



Article

Sport for All and Social Inclusion of Individuals with Impairments: A Case Study from Brazil

Lyusyena Kirakosyan[®]

Institute for Policy and Governance, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, USA; lyusyena@vt.edu

Received: 1 May 2019; Accepted: 30 May 2019; Published: 1 June 2019



Abstract: This article examines the discourses about Sport for All (SFA) and their evolution over the past four decades in Brazil and analyzes the implications of those discourses for social inclusion of Brazilians with impairments in sport and leisure. It provides an overview of four political milestones in the development of sport participation in Brazil: the launch of the SFA program under the military dictatorship; the adoption of the 1988 Constitution; the ratification of the United Nations Convention on the Rights of Persons with Disabilities; and the Rio 2016 Paralympics. Foucault's archaeological-genealogical approach has been used to explain how the principle of social inclusion has been practised and enacted through the SFA discourses in Brazil and to discuss the implications of sport and leisure policies for the population with impairments.

Keywords: Sport for All; Brazil; social inclusion; sport policy; people with impairments

1. Introduction

The idea of Sport for All (SFA) was launched by Pierre de Coubertin, the founder of the International Olympic Committee, to fulfill the doctrine of Olympism, according to which the Olympic Games served as an instrument for the popularization of sports [1]. The SFA initiative intended to democratize physical activities and sport, making them accessible to the whole population, regardless of their physical capacities [2]. SFA spread across Europe in the late 1960s, paralleling the various democratizing movements, among them the civil rights movement in the United States and the anticolonial and independence movements in the developing nations [3].

The discussion of the SFA movement lies within the broader debate of the value of sport and its private and public benefits. Many international organizations have considered sport as a means of achieving nonsporting outcomes, such as promoting human rights and human dignity. There are several examples of their sport-related policies to promote development, among them the initiatives by the Red Cross, the International Labor Organization, UNESCO, and others [4]. UNESCO's Declaration on Sport considers sport as a worldwide social phenomenon deeply rooted in the lives of people. Sport, as conceived in the Olympic Charter, serves as a promoter of a peaceful society and a defender of human dignity and plays an essential role in the development of both societies and human beings [5]. The 1948 United Nations Declaration of Human Rights conceived the right to rest and leisure as a human right, which grounded both the SFA campaign initially launched in Norway in the 1960s and the idea that practicing sport was a human right [4]. By adopting democratic practices in sport, the SFA primarily intended to promote social inclusion for all without any form of discrimination [6].

Several published scholarly works discussed the SFA development in Brazil from its beginnings under the military regime in the 1970s to sport and leisure becoming a constitutional right when Brazil undertook a formal turn to democratization in the 1980s. However, there has been no research in Brazil that offered a critical examination of social inclusion in sport with a particular focus on people with impairments. This article intends to address this gap by examining the discourses on sport participation

Societies **2019**, 9, 44 2 2 of 14

in the SFA campaign and the 1988 Constitution, further extending the analysis to the implications of the UN Convention on the Rights of Persons with Disabilities and the Rio 2016 Paralympics for policies, programs, and opportunities for sport participation for Brazilians with impairments.

Next, for analytical purposes, the terminology used throughout this article is clarified. The social model of disability¹, which is at the foundation of the field of Disability Studies, considers disability as a kind of oppression that people with impairments endure because of the inaccessible environment and discriminatory society. However, several scholars of disability studies challenged the social model approach, considering it outdated and inappropriate for the current historical moment [7–10], and distinguished between disability studies and the social model of disability, claiming the latter does not fully embrace contemporary disability studies [11]. The main reason, they argue, is that the social model of disability dichotomizes disability and impairment. The distinction between socially created disability and impairment, which is a physical attribute, breaks the conceptual link between disability oppression and impairment as if they were not related [11]. This distinction between impairment and disability has constituted one of the major dilemmas in disability theory [8,11].

The social model of disability significantly influenced the development of the 2006 UN Convention on the Rights of Persons with Disabilities, and both the advantages and limitations of the approach were carried over into the provisions of the Convention [12]. Because the aim of the Convention was to change oppressive social structures and attitudes, it makes sense to protect all people with impairments, rather than only those already oppressed, or disabled. Contrary to the claims made by the supporters of the social model, disability does not wholly result from discriminatory social practices and institutions. Some impairments may be so severe that they limit an individual's function regardless of how society is organized [13]. Thus, disability is the consequence of the relationship between influences intrinsic to the individual (nature and severity of the impairment, his or her own attitudes to it, abilities, and personality traits) and contextual elements (enabling or disabling environment, wider cultural, political, social and economic values, attitudes, and interests) [7].

Thus, throughout this article, the term "people/individuals with impairments" is adopted as a more inclusive term to denote all individuals who live with an impairment and may be at risk of oppression, discrimination, and exclusion, rather than just those individuals with impairments who are already oppressed. When examining specific documents, the terminology employed in the documents has been maintained, which often includes "persons/people with disabilities". The terminology commonly utilized in the literature, such as disability sport or parasport has been used for the discussion of sport for people with impairments.

After the methodology, the analysis is structured as a four-part overview of the critical milestones and related discourses in the development of the SFA movement in Brazil as follows: First, the circumstances of the launch of the SFA campaign under the military dictatorship are summarized. This campaign aimed to involve the population in sport and physical activities and to serve as a mechanism of social control. Secondly, the adoption of the new democratic Constitution in 1988, which made access to sport and recreation a constitutional right and an obligation of the State to guarantee it, is discussed. Third, after setting a more general background, the discussion moves to a disability-specific milestone, the 2006 UN Convention on the Rights of Persons with Disabilities. The Convention emphasized the power of sport in helping individuals with impairments realize their full potential and in ensuring their access to sport and recreation. Brazil ratified the Convention in 2008, which urged many local governments to launch sport participation and recreation programs specifically for people with impairments, under the umbrella of the SFA movement. Fourth, the impact of the Rio 2016 Paralympics on sport policies, programs, and opportunities for people with impairments is explored.

The social model views disability as a result of the way society is organized. It claims that because social order is unjust, people with impairments face attitudinal, environmental, and institutional barriers. These obstacles make it harder for these individuals to take control of their lives and denote the need for laws and policies to address them.

Societies **2019**, 9, 44 3 of 14

The Discussion section that follows the overview problematizes the notion of social inclusion and examines the form and meaning of inclusion in sport for the population with impairments in Brazil. Furthermore, it outlines the implications of the case findings for sport and leisure policies. It is argued that for genuinely inclusive sport practices associated with equal opportunities and the Sport for All movement, the respective policies need to engage with the socio-structural aspects of exclusion that are often beyond the scope of current sport and recreational policies and programs. Social exclusion is not an outcome of a process but a process in and of itself, where the accumulation of different disadvantages may result in a vicious cycle, making it hard to identify and address causal factors accurately [14].

2. Methodology

A case study approach was employed for this study, offering an in-depth exploration of the discourses associated with SFA in Brazil over the past four decades. This study draws on secondary sources, such as publicly available legal and policy documents, official reports, and relevant scholarly literature on the issues of sport participation and social inclusion. As an instrumental case study [15], the analysis draws on the SFA discourses to advance our understanding of social inclusion in sport and leisure of Brazilians with impairments.

Researchers express fundamental concerns about a reliable generalization from a single case study, considering it a significant limitation. When discussing the potential for generalizations from the implications of a case study, it has been suggested that the analysis considers two aspects of generalization. First, the case findings can be transferable to other contexts, and second, generalizations can be made within the case study [16]. In terms of the first aspect, the findings from this study are transferable to the sport-based inclusion issues in other developing nations in Latin America and elsewhere. With regard to the second aspect of generalization, the insights from this case study may contribute to debates about inclusion beyond sport and leisure.

For data analysis and interpretation, Michel Foucault's archaeological-genealogical approach to problematize social inclusion in sport is employed. This method is helpful for drawing out the problems when exploring how the principle of social inclusion has been practised and enacted through the SFA-related discourses in Brazil. As it has been pointed out, "the roles of genealogy and archaeology appear complementary, the latter performing analyses that are a necessary condition of the former" [17] (p. 33).

Archaeology organizes the discourses offered within specific temporal-spatial conditions [17]. As archaeology provides "a pure description of discursive events" [18] (p. 27), it is helpful for the organization and description of the discourses enacted during each of the four major milestones discussed in the next section, as well as the relations they have to each other and their modes of transformation within the historical conditions. The archaeological analysis focuses on "the conditions of existence of particular discursive formations and the fields in which they operate" [19] (p. 98). Archaeology also assists in uncovering how discursive formation gave rise to practical, political, and moral considerations [17].

In turn, genealogy relates analyzed discourses to the contemporary concerns of the exercise of power, inclusion/exclusion, and equality revealed in the particular social struggles [17]. It undertakes a critical inquiry into the necessary components that make up the reality, thereby, uncovering multiple conditions for the formation of contemporary norms of validity and meaning [17]. In sum, genealogy is concerned with the centrality of power in the production of discourses, identities, and institutions, and takes a critical stance towards them, rather than merely accepting and legitimating them [20]. Importantly, Foucault viewed the exercise of disciplinary power as disseminated throughout the social body, shaping every aspect of human existence [19].

Societies **2019**, 9, 44 4 of 14

3. Overview of Sport Participation and Inclusion Discourses

3.1. The Launch of Sport for All in Brazil

The idea of SFA was imported to Brazil and launched in the 1970s by the military government [21]. The campaign was organized by the Ministry of Education and Culture and was actively promoted on radio and television, through newspapers, magazines, and brochures, with the purpose to encourage mass sport participation amongst the Brazilian population [22].

The SFA campaign was based on a set of practical discourses related to health, longevity, and sport and leisure practices [6,22]. The discourse of healthy lifestyle helped the government to enact a policy focused on the control of corporal practices in the population; productive use of free time; development of healthy habits and attitudes; and, above all, dissemination of docility [2,23]. Leisure and recreation opportunities offered to the population were accompanied by the discourses that emphasized humanistic values [2]. In this way, it was easier to convince the population of the elusive sense of freedom, while repression was the prevailing apparatus for maintaining the military state [2]. The campaign organizers did not consider the population's individual or collective choices of sports and leisure options; instead, people could decide whether or not to participate in predetermined activities that highlighted the benefits of physical activity and healthy lifestyle [2].

Throughout this period, the regime did not make significant investments to improve Brazil's competitive position in the international sports arena. Instead, it merely relied on the discourse that mass sport participation would naturally bring positive results at the elite level [22]. Interestingly, while the SFA movement in Europe was intended to oppose elite sport and make sport practice accessible to everyone, the discourses of Brazil's military government linked better sporting performance at the elite level to participation in the SFA activities by the general population.

Some scholars argued that the SFA campaign tried to propagate a belief in the popular imagination that the practice of collective physical activities could bring benefits that would transform the lives of individuals, their communities, and the nation [2,22]. This disciplining strategy was thought to make each individual feel important to participate in sport activities and, at the same time, feel disciplined to incorporate the proposed discursive practices. Consequently, the objective of SFA was to constitute docile and useful citizens, consistent with the agenda of the military regime [2].

The economic timing was also a significant factor in the unfolding of the SFA campaign in Brazil. The Brazilian economy experienced remarkable economic growth in the late 1960s, exceeding 10% annually, a period coined as the "economic miracle". However, in the early 1970s, as this miracle growth slowed down, the notion of "moral crisis" and pessimism spread across the nation [22]. In response, the military government deployed discourses that engaged such values as love for one's family and community, hope, unity, and national cohesion, to promote social harmony and national integration [22]. With a gradual weakening position of the military government in the late 1970s to early 1980s, it sought the support of the population for its initiatives, instead of imposing its decisions unilaterally [2].

In summary, because of the political climate, the early years of SFA in Brazil deviated from the original intentions of the SFA movement in Europe. Instead of encouraging popular sport participation, Brazil's government at the time used SFA as an instrument for constructing a disciplinary society. The idea of mass participation by the population was intended to create multiple gazes, facilitating an efficient surveillance system [2]. Foucault's notion of the "positive, productive and enabling" power [17] (p. 171) that permeated the SFA discourses delimited the choices not only for citizens' actions but also for their capacities for action. However, the launch of the SFA campaign in Brazil laid the groundwork for the further popularization of sport and leisure, as the following section suggests.

3.2. The New Constitution and Access to Sport

Democracy was formally restored in Brazil in 1985 when a civilian government took charge after two decades of military dictatorship. However, this change to a nonmilitary government did not Societies **2019**, 9, 44 5 of 14

automatically result in the re-establishment of democracy in the nation, and the transition occurred gradually and unevenly. Brazil's disability rights activists actively contributed to the deliberations on the new Constitution that was enacted in 1988 [24].

The Constitution was widely perceived as the backbone of the democratization process. It had at its foundation a formal conception of citizenship as fixed in individuals as autonomous holders of universal political and social rights. Access to sport and recreation became a constitutional right for all, on equal footing with the right to elementary education and primary health care. Article 217 of the Constitution made access to sport and leisure as a social right of every Brazilian, and an obligation of the State to guarantee it [25]. It brought institutional legitimization to what was before a non-institutionalized manifestation of the population's cultural diversity in sport on national, regional, and local levels [26]. Moreover, the State was responsible for encouraging leisure as a form of social promotion [25] (Paragraph 3).

For some legal scholars, this Constitutional provision framed sport as an instrument of social inclusion [27]. The Constitution linked the practice of sport as a right to the integral development of individuals and to the production of socially integrated, healthy, educated, and engaged citizens [28]. Different from the period of military rule, while the discourses emphasizing humanistic values continued to accompany sport participation politics, the population was not monitored by a surveillance mechanism in this period.

The Constitution also established directives for sport funding, prioritizing the allocation of public resources to the educational sport practices in schools, and, in some specific cases, to elite sport. However, a study of the allocation of public funding to diverse sport categories in the period from 2004 to 2009 revealed a different situation [29]. The authors identified a funding loophole created by the 1998 law, popularly known as the Pelé Law, which allowed elite sports and sporting mega-events to receive funding priority. The study concluded that over the examined period, the government did not allocate funds in accordance with the guidelines set by the 1988 Constitution.

Brazil's neoliberal reforms of the 1990s reshaped power relations in an enduring manner, including in the area of sport and leisure. As a result, neoliberal governance was carried out through restructuring or privatization of many critical state activities. This trend affected the capacity of the state to guarantee the population's rights, thus weakening the purport of the Constitution [30]. Increasingly, sport participation has come to depend on private sponsors, leading to privatization of sport programs and further linking sports consumption to the valued components of everyday life [31].

In summary, the 1988 Constitution was a major force in advancing discourses of sport participation in terms of making access to sport and leisure the right of every Brazilian. However, when it comes to the practical implementation of that right, the subsequent legislation and policies failed to consider the complexity surrounding the effective guarantee of sport participation. Brazil already invests a negligible amount of public resources in sport, and the fact that the bulk of the available funding goes to elite sport [29] denotes the elitization of sport and leisure participation practices, consistent with neoliberal values [31].

3.3. The United Nations Convention on the Rights of Persons with Disabilities

When asked to prioritize essential aspects of human rights, some may choose the right to employment, education, housing, or culture. Others may consider civil and political rights to be more critical. However, the discussion of human rights would be incomplete without recognizing the importance of sport and recreation [32]. Sport has played a vital role in the lives of individuals with impairments, helping them develop the skills to become effective self-advocates and agents of change [33].

The 2006 United Nations Convention on the Rights of Persons with Disabilities highlighted the power of sport in helping people with impairments realize their full potential in the context of recreational, leisure, and sporting activities. The Convention was the first binding legal instrument in the long struggle of disability rights activists worldwide to secure protection and promotion of their

Societies **2019**, 9, 44 6 of 14

human rights. Under the Convention, States need to encourage a twin-track approach to sport. On the one hand, the governments must encourage people with impairments to participate in mainstream sporting activities, while on the other hand, people with impairments should have the opportunity to participate in impairment-specific sporting activities with guaranteed accessibility of sporting venues and services [34].

The human rights enumerations in Article 30.5 of the Convention gave voice to the grassroots sport organizations that advocate for human rights for the masses in health and physical activity, beyond the Paralympic, Special Olympics, and Deaflympic movements that serve a few of the elite athletes with impairments [35]. In particular, sections of the Article call on the national governments to take the following measures:

- To encourage and promote the participation, to the fullest extent possible, of persons with disabilities in mainstream sporting activities at all levels;
- To ensure that persons with disabilities have an opportunity to organize, develop and participate
 in disability-specific sporting and recreational activities and, to this end, encourage the provision,
 on an equal basis with others, of appropriate instruction, training, and resources;
- To ensure that persons with disabilities have access to sporting, recreational, and tourism venues;
- To ensure that children with disabilities have equal access with other children to participation in play, recreation and leisure and sporting activities, including those activities in the school system;
- To ensure that persons with disabilities have access to services from those involved in the organization of recreational, tourism, leisure, and sporting activities [36].

These provisions are intended to provide visibility and voice for people with impairments to engage in recreational, leisure, and sporting activities, as stated in Article 30.5. The Article "promotes and advances the access and dignity of people with disabilities in sport, recreation, and leisure, and furthers a broader understanding of the rights that all individuals have in the domain of sport and physical activity" [37] (p. 32).

Brazil formally ratified the Convention with the status of a Constitutional amendment in July 2008, which helped place disability rights on the national agenda. As a result, Brazilians with impairments were included in two already existing programs implemented by the Ministry of Sport: The Second Half Program (*Programa Segundo Tempo*) and Sport and Leisure in the City (*Esporte e Lazer da Cidade*). The Second Half Program (SHP) focused on school-age youth with impairments and their inclusion in sports. As the official report pointed out, this initiative intended "to democratize the access to quality educational sports as a means to ensure social inclusion and contribute in this way to effectuating the rights and building citizenship for children and youth with disabilities in situations of social vulnerability" [38] (Paragraph 165). The sport activities offered as part of the SHP were educational and "centred on the full development of children and adolescents, to foster self-awareness of their own bodies, discovering their limits, increasing their potential, developing the spirit of solidarity, mutual cooperation, and respect for the collective" [38] (Paragraph 165).

Since 2003, Sport and Leisure in the City Program has targeted all Brazilian citizens. The Program's primary objective has been to expand, democratize, and universalize access of all to recreational sports and leisure, and to promote human development and social inclusion for all age groups, including individuals with impairments [39]. In addition to providing physical, cultural, and leisure activities for all age groups and people with impairments, the initiative claimed to encourage social coexistence, to provide training to community leaders, and to foster research and the socialization of knowledge [39]. The Program has been implemented in a decentralized manner through 400 recreational and leisure sport centers operated by the state and municipal governments [40].

In summary, the UN Convention has helped the disability rights movement in Brazil place the rights of this population on the national agenda, ranging from education and employment to culture, sport, and leisure. Article 30.5 recognized that sport participation helps to break down impairment-related stereotypes held by the broader society, as well as contributes to more inclusive

Societies **2019**, 9, 44 7 of 14

communities and greater social cohesion [34]. Although the adoption of the Convention in Brazil emphasized social inclusion in the discourses of sport participation, these discourses were not successful in changing the attitudes and behaviors of the people. For example, Sport and Leisure in the City Program registered weak participation (only about two percent) of people with impairments, urging the Ministry of Sport to rethink the program design, expected impacts, and accessibility [40].

3.4. Rio 2016 Paralympics and Sport Participation Legacy

The Sport and Venues Plan for the Rio 2016 Olympic and Paralympic Games was developed with several principles in mind, among them:

- ensuring strong legacies for all Olympic and Paralympic sports and for community and youth recreation, and;
- optimizing the social impact of sport on the city and its people [41] (p. 9).

Rio de Janeiro's candidature bid for the 2016 Games described its intent to invest in sport as a catalyst for social inclusion through sport and the expansion of sport infrastructure. As part of their sport participation legacy with its derivative health and social benefits for both Rio and the entire country, the government promised to bring these benefits to the socially vulnerable children and youth living in low-income areas, such as Rio's favelas, or urban slums [42]. Moreover, the organizers intended to promote active involvement of, and benefits to, 65 million young Brazilians and 180 million youths across South America [42].

Although there are no official data on sport participation legacy after the Rio 2016 Games, some believe that because of inadequately designed policies and poorly implemented programs, their sport participation legacy aimed at the marginalized groups is likely to be ineffective and unenduring [43]. Moreover, a lack of legacy planning and issues in the governance of the legacy of the Rio 2016 Games had a negative impact on the perceived value of legacy programs and resulted in cuts to government funding [44]. Another study of the perceptions of the potential for the sport participation legacy post-Rio 2016 revealed that legacy planning and implementation had neither community involvement nor open discussions about the proposal for hosting the Games [44]. Research indicates that one of the main factors in building a sport participation legacy is public participation in planning and implementing programs that will capitalize on sport mega-events [45].

Such failure to implement a long-term sport participation legacy for Rio's marginalized youth is, in fact, reflective of Brazilian's sport policy more broadly. Brazilian sport programs and their continued funding have historically been heavily dependent on political will [43]. Another problem was the public-private partnerships that the government heavily relied on in preparation for the Rio 2016 Games. The subcontracting of the construction of the Olympic sites to the private sector meant not only higher construction costs but also inconsistent and unaccountable service delivery, unstable management, discontinuity, and privatization when the Games were over. At least the experience of the 2007 Pan-American Games in Brazil has shown this to have been the case [43].

One may argue that in fact, sport participation legacies are something of a myth and offer little empirical evidence of such legacies enduring past the mega-events, especially for individuals who are not physically active. A study of the impact of the Paralympics on young people with impairments found that viewing Paralympic sports or having Paralympians as role models would not likely result in increased engagement in sport activities [46]. Instead, the scholars argued that an increased sports engagement among children with impairments in the wake of the Paralympic Games would take place only when coupled with improved opportunities to engage in sport.

Regardless of the consistent empirical findings to the contrary, there seems to be ongoing hope for a positive effect from sporting events on participation [47,48]. For example, the organizers of the London 2012 Games created high expectations of sport participation legacies, but in reality, sport participation had dropped, especially among the poor and working-class population groups [47]. It seems that in the case of the London 2012 and the Rio 2016 Games, the promises of sport participation

Societies **2019**, 9, 44 8 of 14

legacies remained mere rhetoric of hope, without much evidence to back up those claims. Not only is such legacy intangible by nature and challenging to implement successfully, but it is even harder to measure its effects [43].

Regarding policy change, the preparation for the Rio 2016 Games and the mega-event itself left no significant impact on promoting sport participation among Brazilians with impairments. Despite a growing interest of Brazilians with impairments in sport after the Rio Paralympics, critics point to persisting barriers to sport participation, which include inadequate and insufficient sporting infrastructure, insufficient sport funding, lack of adequately trained professionals, accessibility, and logistical issues among others [49,50]. None of the government policies and programs intended to address these barriers and the Rio 2016 impact evaluation documents did not contain a planned sport participation legacy after the mega-event.

The National Plan for the Rights of Persons with Disability, launched in 2011 and entitled Living without Limits (*Viver Sem Limite*), contained the nation's proposed strategic actions for this group in the areas of education, health, citizenship, and accessibility, however, it only mentions the elite sport and the upcoming Paralympic Games that Brazil hosted in 2016 [51]. Next, the 2016–2019 Multi-year Plan (*Plano Plurianual*) that outlined the priorities of government policy for the period did not contain any sport participation programs or policies for people with impairments [52]. The section of the Plan entitled "Program 2063, Promoção e Defesa dos Direitos de Pessoas com Deficiência) refers to government programs and outcomes in education, accessibility, and housing, but no access to sport policies or outcomes explicitly targeting individuals with impairments. In the section entitled "Program 2035, Sport, Citizenship, and Development" (*Programa 2035, Esporte, Cidadania e Desenvolvimento*), the document cites the Program Sport and Leisure in the City that includes people with impairments without any specific data on sport participation of this population.

In summary, although the Rio 2016 organizers intended for the mega-event to leave a lasting sport participation legacy, they did not make it clear how different target groups would exercise their right to access sport facilities and resources in the long term. One of the outcomes of the Paralympic legacy can be revealed by examining whether ordinary people with impairments have been encouraged and supported to seek a long-term quality of life through the practice of sports [53]. However, analysts caution that the lack of commitment and consistency in policy implementation could be a significant obstacle in Brazil that has a long history of discontinuing public services and programs [54]. It seems that the Rio 2016 legacy will hardly endure until policies are designed and implemented with a long-term vision and political commitment.

4. Discussion

Against the background of conditions and formation of sport participation discourses over the past four decades, this section draws on the current debates on social inclusion to examine the form and meaning of inclusion in sport for individuals with impairments in Brazil. Although sport has the potential for social inclusion, it can also be a divisive social practice that reinforces presumptions about the capabilities of specific groups, in particular, of individuals with impairments [55]. Social inclusion was a fundamental principle in the drafting of the UN Convention on the Rights of Persons with Disabilities, as it aimed to address the long-lasting oppression and exclusion of people with impairments from social, economic, political, and cultural domains of society.

There seems to be a lack of consensus among scholars, practitioners, and policy makers about what constitutes social inclusion. In one study, the authors surveyed multiple definitions of social inclusion in the available literature and were able to draw out some common elements, as outlined below. Thus, social inclusion constitutes:

- a series of complex interactions between environmental factors and personal characteristics that provide opportunities to;
- access public goods and services;

Societies **2019**, 9, 44 9 of 14

 experience valued and expected social roles of one's choosing based on his/her age, gender and culture;

- be recognized as a competent individual and trusted to perform social roles in the community, and;
- belonging to a social network within which one receives and contributes support [56] (p. 82).

This definition goes beyond material inequalities and securing fundamental human rights, which are necessary but not sufficient conditions for individuals to be fully included in their families, communities, and society [57]. It also conceptualizes social inclusion as a combination of participation, access, and recognition of autonomy, capacity, and accomplishments of people with impairments.

It is helpful to distinguish between social inclusion in sport and social inclusion through sport [55]. The former implies actual existence of equal opportunities in the access to sport, while the latter refers to the development of skills (social, motor, cognitive, perceptual, and so on) that are also applicable outside sport. While both concepts are essential for people with impairments, this article focuses on the notion of social inclusion in sport.

The analysis of the recent inclusion debates in sport helps the argument that inclusion in sport is distinct from inclusion in other contexts, for example, in education and workplace [58]. Differently from those contexts, nonparticipation in sport is not equivalent to social exclusion, which would be the case if people wanted to participate but could not. Inclusion in sport should consider guaranteeing access, improving participation, and offering a continuum of opportunities for people with impairments [58]. This argument is in line with the UN Convention that stated that the states should encourage a twin-track approach to sport participation, in both mainstream sport with necessary adaptations and in parasport.

Some scholars suggested understanding inclusion in sport as ranging across "access, participation and achievement" that makes it more process-oriented and empowering for persons with impairments [58,59] (p. 11). Considering the concept of social inclusion laid out above [56], without the recognition of everyone as equally valued individuals, the process of social inclusion will hardly advance. A study of the barriers to sport participation faced by individuals with impairments in England revealed that psychological barriers were the hardest to overcome [60]. The internal beliefs and perceptions of people with impairments themselves and the attitudes of people without impairments were the most significant barriers to sport participation, ahead of physical and logistical hurdles [60].

Consequently, a more comprehensive understanding of inclusion in sport would situate diverse sport participation activities along the "inclusion spectrum" which provides the following five distinct modalities of practice [58] (pp. 14–15):

- Segregated activities, specially thought for and proposed for people with impairments and practised in separate times and spaces;
- Parallel activities, where athletes with impairments train separately with their peers, but the group is part of a local sports club;
- Disability sport activities that are typically practised by the participants with impairments, but can
 also have children and adults with and without impairments included in disability sport together,
 following the rules of a specific parasport;
- Open activities, where everyone is involved in the same activity, which can be cooperative or unstructured movement games, with minimal or no adaptations to the environment or equipment;
- Modified activities designed for all, with specific adaptations to space, rules, tasks, and equipment.

The inclusion spectrum allows for activities that bring together people with different physical abilities, characteristics, and expectations, by their individual choice, and many scholars have defended giving segregated and more inclusive approaches equal importance [58]. However, there are also scholars who argue against segregated solutions that are separated from mainstream sport, arguing that "being placed in any form of a segregated setting tends to force disabled people to lead a separate or parallel life" [1] (p. 80), which counters the overall purpose of social inclusion. Under the Constitution

Societies **2019**, 9, 44 10 of 14

of 1988, the concept of social inclusion encompassed a group of social rights, such as education, health, work, and leisure, which are grouped as "right to social inclusion" [61]. However, it seems that the discourse of inclusion, legitimized by Brazil's Constitution and reproduced in the legislation and public policies, focuses mainly on providing access to social rights. A more robust understanding of social inclusion would help policy makers tackle the obstacles that impede fully guaranteeing social rights in practice for all Brazilians. In the case of sport, the programs and policies in place do not adequately address the many barriers that the population with impairments faces to sport participation, either in an inclusive or in a segregated setting. England's findings [60] are helpful for Brazil's context as well. Addressing psychological, physical, and logistical barriers through increasing awareness, communication, and demand for sport activities are critical steps in building sport-based inclusion of people with impairments.

Social inclusion has also been a core value guiding the SFA politics [6]. If the SFA policies and initiatives aim for an outcome of equal sport participation, then their target should be to raise the proportion of people with impairments who participate in sports and exercise to a similar level of participation among people without impairments [1]. In Brazil, as in many developing countries, there is a significant overlap between impairment, disability, and poverty, which leads to weak social participation and reduced opportunities to improve one's life prospects. Because poverty significantly limits leisure and recreation spending [62], genuinely inclusive sport participation policies must engage with the socio-structural factors of exclusion, which are mostly beyond the scope of existing sport and recreational policies and programs. In other words, separate policies would need to be replaced by multi-sectoral ones that integrate other socioeconomic issues, such as transportation, city planning, education, tourism, and leisure. Furthermore, for sport practices to be inclusive and associated with equal opportunities and the SFA movement, policy development needs to be participatory, with input from people with impairments who bring in their knowledge, experiences, and practice.

Considering the perspectives of people with impairments, or what Foucault called "subjugated knowledges"—"a whole set of knowledges that have been disqualified as inadequate to their task"—may help to produce more informed and deliberative decisions [63] (p. 82). This step by itself may not address the challenges in sport participation policies, but it will engage divergent viewpoints from individuals with impairments and their advocates and may lead to the emergence of different discursive patterns and tensions in the understanding of inclusion in sport, thus challenging the existing practices.

5. Conclusions

From its beginnings, discourses of Sport for All were closely linked to the discourses of democratization of the access to sport and leisure and promotion of social inclusion. However, when the military dictatorship imported the idea and launched the campaign in Brazil, the official discourse turned sport into an instrument of political propaganda and social control. The dynamics of panopticism permeated the implementation of the SFA campaign that had little to do with social inclusion in sport.

After the formal restoration of democracy in Brazil, the new 1988 Constitution incorporated the original intent of SFA that framed sport as a human right. The Constitution and subsequent laws gave rise to several national and local programs under the SFA brand that have been implemented in a decentralized manner by public and private actors. However, Brazil's neoliberal reforms of the 1990's reshaped power relations in the area of sport and leisure, affecting the state's capacity to guarantee the population's rights, thus weakening the purport of the democratic Constitution. Consequently, addressing the needs of the population with impairments in the policies and programs under the SFA umbrella did not have a comprehensive and progressive approach, as the brief discussion of the government programs above demonstrated.

The adoption of the UN Convention brought advances to the disability rights movement in Brazil and urged the government to recognize the challenges and obstacles in guaranteeing social rights to citizens with impairments, including access to sport and leisure. The resulting sport and recreation

Societies **2019**, 9, 44 11 of 14

policies and programs purportedly became more inclusive, although in practice they had little impact on sport-based inclusion of individuals with impairments. Failure of the Rio 2016 Games organizers to plan for and implement a lasting sport participation legacy points to missed opportunities to derive significant positive benefits from the event itself or from leveraging activities and accomplishments surrounding it. Beyond the inspirational effects of elite sport, there may even be potentially negative aspects of elite sport performances that are perceived unattainable to the potential participants with impairments [47].

Despite the broad consensus on the potential of sport in promoting social inclusion, it can only be realized when the discourses of social inclusion that underpin the respective policies, encompass access, participation, and recognition of citizens with impairments as equals. Sport-based inclusion needs to employ more comprehensive strategies, from the appropriate professional training of sport professionals, adequate space and equipment, and accessible transportation and logistics to the prevention of discrimination and abuse and awareness raising, as previous empirical studies recommended [60]. Moreover, sport policy development needs to engage with the perspectives of people with impairments and provide the conditions for them to take on more assertive knowledge roles in the process of social inclusion in sport.

Funding: This research received no external funding.

Acknowledgments: I am grateful to my colleagues at the Virginia Tech Institute for Policy and Governance for their support with my attendance and presentation of the earlier version of this article at the 25th Annual Conference of the European Association for Sport Management (EASM) at the University of Bern, Switzerland. I am also appreciative for the peer reviewers' comments and suggestions that helped me to clarify and strengthen the article's argument.

Conflicts of Interest: The author declares no conflict of interest.

References

- 1. Jespersen, E. Sport for All: Frail bodies. *Phys. Cult. Sport Stud. Res.* **2015**, *65*, 74–85. [CrossRef]
- Teixeira, S. O Esporte para Todos: 'Popularização' do lazer e da recreação. [Sport for All: The 'popularization' of leisure and recreation]. *Recorde: Revista de História do Esporte* 2009, 2. Available online: http://www.sport.ifcs.ufrj.br/recorde/pdf/recordeV2N2_2009_16.pdf (accessed on 1 February 2019).
- 3. Donnelly, P. 1968 and all that: Social change and the social sciences of sport. *Sport Soc.* **2010**, *13*, 1–5. [CrossRef]
- 4. Javier, F. The sport for all ideal: A tool for enhancing human capabilities and dignity. *Phys. Cult. Sport Stud. Res.* **2014**, *63*, 20–28. [CrossRef]
- 5. International Olympic Committee (IOC). *Olympic Charter*; International Olympic Committee: Lausanne, Switzerland, 2016; Available online: https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/General/EN-Olympic-Charter.pdf#_ga=2.37965411.1183319866.1512406026-945388327.1512406026 (accessed on 9 February 2019).
- Tubino, M. Sports for All movement: From opposing high-level performance sports to promoting current health. FIEP Bull. 2003, 73. Available online: http://www.fiepbulletin.net/index.php/fiepbulletin/article/ download/2584/5056 (accessed on 1 February 2019).
- 7. Shakespeare, T. Disability Rights and Wrongs; Routledge: London, UK, 2006.
- 8. Schillmeier, M. Rethinking Disability: Bodies, Senses, and Things; Routledge: New York, NY, USA, 2010.
- 9. Scully, J.L. Disability Bioethics: Moral Bodies, Moral Difference; Rowman & Littlefield: Lanham, MD, USA, 2008.
- Siebers, T. Disability Theory; University of Michigan Press: Ann Arbor, MI, USA, 2008.
- 11. Corker, M.; French, S. Reclaiming Discourse in Disability Studies. In *Disability Discourse*; Corker, M., French, S., Eds.; Open University Press: Buckingham, UK, 1999; pp. 1–11.
- 12. Kayess, R.; French, P. Out of Darkness into Light? Introducing the Convention on the Rights of Persons with Disabilities. *Hum. Rights Law Rev.* **2008**, *8*, 1–34. [CrossRef]
- 13. Hartley, C. Disability and Justice. Philos. Compass 2011, 6, 120-132. [CrossRef]
- 14. Steed, K. Social inclusion and exclusion. Culturescope 2015, 106, 28-30.

Societies **2019**, 9, 44 12 of 14

15. Hodge, K.; Sharp, L.A. Case Studies. In *Routledge Handbook of Qualitative Research in Sport and Exercise*; Sparkes, A., Smith, B., Eds.; Routledge: London, UK, 2016; pp. 62–74.

- 16. Tracy, S.J. Qualitative quality: Eight 'big tent' criteria for excellent qualitative research. *Qual. Inq.* **2010**, *16*, 837–851. [CrossRef]
- 17. Dean, M. Critical and Effective Histories: Foucault's Methods and Historical Sociology; Routledge: New York, NY, USA; London, UK, 1994.
- 18. Foucault, M. Archaeology of Knowledge; Pantheon Books: New York, NY, USA, 1972.
- 19. King, S. Poststructuralism and the sociology of sport. In *Routledge Handbook of the Sociology of Sport*; Giulianotti, R., Ed.; Routledge: London, UK; New York, UY, USA, 2015; pp. 94–104.
- 20. Howarth, D. Discourse; Open University Press: Buckingham, UK, 2000.
- 21. Bueno, L. Políticas públicas do esporte no Brasil: Razões para o predomínio do alto rendimento. [Public policy in sport in Brazil: Reasons for the elite sport predominance]. Ph.D. Thesis, Escola de Administração de Empresas de São Paulo, São Paulo, Brazil, 2008.
- Pazin, N.P.A. Esporte para Todos: A reinvenção da alegria brasileira, 1971–1985 [Sport for All: A reinvention of the Brazilian joy, 1971–1985]. In Proceedings of the XXVIII National Symposium on History, Florianopolis, Brazil, 27–31 July 2015.
- 23. Menezes, N.M.S.; Marcelino, N.C. O Esporte para Todos e a educação do corpo: Notas acerca das práticas corporais e de lazer no contexto da ditadura militar brasileira. [Sport For All and body education: Notes on the body practices and leisure in the context of Brazilian military dictatorship]. In Proceedings of the VII Congresso Goiano de Ciências do Esporte, Anapolis, Brazil, 3–5 June 2011.
- 24. Lanna, M.C.M., Jr. História do Movimento Político das Pessoas com Deficiência no Brasil. [The History of the Political Movement of People with Disabilities in Brazil]; Secretaria de Direitos Humanos: Brasília, Brazil, 2010.
- 25. Brazil. Constituição da República Federativa do Brasil de 1988 [1988 Constitution of the Federal Republic of Brazil]. 1988. Available online: http://www.planalto.gov.br/ccivil_03/constituicao/constituicaocompilado.htm (accessed on 20 March 2019).
- 26. Valente, E.F. Esporte para Todos: A Desescolarização da Educação Física e do Esporte e o Universalismo Olímpico. [Sport For All: Disembedding of Physical Education and Sport and the Olympic Universalism]. Ph.D. Thesis, Universidade Estadual de Campinas, Campinas, Brazil, 1996.
- 27. Tasso, F. O desporto na Constituição Federal brasileira. Blog post. 2008. Available online: https://blogextracampo.wordpress.com/2008/09/10/artigo-juridico-o-desporto-na-constituicao-federal-brasileira/ (accessed on 30 March 2019).
- 28. Silva, R.M.; Silva, M.R. O esporte como um direito: Traços e tramas da Constituição de uma verdade. [Sport as a right: True features and plot of the Constitution]. *Movimento* **2015**, *21*, 69–80. [CrossRef]
- 29. Almeida, B.S.; Coakley, J.; Marchi Júnior, W.; Starepravo, F.A. Federal government funding and sport: The case of Brazil, 2004–2009. *Int. J. Sport Policy Politics* **2012**, *4*, 411–426. [CrossRef]
- 30. Oléias, V. Políticas esportivas do neoliberalismo. [Neoliberalism's sport policies]. *Motrivivência* **1999**, 12. Available online: https://periodicos.ufsc.br/index.php/motrivivencia/article/view/14413 (accessed on 1 March 2019).
- 31. Coakley, J. Ideology doesn't just happen: Sports and neoliberalism. *Revista de Associação Latinoamericana de Estudos Socioculturais de Esporte* **2011**, *1*, 67–84.
- 32. Mastandrea, L. The importance of sport to the Convention on the Rights of Persons with Disabilities. In Sport in the United Nations Convention on the Rights of Persons with Disabilities; International Disability in Sport Working Group, 2007; pp. 39–40. Available online: https://www.sportanddev.org/en/document/un-reports-un-resolutions/sport-united-nations-convention-rights-persons-disabilities (accessed on 28 February 2019).
- 33. Chantereault, T. Sport and Leisure Activities. In *Sport in the United Nations Convention on the Rights of Persons with Disabilities*; International Disability in Sport Working Group, 2007; pp. 24–25. Available online: https://www.sportanddev.org/en/document/un-reports-un-resolutions/sport-united-nations-convention-rights-persons-disabilities (accessed on 28 February 2019).
- 34. Walker, S. The Convention on the Rights of Persons with Disabilities: Participation in sport and the right to take part in cultural life. In *Sport in the United Nations Convention on the Rights of Persons with Disabilities*; International Disability in Sport Working Group, 2007; pp. 16–17. Available online: https://www.sportanddev.org/en/document/un-reports-un-resolutions/sport-united-nations-convention-rights-persons-disabilities (accessed on 28 February 2019).

Societies **2019**, 9, 44 13 of 14

35. Sherrill, C. United Nations Convention on the Rights of Persons with Disabilities: Position Statement of the International Federation of Adapted Physical Activity. In *Sport in the United Nations Convention on the Rights of Persons with Disabilities;* International Disability in Sport Working Group, 2007; pp. 37–38. Available online: https://www.sportanddev.org/en/document/un-reports-un-resolutions/sport-united-nations-convention-rights-persons-disabilities (accessed on 28 February 2019).

- 36. United Nations–Disability, Department of Economic and Social Affairs. Convention on the Rights of Persons with Disabilities (CRPD) Article 30–Participation in Cultural Life, Recreation, Leisure and Sport. 2006. Available online: https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-30-participation-in-cultural-life-recreation-leisure-and-sport.html (accessed on 1 February 2019).
- 37. Wolf, E.A.; Hums, M.A.; Roy, E.C. Understanding the Right to Sport in the United Nations Convention on the Rights of Persons with Disabilities. In *Sport in the United Nations Convention on the Rights of Persons with Disabilities*; International Disability in Sport Working Group, 2007; pp. 32–33. Available online: https://www.sportanddev.org/en/document/un-reports-un-resolutions/sport-united-nations-convention-rights-persons-disabilities (accessed on 28 February 2019).
- 38. First National Report of the Federative Republic of Brazil on Fulfilment of the Provisions of the Convention on the Rights of Disabled Persons, 2008–2010; 2012. Available online: http://www.pessoacomdeficiencia.gov.br/app/sites/default/files/arquivos/%5Bfield_generico_imagens-filefield-description%5D_31.pdf (accessed on 25 November 2018).
- 39. Ministério do Esporte. Programa Esporte e Lazer da Cidade. [Sport and Leisure in the City]. 2017. Available online: http://www.esporte.gov.br/index.php/institucional/esporte-educacao-lazer-e-inclusao-social/esporte-e-lazer-da-cidade/programa-esporte-e-lazer-da-cidade-pelc (accessed on 30 March 2019).
- Pancotto, E.P. O Esporte nas Políticas Públicas de Inclusão Social para Pessoas com Deficiência, no Brasil.
 [Sport in the Social Inclusion Policies for People with Disabilities in Brazil.]. Master's Thesis, State University of Campinas, Campinas, Brazil, 2016.
- 41. Comitê de Candidatura Rio 2016. Dossiê de candidatura do Rio de Janeiro à sede dos Jogos Olímpicos e Paraolímpicos de 2016. [Rio de Janeiro Candidature Dossier for hosting 2016 Olympic and Paralympic Games], 2009. Comitê Rio 2016: Rio de Janeiro, Brazil. Available online: http://memoriadasolimpiadas.rb.gov.br/jspui/handle/123456789/594 (accessed on 10 December 2018).
- 42. Guimarães, A.S. *Rio 2016, e agora? Oportunidades e desafios. [Rio 2016, what now? Opportunities and challenges]*; Centro de Estudos da Consultoria do Senado Federal: Brasilia, Brazil, 2009. Available online: http://www12.senado.gov.br/publicacoes/estudos-legislativos/tipos-de-estudos/textos-para-discussao/td-67-rio-2016-e-agora-oportunidades-e-desafios (accessed on 10 December 2018).
- 43. Tahir, I. Rio 2016's unenduring legacy. Politheor: European Policy Network. 2016. Available online: http://politheor.net/rio-2016s-unenduring-legacy/ (accessed on 20 January 2019).
- 44. Reis, A.C.; Frawley, S.; Hodgetts, D.; Thomson, A.; Hughes, K. Sport participation legacy and the Olympic games: The case of Sydney 2000, London 2012, and Rio 2016. *Event Manag.* **2017**, 21, 139–158. [CrossRef]
- 45. Girginov, V.; Hills, L. A sustainable sports legacy: Creating a link between the London Olympics and sports participation. *Int. J. Hist. Sport* **2008**, 25, 2091–2116. [CrossRef]
- 46. Coates, J.; Vickerman, P.B. Paralympic legacy: Exploring the impact of the Games on the perceptions of young people with disabilities. *Adapt. Phys. Activity Q.* **2016**, *33*, 338–357. [CrossRef]
- 47. Chalip, L.; Green, B.C.; Taks, M.; Misener, L. Creating sport participation from sport events: Making it happen. *Int. J. Sport Policy Politics* **2017**, *9*, 257–276. [CrossRef]
- 48. Misener, L.; Darcy, S.; Legg, D.; Gilbert, K. Beyond Olympic legacy: Understanding Paralympic legacy through a research synthesis. *J. Sport Manag.* **2013**, *27*, 329–341. [CrossRef]
- 49. Seron, B.B.; Arruda, G.A.; Greguol, M. Facilitadores e Barreiras Percebidas para a Prática de Atividade Física por Pessoas com Deficiência Motora. [Facilitating and Deterring Factors in the Physical Activity by People with Physical Impairments]. *Revista Brasileira de Ciências de Esporte* **2015**, *37*, 214–221. [CrossRef]
- 50. DataSenado. Paratletas e o Esporte Paralímpico [Parathletes and Paralympic Sport]. Research Report. 2017. Available online: https://www12.senado.leg.br/institucional/datasenado/arquivos/estrutura-e-investimento-para-pratica-de-esportes-paralimpicos-no-brasil-continuam-insuficientes-mesmo-apos-pais-sediar-paralimpiada-avaliam-paratletas (accessed on 23 May 2019).

Societies **2019**, 9, 44 14 of 14

51. Secretaria Nacional de Promoção dos Direitos da Pessoa com Deficiência. Plano Nacional dos Direitos da Pessoa com Deficiência - Viver sem Limite. [The National Plan for the Rights of Persons with Disabilities – Living without Limits]. 2011. Available online: http://www.pessoacomdeficiencia.gov.br/app/viver-sem-limite (accessed on 1 April 2019).

- 52. Ministério do Planejamento. Relatório Anual de Avaliação do PPA 2016–2019. [Annual Assessment Report of 2016-2019 Multiyear Plan]. Available online: http://www.planejamento.gov.br/assuntos/planeja/plano-plurianual/relatorio_final.pdf/view (accessed on 30 March 2019).
- 53. Mauerberg-de-Castro, E.; Campbell, D.F.; Tavares, C.P. The global reality of the Paralympic Movement: Challenges and opportunities in disability sports. *Motriz* **2016**, 22, 111–123. [CrossRef]
- 54. Reis, A.C.; Sousa-Mast, F.R.; Gurgel, L.A. Rio 2016 and the sport participation legacies. *Leis. Stud.* **2014**, 33, 437–453. [CrossRef]
- 55. Marivoet, S. Challenge of sport towards social inclusion and awareness-raising against any discrimination. *Phys. Cult. Sport Stud. Res.* **2014**, *63*, 3–11. [CrossRef]
- 56. Cobigo, V.; Ouellette-Kuntz, H.; Lysaght, R.; Martin, L. Shifting our conceptualization of social inclusion. *Stigma Res. Action* **2012**, 2, 75–84. [CrossRef]
- 57. Labonte, R. Social inclusion/exclusion: Dancing the dialectic. *Health Promot. Int.* **2004**, *19*, 115–121. [CrossRef] [PubMed]
- 58. Kiuppis, F. Inclusion in Sport: Disability and Participation. Sport Soc. 2018, 21, 4–21. [CrossRef]
- 59. Slee, R. Teacher Education, Government and Inclusive Schooling: The Politics of the Faustian Waltz. In *Inclusion, Participation and Democracy: What is the Purpose?* Allen, J., Ed.; Kluwer Academic: New York, NY, USA, 2006; pp. 207–223.
- 60. Rankin, A.M. Understanding the Barriers to Participation in Sport: Views and Opinions of Active and Non-active Disabled People. English Federation of Disability Sport. 2012. Available online: www.efds.co.uk (accessed on 20 January 2019).
- 61. Gomes da Silva, L. Portadores de deficiência, igualdade e inclusão social. [Disabled people, equality and social inclusion]. *Revista Âmbito Jurídico* **2011**. Available online: http://www.ambitojuridico.com.br/site/index.php?n_link=revista_artigos_leitura&artigo_id=10839 (accessed on 20 January 2019).
- 62. Collins, M. Sport, Physical Activity, and Social Exclusion. *J. Sports Sci.* **2004**, 22, 727–740. [CrossRef] [PubMed]
- 63. Foucault, M. *Power/Knowledge: Selected Interviews and Other Writings* 1972–1977; Pantheon Books: New York, NY, USA, 1980.



© 2019 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).