Tracking the Origins of Physical Education in Argentina and Australia

Pablo Ariel Scharagrodsky

Departamento de Ciencias Sociales, Universidad Nacional de Quilmes, Bernal, Argentina.

Departamento de Educación Física, Universidad Nacional de la Plata, La Plata, Argentina.

Valeria Varea

School of Education, University of New England, Armidale, NSW 2351, Australia.

Accepted version before typesetting

To cite this article: Scharagrodsky, P. A. & Varea, V (2016). Tracking the Origins of Physical Education in Argentina and Australia. *The International Journal of the History of Sport*.

doi:10.1080/09523367.2016.1218331

Tracking the Origins of Physical Education in Argentina and Australia

The origins of sports in Argentina and Australia have been widely investigated. However, little research has been conducted to investigate the origins of Physical Education (PE). This paper explores the origins of PE in both Argentina and Australia. It first describes the general social context and the education system for both countries. Then, it explores the foundations of PE as a school subject and as a university degree in Argentina and Australia. Finally, it compares the origins of PE in both countries. The research reveals how these two countries share similarities and differ in regard to the origins of PE both as a school subject and as a university degree.

Key words: Physical Education; Argentina; Australia; nineteenth and twentieth centuries

Introduction

By the end of the nineteenth century, Australia and Argentina were promising lands in which to live. Their appeal derived largely from the economic, politic and cultural influences of European colonialism and imperialism, as well as the influence of the United States. Both countries experienced significant levels of immigration; however, the cultural, economic and political influences in each were different. Australia was mostly influenced by the British culture, and Argentina by the combination of the Hispanic heritage from the nineteenth century and the culture of immigrants from different countries, particularly Spain, Italy and France. This led to the establishment of different relationships with the state, society, church and the education system. More importantly, it also influenced ways of thinking about and considering bodies, health, gender, sexuality and movement.

While it has been claimed that Australia has a strong sporting identity, little research has been conducted to investigate the origins of Physical Education (PE) in Australia, particularly in the higher education system. Furthermore, to our knowledge, no comparisons between the origins of PE in Argentina and Australia are present in the literature. While comparisons between Australia and European countries are more frequent among the existing literature, comparative studies between these two countries in the southern hemisphere are not well-known. Australia and Argentina do not

share many similarities in regard to culture or education systems. In this paper, we analyse the political and education systems of both countries, subsequently exploring the origins of PE as a school subject and the academic preparation of PE teachers in Argentina and Australia. Finally, we compare the origins of PE, both as a school subject and university degree, across the two countries.

The general Education System and the Social Context in Argentina

Argentina became a nation between 1870 and 1880. During this time, the focus of the Argentinian economy changed from traditional agriculture to highly technologized agro-exportation. Between 1880 and 1930, several key events contributed to the formation of the nation. The 'Conquest of the Desert' (1879), the federalisation of Buenos Aires (1880), the introduction of a secular education system for primary schools (1884), the creation of a solid currency (1898), the implementation of compulsory military training (1902) and electoral reform (1912) were important developments in the process of consolidating the nation in accordance with the socio-economic times.¹

By the beginning of the twentieth century, European immigrants – particularly Italians and Spaniards – had contributed to significant growth in the Argentinian population, which grew from 1,700,000 in 1870 to 7,900,000 in 1910. By the end of the first decade of the twentieth century, more than the half of inhabitants lived in urban areas (53% in 1914). Furthermore, the majority of inhabitants benefited from the economic expansion of the time.² However, mass immigration to Argentina resulted in ethnic heterogeneity and questioning of the hegemonic power of the dominant classes. Immigration also influenced the development of cities, sanitary issues and the construction of 'Others' and identities.³ In this context, characterized by social conflict and tension, the Argentinian state and the education system were established.

The bases of the Argentinian education system took place in the last three decades of the nineteenth century from a public and centralized instruction system⁴ which was characterized by an hegemonic state, a secular influence and a hierarchical and bureaucratic functioning in a conservative sociopolitic context. This education system was originated from the influence of certain laws,⁵ the constitution of the *Escuela Normal de Paraná* ('Normal School of Paraná'),⁶ the establishment of national schools since 1863, the foundation and consolidation of certain education bureaucratic structures,⁷ the creation of many school buildings and libraries, the production and circulation of official education magazines, the design of different school programmes and textbooks, among

many other strategies. All these actions that took place at the beginning of the twentieth century resulted that Argentina was the most alphabetized country of Latin America and the three education levels in Argentina (i.e. primary, secondary and higher education) were consolidated and expanded. As consequence, the amount of children attending school duplicated during the first decades of the twentieth century albeit politic and ideological opposition from certain groups in the society (e.g. anarchists, socialists, etc.). A more unified national identity was consolidated, however, the national education system had some other purposes.

The Argentinian education system had certain politic, moral, economic, cultural and social aims. These included the formation of a specific citizen, the construction of a national identity, developing a sense of 'belonging' in communities, and the transmission of certain commitments and values. Some of those values included individual responsibility, narratives of progress and national community, an ethos associated with attitudes and behaviours of discipline, self-discipline, respect for social hierarchies, the production of healthy bodies ready for work and the denial of the aboriginal culture. Therefore, the main goals of the new state and the education system were the regulation, administration and control of the population and individual bodies based on a white European heterosexual model.

Several practices and school subjects, including PE, were created in order to transmit these aims. By the end of the nineteenth century, games, gymnastics, sports, outdoor excursions and other physical activities had an important place within the education system and were regularly practiced. Educational and legal policies, regimens, school programmes, pedagogical discourses, manuals, flyers and didactic books produced in the last two decades of the nineteenth century included physical culture and PE. There were several reasons for the inclusion of PE and physical culture in education, including the need to impose moral values on children, increase production via physical discipline and control of bodies, and achieve balance between the intellectual, the moral and the physical, re-connecting bodies and populations with nature and fighting against disease. In this way, the body became the main focus of attention and discipline. The establishment of Argentinian colleges, public high schools and the proliferation of primary schools across the country facilitated the emergence of the 'physical educator' as a specialized teacher.

The general Education System and the Social Context in Australia

European settlement in Australia began in 1788 when the first 11 convict ships, known as the 'First Fleet', arrived from Great Britain on 26 January to the colony of New South Wales (NSW). Early free settlers came predominantly from Great Britain and Ireland. Later, when gold was discovered in 1851, immigrants from China formed the first large non-European migrant group. Within the ten years following the discovery of gold, the population more than doubled. Over the next decades, the separate colonies discussed the idea of becoming one nation. The push towards a federation in the 1890s emerged from economic necessity, concerns over the territorial ambitions of France, Russia and Japan¹³ and the coloured workforce among white Australians. ¹⁴ In 1901, the six different selfgoverning British colonies were united into a federation of states called the Commonwealth of Australia. Australia was formed as nation by negotiation and referendum, and not through revolution or bloodshed. At that time, Australia's population was counted at four million people approximately, and this numbers did not include aboriginals. It was suggested that to be Australian was to be white and therefore, aboriginals were excluded from official population counts and from consideration as Australian citizens. 15 Until 1950, migration levels rose and fell and wave of non-British migration arrived after the Second World War. Since this early period, individuals from more than 200 countries have migrated to Australia and, as a result, Australian society is currently one of the most diverse in the world. 16

Since the founding of the first colony of NSW in 1788, the British government had definite ideas of how education was to be developed in the colony. A charter was proclaimed in 1826, by the British Colonial Office and the Earl of Bathurst. This charter was empowered to devote its products to the church and its schools. By 1833, there were 36 schools in existence on Anglican land. Three years later, Governor Bourke introduced a system based on the Irish National School system, in order to not establish a preferred religion and to offer education for all children of the colony. However, this system failed for a number of reasons. In 1848, a dual system was established by Governor Fitzroy, made up of a Denominational Schools Board and a National Schools Board. In any discussion of the history of schooling in Australia, it is necessary to acknowledge the distinctions between the states:

Between 1825 and 1859, the states of Tasmania, Western Australia, Victoria, South Australia and Queensland all separated from New South Wales and set up their own education systems

and legislation. Although the structural, legislative and ideological trends were very similar, each state because of its own settler heritages (e.g. some free some convict), the differential power of Church and so on, introduced changes at different times and with different degrees of struggle. Federation of the states in 1901 did not mean a national system of education, each state was and continues to be responsible for its own state education system, for curriculum and for the training and registration of teachers. However, between 1880 and 1905 there was a raft of legislation including the various Public Instruction Acts to 'encourage' children into education and to improve educational provision. These Acts laid the basis for secular and compulsory system of Education in each State. Different States introduced legislation to abolish fees for elementary schooling at different times in late 1880s. Since Federation attempts by future federal governments to introduce a uniform system of schooling have consistently been met with strong resistance by the States.²⁰

During the first decades of the twentieth century, radical structural and ideological shifts in Australia influenced the relationship between church and state, family relations and relationships between the state and families. To understand Australian schooling, it is necessary to take into account British and wider European influences. The first colonists, colonial governors and educators were from Britain or educated in Britain and, until the 1940s, the Australian states used mainly British syllabuses. The colonists also brought with them a sports ethos that was already well established in England and marked by social class. Australia inherited the white immigrants' taste for money, brick houses, straight roads and systems of familial, social and economic relations. With democracy came also the need for voters who had the basic elements of literacy and an understanding of their duties and rights. The early 1900s were marked by attempts to systematize and regulate schooling via the introduction of secular and compulsory free schooling, in order to address issues of distance, isolation, politics and poor standards in education.

As Victoria and NSW were home to the greatest proportion of population, formal schooling was well established for the elementary years. ²⁶ Nowadays, each state government is responsible for their state education and their own syllabus. In the case of the school subject of PE, there are some differences among the states, even in the name used for the subject. PE is called 'Health and Physical Education' in Queensland, Western Australia, South Australia and in the Northern and Australian Capital Territories; however, it is referred to as 'Personal Development, Health and

Physical Education' in NSW and 'Health and Wellbeing' in Tasmania. Nevertheless, it is important to mention that all the state PE syllabuses are required to be written in accordance with the recently released Australian Health and Physical Education curriculum.²⁷

The Origins of PE as School Subject in Argentina

By the end of the nineteenth century, certain types of gymnastics and physical culture were included in the education system in Argentina. Growing concerns about the kinaesthetic development of students resulted in the establishment of the first specialist PE teacher training course in the 1910s. Before this institutionalization process of PE, the diverse, precarious and heterogeneous education institutions existing in Argentina in mid-nineteenth century prioritized teaching certain physical activities, such as analytic physical exercises, marches and ludic activities. The first temporary course was named 'Physical Exercises of Argentina' and was offered in 1901. It later became the first Escuela Normal de Educación Física – INEF ('National Institution of Physical Education') in 1909. The director, Dr Enrique Romero Brest²⁸, was influential in introducing PE as a school subject, initially named 'Argentinian System of Physical Education'. This system was the only one of its kind offered for almost 40 years and was not free from criticism, particularly from the military, newly established sporting institutions and INEF graduates. At the beginning of the 1930s, some individuals influenced by the military coup began to question the Argentinian System of Physical Education delivered at INEF. However, the system was simultaneously growing in popularity in more schools in the capital and in several provinces, such as Entre Ríos, Mendoza, Santa Fe and Córdoba, which also started using the same programmes. The Argentinian System of Physical Education²⁹ basically included physical exercises with no fixed

The Argentinian System of Physical Education²⁹ basically included physical exercises with no fixed equipment and games, which comprised physiological criteria for younger children. Suspension and balance exercises were prioritized, together with upper body and locomotor exercises, particularly jumping. Some other body practices were added later, such as group games, outdoor excursions, Argentinian pentathlon – which included five different games, and a small selection of sports. However, all these physical practices were influenced by specific principles and rules from the System. The Argentinian System of Physical Education was created with three main characteristics: a scientific status as taken-for-granted truth, a hygienic approach as rational justification and a different approach to the already established physical activities. Bodies were educated at schools in line with scientific and positivist perspectives. Medical discourses were dominant in this system.

The Argentinian System of Physical Education was a scientific modern creation. Therefore, its principles and theories were considered rational and unquestionable truths. Accordingly, Romero Brest stated:

We have eliminated the procedures that were not based on scientific reasons and the exercises that do not respond to a physiological, hygienic and educative aim, according to the age of children. The scientific spirit characterizes the Argentinian system of physical education...Physiology, hygienic and rational pedagogy are the touchstones of the system's doctrines.³⁰

Furthermore, the Argentinian System of Physical Education was established according to three principles: differentiation, questioning and integration. One of the first goals of the system was to differentiate itself from, and even to oppose, existing European PE systems in order to construct an alternative discourse about body education. Romero Brest wished to create a truly national system with Argentinian principles, characteristics and attributes. Romero Brest explicitly questioned the French, British, German and Swedish systems:

I have rejected the application of these systems in our schools. The French physical education system because is not physiologic; the German system is characterized by its strength and military influence; the British system is difficult to adapt in the different levels and to apply in our schools given the local conditions; and the Swedish system, even though is strongly scientific-based, is incomplete in regards to the psychological area, and it requires specialized staff, appropriate local conditions and maybe racial conditions that we do not have.³¹

As a consequence, the Argentinian system questioned the French and German systems, and borrowed some aspects from other systems, particularly from the Swedish and to a lesser extent, from the British system. It also combined physiological facets of gymnastics with games and certain sports from the British system. This 'mix' of components was the innovative aspect of the Argentinian system.

The foundation of a system of physical exercises and games also needed a 'new body' with different skills and a level of fitness which could be differentiated from the rest (mainly European bodies). This system contributed to the creation of an ideal (masculine) Argentinian body, in accordance with contemporary debate about the true meaning of 'being Argentinian' and the establishment of the nation state and the education system. ³² In this way, the 'Latin element' was starting to emerge, not only in ways of thinking and feeling, but also in body movements, games and sports. Argentinians excelled in some specific physical skills, such as speed, when compared with other non-Argentinian bodies. However, this 'Latin element' was also characterized by a lack of energy, strength and discipline. Therefore, the Argentinian System of Physical Education had the mission of promoting moral strengths and correcting weaknesses, according to Eurocentric criteria. Accordingly, Romero Brest affirmed:

The first impression from an external observer in a (Argentinian) school playground, or in a physical exercise class or even in loud streets, is the excessive movement and activity of children...In the physical exercise classes, the slow kid is quite strange and is always a foreigner, who becomes the bullying target of his classmates who detect something abnormal and unusual ³³

Argentinian children were easily distinguished from others because of their movements. Their skills, speed and elegance were distinctive characteristics which differentiated the agile stereotype from the strong but 'clumsy' and slow non-Argentinian. These differentiations were noticeable not only during Romero Brest's period in the first 30 or 40 years of the twentieth century, but persisted for the rest of the century.

The Origins of PE as a School Subject in Australia

There is no single origin in how PE developed in Australian schools. Drills and cadet movements were scarcely mentioned in key education texts before the 1900s.³⁴ However, as early as in 1858, there were some semblances of PE in the public schools in the suggestions to teachers, concerning the orderly conduct of pupils entering and leaving school, and the importance of the playground. The Board of National Education issued these 'Directions to the Teacher in Charge of Playground':

The time spent by the children in the playground is devoted to refreshment and recreation. Advantage should be taken of the opportunity to study the characters of children, and to discover how to rule them by moral influence. At play children appear as they really are; and stripped of the artificial manner induced by the restraint of the schoolroom, their characters and dispositions are exhibited in their true light. Intelligent teachers will not fail to conclude, therefore, that the playground, or uncovered schoolroom, is a field in which the exercise of all their faculties is required. Nothing should escape the observations of the teacher. His eye should view every action of a child with the desire and purpose of divining its motives. Without any appearance of intermeddling, the teacher should see all, know all, control all, and animate all that is done by the children; his influence, unfelt and unsuspected by them, should preside over every action. At the same time, remembering that they are his charge, and that he is responsible for their safe keeping, he should never relax his vigilant watchfulness, but care for each as he would for his own.³⁵

In 1859, the Board of National Education report urged teachers to regard the playground and other facilities as valuable assets in the education of growing children, to consider the possibilities of physical activity as an agent to facilitate proper growth and to consider sanitary conveniences and drinking arrangements for hygienic and healthy living purposes:

The value of a playground and its appurtenances is very great, whether regarded from a sanitary or a moral point of view, and it is not less important as an aid to the teacher in the conduct of his school. In fact, no school can be considered as completely organized to which a large playground, properly enclosed and furnished with the requisite accompaniments is not attached.³⁶

The system of PE in Australia was also established in accordance with the three principles mentioned above: differentiation, questioning and integration. During the 1850s and 1860s, drawing, singing, drills and gymnastics were added to the already established and more traditional

subjects, such us reading, handwriting, arithmetic, grammar and geography.³⁷ At this time, new ideas and philosophies were emerging and changing the social fabric of the Australian society.³⁸ In 1866, a Royal Commission, established by the Victorian Board of Education, stated the first concrete details of the place of PE in the Victorian elementary syllabus.³⁹

Gustav Techow⁴⁰ brought progressive views and extensive knowledge to Victoria in the 1860s and, in particular, promoted the Swedish system of gymnastics, which made extensive use of apparatus. In 1859, Techow left Prussia and migrated to Melbourne, where he set up gymnastic clubs. He was then appointed as director of the National Gymnasium in Melbourne in 1864 and was employed by the Board of Education to train teachers in gymnastics and military drills. Techow wrote several influential manuals, including the *Manual of gymnastic exercises for the use of schools and at home* (1866) and *Gymnastics for State Schools* (1877). In the *Manual of gymnastic exercises for the use of schools and at home*, in which he described in great detail a series of exercises to be undertaken, Techow stated:

The shoulders and body square to the front, the heels in line and closed, the knees straight and firmly braced back; the feet turned out so as to form an angle of sixty degrees, the arms straight down from the shoulders, the elbows turned in and close to the sides so as to bring the palms of the hands full to the front, the five fingers close together, the hips and shoulders drawn back, the chest advanced, the body straight and inclining forward so as to have its weight bearing on the fore part of the feet, the head erect without being thrown back, the eyes straight to the front.⁴¹

All the exercises in Techow's manual were prescribed with the same exactitude as in the example above. The overall aim of this manual was to discipline the body to an extreme extent, including to the level of individual muscle groups, and to organize bodies in relation to space and to other bodies. Given that discipline was one of the main concerns in schools, military methods were used for all situations, in addition to the formal periods of drilling and exercising. Similarly, Mr Carter, a head teacher of Maryborough State School, advised other teachers that:

In arranging a scheme of drill at assembly, care must be taken that no class shall interfere with the drill of the other classes in the front, rear or flank; therefore, the school will probably have to be arranged in two columns. The classes in each column must be placed at least at column distance (the depth of the class), and the movements, confined almost to this limited area, should be so arranged that, at the close, the class will be on the line of the original formation. ⁴³

The school practices of physical training and sports were shaped according to the search of nationhood after the constitution of the federation in 1901. They focussed on the individualized and objectified moving body, as Australians aimed to create 'an economically productive nation and a national identity out of parochialism, cultural difference and a colonial mentality. Concerns for the physical deterioration of the Anglo-Celtic race drew heavily on widespread public discussion on this issue in Britain and on the discourse of eugenics'. ⁴⁴ Therefore, questions surrounding nationhood and race were main concerns at that time, particularly those ones related to what it truly meant to be Australian. Muskett was interested in the arguments about an Australian race-type and stated that no distinctive breed from the Anglo-Celtic race could emerge in Australia. He claimed that if Australia was to be inhabited by healthy and vigorous people, there was a need for more attention to physical health.

Physical drill was required to be taught at schools. The drill was considered as both an instrument of control and military preparation, with the ultimate goal that the strength of the nation would lie in the fitness of the youth. As the drill developed for boys in the late nineteenth century, a model based on Ling's Swedish gymnastics was developed for girls. Influenced by the British trend in feminism, it was believed that physically stronger women could increase their independence from fathers and husbands. The general public agreed and also believed it would make them superior mothers. Therefore, several schools for girls which incorporated physical training into their curricula were established in Melbourne. Harriett E. Dick and, later, Alice C. Moon were appointed to teach Swedish gymnastics in these schools. They also established the Ladies Gymnasium, where similar classes were held at night. From 1884, the Ladies Gymnasium held annual displays that were initially exhibited in the Melbourne Town Hall.

The military managed to install compulsory military training in Australian schools in 1911. Boys aged between 12 and 14 years were provided with a mixture of marching, squad drill and rifle shooting under this scheme.⁴⁹ The Ling system of Swedish gymnastics was implemented as the

main physical experience, together with some swimming, running and organized games.⁵⁰ The Defence Department physical training staff ran physical training instructor courses and military drill courses for teachers employed by the states.⁵¹ In the early years of the twentieth century, physical activity was included in all Victorian schools. For boys, it was aimed towards military preparedness for officers and rank, at both public and private schools, given the present threat of war. For girls, physical activity centered primarily on healthy motherhood.⁵² In 1903, the exercise requirement by the Defence Department was 15 minutes daily, consisting of marching drill and gymnastics, plus swimming. The federal government considered this activity not as education but as a method of military preparedness.

Given the British colonial legacy in Australia, PE was also heavily influenced by the British model. Australians implemented British recommendations from manuals, syllabi and books on physical training. Like the British, Australians preferred the Swedish system, rather than the German model of gymnastics adopted by the North Americans. The 1909 British *Syllabus of Physical Exercises* was adopted in its entirety. This syllabus was mainly based on the Ling system and had some sections that included various military training drills, marching and rifle shooting. These last sections were later published as the *Junior Cadet Manual* in 1916. Lessons were written in the form of tables that included the major joints and muscle groups of the body. The tables were organized in sequence according to the age and experience of the pupils. For example, Lesson 2 of the 1922 edition of the *Junior Cadet Training Textbook* began in the following way:

Free running in large circle. Instant halt on signal.

Double-march! Class-halt!

Run to form one rank at wall; place leaders on marks; run to open ranks.

Back to the wall-move! Leaders on markers-move! To your places-move!⁵⁵

Teachers were required to memorize the sequence of exercises for each lesson and to use commands such as "'head backwards–bend", "left foot sideways–place", "trunk forward and downward–stretch" and "knees–bend". These commands were amended to "suit Australian conditions" in 1922 and again in 1926'. ⁵⁶ After the First World War, the first attempts to liberalize PE in Victorian schools appeared and, throughout the 1920s and 1930s, there was a desire to

broaden the content of PE and change its pedagogical approach. The military finally revoked its involvement in physical training in state schools in November 1929.⁵⁷

It was not until the publication of *The Grey Book* in 1946 that educational authorities in Australia consciously moved away from British syllabi and developed a system of PE distinctly different to the British model.⁵⁸ The parameters of PE in Australia, however, exhibited different dimensions from the British system because of the influence of localized social, cultural and political issues. For instance, unlike Britain, Australia did not develop a tradition of training female physical educators⁵⁹ and the shortage of women teachers 'had important implications for the gender appropriateness of physical education offered to girls'.⁶⁰

In the elite private schools for boys, competitive team games and military training were undertaken to contribute to the leadership role of ruling-class and other socially aspiring males. Their female counterparties also played team and individual games and, in some schools, were involved in calisthenics or Scandinavian gymnastics. This training was considered important to prepare girls for marriage and motherhood, but not for leadership roles. Rhythmic activities, such as folk dancing, were also introduced through the 1920s in Victoria, mainly at the initiative of Rosalie Virtue. For most students, both boys and girls, discipline and physical fitness were emphasized in order to form economically productive citizens.

The Origins of PE as a University Degree in Argentina⁶⁴

The process of institutionalizing the training of teachers and the development of the PE discipline in Argentina was not dependent on a university degree in the early origins of the field of PE. In 1901, the first temporary courses on physical exercises were conducted in Argentina. These courses presented the topics, subjects, content and references that were used later to establish the Argentinian System of Physical Education. Among these courses, the hygienic and physiologist influences, particularly the French and the Swedish, were significant in defining the knowledge and practices necessary to prepare the 'physical educator'. Biomechanics and exercise physiology were the dominant influences. After some years, the content of these courses was increased, resulting in a longer degree. Having certain skills defined the job of the physical educator, but also claimed power on students' bodies. The physical educator role was based on scientific and medical knowledge.

When these courses were transferred to the colleges, there was an increased specialisation and institutional growth due to new scholarly material, newer lab instruments, more appropriate buildings, more employment for teachers and the increased prestige of physical culture. By the beginning of the 1920s, the INEF was founded. At the time, medical discourses were still dominant. During this decade, the profile of the PE teacher was defined in line with the inclusion of specific subjects with particular medical-pedagogic content aims in the degree, thus creating and transmitting knowledge which defined the school subject and the role of the physical educator.

By the mid-1920s, more subjects related to medical discourses were incorporated into the PE degree, such as 'First Aid', 'Lab Work' and 'Artistic Anatomy', and the degree was lengthened to three years. The already established subjects that included medical discourses were 'Human Anatomy applied to Physical Education', 'Exercise Physiology' and 'Biomechanics'. Practical subjects offered during the degree were also associated with anatomic and physiological discourses. As a consequence, PE teachers were expected to apply principles of medical discourses. During this time, there were some tensions and issues in the field of physical culture. Due to these tensions, the Argentinian System of Physical Education was established as the sole form of PE in the educational sphere. Despite some small changes, this system remained relatively unchanged until Enrique Romero Brest retired in 1931. Following his retirement, new graduates participating in the field of physical culture made some ideological and conceptual changes to the INEF degree. However, the strong dependence of physical educators on medical discourses, particularly those related to anatomy, exercise physiology and anthropometry, endured. By the end of 1930s, more than 2000 specialist PE teachers had graduated from the programme, of which 90% were women.

As well as the INEF, the *Escuela de Gimnasia y Esgrima del Ejército* ('School of Gymnastics and Fencing of the Army'), another institution offering pre-service PE teacher education, was created in 1897 and closed in 1903, to be re-opened 22 years later. The graduates from this school, together with graduates from the *Dirección General de Tiro y Gimnasia* ('General Board or Rifle Shooting and Gymnastics'), promoted military-orientated PE and opposed the educational perspectives delivered at INEF. In light of differing perspectives in the field, conflicts concerning the objectives of PE characterized the first three decades of the twentieth century. These conflicts concerned more than just certain types of movements, but also encompassed pedagogy and political concepts. Proponents were roughly organized into two camps. On the one side were the *Sociedad Sportiva Argentina* ('Argentinian Sporting Society') supporters, graduates from the *Escuela de Gimnasia y*

Esgrima del Ejército, members of the Dirección General de Tiro y Gimnasia, officials of the Defence Ministry and some politicians and traditional educators. On the other side were distinguished officials of the Consejo Nacional de Educación ('National Senate of Education') and educators, as well as many members of the INEF represented by Enrique Romero Brest.

The Argentinian System of Physical Education was designed responsive to a democratic and republican school model in which solidarity and respect for individual rights were priorities. The discourse promoted by Romero Brest proclaimed individual freedom and education for the civic life, couched within a spirit of solidarity characteristic of a 'real' democracy. Nevertheless, the school PE subject was simultaneously presented as rational and based on scientific principles. This system also criticized militarized PE, which resulted in the rejection of discipline, obedience and hierarchies as main elements of social and student relationships. The opposition to militarized gymnastics and student battalions represented support for children's autonomy and recognition of individual rights.

School military gymnastics, shooting practices and student battalions aimed to contribute to the creation of a school where the obedience, subordination, military treatment and strength were the touchstones of the pedagogical relationship. Supporters of the militaristic approach promoted power over reasoning and social organisation based on hierarchies. Military practices shaped an ideal in which there were no individual rights, freedom or science. This militaristic ideal was based on excessive patriotism and the exclusion of 'the other'. In this regard, Romero Brest claimed that 'the true education needs to be deeply human among all things...[highlighting] freedom and justice [and where] man is next to man and not against him'. 65

Despite conflictual approaches to PE, Romero Brest's system dominated for several decades, particularly in schools during the first three or four decades of the twentieth century. However, the ongoing dispute and attempts to monopolize the education of bodies were disrupted at the beginning of the 1930s by the imposition of military training. As a consequence, and as a result of the military coup in 1930, Romero Brest was forced to retire as director of the INEF and military personnel took over administrative tasks and the discipline of bodies. During this decade, shooting practice became compulsory in schools, and PE again assumed a militaristic approach. Some other institutions emerged in the 1940s and 1950s to prepare PE teachers, such as the *Instituto de Educación Física Provincial de Córdoba* ('Córdoba Provincial Institute of Physical Education') founded in 1946, and the institutes that were dependent of the universities of Tucumán and La

Plata, established in the 1950s. The emergence of these institutes increased the conflicts within the field of PE.

The Origins of PE as a University Degree in Australia

The process of institutionalizing the training of teachers and the development of the PE discipline in Australia was dependent on a university degree in the early origins of the field of PE. For several years, teachers were trained at foreign universities, until the training was institutionalized within the educational system and away from military training. The development trajectories of PE in North America, Britain and Australia share some similarities. All three nations adopted forms of gymnastic exercises originating in Germany, Sweden and Denmark at different points in times, and supported hybrid and unique systems of gymnastics developed by individuals including Dio Lewis and Dudley Sargent in North America, Archibald Maclaren in England and Gustav Techow in Australia. However, beyond these similarities, PE in these countries was individually shaped by considerations about the body, eugenics, health, nationalism and militarism, and linked in unique ways with class, gender and race. Therefore, each country developed specific forms of PE that were shaped by their distinct social, economical and political environments.⁶⁶

One of the first attempts to educate teachers to deliver PE is found in the framing of the Military Drill and Gymnastic Regulations, set up by the new Victoria Board of Education, which stated:

Teachers of schools who are desirous of becoming qualified instructors in Military Drill and Gymnastics may, on application to the Board of Education, obtain free admittance as pupils to a course of instruction in those subjects to be given at the National Gymnasium; but all teachers availing themselves of this privilege must undertake to attend during the whole course of instruction, and to submit to an examination at its termination. The course of instruction will consist of two lessons weekly during a period of four months, and the time must be fixed so as not to interfere with the hours of secular instruction. Certificates will be issued to teachers who pass the examination, and they will be required to instruct their pupils in military drill, and, if practicable, in gymnastics also; and such instructions will be duly reported upon the visiting inspector.

No class will be formed unless a specified number of teachers, to be fixed by the Board,

Teachers were trained in the Ling system of gymnastics and military drill exercises in the National Gymnasium of Melbourne, using teachers who were trained by Techow and military personnel. The classes were conducted at night and were offered as single sex classes, some for teachers only and others for the general community. The classes became very popular and, after Techow retired, Mr Enlish and Mr Price continued his work at the same location until the 1890s. Teachers who were trained at the National Gymnasium and were qualified to teach gymnastics received an extra ten pounds sterling annually for teaching the subject. However, with the national economic depression in the 1890s, many schools closed, teachers' salaries were reduced and the bonuses for taking extra classes in gymnastics or drill were cancelled. Even the Melbourne Teachers' College closed in 1893, and experienced teachers who were leaving the profession were replaced by inexperienced student teachers and monitors. After the 1901 new constitution, the Department of Defence trained the teachers, and teacher training courses were usually conducted by retired soldiers.

In Victoria, in 1900, Miss Gerta Anderson was the organizer of PE for the whole state. Her task was to move from school to school within the department, demonstrating and advertising PE. She was mainly self-trained and came from a family which was very interested in PE. Her work outside the department, including work in church guilds and in the field of rhythmic work and dance, attracted the attention of the department. In 1913, while Mr Frank Tate was the Victorian Director of Education, a PE course was organized in the Albert Street Drill Hall. This course was introduced as the result of the Commonwealth being placed in charge of cadet training and lasted for three months. Representatives from all states attended the course and a certificate of higher rank was awarded to those who completed it successfully. Miss Anderson and Miss Virtue also provided short courses for teachers, focusing particularly on games and folk dancing.⁶⁹

Before the First World War and thereafter, some Australians elected to travel overseas to enrol in different PE college courses. In the US, college and university PE courses had been implemented in most states by 1927. In 1912, the Springfield International College in Massachusetts already offered courses leading to a degree in PE. Students from many countries, including Australia, were attracted to the college by its prestigious reputation for PE training. One of the first Australians to become interested in advanced training in PE was Edgar Herbert, who enrolled in the Springfield College in 1909 and pursued a Bachelor of Physical Education. He returned to Australia in 1913 as the first

overseas-trained Australian in PE. Later, in 1912, two other Australians from Ballarat, James Summers and Arthur Lamb, also went to Springfield College. After the war, they continued with their interrupted studies and eventually graduated. As Australia had no positions available for graduates in PE, James Summers went to South America and became the Director of the *Instituto Técnico* ('Technical Institute') in Montevideo, Uruguay. Arthur Lamb went to McGill University in Montreal, Canada, to study medicine. After he graduated, he remained at McGill as Director of the Department of PE.

In due course, other Australians followed in these footsteps, studying overseas and returning to Australia to make significant contributions to the field. For example, Dr Ivor Burge returned to Melbourne following study abroad and was later appointed Director of PE at the University of Queensland. E. H. Le Maistre was employed as a lecturer in PE at Sydney University and led the development of the Diploma of Physical Education degree. He then established the Bachelor of Education degree (major in Physical Education). The movement of Australian students to America continued and it was not until 1939 that New South Wales took the first step towards organising a programme of PE.⁷⁰

The Minister of Education for New South Wales, impressed by his observations of sports and PE while overseas, immediately proposed the reorganisation of PE in the state and the acceleration of its development in accordance with contemporary trends upon returning to Australia in the early 1900s. In Victoria there were similar developments at this time, and General Alan Ramsay participated in different discussions with an advisory committee to propose a state PE programme. In 1937, the Department of Education in Victoria advertised a position for a full-time specialist PE staff member. The candidate was to give demonstrations to teachers in all branches of PE. In the same year, the Minister for Education invited applications for the position of Director of PE, and an advertisement for the Director of PE in New South Wales was published, an excerpt of which is included below:

The successful applicant will be required to devote his full time to the duties of the position which will be to formulate, carry into effect, and supervise a comprehensive scheme of physical education for children, including those of pre-school age and generally to the adolescent age, primarily under the Department of Education, but linked up with a State-wide scheme of physical education.

Applicants must be British subjects and will be required to furnish satisfactory evidence of physical fitness; they should be graduates of an English, European or American university of recognized standing following upon a course of at least four years' training in physical education and/or recreation; they should have had satisfactory post-graduate administrative experience in England and/or elsewhere, in relation to physical education and recreation, and should furnish evidence of good executive ability, personality and driving force.⁷¹

The need for university courses to produce trained staff in PE was noticed. Australian universities and teachers' colleges offered no PE teacher training or education courses until 1937. In the city of Geelong, Victoria, there were two higher education institutions prior to the foundation of universities. One of them, the Teachers' College, incorporated PE into its curriculum, provided mainly for generalist primary school teachers.⁷² The instructional discourse of the physical activity field in the Teachers' College was predominantly biophysical and practical. Topics such as human anatomy, biomechanics, exercise physiology, motor learning and sport sociology were taught; however, they were not identified as separate from 'Physical Education' and constituted subjects with the titles 'Physical Education 1', 'Physical Education 2' and 'Physical Education 3' within courses.⁷³ The specialist Teachers' College merged with the Institute of Technology in Geelong to form Deakin University, which was founded in 1977. Members of staff of the school subject departments of the Teachers' College, such as PE, were relocated into the Deakin University School of Education.⁷⁴

The University of Queensland has the oldest continuing physical activity department in higher education in Australia, and the University of Melbourne was the first of the traditional universities to offer a course to prepare PE teachers, with the first students graduating from a one-year diploma course in 1937. The course was highly successful and, therefore, the Director, Dr Fritz Duras, was able to persuade the University to add a second year in 1938. In July 1939, a Commonwealth grant enabled more Australian universities to begin PE teacher training programmes. As a consequence, Adelaide University offered a two-year diploma in PE in 1940, and a three-year diploma course was established at Brisbane University in 1941 on a part-time basis. The states of Western Australia and Tasmania elected to use the grant money to provide scholarships to send students to the eastern states to study PE. The courses that were introduced to universities in Melbourne, Sydney, Adelaide and Queensland provided specialized training for PE teachers, thus

increasing the number of trained PE staff in schools.⁷⁶

What some years later has been termed the scientization of physical education⁷⁷ witnessed the emergence of specialist subdisciplines in biomechanics, exercise physiology, sport psychology and motor learning, accompanied by niche academic journals, which epitomized a growing emphasis on sporting performance and marginalisation of the social dimensions of PE. ⁷⁸ Former university PE schools and departments were renamed as schools of Exercise Science, Human Movement Studies, Kinesiology, and Sport Studies. ⁷⁹ This transition is described in the Australian context as follows: 'in keeping with trends worldwide, the emergence of the discipline of human movement studies in Australia came many years after, and derived its roots from, the physical education profession'. ⁸⁰ The history of PE became dated as it was subordinated by the new disciplines that appeared under the range of guises mentioned previously. ⁸¹

Comparisons between Argentina and Australia

Physical culture was part of a process of globalisation, exchange, imposition and normalisation of certain body practices in both Australia and Argentina. This process took place between certain countries that produced some bodily discourses, particularly from Europe, such as France, Germany, England, Sweden, and to a lesser extent, Italy and Spain, as well as the United States. It began in the last decades of the nineteenth century and reached its peak in the first decades of the twentieth century. While eclecticism was also a characteristic of Australian PE, given that it was influenced by Ling's system and others, more than the German model, the British influence was stronger than in Argentina. Argentina was more heavily influenced by the French and Swedish models and, in the 1930s, also by the Italian. These models were shaped by the Spanish and Catholic colonial legacy, which influenced ways of thinking about bodies, health, desire, pleasure, femininity and masculinity.

The ideological motivations for the origins of PE in Australia by the end of the eighteenth century were mainly based on the aim of schooling a docile body. As consequence, various systems of rational gymnastics emerged, which were later adopted by schools and the military:⁸³

From their first appearance in the mid-1800s, physical activities in Australian schools can be viewed as practices of corporeal regulations and normalisation which were integral to the

emergence and operation of at least two institutions of modernity, surveillance (or 'the control of information and social supervision') and capitalism (or 'capital accumulation in the context of competitive labor and product markets' 84)85

The ideological motivations for the origins of PE in Argentina also had a well-recognized disciplinary, normative and orderly function. However, the Argentinian System of Physical Education prioritized the formation of a citizen-soldier respectful of the human rights. On the contrary, the militaristic approach of PE prioritized the formation of a citizen-soldier having the human rights conditioned to the nation and conceptualizing discipline as synonym of obedience, and hierarchy as main concept in the school and society.

PE in Argentina and Australia was also influenced by military forces. The emergence of new European states and the strong sense of nationalism of the nineteenth century resulted in a new military organisation that promoted the development of PE. Military gymnastics was expanded during the nineteenth century and supported by nationalist ideals and the introduction of military training. Developing the fitness of future soldiers and boys in the final years of secondary schools was a national aim. ⁸⁶ The main representatives of this movement were Gustav Techow in Australia, and Eugenio Pini, Barón Antonio De Marchi, Escipion A. Ferreto and Cliffton Goldney, among others, in Argentina. However, this militaristic focus was questioned by proponents of liberal progressive pedagogies in both countries. Nonetheless, the armed forces successfully implemented compulsory military training and shooting practice in schools in Australia and in Argentina. In Argentina, the influence of the armed forces resurged on several occasions, such as in the 1930s and during the military coups of the twentieth century.

PE in Argentina and Australia, like in most western countries, was also influenced by hygienic discourses. However, these discourses were somewhat different in Argentina. They were inspired by the French movement, which was mainly concerned with the consequences of industrialisation and increased labour, but the economic situation of the country pointed to problems due to urbanisation. In Australia, hygienic discourses were implicit in the very origins of PE as a school subject, and practices such as school medical inspections⁸⁷ are clear indication of this.

PE in both countries was also influenced by positivist discourses. The scientific approach to gymnastics was dominant and showed 'the correct' movements of the body and rational procedures

originated from the field of medicine. It was believed that understanding the laws of bodily movement would lead to achieving the desired results. The Argentinian System of Physical Education promoted a specific 'Argentinian body' with particular characteristics, such as speed and elegance, which excelled in comparison with other, non-Argentinian bodies. Although this 'Latin element' was also characterized by certain aspects that needed to be 'fixed', such as lack of energy, strength, obedience and discipline, it was nonetheless highly valued. In this way, Romero Brest's system was not totally biologically defined, as it combined the 'Latin element' with 'nature' to construct an ideal Argentinian body.

Both countries allowed different access to physical activities and school sports according to the gender of students. For example, in Australia, boys participated in competitive team games and military training, while girls played team and individual games and, in some schools, were involved in calisthenics or Scandinavian gymnastics. Rhythmic activities, such as folk dancing and swimming, were introduced later. In Argentina, factors such as maternity, body image, aesthetics and heterosexuality defined bodily practices and sports offered only to girls, while 'productive masculinity' – protectionist, provider and procreator – together with virile aesthetics (e.g. strength, bravery, honour), were the desired characteristics for boys. Boys participated in activities such as (outdoor) games, fights, runs, gymnastics and activities that involved strength and pain tolerance. Their female counterparts were involved in outdoor walks, a restricted version of gymnastics and activities related to expression and emotions. Sports were included in the curriculum in the 1920s and 1930s, and were different for boys and girls. For girls, they were designed to construct their femininity through 'feminine' gymnastics, dance and cestoball⁸⁸, and for boys, to develop their masculinity through soccer, 'masculine' gymnastics and basketball. In both countries, private schools used certain games, sports and gymnastics to differentiate social classes and hierarchies. When sports and specific bodily practices were incorporated in the curriculum of school PE, aboriginal games and practices experienced a wash out effect in both countries.

The foundation of the INEF in 1909 and the *Escuela de Gimnasia y Esgrima del Ejército* in 1897 in Argentina represented the emergence of two different bodily practices in relation to kinaesthetic and political aspects. In Australia, the establishment of PE study in higher education took place at the end of 1930. In Argentina, the emergence of PE degrees was supported by the public sector and subsidised by the state.

In both Argentina and Australia, PE teachers' knowledge was largely influenced by bio-medical discourses, particularly those related to anatomy, exercise physiology and anthropometry. However, this content was implicitly incorporated into more general subjects in Australia. Both countries were heavily influenced by knowledge deriving from scientific research (e.g. ergonometric tests), which was considered to be the main (and only) source of legitimate knowledge. Standardized tests established ideal bodies and 'otherness'. In Australia, the field of PE was later subdivided according to different specialisations, creating particular fields such as biomechanics or motor control.

To conclude, Australia and Argentina share some similarities in the early steps of the constitution of the field of PE. For example, both countries were heavily influenced by positivist and bio-medical discourses. Military training was also a significant component for both locations. However, the constitution of PE in the higher education section took place first in Argentina and then in Australia. Also, the field of PE in Australia was later sub-divided into more specific disciplines; however, it remained the same in Argentina. The two cases described in this article reinforce the struggle of the field of PE to be recognized, and finally established, in two different countries and in two different continents.

Notes

¹ Ricardo Salvatore, 'Sobre el Surgimiento del Estado Médico Legal en Argentina (1890-1940)', *Estudios Sociales* 20 (2001), 81–114.

² Catalina Wainerman and Mariana Heredia, ¿Mamá Amasa la Masa? Cien Años en los Libros de Lectura de la Escuela Primaria (Buenos Aires: Editorial de Belgrano, 1999).

³ Juan Suriano (ed.), *La Cuestión Social en Argentina. 1970-1943* (Buenos Aires: La Colmena, 2000); Eduardo Zimmerman, *Los Liberales Reformistas. La Cuestión Social en la Argentina 1890-1916* (Buenos Aires: Sudamericana-Universidad de San Andrés, 1995).

⁴ Adriana Puiggrós, *Sujetos, Disciplina y Curriculum (1885-1916)* (Buenos Aires: Editorial Galerna, 1990); Adriana Puiggrós, *Qué Pasó en la Educación Argentina. Desde la Conquista al Menemismo* (Buenos Aires: Kapelusz, 1996).

⁵ For example, law 988 of primary education for Buenos Aires province, promulgated in 1875; law 1420 of secular, free and compulsory national primary education, promulgated in 1884.

⁶ The *Escuela Normal de Paraná* was the first national school for teachers and started to operate in 1869. In 1885, there were fourteen schools established in the provinces, and together with the other schools already founded, there was a total of eighteen schools for teachers.

- ⁸ Thomas Popkewitz, *Cultural Productions: (Re)constructing the Nation, the Child & Teacher in the Educational Sciences* (Lisboa: Educa, 2002).
- ⁹ Ángela Aisenstein, 'La Matriz Disciplinar de la Educación Física. Su Relación con la Escuela y la Cultura en el Contexto Nacional (Argentina 1880-1960)', in Carmen Soares (ed.), *Pesquisas Sobre o Corpo. Ciências Humanas e Educação* (Sao Paulo: Autores Asociados, 2007), 23–47.
- ¹⁰ Even though the values transmitted were in accordance to the Occidental civilization process (whiteness, masculine and active for men; passive, feminine and reproductive for women; classist; heterosexist, hygienic, docile, etc), there were some variations. The moral values transmitted by the Argentinian System of Physical Education privileged to certain extend solidarity, respect to individual freedom, democratic principles and republican values. On the contrary, the militaristic approach to PE transmitted values associated to obedience, subordination and masculine strength as the bases of pedagogy.
- ¹¹ David Kamens and Yun-Kyung Cha, 'La Legitimación de Nuevas Asignaturas en la Escolarización de Masas: Orígenes (Siglo XIX) y Difusión (Siglo XX) de la Enseñanza del Arte y de la Educación Física', *Revista de Estudios del Currículo* 2, no. 1 (1999), 62–86; David Kirk, *Schooling Bodies. School Practice and Public Discourse, 1880-1950* (London: Leicester University Press, 1998); Georges Vigarello, *Corregir el Cuerpo* (Buenos Aires: Ediciones Nueva Visión, 2005).
- ¹² Sandra Carli, Niñez, Pedagogía y Política. Transformaciones de los Discursos acerca de la Infancia en la Historia de la Educación Argentina entre 1880-1955 (Buenos Aires: Miño y Dávila, 2002); Inés Dussel, Currículum, Humanismo y Democracia en la Enseñanza Media 1863-1920 (Buenos Aires: Editorial CBC/UBA-FLACSO, 1997); Virginia Kummer, José María Torres: las Huellas de su Pensamiento en la Conformación del Campo Pedagógico Normalista (Paraná:

⁷ For example, the *Consejo Nacional de Educación* ('National Advice of Education'), the *Ministerio de Instrucción Pública* ('Ministery of Public Instruction'), the *Cuerpo Médico Escolar* ('School Medical Board'), the *Cuerpo de inspectores nacionales* ('National inspectors Board'), etc.

Universidad Nacional de Entre Ríos, 2010); Lucía Lionetti, *La Misión Política de la Escuela Pública. Formar a los Ciudadanos de la República (1870-1916)* (Buenos Aires: Miño y Dávila, 2007); Puiggrós, *Sujetos, Disciplina y Curriculum (1885-1916)*; Puiggrós, *Qué Pasó en la Educación Argentina. Desde la Conquista al Menemismo*.

¹³ Kirk, Schooling Bodies.

¹⁴ Mark Clark, *A Short History of Australia* (Sydney: Mead & Beckett, 1981).

¹⁵ Stuart Macintyre, *The Oxford History of Australia (Volume 4) 1901-1942.* (Melbourne: Oxford Universty Press, 1993).

¹⁶ Commonwealth of Australia, *Australian Citizenship. Our Common Bond.* (Belconnen: The National Communications Branch of the Department of Immigration and Border Protection, 2014).

¹⁷ Peter Fryar, 'Physical Education in Victoria – a Historical Perspective', *ACHPER Journal* (1978).

¹⁸ Clifford Turney (ed.), *Pioneers of Australian Education: a Study of the Development of Education in New South Wales in the Nineteenth Century* (Sydney: Sydney University Press, 1969).

¹⁹ Gary Powell, *Valuable Steps. A history of Physical Education in Victoria* (Windsor: Prahran Mechanics' Institute Press, 2012).

²⁰ Jan Wright, 'Educación Corporal en Australia: 1870-1910', in Pablo Scharagrodsky (ed.), *La Invención del "Homo Gymnasticus". Fragmentos Históricos sobre la Educación de los Cuerpos en Movimiento en Occidente* (Buenos Aires: Prometeo, 2011), 322.

²¹ Wright, 'Educación Corporal en Australia: 1870-1910', 321-345.

²² Pavia Miller and Ian Davey, 'Family Formation, Schooling and the Patriarchal State', in Marjorie Theobald and Richard Selleck (eds), *Family, School and State in Australian History* (Sydney: Allen & Unwin, 1990), 83–99.

²³ Wright, 'Educación Corporal en Australia: 1870-1910', 321-345.

²⁴ Miller and Davey, 'Family Formation, Schooling and the Patriarchal State', 83–99.

²⁵ E. McCloughan, 'Centralisation and Physical Education in New South Wales', *Australian Physical Education Association Journal* 1, no. 5 (1970), 6–7.

²⁶ Wright, 'Educación Corporal en Australia: 1870-1910', 321-345.

²⁸ Dr Enrique Romero Brest was one of the most influential persons in Argentinian and Latin American PE during the first four decades of the twentieth century. Together with a varied group of teachers, they hegemonized the field of PE in Argentina, particularly in schools. He was one of the most significant and well-recognized voices, and directed the first specialised courses in PE. Dr Brest was also an inspector in the decision-making processes in the educational programmes of Argentinian educational institutions and created the Argentinian System of Physical Education as the only possible educational option. This system had a positivist inspiration, however, it also included a spiritual approach in 1930s. The system was implemented in Argentinian schools until it was revoked in 1938. Dr Brest's medical background complimented his pedagogical knowledge. He was the director of the first Argentinian PE magazine and created the Asociación de Profesores de Educación Física – APEF ('Physical Education Teachers Association') in 1909. Dr Enrique Romero Brest also participated in the majority of the government commissions that studied the situation of PE during the first decades of the twentieth century. He participated in numerous conferences about education and hygiene, including the International Conference of Physical Education conducted in Sorbona, Paris, in 1913. He interacted with well-recognized physiologists and specialists during that time, such as Dr Philippe Tissié. Furthermore, Dr Brest created diverse medical equipment which circulated outside of Argentina, including the thoracic spring cyrtometer, the hydrostatic spirometer, the dynamometer adaptable to the hand size, the thoracic kinetic meter, the millimetric anthropometer and the unchanging double jump meter for gymnastics lessons.

²⁷ Australian Curriculum and Assessment Reporting Authority [ACARA], 'Foundation to Year 10 Curriculum: Health and Physical Education', http://www.australiancurriculum.edu.au/health-and-physical-education/curriculum/f-10?layout=1 (accessed 6 March 2016).

²⁹ For further information on the Argentinian System of Physical Education, see Pablo Scharagrodsky, 'El Sistema Argentino de Educación Física. Entre el Cientificismo, la Higienización, el Eclecticismo y la Argentinidad', *Revista Brasileira de Ciências do Esporte* 37 (2015), 158–164.

³⁰ Enrique Romero Brest, *Pedagogía de la Educación Física* (Buenos Aires: Editorial Cabaut y Cía, 1911), 179.

³¹ Enrique Romero Brest, *Cursos Normales de Educación Física (sus Resultados)* (Buenos Aires: Las Ciencias Librería y Casa editora de Nicolás Marana, 1903), 56–7; Romero Brest, *Pedagogía de la Educación Física*, 247–66.

- ³⁴ Wright, 'Educación Corporal en Australia: 1870-1910', 321–345.
- ³⁵ Board of National Education, *Report* (Victoria, 1858), 32.
- ³⁶ Board of National Education, *Report* (Victoria, 1859), 6.
- ³⁷ Robert Crawford, 'A History of Physical Education in Victoria and New South Wales 1872-1939, with Particular Reference to English Precedent' (PhD diss., Latrobe University, 1981).
- ³⁸ Powell, *Valuable Steps*.
- ³⁹ Ibid
- ⁴⁰ Herman Gustav Adolph Techow was an officer in the Prussian Army, a physical culturist and a democrat. He was serving at the Berlin arsenal when the arsenal was stormed by the citizens of Berlin who were upset over revocation of the German constitution and the dissolution National Assembly. Techow led the revolutionary army in Baden and migrated to Australia in 1852. Gustav Techow held a long battle with the Victorian Education Department to provide a more liberal and meaningful interpretation of PE in the elementary school system.
- ⁴¹ Gustav Techow, *Manual of Gymnastics Exercises for the Use of Schools and at Home.* (Melbourne, 1866), 3–4.
- ⁴² David Kirk, *The Body, Schooling and Culture* (Geelong, Victoria: Deakin University Press, 1993).
- ⁴³ Victoria Education Gazette (1903), as cited in Kirk, The Body, Schooling and Culture, 42.
- ⁴⁴ Kirk, Schooling Bodies, 16.
- ⁴⁵ P. Muskett, *The Diet of Australian School Children (with also Health and Disease during School Life), and Technical Education* (Melbourne: George Robertson, 1899).

³² Lionetti *La Misión Política de la Escuela Pública*.

³³ Enrique Romero Brest, *El Ejercicio Físico en la Escuela (del punto de vista Higiénico)* (Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1900), 5–7.

⁴⁶ P. Fryar and P. Swan, 'Role of the Commonwealth in the Development of Physical Education in Australia' (manuscript prepared for Health and Recreation Studies, Ballarat College of Advanced Education, 1983).

- ⁴⁸ F. Robinson, 'May Julia Cox and her Contribution to School Based Swimming' (Victorian Department of Education Archives, 1996).
- ⁴⁹ Murray Phillips and Alexander Roper, 'History of Physical Education', in D. Kirk, D. Macdonald, and M. O'Sullivan (eds), *The Handbook of Physical Education* (London: Sage, 2006), 123–40.
- ⁵⁰ Kirk, Schooling Bodies.
- ⁵¹ Kirk, *The Body, Schooling and Culture*.
- ⁵² Powell, Valuable Steps.
- ⁵³ Phillips and Roper, 'History of Physical Education'.
- ⁵⁴ Kirk, *The Body, Schooling and Culture*.
- ⁵⁵ Department of Defence, *Junior Cadet Training Textbook* (Melbourne, 1922).
- ⁵⁶ Kirk, The Body, Schooling and Culture, 44.
- ⁵⁷ Kirk, The Body, Schooling and Culture.
- ⁵⁸ Kirk, Schooling Bodies.
- ⁵⁹ David Kirk, 'Gender Associations: Sport, State Schools and Australian Culture', *The International Journal of Sport History* 17, no. 2/3 (2000), 49–64.
- ⁶⁰ David Kirk, 'The Reconfiguration of the Physical Activity Field in Australian Higher Education, 1970–1986', *Sporting Traditions* 16, no. 2 (2000), 21.
- ⁶¹ David Kirk et al., *The Sociocultural Foundations of Human Movement* (South Melbourne: Macmillan Education, 1996).
- ⁶² David Kirk, "Making the Present Strange": Sources of the Current Crisis in Physical Education', *Discourse* 15, no. 1 (1994), 46–63.

⁴⁷ Powell, Valuable Steps.

⁶³ Kirk et al., *The Sociocultural Foundations of Human Movement*.

⁶⁴ For further information on the origins of PE as a university degree in Argentina, see Pablo Scharagrodsky, 'El Discurso Médico y su Relación con la Invención del Oficio de "Educador Físico": entre la Heteronomía Solapada y la Autonomía Vigilada (Argentina, 1901-1931)', in Pablo Scharagrodsky (ed.), *Miradas Médicas sobre la Cultura Física en Argentina, 1880-1970*. (Buenos Aires: Prometeo, 2014), 101-48.

⁶⁵ Enrique Romero Brest, *El Sentido Espiritual de la Educación Física* (Buenos Aires: Librería del Colegio, 1938), 243.

⁶⁶ Phillips and Roper, 'History of Physical Education'.

⁶⁷ Victoria Board of Education, *Report* (1865), 13.

⁶⁸ Powell, Valuable Steps.

⁶⁹ William Gordon Young, 'Physical Education in Australia. A Study of the History of Physical Education in Australia and a Forecast of Future Development' (Master's thesis, The University of Sydney, 1962).

⁷⁰ Ibid

⁷¹ Ibid., 116.

⁷² D. Kirk, D. Macdonald, and R. Tinning, 'The Social Construction of Pedagogic Discourse in Physical Education Teacher Education in Australia', *Curriculum Journal* 8, no. 2 (1997), 271–98.

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ Kirk, 'The Reconfiguration of the Physical Activity field in Australian Higher Education, 1970–1986'.

⁷⁶ Gordon Young, 'Physical Education in Australia'.

⁷⁷ David Whitson and Donald MacIntosh, 'The Scientization of Physical Education: Discourses of Performance', *Quest* 42, no. 1 (1990), 40–51.

⁷⁸ Kirk, Macdonald, and Tinning, 'The Social Construction of Pedagogic Discourse in Physical Education Teacher Education in Australia'.

⁷⁹ Kirk, 'The Reconfiguration of the Physical Activity field in Australian Higher Education, 1970–1986'; Richard Tinning, 'Physical Education and the Sciences of Physical Activity and Sport: Symbiotic or Adversarial Knowledge Fields' (conference paper, Congreso Mundial de Ciencias de la Actividad Física y del Deporte, Granada, Spain, 1993).

- ⁸¹ J. McKay, J. Gore, and D. Kirk, 'Beyond the Limts of Technocratic Physical Education', *Quest* 42, no. 1 (1990), 52–75; Phillips and Roper, 'History of Physical Education'.
- ⁸² Jaques Gleyse and Pablo Scharagrodsky, 'Le Dr. Enrique Romero Brest, ses Visites aux Institutions Européennes de Formation et le Congrès d'Education Physique de Paris en 1913 comme Indicateurs de la Mondialisation et de la Nationalisation de la "Culture Physique", *Staps, Revue Internationale des Sciences du Sport et de L'éducation Physique* 100 (2013), 89–107.

⁸⁰ Bruce Abernathy et al., *The Biophysical Foundations of Human Movement* (South Melbourne: Macmillan, 1996), 24

⁸³ Kirk, Schooling Bodies.

⁸⁴ Anthony Giddens, *The Consequences of Modernity* (Redwood City, CA: Stanford University Press, 1990), 59.

⁸⁵ Kirk, Schooling Bodies, 167.

⁸⁶ George Mosse, *The Image of Man: the Creation of Modern Masculinity* (Oxford: Oxford University Press, 1996).

⁸⁷ David Kirk, 'Physical Education and Regimes of the Body', *Australian and New Zealand Journal of Sociology* 20, no. 2 (1994), 165–177.

⁸⁸ Cestoball is a sport created in Argentina in 1897 by Enrique Romero Brest. Its rules share some similarities with netball.