A Truly Sustainable Olympics

The Potential of New Technology and the Obstacle of Growth

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The Olympics is a massive undertaking with an equally massive carbon footprint. The preparation and execution of the Olympic Games involves the demolition of large areas of land, and subsequent rebuilding of enormous structures. It involves providing memorabilia, food, and transportation for millions of people, and then dealing with the subsequent waste. The Olympics displaces communities of people and animals, often wrecks natural habitats, and is the impetus for large amounts of travel by car, train, and plane. The model is far from sustainable.

That being said, there has been pressure on the Games to increase its level of sustainability. In 1996, the International Olympic Committee (IOC) added a paragraph on sustainability to the Olympic Charter (Factsheet, 2012), and recent Games have tried to meet certain sustainability goals. The organizers of the 2012 London Summer Olympics set out to create the world's "first truly sustainable" Olympic Games that would leave a legacy of improved living for local communities and higher industry standards (www.london2012.com). While falling short of total sustainability, the London Olympics was the greenest in history. The Commission for a Sustainable London 2012 tried to embed the theme of sustainability in the very culture of the London Games, from the beginning of the design and planning stages to the legacy that would exist long after the Games were over (Delivering, 2012). The Commission decided on five themes that would structure their sustainability efforts: climate change, waste, biodiversity, inclusion, and healthy living (Delivering, 2012). New technologies and increased awareness helped the Commission design-out a great deal of waste and lower the Olympic's carbon footprint, but the exponential growth of the Games conflicts with the goal of sustainability and limits the level of sustainability that can ever truly be achieved by the Olympic Games.

Climate Change
It's not easy to compare the London Games' carbon footprint to that of past Summer Games because the London Games was the first to take such a measurement (Learning, 2012), but efforts were made to reduce the footprint as much as possible. To maximize energy efficiency, new energy centers were built, and buildings needing more heating and cooling were strategically located near these centers (Delivering, 2012, p. 32). Seven wind turbines were installed to help power the Olympic Park's lighting fixtures (Murray, 2012). Olympic buildings were designed to have natural ventilation systems, were lightweight, many were temporary, and much of the material used to build them was recycled (Learning, 2012; Delivering, 2012). However, there is no way to completely eliminate the environmental impact of the extensive construction and travel generated by the Olympics.

Waste
The Olympic Delivery Authority (ODA) recycled or reused more than 90 percent of Olympic Park demolition material (Reuse, 2011). They worked to create an efficient and effective waste program that included color-coded receptacle and provisions for recycling unusual materials and specialty items

(Delivering, 2012). However, while they had much control over "closed sites," sites under the jurisdiction of the Olympic Park, they could not control the streams of waste at "open sites," Olympic-related spaces outside of the Park (London, 2012).

Biodiversity

While designing the Olympic Park, measures were taken to build a network of green infrastructure that would last long after the Games were over. These included ponds, rivers, grasslands, forests, and wildlife-rich parks as well as manmade structures including bird boxes, bee hotels, and living roofs, all that would support native flora and fauna and the reconnection of humans with their natural surroundings (Olympic, 2008). However, habitats were also destroyed in the process, including that of the endangered Great Crested Newt, which had to be relocated (Rare, 2007).

Inclusion

The ODA wanted to create an Olympics that was welcoming and sensitive to diversity so they worked with partner organizations "to ensure that the views of people from all equality target groups were considered within the planning, design and construction of the venues, Park and infrastructure" (Delivering, 2012, p. 56, 59). However, poor communities in east London were essentially destroyed in order to build the Olympic Park, an all too common casualty of the Olympics (Displaced, 2008; Morris, 2012; Essex & Chalkley, 2003, p. 13).

Healthy living

The Commission hoped to use the Games as a way to educate the broader public on the importance of exercise and to extend this education through community use of the permanent Olympic Park structures (Fit, 2011). Additionally, the Commission created the 2012 Food Charter to "encourage organizations throughout the events, catering and hospitality sector to commit themselves to supporting and implementing local, seasonal, healthier and sustainable standards across the industry" (For, 2009). However, the Commission notes that more needs to be done, including better labeling and the promotion of a non-smoking lifestyle (Fit, 2011).

The Obstacle of Growth

Despite these efforts to create a sustainable Olympic Games, the Olympics faces a future of exponential growth that makes sustainability difficult. In 2002, the IOC released a report which identified its growth problem and called for action. "Today, the Olympic Movement must contend with the reality that more sports want to participate in the Olympic Games, more athletes want to compete in the Olympic Games, more people want to attend the Olympic Games, and more media want to cover the Olympic Games...Measures will have to be taken to control the future growth of the Games. The Games certainly must not be allowed to grow any larger, otherwise they will present a major risk" (Pound, 2002). However, reversing growth is very difficult and the Games have so far been unsuccessful.

In 2000, 92.4 percent of tickets were sold for the Sydney Games (Final, 2001). In 2012, 97 percent of tickets were sold for the London Games (Marketing, 2012). Between 1948 and 2002, the Summer Games increased from 17 to 28 sports and the number of athletes participating in the Summer Games increased from 4,092 to 10,651. In 2012, there was a slight decline from 28 sports to 26, and from 10,651 to 10,500 athletes (Associated, 2012; Pound, 2002), but there is strong public resistance to reducing Olympic growth. The recent decision by the IOC to eliminate wrestling as an Olympic sport met with public outcry. Being an Olympic sport legitimizes a sport in many respects, which is why sport associations fight so hard for inclusion. But with more sports come more athletes, more stadiums, and more spectators. Additionally, digital media is expanding the coverage to the Games. The London Games included for the first time live and on-demand coverage of the Games on the IOC's official YouTube channel. (Marketing, 2012; Rubens, 2012). As more people are able to access Olympic coverage through more channels, the demand will increase, along with pressure for continued growth.

Conclusion
The steps taken by the London Games will definitely help future Games to be more sustainable. The plethora of reports, data, and information collected and published detailing the sustainability triumphs and tribulations from the London Olympics will help future Games implement more sustainable methods. Improvements in technology, such as lightweight building materials, wind turbines, and more efficient and encompassing recycling capabilities will also increase sustainability, but, as with expansion of media coverage, it will also increase growth. Additionally, as shown in each sustainability theme for the London Games, there were always areas which fell short of total sustainability. The London Games created the first ever methodology for measuring an Olympic carbon footprint (Learning, 2012), which will no doubt aid in the planning and execution of sustainability in future Olympics. The growth of sustainable methods and practices is encouraging, but it is another growth, the growth of the Games themselves, which are most likely to jeopardize the ability to ever successfully produce a truly sustainable Olympics.

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