

Legacy of beautiful for Tokyo 2020 Olympic and Paralympic Games

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Abstract

A major sports event is required to raise environmental awareness, which is a big difference from the 1964 Tokyo Games. The 1964 Tokyo Games left a long-lasting legacy in Japan to express the words *faster*, *higher*, and *stronger*, as in the Olympic motto. The Metropolitan Highway, the Railway network of Shinkansen, and the Tokyo International Airport (new runway and terminal building extension) were opened, and color television was popularized. We recommend that the 2020 Tokyo Games add beautiful (*Ωpaia*) to the three parts of the Olympic motto. Japanese athletes like gymnast Kohei Uchimura pursue beautiful techniques. The legacy at the 2020 Tokyo Olympics and Paralympic Games will be to pursue more beauty, including environmental beautification activities. After the Japanese representation at the FIFA World Cup in Russia, Japanese supporters picked up trash and were widely reported by overseas media. Japanese people generally have a high level of environmental awareness and contribute to the formation of Japan's national image. The Sports Garbage Pickup Tournament is a sporting event that incorporates elements of sports competition into cleaning activities. Recently, it has been introduced on the IOC channel.

Keywords

Tokyo Olympic Games 1964, Tokyo Olympic and Paralympic Games 2020, Legacy.

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Introduction

Considering the extreme heat of Tokyo, the International Olympic Committee (IOC) has changed the venue of the Olympic marathon and race walk to Sapporo, about 800 km away from Tokyo (Kitagawa, 2019).

In terms of organizing the Olympic Games facilities and schedules, the usual procedure is that the Organizing Committee established by the venue in cooperation with the National Olympic Committee (NOC) makes their proposals to the IOC in consultation with the International Federation of Sports which then require final approval by the IOC Board. It is not uncommon for the IOC to request improvements and changes throughout this process, but it is extremely unlikely that a unilateral decision is made to change a competition venue that had previously been approved by the Board. However, Chapter 41, Rule 5 of the Olympic Charter states that if there is a problem that is difficult to solve regarding the competition facilities and operation of the Games, “the final decision lies with the IOC Board of Directors.” (IOC, 2003). The venue has a contract with the IOC to adhere to the Olympic Charter, and this contract provides the basis for the IOC’s strong authority in this situation.

Global warming and the environmental effects of the Olympics is also a consideration for the IOC. However, environmental conservation became a priority only after the 1970s, and so Games prior to this, such as the 1964 Tokyo Olympic Games, did not factor these concerns into their planning.

Purpose & Method

In this research paper, we focus on changes which have occurred with the Olympics since the 1970s brought about by environmental issues, and consider differences between the Tokyo Olympics in 1964 and 2020 and examine the legacy of the environmental impacts, considering that the 1964 Games did not prioritize this issue. As a research method, the Olympic Games and environmental issues are summarized from previous research on their historical background. Next, we compare the Tokyo Olympics in 1964 and 2020, and consider the impact of the Tokyo Olympics on the environment. Finally, we present the concept, context, and content through practical examples of how integrating sporting events and environmental philosophy can be achieved.

Literature Review

Historical background of the Olympics and environment

1. 1976 Winter Olympic Games

According to Ebisuka (2014), after the Second World War, countries that prioritized economic growth started to become conscious of environmental conservation in the 1970s. The Roman Club published “Growth Limits” in 1972 and warned that if population growth and environmental destruction continued, human growth would reach its limit within 100 years due to resource depletion and environmental degradation (Meadows, Headows, et al., 1972). In response, society turned its attention to the health of the global environment.

The relationship between sports and the environment has been attracting attention since the 1970s, when the destruction of the natural environment accompanying the development of large-scale resorts and ski resorts during a period of high economic growth was regarded as a problem (Okada, 2015). Discussions about the negative impact of sports on the environment therefore focuses primarily on discussions regarding the balance between sports-related development and the environment.

Environmental issues were first taken up in the context of sport in the debate over the 12th Winter Olympic Games in 1976. The 12th Winter Games were awarded to Denver, Colorado, USA, at the IOC General Assembly in Amsterdam, the Netherlands, in 1970. Denver in the 1960s did not have winter resort facilities, but an investment of \$14 million to build facilities necessary for competitions such as skiing, and the ambition to realize a winter sports mecca accessible by car was envisioned (Psarakis, 2010).

However, complaints were raised about the subsequent increase in hosting costs to \$35 million, which was twice the original budget, as well as the negative environmental impacts to the Rocky Mountains. In October 1972, the city conducted a referendum to determine if it would issue a \$5 million bond to raise funds, with about 350,000 votes in favor and about 520,000 votes against; 60% of residents abstained. In response, Denver forfeited their right to host. Suddenly, Innsbruck, Austria, was chosen as the alternative host. This is the only historical case in the modern Olympic Games where the host city was changed for a reason other than war.

2. Environment and Olympics since the 1980s

In August 1988, the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) jointly established the Intergovernmental Panel on Climate Change (IPCC) to conduct various studies regarding the effect of the Olympics on the environment. The debate on this began in earnest after this panel was formed.

The Rio de Janeiro Declaration was adopted at the UNCED on Environment and Development in 1992 and Agenda 21 agreed in 178 countries. From the perspective of respecting the 1992 Rio de Janeiro Declaration Environmental guidelines, the Sydney Olympic Bid Committee was included in the invitation to submit their plan to the IOC in 1993. Based on the guidelines of the Sydney Olympics, more than 100 environmental guidelines have been established in five main areas. These include: 1. energy conservation; 2. water resource conservation; 3. reduction of waste generation; 4. improvement of air, water, and soil quality; and 5. protection of important natural and cultural environments.

IOC Congress held in Paris took up sports and the environment as one of the issues in 1994, and revised Rule 2 in Chapter 1 of the Olympic Charter. With this revision, the IOC has made the Olympic Movement three more than traditional sports and culture.

Mega sports event is required to raise environmental awareness, which is a big difference from the 1964 Tokyo Games.

The Sydney 2000 Olympic Games Environmental Performance Indicators drew three conclusions on sports and the environment: 1. large sporting events can have a negative impact on the environment due to increased pollution and waste, and large consumption of raw materials, water resources, and energy; 2. athletes need a healthy environment for training and competition; and 3. sports originated in the natural environment and many sports still take place in the natural environment.

The Olympic Games require social impact assessments including the environment (Cahman, 2006; Donnelly & Kidd, 2006; Lecocq, 2018; Gratton, Dobson, & Shibli, 2000; Gratton & Preuss, 2008; Lenskyj, 2000; Moriguchi, 2020; Preuss, 2007; Shelfer, 1999). The IOC established the Olympic Games Study Commission (OGSC) in February 2002. As part of the OGSC, the IOC established the Olympic Games Global Impact Project (OGGIP), the OGGIP is beginning to investigate the impact of about 150 items.

At the London Olympics, ISO202121, the international standard for management systems for event sustainability, was adopted. From the beginning of the London Olympics, the operation was implemented not only with economics based on sustainability but also with consideration of the legacy to the environment and society.

The candidacy file submitted to the IOC by the 2020 Tokyo Olympic and Paralympic Games Bid Committee also specifies the adoption of ISO202121. There are three environmental philosophies for the Tokyo Olympics and Paralympics: 1. minimize environmental load by reducing energy resource consumption and carbon dioxide (CO₂) emissions; 2. use sustainable venue design and facilities from the perspective of conservation of energy and water resources and the coexisting urban environmental plan; and 3. create a sustainable society through sports because a good environment is a prerequisite for good performance.

Table1. Chronology of Environment and Sports

Year	Event
1972	Roman Club published “the limits of growth”. Denver has returned to the host city of the Winter Olympics
1988	WMO and UNEP have established an intergovernmental panel on climate change (IPCC)
1992	The United Nations Conference on Environment and Development (UNCED) adopted the Rio de Janeiro Declaration. 「 Agenda21 」 178 countries agreed
1993	Sydney, Olympic Bit 2000 (Green Games)
1994	IOC Congress (Paris) resolved the Environment and sustainable development
1995	IOC has established Sports and Environment Committee
1996	IOC revised Rule2 in Chapter1 「…promoting sustainable development for the event」
1997	Global Warming Prevention ConferenceCOP3 「Kyoto Protocol」
1999	IOC Congress agreed an original 「 Agenda21 」 .
2003	JOC ISO14001 acquired certification

3. 1998 Winter Olympic Games

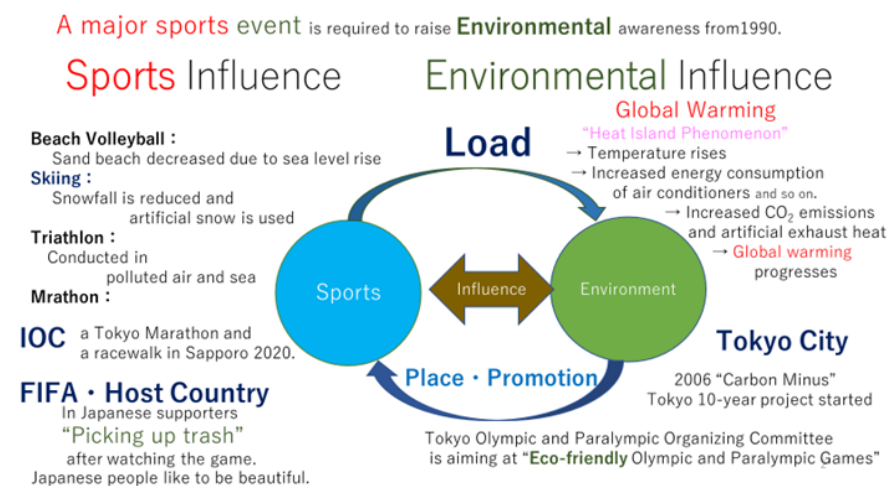
The Environment Agency was established in 1971 in Japan,, and efforts to improve the environment were quickly enacted. Prior to the 1998 Nagano Winter Olympics, discussions began on the idea of a ski course planned for the Hakuba Happou-one Ski resort and concerns regarding erosion of a Type 1 Special Area in the national park. Type 1 Special Areas have the same landscape as

Special Protected Areas, and are areas where the need to maintain the natural landscape is highest. For this reason, it was necessary to protect the landscape as much as possible. In the end, a solution was set up by the Federation Internationale de Ski (FIS) shortly before the tournament (December 1997), in which a jump section was set up to allow the athletes to pass through the air instead of gliding through the special area. However, according to Ebisuka (2014), this did not address the issue of protecting nature, and rather served to maintain the Nagano Organizing Committee's (NAOC) relationship with the FIS in a way that complied with the provisions of the National Parks Law. It can be seen as a compromise, and it is not proof that the Japanese people's environmental awareness has increased.

Findings

Sports and natural development have a history of about 50 years. "Development and Sports," which attracted attention since the 1970s, saw the destruction of the natural environment as a result of the development of large-scale resorts and ski resorts during a period of high economic growth (Okada, 2015). Discussions on the negative aspects of sports promotion have also been raised, mainly with respect to the debate on how to achieve a balance between sport development and environmental protection. The cancellation of the 1972 Denver Winter Olympics was the first event that alerted stakeholders to the challenges of balancing the positive and negative effects that venues enjoy in connection with a sports event.

Figure 1. Comparison between the Picornell Swimming Pool



Among winter sports, skiing competitions are held in the wilderness for both the alpine and Nordic events, and course development may have a considerable impact on the ecosystem. As well, snowfall is decreasing and the use of artificial snow by ski resorts is increasing.

Japan's forested area is about 250,000 square kilometers, and the land area (378,000 square kilometers) is equivalent to 68.2% of the total land mass. The area of forests occupying an area is referred to as the "forest rate," and is well above the average of 30% of the world's forest rate suggested by the Food and Agriculture Organization (FAO) of the United Nations. In addition, only 26.7% of the land is under 100 m in altitude, and there are many mountains and hills throughout (Otomo, & Sasagawa, 2001).

In addition, Japan is an island nation surrounded by the sea on all sides, and this will affect Olympic sports (yacht, surfing, boats, canoes, triathlons, etc.) that require natural water environments. Beach volleyball venues, which use sand, are decreasing due to rising sea levels.

The World Health Organization (WHO) states in its health promotion guidelines that the terrain and geography of cities and their surrounding environment (such as hills and mountains) will affect the types of activities and sports that people can enjoy (WHO, 2010).

Environment and Olympics

Sports and the environment were not considered at the 1964 Tokyo Olympics. At the 100th anniversary plenary IOC Congress held in Paris in 1994, the IOC took up sports and the environment as one of the issues to address, and revised Rule 2 in Chapter 1 of the Olympic Charter. As a result, environmental measures have become an important factor since the 2000 Sydney Olympics and Paralympics.

At the 2020 Tokyo Olympic and Paralympic Games, all electricity used in competition venues, athlete villages, broadcasting centers, etc., will be supplied by renewable energy sources for the first time in the history of the Games. The concept of sustainability, "Be better, together, for a better future," has been launched, and the goal is to achieve near zero carbon dioxide (CO₂) emissions during the Games. As the largest sporting event in the world, its impact on the environment, society, and the economy is widespread, suggesting

environmental considerations in preparing and running the Games. The medals and podiums given to the players will also be made using recycled materials.

In recent mega sports events such as the Olympics and the FIFA World Cup, there is a strong demand for environmental awareness, which is a big difference from the 1964 Tokyo Olympics.

The 1964 Tokyo Games left a long-lasting legacy in Japan to express the words faster (*citius*), higher (*atius*), and stronger (*fortius*), as in the Olympic motto. The Metropolitan Highway, the Railway network of Shinkansen, and the Tokyo International Airport (new runway and terminal building extension) were opened, and color television was popularized.

In 1964, much litter was left by the Japanese people on the train. The Japan Land Beautification Movement slogan was “Japan, which has no paper debris, loves flowers,” and work was done to install trash bins so that the people did not dispose of garbage in train stations or public facilities (Hamada, 2018). It is hard to believe the comparison between the Japan of 1964 and the one of today with respect to the effect of this policy. The Japanese people have greatly improved their environmental awareness in the last 50 years. For example, after the Japan National Soccer Team participated in the FIFA World Cup in Russia, Japanese supporters were observed picking up trash and this was widely reported by foreign media. The Japanese are generally environmentally conscious and this contributes to the context of Japan’s national image.

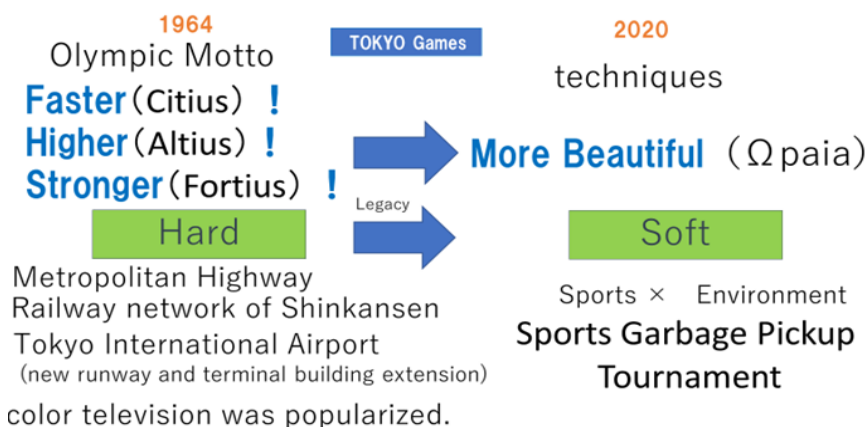
The dissemination of civilized significance, such as economic development, at home and abroad is already outdated in Japan, a civilized advanced country. New sports values and the unique spirituality of Japan should be communicated at sports festivals that attract the attention of the world.

International sporting events are required to raise environmental awareness; therefore, practical examples that integrate sporting events and environmental conservation should be developed for the 2020 Tokyo Olympic and Paralympic Games.

Permanent legacies of the 2020 Tokyo Olympic and Paralympic Games include the New National Stadium, Tokyo Aquatics Centre, Ariake Arena, Musashinomori Forest Sports Plaza, and the athlete’s village in Harumi. However, the 2020 Tokyo Olympic and Paralympic Games also wants to promote soft legacies and emphasize “more beauty.” Therefore, it is recommended to add

more beauty (*Ωpaia*) to the three Olympic mottoes. Japanese athletes, such as the gymnast Kohei Uchimura and the figure skater Yuzuki Hanyu, pursue beautiful techniques that adhere to this spirit.

Figure 2. Legacy in 2020 Tokyo Olympic and Paralympic Games



The legacy of the 2020 Tokyo Olympic and Paralympic Games should be to pursue “more beauty,” including environmental beautification activities. The concept of the national image is environmental protection, the context is the reform of individual awareness of the environment, and the content is environmental beautification activities. These three ideas will help the legacy of the 2020 Tokyo Olympic and Paralympic Games to pursue more beauty, including environmental beautification activities.

As a specific example of this practice, sports garbage pickup tournaments have become popular. Sports garbage pickup competitions are a new sport that incorporates elements of sports competition into cleaning activities.

As of the end of December 2019, a total of 929 Sports Garbage Pickup Tournaments, which is a fusion of sports and environmental activities, had been held with a total cumulative number of participants reaching 97,877 (Mamitsuka, 2019). The tournament won the fourth Social Contribution Award of the Japan Institute of Eventology (2009), the Japan Sports Health Industries Federation and Japan Sport Tourism Alliance Award (Sports and Urban Development Award), the Chief of the Commerce and Information Policy Bureau, Ministry of Economy, Trade and Industry Award (2013), and the first Cool Japan Matching Award 2017, Special Jury Price (Aihara, 2016). Recently, the Tokyo Organising Committee of the Olympic and Paralympic Games has

implemented this competition and presents it on the International Olympic Committee (IOC) Channel and the official website of the Paralympic Games (the Paralympic Movement, 2017). In 2019, the founder Kenichi Mamizuka received the Minister of the Environment Award.

The Sports Garbage Pickup Tournament is a participative educational program for sustainable development with an emphasis on experience, pursuit, and practice, and also an action-based Environment program aimed at promoting spontaneous activity by learners in sports activities.

The Sports Garbage Pickup Tournament allows participants to visually understand environmental capacity as shown by the garbage produced in the community, as the points are weighted according to the types of garbage (Aihara, 2019).

According to a survey by the National Institute for Environmental Studies, children participating in Sports Garbage Pickup Tournaments have become more environmentally conscious. This activity is effective as an environmental education tool that can help students grasp the difference of garbage and environmental capacity in the area (Mori, Maeda & Asano, 2015).

This is a competition for participants of all skill levels. As children, adults, and people with disabilities can play together, the competition can promote communication across generations.

The garbage issue, which is a social problem for local communities, should not be left to the local government or a handful of people to resolve but should involve local residents, visitors, and workers. The Sports Garbage Pickup Tournament can be referred to as an eco-friendly sport, if we can turn the act of picking up garbage into a sports competition and at the same time contribute to solving this social problem for the city.

Conclusions

The relationship between sports and the environment was not considered at the 1964 Tokyo Olympics. At the 100th anniversary plenary IOC Congress held in Paris in 1994, the IOC took up sports and the environment as an issue of interest, and revised Rule 2 in Chapter 1 of the Olympic Charter. As a result, environmental measures have become an important factor since the 2000 Sydney Olympics and Paralympics. A major sports event is required to raise environmental awareness, which is a big difference from the 1964 Tokyo Games.

The 1964 Tokyo Games left a long-lasting legacy in Japan to express the words *faster*, *higher*, and *stronger*, as in the Olympic motto. The Metropolitan Highway, the Railway network of Shinkansen, and the Tokyo International Airport (new runway and terminal building extension) were opened, and color television was popularized. We recommend that the 2020 Tokyo Games add *beautiful* (Ωpaia) to the three parts of the Olympic motto. Japanese athletes like gymnast Kohei Uchimura pursue beautiful techniques. The legacy at the 2020 Tokyo Olympics and Paralympic Games will be to pursue more beauty, including environmental beautification activities. After the Japanese representation at the FIFA World Cup in Russia, Japanese supporters picked up trash and were widely reported by overseas media. Japanese people generally have a high level of environmental awareness and contribute to the formation of Japan's national image. The concept of the national image is environmental protection, the context is the reform of individual awareness of the environment, and the content is environmental beautification activities.

As a specific example of this practice, sports garbage pickup tournaments have become popular. Sports garbage pickup tournaments are now a new sport that incorporate sports competition elements into cleaning activities.

Figure 3. Legacy in 2020 Tokyo Olympic and Paralympic Games



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