

PERSPECTIVE

From Rio 2016 to Tokyo 2020: State University of Rio de Janeiro and University of Tsukuba Legacy Footprint

Bianca Pena¹, Lamartine DaCosta², Marinilza Bruno¹, Silvio Telles², Kenji Saito³, Hisashi Sanada⁴ and Randeep Rakwal⁴

¹Innovation Department, State University of Rio de Janeiro, São Francisco Xavier 524, Maracanã 20550-900, Rio de Janeiro, Brazil

²Postgraduate Program in Exercise and Sport Sciences, State University of Rio de Janeiro, São Francisco Xavier 524, Maracanã 20550-900, Rio de Janeiro, Brazil

³National Olympic Committee, Rio de Janeiro, Brazil

⁴Faculty of Health and Sport Sciences, University of Tsukuba, 1-1-1 Tennodai, Tsukuba 305-8574, Ibaraki, Japan

*Corresponding Author: biancagamapena@gmail.com

ABSTRACT

Both Rio de Janeiro and Tokyo, being the host cities of the last and current Olympic and Paralympic Games, respectively, have an important shared connection for knowledge transfer. TIAS is an academic legacy program for the Tokyo 2020 Games under the SFT (Sport for Tomorrow) project of the Japanese government, at the University of Tsukuba (UT), which can be considered one of the homes of the Olympic movement, being the legacy of Jigoro Kano. This strategic initiative specifically looks at the accumulated knowledge/resource base in UT, and aims to develop the Tsukuba eMuseum platform inside the National Sport eMuseum as an academic project with the State University of Rio de Janeiro (Universidade do Estado do Rio de Janeiro, UERJ). The goal is to spread the heritage of Japan and UT to the world through an institutional partnership between the two universities.

Keywords: Legacy, Tokyo 2020, eMuseum, Japan, Rio 2016 Olympic Games, Brazil, Olympic Games, Sport.

INTRODUCTION

Olympic legacy “is the result of a vision. It encompasses all the tangible and intangible long-term benefits initiated or accelerated by the hosting of the Olympic Games/sport events for people, cities/territories and the Olympic Movement” (IOC, 2017; p. 3). The importance of legacy is “specifically addressed in Rule 2.14 of the Olympic Charter (Olympic Charter, 1996) and highlighted by Recommendations 1, 2 and 4 of Olympic Agenda 2020 (Olympic Agenda 2020). Despite the work done so far by the IOC, the perception of the Olympic Games legacy remains challenging (IOC, 2017). The International Olympic Committee (IOC) Olympic Agenda 2020 suggests in its recommendations the use of electronic devices by entities that are involved with the Olympic Games and features virtual hubs as an innovation strategy. For Coubertin, the father of the Olympic movement, history has always been “the first of all sciences in importance and educational effectiveness”. This is a quote from a 1916 newsletter written by Pierre de Coubertin, the President of the IOC at that time. For him the support of the Olympic Games is based on history accompanied by various areas of knowledge, especially the technology and innovation applied in sport.

One validation of this innovative and technological approach “has been developed by recording history through a digital museum and sharing it with museums, similar entities, collectors and sports memory researchers in order to adopt digital technologies in their promotional initiatives, contributing to legacy

promotion” (DaCosta and Miragaya, 2019, p. 18). The validation process of sports science combined with technology to promote memory/history preservation as a primordial action for the legacy has been discussed in practice by the national eMuseum of sport, as a start-up initiative with UERJ, which has tested since 2017, cognitive and virtual interaction modes, and the relations between history, exhibitions, collections, archives, and online repositories. The aim of this proposed project is to have an institutional partnership between UERJ and the University of Tsukuba in order to consider the important connection of knowledge transfer being Rio de Janeiro and Tokyo, respectively, host cities of the last and current Olympic Games edition and TIAS as an important legacy program at the University of Tsukuba.

The objectives are: a) developing the platform, Tsukuba e-Museum inside the National Sport e-Museum at the State University of Rio de Janeiro, to spread the heritage of Japan and the University of Tsukuba; b) to strengthen strategic collaboration between the institutions; c) to support exchange of professors, researchers and students between the two institutes for exchange of information and academic publications; and d) to establish joint research programs in Olympic-Paralympic education, sport management, sport science and medicine, innovation and technology and internships for graduate students from the university and affiliated institutions.

OLYMPIC REPOSITORY

Today, someone who wants to get an overview of the legacy of a specific Olympic Games edition can refer to multiple information sources, either from the IOC (2017, p. 27) or from the LA84 Foundation:

From the IOC (2017):

- The Olympic World Library (OWL), developed and maintained by the Olympic Studies Centre, is a catalogue, information portal and search engine covering the main subject areas linked to the Olympic Games and the Olympic Movement, including legacy. Books, digital collections and journals can be searched online. A list of the main publications on impact and legacy in the OWL collection is available online (<https://library.olympic.org/>).
- The Olympic Multimedia Library contains 400,000 photos, 33,000 hours of video, 2,000 archive documents, 8,500 hours of sound recordings and 20,000 Olympic Museum objects, which are all visual illustrations of past Olympic Games (<https://library.olympic.org/Default/multimedia-library.aspx>).
- Information on legacy in different formats can also be found within different departments of the IOC administration (<https://www.olympicchannel.com/en/>).
- The Olympic Channel has produced content related to legacy which is accessible to the public.
- At national/local level, information can be found in the official archives and on the websites of past host cities, and at research centers belonging to the network of Olympic Studies Centers.

In addition to the IOC initiatives, also noteworthy is the LA84 Foundation, an important online library. The LA84 Foundation funds youth sports in Southern California, trains coaches and examines the role of sports in society as a real legacy of the 1984 Los Angeles Olympic Games. In addition, the LA84 library is a unique digital archive containing, reports, oral histories, articles on sport and Olympic Games history (<https://digital.la84.org/>).

However, as highlighted by the IOC (2017) “the options for overviews/consolidated information, such as quick-reference guides, short case studies, storytelling resources, facts and figures and dashboards, are limited (p. 28). Afterwards, IOC (2017) reinforce that “there is no common framework to assess what success looks like in regard to legacy, suggesting some needs and opportunities in terms of methodology, scope and content of legacy evaluation. Some suggestions are directly related to the initiative of the creation of the museum since it is positioned as a solution tool for the proposed needs, as can be seen below (IOC, 2017; p. 28):

- There is a need for longitudinal studies that examine legacies over longer timeframes;
- There is a need for the development of common methodologies regarding metrics indicators;
- There is a need for studies using systematic direct observation, primary data and monetary valuation methods.

As a proposed approach, the IOC (2017) envisages taking a more active role in collecting and sharing quality information on the Olympic Games legacy. The priorities are (p. 28):

- Report the legacy of upcoming Olympic Games on a regular basis;
- Capture the legacy of past Olympic Games.

NATIONAL SPORT EMUSEUM

The eMuseum is a virtual platform for public access, which brings together collections of athletes, collectors, sport fans, 3D Universities, 3D museums, and 3D Training centers, constituting a memory center for socio-cultural and educational purposes (PENA, 2019).

The Emuseum Mission

- To promote real and virtual experiences that highlight the importance of sport memories;
- To help the collectors to promote their archives/history/legacy;
- To promote sport;
- To change the world through the power of sport.

Operational Objectives

- To rescue and preserve the memory of sport, operating with advanced technologies;
- To gather in just one place all of those memories of sport;
- Support partners to create their own virtual gallery;
- Create a connectivity platform for the engagement of athletes, collectors and fans;
- To promote a network of exchange with private and public institutions, from Brazil and abroad, that has functions related to the memory of sport.

Pilot

The pilot was developed with the Brazilian Basketball Confederation.



Figure 1. The eMuseum Pilot

Functionalities

- Oral Memory Management Tool:

To rescue and preserve the history of Brazilian athletes is to contribute to the construction of a culture of collaboration. It is an open and collaborative space that transforms athletes' history into sources of knowledge and inspiration. This tool allows the insertion of athletes' channels, the insertion and editing of audiovisual contents.

- Personal Collection Management Tool:

To identify, catalog and make available on an digital online platform, the items held by the Brazilian athletes. This tool allows the insertion, editing and management of the photos or 3D of the selected collections.

Emuseum Roadshow



Figure 2. Roadshow Illustration

With essentially itinerant actions, we want to provide people experiences in different cities of Brazil, to the point of gaining involvement and, above all, building a close and affective relationship with the population. The eMuseum Roadshow allows participants to take their inspiration from stories, souvenirs and collections from close quarters. So, the sport is able to promote real sensorial and personal experiences, propagating values and transforming people wherever they go.

Exhibition Inside the Truck

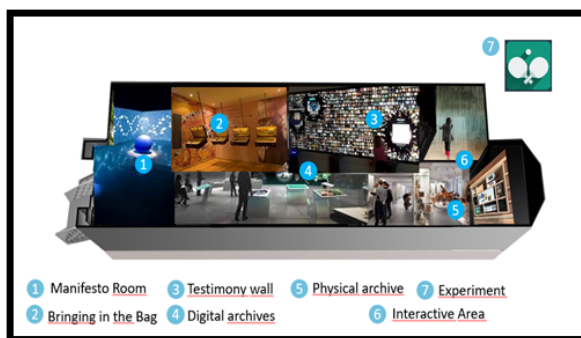


Figure 3. Truck Exhibition

Exhibition number 7 is outside the truck. There will be sports modalities according to the operation in place so that the visitors can know the rules and be an athlete for a moment. The eMuseum will connect + 1million people and will have a roadshow to 18 different cities. It will engage a) 30,000 children; b) 30,000 youth; c) 10,000 students; d) 100 professors and e) + 100,000 members of the public.

ALIGNMENT OF THE EMUSEUM WITH AGENDA 2020 AND IOC RECOMMENDATIONS

As an expected long-term benefit of the Olympic Games, the eMuseum has aligned with at least three recommendations of the IOC (2017): 1) Social development through sport; 1.1 Olympic values and sport as a tool for education, 1.2 Peace-building and international cooperation; 2) Human skills, networks and innovation; 2.1 New generation of talent in different fields (technology, project management, the arts, etc.), 2.2 Innovation in different fields (materials, technologies, business models, management, sports entrepreneurship) and 3. Culture and creative development; 3.1 Intangible cultural heritage of Olympism, 3.2 Increased visibility of national culture, 3.3 New design, brand and visual identity (p. 18). In accordance with the Agenda 2020, six (6) recommendations can be considered aligned to the eMuseum:

Table 1. IOC Agenda 2020 Recommendations Aligned to the eMuseum

Recommendation 3 - Reduce the cost of bidding – (highlights preference for electronic documents)	Publication of the Candidature File to be in electronic format only.
Recommendation 4 - Include sustainability in all aspects of the Olympic Games	Develop a sustainability strategy to enable potential and actual Olympic Games organizers to integrate and implement sustainability measures that encompass economic, social and environmental spheres.
Recommendation 5 - Include sustainability within the Olympic Movement’s daily operations	Providing mechanisms to ensure the exchange of information between Olympic stakeholders.
Recommendation 22 - Spread Olympic values-based education	The IOC to devise an electronic platform to share Olympic values-based education programs of different NOCs and other organizations. The IOC to identify and support initiatives that can help spread the Olympic values.
Recommendation 23 - Engage with communities	1. Create a virtual hub for athletes. 2. Create a virtual club of volunteers. 3. Engage with the general public. 4. Engage with youth.
Recommendation 26 - Further blend sport and culture	At Games time: Study an “Olympic Museum on the move” concept to introduce Olympic culture to the general public. Between Olympic Games: Study how to develop an impactful commissioned artists program to engage a steady and authentic interaction with global cultural players and build a dynamic legacy.

CONCLUSION AND FUTURE PERSPECTIVES

In the emerging and important field of technology and innovation in sports science, from this institutional partnership, it will be possible to develop an academic project, playing a crucial role through its academic legacy, in order to create the Tsukuba eMuseum (virtual gallery). The cooperation also envisages bringing sports scientists together by organizing joint workshops and research projects, beginning with the eMuseum. The work will be coordinated by Prof Dr. Bianca Gama and Prof. Dr. Lamartine DaCosta from UERJ and Profs. Hisashi Sanada and Randeep Rakwal, and sports scientists and experts from University of Tsukuba, Faculty of Health and Sport Sciences, Japan. These project-based initiatives will be undertaken by an institutional arrangement with the signing of a Letter of Intent (LOI) followed by a Memorandum of Understanding (MoU) between the University of Tsukuba (UT) and the State University of Rio de Janeiro (UERJ) in 2020. Afterwards, the partnership will be expanded to workshops, symposiums, and activities conducted on multiple occasions up to 2020 by students, coaches, academicians, and practitioners in order to engage in a meaningful way and familiarize them with the foundations of the Olympic idea (TIAS, 2019) and UT sports history. In order to promote international collaboration, a group of researchers and academicians can visit and organize one-week activities at UT as well as UT can send a group to UERJ. The aim is to increase cooperation between the two countries in regard to the promotion of sports history, considering the dissemination of a real legacy from Rio 2016 Olympic Games and Tokyo 2020.

The institutional partnership has already begun with the participation of Prof Dr. Bianca Gama in the TIAS Networking Conference (Figure 4). At this time Bianca Gama presented the eMuseum concept to Prof. Dr. Hisashi Sanada (Figure 5).



Figure 4. TIAS Networking Conference



Figure 5. Bianca and Prof. Sanada at eMuseum Meeting

The eMuseum responsibilities are a) create a virtual gallery from the existing Tsukuba museum (Figure 6); b) identify the collection to be used; c) collect and treat the archives; d) store photos and videos; e) transform physical archives into virtual reality, augmented reality with the various technologies support; and f) perform operational management. The University of Tsukuba will identify and make the collections available.



Figure 6. University of Tsukuba Sports Museum

Acknowledgements

The authors would like to thank TIAS, University of Tsukuba, TAIKU (Faculty of Health and Sport Sciences; <https://www.taiiku.tsukuba.ac.jp/en/>) and State University of Rio de Janeiro (<http://www.uerj.org/>) for their support and encouragement to move the project forward.

Conflict of Interest Statement

The authors declare no conflict of interest.

References

- DaCosta L and Miragaya A (2019). New cognitive and virtual interactions of sport sciences and olympic studies. Nova Studio, Petrópolis, 2018. <http://www.sportsinbrazil.com.br/livros/sport-tech.pdf>. (accessed on 2020.03.01).
- International Olympic Committee (1996). Olympic Charter. https://stillmed.olympic.org/Documents/Olympic%20Charter/Olympic_Charter_through_time/1996-Olympic_Charter.pdf. (accessed on 2020.03.01).
- International Olympic Committee (2017). Legacy strategic approach moving forward. https://www.olympic.org/~media/Document%20Library/OlympicOrg/Documents/OlympicLegacy/IOC_Legacy_Strategy_Full_version.pdf?la=en (accessed on 2020.01.03).
- International Olympic Committee (2020). Olympic Agenda 2020, 20+20. Recommendations. https://stillmed.olympic.org/Documents/Olympic_Agenda_2020/Olympic_Agenda_2020-20-20_Recommendations-ENG.pdf. (accessed on 2020.01.03).
- LA84 Foundation Library (1985). Digital Library Collections. <https://digital.la84.org/>. (accessed on 2020.03.01).
- Olympic Channel (2020). Olympic Channel. <https://www.olympicchannel.com/en/> (accessed on 2020.03.01).
- Olympic World Library (2020). Olympic Library. <https://library.olympic.org/>. (accessed on 2020.03.01).
- Olympic World Library (2020). Olympic Library <https://library.olympic.org/Default/multimedia-library.aspx>. (accessed on 2020.03.01).
- Pena BG (2019). National eMuseum of Sport. In: New Cognitive and Virtual Interactions of Sport Sciences and Olympic Studies. Lamartine DaCosta and Ana Miragaya (eds), Nova Studio, Petrópolis, 2018. <http://www.sportsinbrazil.com.br/livros/sport-tech.pdf> (accessed on 2020.03.01)
- Tsukuba International Academy for Sport Studies (2019a). <http://tias.tsukuba.ac.jp/> (accessed on 2020.01.03).