013 [56] has brought into sharper focus the

absence of long-term planning agendas in the Brazilian urban system. Instead of targeting structural transformations during a decade of relative stability and prosperity, the Brazilian state as well as the Rio de Janeiro municipal and state governments sought to sustain consumerist regimes of economic expansion. The articulation of a mega-event cycle in the city of Rio has accelerated trends away from sustainable urban planning.

The IOCs evaluates eight items of a city's candidacy: motivation, concept and legacy, political support, financing, sport installations, accommodations, transportation, security, public opinion and experience. These evaluation criteria do not take into consideration the needs and deficits of the city in the years leading up to the event. In the items above, there is no consideration of housing, education, sanitation, health care, or urban mobility—fundamental components of urban sustainability [57]. Transportation concerns are limited to the needs of the event, with the built in assumption that the urban plans proposed for the Games will attend the future demands of the city. If good urban planning calls for both the preservation of the environment for future generations *and* social justice, then it is clear that the Rio 2016 project advances neither.

The sustainability discourse has not articulated with public planning or public policy in the context of sports mega-events in Brazil. To the contrary, the carrying off of urban infrastructure projects and Games related infrastructure has eroded democratic process (through use of executive decree and the construction of temporary and powerful Olympic Delivery Authorities), increased authoritarianism and resulted in a short term planning regime that conforms to the invented, discursively framed demands of the Games themselves. The planning horizon in Rio does not extend past 2016. This is consistent with the ways in which mega-events have damaged long term urban planning in other cities [22,58–60].

Core issues of economic, social and environmental sustainability can be compared across developing nations that have recently or will soon hold mega-events. International sports federations need to massively re-think the planning cycles that their events force onto cities and countries. Seven years is not enough time to change the basic infrastructures of a metropolitan area. There needs to be independent urban planning evaluation committees that debate and discuss bidding process with candidate. The restructuring of mega-event planning regimes should be predicated upon the sustainability of urban planning in candidate cities. Articulating the ways that this can happen is an area for future research and collaboration [61]. However, we suggest that the IOC, FIFA and the World Expo immediately incorporate independent urban planning experts into their bid evaluation committees so that institutional reforms can begin.

Upon further reflection, there may not be much distance between the discourse and reality of the Rio 2016 Olympic bid books. We have presented arguments that suggest that the current model of urban planning associated with mega events is not sustainable because it does not take into account local stakeholders, it is carried off in too short a time frame, it attends to externally driven discursive frames, it violates basic principles of environmental sustainability and reduces rather than increase social equity.

The story of Rio 2016's golf course reflects all of these trends: it required the destruction of an environmentally protected area by executive decree, will be paid for with public money, will attend to the leisure and hospitality demands of a global capitalist class, and will create zones of social and economic exclusion in a region of the city that is already highly territorialized and fragmented. This is but one example of many unsustainable projects that are currently under way for the next edition of the

Summer Olympic Games. In Rio de Janeiro, these projects have already resulted in grave violations of human rights. As the clock ticks down to 2016, these projects will accelerate, impacting ever more profoundly the social, economic and material environments of Rio de Janeiro.

## Acknowledgments

I would like to thank Tessa Kaneene for her help in research and editing the text. I would also like to acknowledge the work of the Comitê Popular da Copa e das Olimpíadas and the *Golfe Para Quem?* movement for their activist work and research that made possible some of the observations in the text. Thank you also to the anonymous reviewers whose comments greatly strengthened the text.

## Conflicts of Interest

The author declares no conflict of interest.

## References and Notes

1. Marcuse, P. Sustainability is not enough. *Environ. Urban* **1998**, *10*, 103–111.
2. Brundtland Commission. *Report of the World Commission on Environment and Development: Our Common Future*; United Nations: New York, NY, USA, 1987.
3. Boff, L. Sustainable development: A critique of the standard model. Available online: leonardoboff.wordpress.com/2012/02/06/sustainable-development-a-critique-of-the-standard-model/ (accessed on 12 August 2013).
4. Friedman, T.L. *The World Is Flat: A Brief History of the Twenty-First Century*; Picador: New York, NY, USA, 2007.
5. Larner, W.; Walters, W. *Global Governmentality Governing International Spaces*; Routledge: London, UK, New York, NY, USA, 2004.
6. Sklair, L. The Transnational Capitalist Class and the Discourse of Globalization. *Camb. Rev. Int. Aff.* **2000**, *14*, 67–85.
7. Hayes, G.; Horne, J. Sustainable development, shock and awe? London 2012 and civil society. *Sociology* **2011**, *45*, 749–764.
8. Shoval, N. A new phase in the competition for the olympic gold: The London and New York bids for the 2012 games. *J. Urban Aff.* **2002**, *24*, 583–599.
9. Gold, J.R.; Gold, M.M. *Olympic Cities: City Agendas, Planning, and the World's Games, 1896 to 2012*; Routledge: London, UK, 2007.
10. Goldman, S. Goldman Sachs Global Economics, Commodities and Strategy Research. In *The World Cup and Economics 2010*; Goldman Sachs Global Investment Research Division: New York, NY, USA, 2010.
11. Gusmão de Oliveira, N.; Gaffney, C. Rio de Janeiro e Barcelona: Os Limites do Paradigma Olímpico (in Portuguese). Available online: <http://www.ub.edu/geocrit/b3w-895/b3w-895-17.htm> (accessed on 12 August 2013).

12. Tremlett, G. Billionaire superyachts cast a shadow over barcelona's traditional barrios. Available online: <http://www.theguardian.com/world/2012/apr/21/billionaire-superyachts-barcelona-barrios>. (accessed on 12 August 2013).
13. Kassens-Noor, E. *Planning Olympic Legacies: Transport Dreams and Urban Realities*; Routledge: Oxon, UK, 2012.
14. International Olympic Committee. *2011 Olympic Charter*; International Olympic Committee: Lausanne, Switzerland, 2011; Chapter 1, Rule 2, Paragraph 13.
15. International Olympic Committee. *Sustainability through Sport: Implementing the Olympic Movement's Agenda 21*; International Olympic Committee: Lausanne, Switzerland, 2012.
16. Fifa. *FIFA 2014 World Cup Sustainability Strategy-Concept*; Federacion Internacional de Football Association: Zurich, Switzerland, 2012.
17. Megaeventos e Violações de Direitos Humanos no Brasil (in Portuguese). Available online: <http://www.apublica.org/wp-content/uploads/2012/01/DossieViolacoesCopa.pdf> (accessed on 7 August 2013).
18. Gaffney, C. Securing the Olympic city. *Georget. J. Int. Aff.* **2012**, *13*, 75–82.
19. Campbell, S. Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development. *J. Am. Plan. Assoc.* **1996**, *62*, 296–312.
20. Alegi, P. “A nation to be reckoned with”: The politics of World Cup stadium construction in Cape Town and Durban, South Africa. *Afr. Stud.* **2008**, *67*, 397–422.
21. Bearak, B. Cost of Stadium Reveals Tensions in South Africa. *The New York Times*, 12 March 2010.
22. Steinbrink, M.; Haferburg, C.; Ley, A. Festivalisation and urban renewal in the Global South: socio-spatial consequences of the 2010 FIFA World Cup. *S. Afr. Geogr. J.* **2011**, *93*, 15–28.
23. Center on Housing Rights and Evictions (COHRE). *Fair Play for Housing Rights: Mega-Events, Olympic Games and Housing Rights*; Center on Housing Rights and Evictions: Geneva, Switzerland, 2007.
24. Gaffney, C. Mega-events and socio-spatial dynamics in Rio de Janeiro, 1919–2016. *J. Lat. Am. Geogr.* **2010**, *9*, 7–29.
25. Sánchez, F. *A Reinvenção das Cidades Para um Mercado Mundial* (in Portuguese); Editora Universitária: Argos, Greece, 2003; p. 596.
26. Vainer, C. Cidades de excessão. In *Anais do XIV Encontro da ENANPUR* (in Portuguese); Associação Nacional de Pós-graduação e Pesquisa em Planejamento Urbano e Regional: Brasília, Brazil, 2011.
27. Arantes, O. *A Cidade do Pensamento Único: Desmascarando Consensos* (in Portuguese); Editora Vozes: Petrópolis, Brazil, 2000.
28. Barchfield, J. Rio's Housing Prices Spell Trouble in Paradise. Available online: <http://bigstory.ap.org/content/rios-housing-prices-spell-trouble-paradise> (accessed on 6 May 2013).
29. Cardoso, A.L.; Leal, J.A. Housing markets in Brazil: Recent trends and governmental responses to the 2008 crisis. *Int. J. Hous. Policy* **2010**, *10*, 191–208.
30. Raeder, S. Conflitos no ordenamento territorial em sedes de megaeventos esportivos. *Esporte e Sociedade* **2008**, *4*, 1–29, (in Portuguese).
31. Mascarenhas, G.; Bienenstein, G.; Sánchez, F. *O Jogo Continua: Megaeventos Esportivos e Cidades* (in Portuguese); EdUERJ: Rio de Janeiro, Brasil, 2011.

32. Câmara Municipal do Rio de Janeiro. Novo Plano Diretor da Cidade do Rio de Janeiro – Complementary Law number 111 de 1 February 2011, (in Portuguese).
33. Quote from mayor Eduardo Paes shown in a video presented by Rio 2016 President Carlos Nuzman to the International Correspondent's Association in November of 2011, (in Portuguese).
34. Shaw, C.A. *Five Ring Circus: Myths and Realities of the Olympic Games*; New Society Publishers: Gabriola Island, Canada, 2008.
35. Raco, M.; Tunney, E. *Visibilities and Invisibilities in Urban Development: Small Business Communities and the London Olympics 2012*; Urban Studies: Thousand Oaks, CA, USA, 2010.
36. The, E. Castles in the Sand. Available online: <http://www.economist.com/news/europe/21581764-most-expensive-olympic-games-history-offer-rich-pickings-select-few-castles> (accessed on 10 July 2013).
37. Jørgensen, M. *Discourse Analysis as Theory and Method*; Sage Publications: London, UK, Thousand Oaks, CA, USA, 2002; p. 229.
38. Howarth, D. Power, discourse, and policy: Articulating a hegemony approach to critical policy studies. *Crit. Policy Stud.* **2010**, *3*, 309–335.
39. Chouliaraki, L.; Fairclough, N. Critical discourse analysis in organizational studies: Towards an integrationist methodology. *J. Manag. Stud.* **2010**, *47*, 1213–1218.
40. McHoul, A.W.; Rapley, M. *How to Analyse Talk in Institutional Settings: A Casebook of Methods*; Continuum: London, UK, New York, NY, USA, 2001; p. 239.
41. Caldas-Coulthard, C.R.; Coulthard, M. *Texts and Practices: Readings in Critical Discourse Analysis*. Routledge: London, UK, 2013; p. 304.
42. The Critical Discourse Analysis method employed here was accomplished by scanning the Rio 2016 Bid Book pdf files for word frequency. In each book, the author entered a search word, noting each time the word appeared, checking it for relevant meaning. While somewhat subjective, the intention was to note the deployment of a sequence of words that could form a semantic network yet also operate independently to convey meaning to a target audience.
43. Silva, G. Processo de ocupação urbana da Barra da Tijuca (RJ): Problemas ambientais, conflitos sócio-ambientais, impactos ambientais urbanos. *Pesquisa em Arquitetura e Construção* **2006**, *11*, 1–29, (in Portuguese).
44. There was one public source in the state of Rio de Janeiro (Japeri) but it has been cut through by the extension of the Arco Metropolitano highway. It served a low income community as an education and leisure center. Available online: <http://www.japerigolfe.com.br/> (accessed on 1 July 2012).
45. Wheeler, K.; Nauright, J. A global perspective on the environmental impact of golf. *Sport Soc.* **2006**, *9*, 427–443.
46. Gismondi, L. Rio escolhe empresa americana para construir campo de golfe olímpico (in Portuguese). Available online: <http://globoesporte.globo.com/olimpiadas/noticia/2012/03/sempretensao-de-popularizar-o-golfe-projeto-do-campo-olimpico-e-escolhido.html> (accessed on 5 August 2013).
47. Rebelo, P. Condomínio é multado por despejar esgoto em lagoa da Barra da Tijuca (in Portuguese). Available online: <http://oglobo.globo.com/rio/condominio-multado-por-despejar-esgoto-em-lagoa-da-barra-da-tijuca-6053637> (accessed on 11 September 2012).

48. Rio de Janeiro City Hall. *Projeto de Lei Complementar 113/1012*(in Portuguese); City of Rio de Janeiro: Rio de Janeiro, Brazil, 2012.
49. Brisolla, F. Pasquale Mauro é alvo de dezenas de processos em que é acusado de posse ilegal na região da Barra (in Portuguese). Available online: <http://oglobo.globo.com/rio/pasquale-mauro-alvo-de-dezenas-de-processos-em-que-acusado-de-posse-ilegal-na-regiao-da-barra-2720984> (accessed 4 July 2013).
50. Lima, C. Manifestantes fazem protesto contra campo de golfe na APA de Marapendi (in Portuguese). Available online: <http://www.jb.com.br/rio/noticias/2013/02/23/manifestantes-fazem-protesto-contra-campo-de-golfe-na-apa-de-marapendi/> (accessed 1 September 2013).
51. Organizing Committee of the Rio 2016 Olympic Games press release, 20 March 2013.
52. Eighteen Tons of Trash are Collected at the Opening Game of the Confederations Cup. Available online: <http://radioglobo.globoradio.globo.com/noticias/2013/06/17/DEZOITO-TONELADAS-DE-LIXO-SAO-RECOLHIDAS-NA-ABERTURA-DA-COPA-DAS-CONFEDERACOES.htm> (accessed on 15 June 2013).
53. International Olympic Committee. *The Environment and Sustainable Development*; International Olympic Committee: Lausanne, Switzerland, 2012.
54. Gusmão de Oliveira, N. *O Poder dos Jogos e os Jogos do Poder* (in Portuguese); Universidade Federal do Rio de Janeiro: Rio de Janeiro, Brazil, 2012; p. 450.
55. Agamben, G. *State of Exception*; University of Chicago Press: Chicago, IL, USA, 2005.
56. The urban manifestations that occurred in Brazil in June and July of 2013 were initially called the Vinegar Revolt after a São Paulo based journalist was arrested by the Military Police for carrying a bottle of vinegar. Vinegar is used to counteract the effects of tear gas on the respiratory system.
57. I differentiate between transportation and urban mobility. Transportation in relation to the Games Bid Books is exclusively targeted at moving Games-related individuals between venues, tourist sites, hotels, and points of entry. Urban mobility addresses the fundamental rights of residents to the city and includes a broader geographic vision of metropolitan areas. In the Rio 2016 bid, none of the transportation projects have any connection with the smaller cities that comprise the metropolitan region.
58. Stavrides, S. *The Athens 2004 Olympics: Modernization as a State of Emergency, in Mega-Events and the City*; Universidade Federal Fluminense: Rio de Janeiro, Brazil, 2010.
59. Death, C. “Greening” the 2010 FIFA World Cup: Environmental sustainability and the mega-event in South Africa. *J. Environ. Policy Plan.* **2011**, *13*, 99–117.
60. Shin, H.B. Unequal cities of spectacle and mega-events in China. *City* **2012**, *16*, 728–744.
61. Gallagher, M.; Hartz-Karp, J. The role of deliberative collaborative governance in achieving sustainable cities. *Sustainability* **2013**, *5*, 2343–2366.