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CONTEMPORARY CHANGES IN THE ACADEMIC-SCIENTIFIC FIELD OF PHYSICAL EDUCATION IN BRAZIL: NEW HABITUS, MODI OPERANDI AND POINTS OF CONTENTION

TRANSFORMAÇÕES CONTEMPORÂNEAS DO CAMPO ACADÊMICO-CIENTÍFICO DA EDUCAÇÃO FÍSICA NO BRASIL: NOVOS HABITUS, MODUS OPERANDI E OBJETOS DE DISPUTA

TRANSFORMACIONES CONTEMPORÁNEAS DEL CAMPO ACADÉMICO-CIENTÍFICO DE LA EDUCACIÓN FÍSICA EN BRASIL: NUEVOS HABITUS, MODUS OPERANDI *Y OBJETOS DE DISPUTA*

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Keywords

Scientific-Academic field.
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Abstract: Systematic scientific research on a regular basis is recent in the field of Physical Education in Brazil. In the first decade of the 21st century, the field has expanded, diversified and become more dynamic, consolidating as an academic-scientific field with greater autonomy. Such a process is large and complex, and it demarcates a social space and forges its own *habitus*, with agents and institutions struggling for specific capital and new points of contention. This essay seeks to analyze that movement under the theoretical framework of Pierre Bourdieu. The power generated in the field and the struggles of agents to retain or transform it are expressed in the disputes over the formulation of concepts and the ways in which these disputes have featured in the constitution of two *modi operandi*. These *modi operandi* manifest themselves as a way of conceiving the field and struggling to legitimize it, and as the formation of new generations of agents who structure ways of seeing it. In this context, it is observed that the modus operandi that has been spurring the academic-scientific development of Physical Education has driven the field relatively away from pedagogic debates.

Palavras-chave

Campo Acadêmico-científico.
Educação Física.
Pierre Bourdieu.

Resumo: O campo da Educação Física no Brasil é relativamente recente no processo de incorporação sistemática da prática científica em seu cotidiano. Na primeira década do século XXI, ele se expande, se diversifica e se dinamiza, consolidando-se como campo acadêmico-científico com maior autonomia. Tal processo é amplo e complexo, demarcando um espaço social e forjando um *habitus* próprio, com a luta entre agentes e instituições em torno de capital específico e de novos objetos em disputa. Esse ensaio busca analisar esse movimento a partir do referencial teórico de Bourdieu. O poder instituído no campo e as lutas dos agentes para mantê-lo ou modificá-lo expressam-se na disputa pela construção dos conceitos e de suas representações na constituição de dois *modus operandi,* os quais representam uma forma de ver o próprio campo e a sua disputa para legitimá-lo, assim como na formação das novas gerações de agentes, estruturando formas de vê-lo. Neste contexto, observa-se que o modus operandi que tem impulsionado o desenvolvimento acadêmico-científico da Educação Física tem implicado no seu relativo afastamento dos debates pedagógicos.

Palabras clave

Campo académico-científico.
Educación Física.
Pierre Bourdieu.

Resumen: El campo de la Educación Física en Brasil es relativamente reciente en la incorporación sistemática de la práctica científica en su proceso diario. En la primera década de este siglo, se expande, se diversifica y pasa a ser dinámico, consolidándose como campo académico-científico con mayor autonomía. Este proceso es complejo y amplio, demarcando un espacio social y forjando *habitus* propio, con la lucha entre agentes e instituciones por un capital específico y por nuevos objetos en disputa. Este ensayo busca analizar este movimiento desde el marco teórico de Bourdieu. El poder establecido en el campo y las luchas de los agentes para mantenerlo o modificarlo se expresan en la disputa por la construcción de los conceptos y sus representaciones en la constitución de dos *modus operandi,* que representan una manera de ver el propio campo y su disputa para legitimarlo, así como en la formación de las nuevas generaciones de agentes, estructurando formas de verlo. En este contexto, se observa que el modus operandi que ha impulsado el desarrollo académico-científico de la Educación Física ha implicado en su relativo alejamiento de los debates educativos.

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1 INTRODUCTION AND PROBLEMS

Systematic scientific research on a regular basis is recent in the field of Physical Education (PE) in Brazil, which seeks to consolidate as an academic-scientific field with greater autonomy. Our hypothesis is that this process has been stronger in the first decade of the 21st century, demarcating its social space and forging its own habitus, with the struggle between agents and institutions over specific capital and new objects of contention. Such hypothesis is based on the analysis of the process started in the field in the 1980s and 1990s, and on the changes that followed that movement.

In the 1980s, Brazilian Physical Education entered a crisis (OLIVEIRA, 1983). Looking for solutions (FENSTERSEIFER, 2001), a group of agents whose background was strongly influenced by "soft sciences"[1] (CHARLOT, 2006), specially Education, brought issues and opportunities for a different becoming in the field.

One of the milestones of the movement was the idea of "engaged" science, mainly due to a *modus operandi* coming from the associative model and the very political engagement in a re-democratized Brazilian society. Within this process, another important milestone was the change in the leadership of the Brazilian College of Sport Sciences (*Colégio Brasileiro de Ciências do Esporte*, CBCE). That is the oldest and one of the leading scientific institutions of Physical Education, and in 1989, it started to be led by agents with ties to "soft sciences". This fact changed the future course of that scientific organization because its leaders had been mostly linked to "hard sciences" since it was founded in 1978. That change can be seen in the words of its former president:

> [...] topics of events and the organization's journal – the RBCE [Brazilian Journal of Sport Science] as well as the effort to consolidate the College no longer as a medical-based organization referenced in the [American College of Sports Medicine] ACSM – a US institution seen as the reference for research in Sports Medicine and physical activity related to health. It would be rather a broader organization that gathers contributions in the areas of Social and Human Sciences, besides the medical field (TAFFAREL, 2007 p. 17).

The same author underscores the idea that the RBCE starts to understand that Physical Education's object of study is pedagogical work (TAFFAREL, 2007). Since then, it has directed its actions to this object and it has been paying attention to it.

This element corroborates the new actions carried out in the field of Physical Education, for example, the book "Methodology of Physical Education Teaching" published by a group of intellectuals (METODOLOGIA..., 1992) who presented a proposal called "critical-overcoming PE"[2] that develops new concepts in this specific field about school Physical Education's foundations, goals, contents and teaching methodologies. Through educational arguments and justifications, and approaching other school disciplines and entering the dispute over the forms that are authorized and deserve attention, it starts to justify PE as a discipline that deserves to be in Brazil's curriculum of basic education.

In the same period, Kunz (1991-1994) also presents a theoretical and methodological proposal called "critical-emancipatory PE". For the author, Physical Education's specificity is

1 On hard and soft sciences and their manifestations in the PE field, see LAZZAROTTI FILHO *et al* (2012).

2 This publication has had one of the highest circulations in this field in Brazil. Souza, Marchi Júnior et al (2011) report that it was selected among others by the National Program of School Libraries (PNBE) and is distributed to over 40,000 teachers in the early grades of elementary school and is available for free download, almost 20 years after it was first published, indicating its seminal character.

movement culture, unlike the proposal of "Metodologia..." (1992), for which that specificity lies in body culture.

This trend developed throughout the 1990s, gaining strength with studies about the state of the art in the field; in other words, theories are developed about other research studies, reviews and essays, such as Castellani Filho (1998). In that work, the author divides PE's pedagogical proposals into systematized and non-systematized ones, and the latter included propositional systematized and non-propositional systematized proposals, seeking to help with internal categorization of the field.

A movement emerges toward building consensuses, such as that presented by Bracht (2003), one of the authors of "Methodology of Physical Education Teaching", which discusses his 1992 proposal and seeks to broaden it with a new concept and a new name: "body movement culture". In addition, agents such as Fensterseifer (2001) and Smith (2002) joined one proposal or the other while Betti (1996) criticized both of them.

Also in the 1990s, these proposals came into contention to define Brazilian educational policy. The Law of Guidelines and Bases [of Education] (LDB) was voted in 1996, guaranteeing mandatory PE as a curriculum component of all basic education in Brazil. The process of social and political construction of that important law drew attention of agents of the field to the topic, and its enactment was the culmination of the arguments justifying its mandatory character.

By succeeding in passing the Law and keeping the discipline as mandatory, and establishing it as a school discipline rather than a mere activity as it used to be, the PE academic community showed the effectiveness of its actions and arguments. Such political and academic process can be understood based on the work of Pierre Bourdieu (2004). It demonstrated the power of exteriorization of the field's interiority, its educational importance and its legitimating power by maintaining it as a mandatory curriculum discipline in Brazil's educational system.

The National Curriculum Parameters (PCNs) for PE were approved in the early 2000s, consolidating possible consensuses in vocational training. Notwithstanding its ambiguities, they incorporated much of PE pedagogical proposals developed in the 1990s and mentioned above.

However, in the first decade of this century, the field would gain new outlines and strengthen scientific practices, definitely incorporating them into its *modus operandi*. PE pedagogical perspective was presented as the component that engenders the field in the country (PAIVA, 2004), and the impulse that had driven it so far would consolidate in that decade. However, new and important components were observed on the scene.

These components appear in the exponential expansion of the academic-scientific field of PE, from the major expansion of undergraduate courses, including the distance learning type (SILVA *et al*., 2009), to graduate programs, to the significant increase in the number of research grants and scholarships for scientific initiation, master's and PhD studies. This expansion process also includes improvement of the field's scientific journals, expansion and diversification of laboratories and research groups throughout Brazil.

We understand that the process is complex and broad, and this essay seeks to provide a way to see the movement based on Bourdieu's theoretical framework, mainly regarding the incorporation of scientific practices after the first decade of the 21st century and the relative absence of debates centered on pedagogical theories.

2 A VIEW ON THE FIELD OF PHYSICAL EDUCATION BASED ON PIERRE BOURDIEU'S CONTRIBUTION

We postulate the theories of Pierre Bourdieu (1930-2002) as a way to look at the field of Physical Education. Appropriation of the author's concepts to study the field is not a recent trend and has been undertaken by authors such as Ferraz (1999), Paiva (1994, 2003, 2004), Souza Neto *et al.* (2004), Souza and Marchi Júnior (2010 and 2011), Stigger *et al.* (2010), Bracht (2003), Betti (1996), among others.

Bourdieu's theoretical framework influences traditional fields such as Anthropology, Philosophy, and especially Sociology and Education. In the specific case of PE, his views have sustained research on sport and, more recently, have been increasingly used to study the academic-scientific field itself.

When we operate with that framework, we understand that it can contribute to understand PE as a new field under construction, which does not fall within the traditional scientific structure organized as disciplines.

Some of Pierre Bourdieu's concepts – particularly those of *habitus*, field and (social, cultural and symbolic) capital – can guide us to understand the academic-scientific field of PE and its current dynamics. Thus, by mobilizing those concepts, we conclude that PE can be understood from its own elements, which distinguish it and shape its specificity.

Such reading is in line with Bourdieu's (2009) understanding that the universe that includes agents and institutions that produce, reproduce and disseminate the field of Physical Education are a social world like any other. However, since it follows more or less specific social laws, it becomes a relatively autonomous field.

This perspective is supported by a theory of practice, mediation or, as Bourdieu (2009) called it, a relational theory that seeks to counter the extremes developed by so-called objectivist and subjectivist theories. The former are bound only to data while the latter are linked to subjects' perception on data. According to Bourdieu (2009), the – objective and subjective – double truth is the truth of the social world and should be pursued by a theory of practice.

For the scientific field, Bourdieu (2009) retranslates relational theory, distinguishing "theoretical theory" from "scientific theory". For the author, theoretical theory has an end in itself, since it is born and lives out of confrontation with other theories and is always a starting point. Scientific theory, in turn, is a perception and action program that is revealed only in the empirical work in which it is realized. The author emphasizes that:

> [...] truly taking the side of science mean to choose, ascetically, to devote more time and effort to put the theoretical knowledge acquired into action by investing it in new research, instead of somehow packaging it for sale, putting it in a metadiscourse wrapping designed less to control thinking than to show and value its own importance or to take benefits directly from it, making it circulate in the numerous occasions that the age of the jet and the colloquium offers the researcher' narcissism (BOURDIEU, 2009 p. 59).

Therefore, he proposes scientific practices that break with the idea of theoretical ghettos, because, as he said,

> […] research is much too serious and too difficult for us to allow ourselves to mistake scientific rigidity […] for scientific rigor, and thus to deprive ourselves of this or

> that resource available in the full panoply of intellectual traditions of our discipline and of the sister disciplines of anthropology, economics, history etc.

Therefore, the author advocates theoretical rigor coupled with empirical research work. He builds what he called a theoretical tool to construct research objects, believing that social dynamics as a whole crosses any given social space, but such movement produces something specific in those spaces according to its possibilities and peculiarities of place and time, thus setting a particular field. In that field, there are agents (individuals and groups) and institutions with specific dispositions called *habitus* which, in turn, are established and defined as currency, thus becoming a specific capital.

Bourdieu (2009) builds the idea of field as a social world that makes impositions and requests that are, however, relatively independent from the pressures of the global social world that surrounds it, even though they are related to it. The notion of field as a relatively autonomous space of objective forces and patterned struggles over specific forms of authority is the possibility found by the author for delimitating certain objects of knowledge:

> The notion of field is, in a sense, a conceptual shorthand of a mode of construction of an object that will command, or orient, all the practical choices of research. It functions as a *pense-bête*, a memory jogger: it tells me that I must, at every stage, make sure that the object I have given myself is not enmeshed in a network of relations that assign its most distinctive properties (BOURDIEU, 2009, p. 27).

Having said that, society is constituted by fields known as:

> [...] Microcosms or spaces of objective relations, which have their own logic that is not reproduced and is irreducible to the logic governing other fields. The field is both a "force field", a structure that constrains the agents involved in it, and a "battlefield", where agents act according to their relative positions in the force field, maintaining or changing its structure. (BOURDIEU, 1996, p. 50)

The author also states that fields are not fixed structures but products of history, having both universal properties and their own characteristics. They also involve the *Doxa*, which consists of the consensual views expressed in the laws that govern and regulate the struggle to maintain and dominate the field.

Fields have relative autonomy that is set as an established relationship between the specific and the general, between microcosm and macrocosm. The higher the refractive and retranslation power that a field is able to impose, the greater its degree of autonomy. On the contrary, the higher the heteronomy of a field, the lower its refraction and retranslation power (BOURDIEU, 2004), and more it is susceptible to external influences.

Allied to the idea of field is that of *habitus*. Thiry-Cherques (2006) says that the construction of the concept of *habitus* has a long history in Western philosophy. For the author, the concept was conceived by Bourdieu "[...] as an expedient to escape the objectivist paradigm of structuralism without falling back on the philosophy of the subject and consciousness" (THIRY-CHERQUES, 2006, p. 33).

Thus, for the purposes of this study on the field of PE, the concept of *habitus* can be understood as a scientific *modus operandi*, a unifying and generator principle that, in practice, works according to the rules of science without having them at its origin (BOURDIEU, 2009). It is the meaning of the scientific game that makes us do what needs to be done. Still according to Bourdieu (2004), the *habitus* is formed by plastic and flexible arrangements, ways of perceiv-

ing, feeling, doing, thinking and acting in a given circumstance. To Wacquant (2002, p. 102), who worked with Bourdieu, "[...] habitus is a set of desires, socially constituted wills and skills, which are cognitive, emotional, aesthetical and ethical at the same time, as it is elaborated and operates in practice".

Continuing with the presentation of Pierre Bourdieu's theoretical framework, we can also say that fields are composed of objects worthy of attention, investment and dispute, since they have values. Thus, the author incorporates homologies to other fields, for example, re-translating concepts from economics in order to approach symbolic objects from other fields, including science. This theoretical tool to think the field based on the economy of symbolic exchanges was called capital by Bourdieu (2004), here understood as social energy. That social energy can be inherited or acquired by investment and it reproduces according to the ability of its holder to invest the energy in the field itself. The author believes that capital comes in three specific forms: cultural capital, social capital and symbolic capital.

In studies about the scientific field, Bourdieu (2004) identifies properties inherent to that concept, which manifest themselves as two forms of power: temporal power and specific power. Temporal power is manifested through institutional or institutionalized power – that linked to the temporary occupation of important positions in the field's institutions. In Brazil's PE field, these positions can be functions or offices in development agencies and scientific organizations, or also in the management of laboratories, graduate programs or university departments. Moreover, that power is expressed in the possession of means of production, such as funding, equipment, advisory or consulting contracts, among others; and means of reproduction, such as the power to appoint, judge and build careers by selecting new agents. In turn, specific or prestige-related power is represented almost exclusively by recognition by peers or the more recognized portion of the field, and is obtained mostly through acknowledged contribution to the progress of the field. In this respect, it can be said that:

> Every field experiences conflict between agents that dominate it and others, that is, between those agents who monopolize the field's specific capital by means of symbolic violence (authority) and those with a claim to domination [...]. Domination is usually non-obvious, non-explicit; it is rather subtle and violent. A symbolic violence that is judged legitimate within each field; that is inherent in the system, whose institutions and practices inexorably reverse the gains of all types of capital to dominant agents (THIRY-CHERQUES, 2006, p. 37).

Capital is the way in which initiated agents and those wishing to enter the field relate. The latter need initial capital – in a new allusion to the economic field – which can be acquired in several ways, always within the rules of the game that can contribute to preserve or reject the tradition of the field itself.

Still in order to think about the PE field, other concepts posed by Bourdieu can be used, such as the comparison of homologies, which allows us to think relationally about a particular case consisting in a particular instance of the possible (BOURDIEU, 2007). This procedure helps in the task of understanding the genesis of the academic-scientific field of PE and its relation to the present moment, placing objects from past and present in dispute and comparing them, and realizing the internal movement and the construction of new objects – which we will approach in the next sections of this paper.

3 THE CHANGES IN THE FIELD OF PE STARTING IN THE FIRST DECADE OF THE 21ST CENTURY

Considering the characterization developed by Paiva (2004), which looks at the field of PE in two steps: its engendering around the 1930s and the point it enters a crisis in the 1980s, we present a new moment started in the first decade of the 21st century. Since then, there is definite and defining incorporation of scientific practices, bringing new configurations to the field of PE.

To understand such movement, we list characteristics of the field until the first decade of this century (expressed in Table 1): its centrality is marked by pedagogical practice; its features are markedly academic in initial professional training; strong intentionality is seen in engaged policy; academic intellectuals were the main agents in the field; books were the main media for disseminating knowledge; the main objects of dispute were theories, methodologies, pedagogic proposals, concepts, among others.

In the last decade, there have been numerous indications of scientific operationalization and a process of dilution of the pedagogical debate in which agents gradually incorporate the scientific *modus operandi*. In this process, the objects in dispute migrate from the debate about pedagogical theories and school PE itself toward systematic scientific practice.

Table 1: Changes in the PE field until the last decade of the 20st Century and after

Until the last decade of the 20th century	From first decade of the 21st century on
Centrality of pedagogical practice	Centrality of scientific practices
Markedly academic characteristic	Academic-scientific characteristic
Strong intentionality in engaged policy	Scientific policy
Intellectuals-academics as the field's main agents	The field's main agents are productive researchers
Main media is the book	Dissemination focused on journals
Main objects of dispute were theories, methodologies, pedagogic proposals, concepts, among others.	Objects of dispute are articles published in indexed journals, grants, funding, management of laboratories, representation of areas, coordination of graduate programs, among others.

Source: Prepared by the authors

As an illustration of such demarcation, we present an important document that expresses the change of purpose in Brazil's postgraduate system.

> While graduate studies in the area used to be focused on training human resources for higher teaching, human resources training for research and innovation are now added. (CAPES, 2003)

Bracht (2003) makes a significant statement on this issue, saying that the more we subordinate ourselves to evaluation procedures of the Higher Education Personnel Training Coordination (CAPES), which regulates and structures Brazilian scientific production, the more we distance ourselves from school.

It can be argued that this field has been developing and creating its relative autonomy and forging its own social space, thus constituting itself as a structured structure, developing its own habitus with new objects of contention and with a different *modus operandi*.

An academic-scientific field demarcates its borders more or less by creating its relative, although process-based autonomy. According to Thiry-Cherques (2006), a field's demarcation

is one of the conditions for its existence; its boundaries are dynamic and extend as far as the power of its effects go, which are then converted into normative boundaries protected by an explicitly encoded right of entry.

As an example of these encodings, we turn again to PE Area Documents[3] (Capes). The first document published in 2000 consisted of six pages. Already in 2013, the area document had 44 pages of academic and scientific details. The increase in the number of pages can be understood as a form of coding and demarcating the field and, at the same time, of complexifying and expanding the very PE academic-scientific field, thus requiring new forms, procedures and criteria. In other words, of requiring organization into new structured structures through and for the field (BOURDIEU, 2004).

For Bourdieu (2009), the greater the autonomy of a field, the greater its refraction and retranslation power over interference and influences by other fields, allowing competition to be fair and appropriate. That is perhaps the locus where the academic-scientific field of PE seems to present the greatest difficulties in this new stage of its development, either for being recent or because of their low degree of development. It can be argued that there is autonomy under construction, still under strong influence of other fields. It is argued that PE operates with little power to retranslate and refract the *modus operandi* of other fields, with dispositions and tendencies of the source fields of its agents and institutions.[4]

Here we must remember that most contemporary PhD-level PE researchers have undergone their academic training in other fields. The *habitus* of those subjects, especially in training new agents in the field, ends up somehow reproducing the *modus operandi* of the field of training, whether they are located in the humanities and social sciences or in exact or biological sciences.

That is because the field of Physical Education is established at the boundaries of knowledge (VAZ, 2000) with biological and exact sciences, as well as human and social sciences – that is, the "hard" and "soft" sciences as previously identified, in addition to dialogue with philosophy, art and culture. PE research topics/objects have been built on prevailing perspectives or within nature or culture domains.

Influence and interference from other fields, such as that of politics, are also identified as a form of the field's weak refractive power (BOURDIEU, 2004) and in PE they have been identified with "engaged science". For Vaz (2003), this process that took place in the eighties and nineties merged several concepts in the same agenda and made them virtually undifferentiated: education as a political act, engaged science and knowledge production from a class point of view.

Analyzing the production of knowledge in that period and using metaphors for the artistic field, Tani (1996) criticized what he considered too many "art critics" for too few "artists". He also said that few people conduct research but many criticize that research. For the author, the field should produce more knowledge. This criticism was also made by Vaz (2003) when he said that PE had been producing much "literatism".

3 The area document is published every three years and is an evaluation of the area's development as well as the criteria used to evaluate graduate studies in PE, Physiotherapy, Occupational Therapy and Speech Therapy, which constitute the so-called Area 21 of Capes.

4 About the subject, the field still lacks analyses of the tensions and disputes with other fields to which it is subordinated, for example, within Capes. In that important institution, Physical Education is subordinated to the Health field and to Medicine in particular. There is strong tension and dispute between subfields, with a predominance of research lines linked to biodynamics over sociocultural ones.

This characteristic, often found in the 1980s, seems to have remained in the 1990s. Differently, in the first decade of the 21st century, it has gained new contours with sharper incorporation of the academic and scientific *modus operandi*, in line with the scientific policy in force in Brazil and abroad. Data indicate strengthening of research practice at the expense perhaps of the field of professional intervention, where conflicts found between pedagogical trends existing in previous periods were gradually "diluted" and started to be operated in the field of research.

Research topics and objects are reproduced. They are broad, coming from the so-called mother sciences and they do not converge much, thus hindering the possible tacit agreements and dialogues between agents from the PE academic and scientific community.

In this respect, it is possible to identify the effectiveness of two *modi operandi* in the field, established from mother sciences, whether they come from the agents' area of basic training or as fields of development for graduate programs where they work. Indications of that movement are found in knowledge conveyed on journals from the PE field with differences in ways of producing, operating concepts and building scientific communication.

These differences in the mode of knowledge production/transmission are more explicitly present in several indicators, as we pointed out elsewhere (LAZAROTTI FILHO *et al*., 2012). These indicators can be synthesized in the use of Brazilian or international literature, in reference to books or journals; in mobilizing the arguments of hard or soft sciences; in a preference for research topics and objects that are closer to the areas of nature or culture; in mobilizing preferably quantity or quality components; in the form of data collection and analysis; in the number and nature of the references used; and even in the number of characters required to communicate research results.

Field agents begin to forge new concepts, placing them in contrast with terms already established. This reflects the movement of the field in the dispute between ways of seeing and asserting the field itself, with new interpretations that translate disputes, including the power to name and classify objects and practices of the PE academic-scientific field. One evidence seems to be the increasing publication of conceptual dictionaries in the field, such as *Dicionário Crítico da Educação Física* (GONZÁLEZ; FENSTENSEIFER, 2005), whose third edition is about to come out, *Dicionário do Esporte* (MELO, 2007) and *Dicionário do Lazer* (Gomes, 2004).

Terms consolidated in the field also dispute, such as *academic* and *scientific*, *teacher*, *intellectual* and *researcher*. A dispute to be underscored is that between *academic* and *scientific* – notions that are intertwined in Brazil's scientific policy. That is because almost all scientific knowledge in the country is produced within universities or is somehow related to them and, more specifically, to graduate courses.

However, strong indications of autonomization and separation between both are observed, as in the change in the centrality of objects before and after the first decade of the 21st century. Before that, academic objects – or, according to Bourdieu (2009), theoretical theories – constituted objects of dispute in the field. From the first decade on, there has been intensification of scientific theories and scientific modes of production – somehow confirming a trend toward increasing autonomy of the scientific field.

Another indication of those changes is the nature of epistemological studies developed within the field of PE until the first decade of the 21st century. Previously, these studies used to focus on dissertations and theses within the sphere of training and their purpose was the

completion of study levels and degrees, thus being markedly academic. Examples of this type of study can be found in Souza e Silva (1990; 1997), Gaya (1994) and Molina Neto (2005). Currently, the analyses stress the results of studies published on scientific journals, such as Job, Fraga and Molina Neto (2008), Job (2010), Rosa and Leta (2010), Medeiros and Godoy (2009), Franco and Cunha (2009), Antunes, Silva and Baptista (2013).

Other terms and ways of operation also stand out, such as the figures of the intellectual and the researcher. From the first decade of the 21st century on, the centrality of both academic training and rating has shifted from the intellectual to the productive researcher. In a field with little tradition in production of scientific knowledge, the researcher ends up occupying a privileged space. At the same time, it is in research that today's most valued objects of dispute are found, such as productivity-based grants, funding for research and events, places for master's and PhD students, participation in editorial boards of scientific journals, selection boards, etc.

Considering these aspects, it is also necessary to keep in mind that disputes engendered within the field form subfields of power, which become defining structures for practices present within PE, as indicated by the analyzes performed by Manoel and Carvalho (2011).

4 FINAL REMARKS

Considering these elements, our view is that the field of PE in the last decade, by expanding, diversifying and becoming more dynamic, has been incorporating the academic-scientific *modus operandi*. By doing this, it forges its concepts supported by several established scientific matrices, but still with strong marks of the dialogue with "hard" and "soft" sciences, and establishing a dispute between authorized forms of constructing its objects –indications of that new academic-scientific moment in the history of this field. As in other fields already developed, scientific journalism intensifies as a form of communication between the scientific community and as their main media, marking and demarcating academic-scientific objects as worthy of attention and dispositions resulting from the *habitus* for the dispute between its agents.

The power established in the field and agents' struggles to keep it or modify it can be understood from the fields of struggle and the force fields present in the work of Pierre Bourdieu. They express themselves in the dispute for the construction of concepts and their representations, and in the constitution of two modi operandi present in the field of PE, which represent ways of seeing the field and their dispute to legitimize them as well as forming new generations of agents, inculcating ways of seeing it.

As the perspective of a future for the field of PE – in which we are located as agents involved and imbricated in its game – we advocate further debate about the changes that catch us and the constant mediations needed for future advances to occur. That is because we understand, as Vaz (2000), that PE is located at the boundaries of knowledge. Its specificity is in interdisciplinary dialogue, permanently requiring decision-making and production of conditions to strengthen, recognize and create its own modus operandi, thus increasing its relative autonomy. Still with Bourdieu (2004), we also understand that the field is the space where antagonistic views face up according to regulated procedures and integrate progressively, thanks to the rational confrontation, since the limit of a field is the very limit of its effects.

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