

# Incorporation of the humanities into the field of Physical Education: analyzing scoring processes in Brazil between 2007 and 2012

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## Abstract

This paper intends to discuss the position occupied by the humanities in the field of Physical Education and to call into question the relationship between the socially-established knowledge pertaining to the humanities as socially established and portrayed in publication outlets in the field and the interaction between Physical Education and subjects of the humanities. The goal is to reflect on scientific development with base on the communication between research in Physical Education as a whole and subjects and methods originated in the field of human sciences. In order to do that, we present an analysis of the relationship between the field of Physical Education and its incorporation of subjects and methods of the humanities. Articles published by some important Brazilian Physical Education journals from between 2007 and 2012 were organized and classified so as to provide substance to the discussion on the use of references from the humanities and its scope in this field of knowledge. The conclusion is that the understanding of the incorporation of subjects and methods belonging to the humanities by the field of Physical Education comes from observing aspects that are internal to the field itself and the specific characteristics of the humanities and, finally, the broader society that surrounds them and has an impact on the entire process.

KEY WORDS: Research; Physical Education; Human Sciences; Publication policy.

## Introduction

Science can be seen as a sort of modern religion, which endorses fields of knowledge and postulations about life's objective reality. Such a symbolic power bestows untouchable and unquestionable - except when the questioning is done by academicians - prestige and precedence upon scientific findings<sup>1</sup>.

The discussion about the development and evolution of science will always be a complex one. Science follows its own fundamental logic which is the establishment of true statements derived from the use of scientific method. This, on its own, constitutes a complicated issue, since there's not always a consensus regarding the different lines of thought which are supported within the academic community. It is also important to take into account the fact that science results from the work of human beings, who may be involved in

political disagreements or motivated by the search of financial and symbolic rewards, each individual having their own peculiarities.

Scholars make an effort to justify their endeavors in the quest for knowledge, such as scientific procedures that are often quite similar to standard experimental and observational methods even when their specific field of research does not require such tools. History, for instance, should not need data collection and processing methods used in basic sciences such as Physics<sup>1</sup>. This trend, however, can be currently observed due to the objective and experimental conception of science that the common sense holds true and that, in some cases, stands as a fundamental aspect for a research to be chosen by foundations that selectively provide grants and funds and by scientific journals.

The environment of Physical Education as a research field is very prone to this type of effort, since it presents a vast array of angles from which its subject (which can also be the source of disagreements, at times) is approached, not to mention the generalization that sometimes occur. Thus, what can be observed are scholars from diverse fields of knowledge who not only bring their methods and interpretations from different backgrounds, but also view science from different, at times competing, points of view.

This will be the scenario considered by this analysis in its debate on the role played by the humanities within Physical Education and in its canvassing of the relationship between knowledge that arises from the humanities - as socially established and promoted by publications in the field - and research subjects pertaining to Physical Education.

## Method

As any other scientific work, the following study addresses two articulated and complimentary dimensions. One regards the research technique, or the collection and processing of data and the other is the epistemological, or methodological, dimension of the research.

With respect to the research technique, the tools used are simple, adequate to the goals at hand and, therefore, little controversial. The approach is based on locating and comparing articles that are anchored in the humanities to ones that incorporate the principles of exact sciences within a relatively uniform, preselected corpus. Once the set of works was established, it was organized into subcategories created according to their recurrence, in order to look at the whole from a more complex and careful perspective.

The epistemological dimension, though, presents different challenges. The considered data only have meaning and therefore aid the understanding of what is real if they are articulated within a known and defined context, otherwise they could, for instance, constitute merely a simple and random assortment.

Raymond ARON<sup>2</sup>, in his most well-known "*Main currents in sociologic thought*", a commentary on interpretative sociology, states:

The characteristic process of the natural sciences is to take the general features of phenomena and establish regular or obligatory relationships among

This study aims to advance in the discussion about scientific development, having as a concrete reference the interaction between the production of research in Physical Education and subjects and methods originated in the humanities, from 2007 to 2012.

This premise considers the scientific field to be a place where struggles and clashes occur and which presents very specific features that differentiate it from other social spaces. Such definition forms the basis for this paper's attempt to scrutinize the relationship between Physical Education and subjects and methods produced within the humanities.

Bourdieu's concept of field and Lyotard's idea of performance are used in this undertaking. This paper seeks to establish a dialogue with the texts about the nature of Science and its contacts with society as a whole written by Paul Feyerabend and Mauricio Tratenberg, and in rare occasion with Habermas' concept of colonization.

them. It tends to build a progressively generalizing system of principles or relationships, as much as mathematically possible. It's a deductive method, organized by simple fundamental laws or principles. In historic or cultural sciences (...) the spirit does not seek to insert a formless subject into a mathematical relationships models; it selects the matter by relating it to values. (...) the result is not a hypothetico-deductive system, but a set of interpretations, all of which are selective and impossible to separate from the chosen system of values (p.471).

In the path to produce an interpretation of reality that supports this research from the primary perspective of an actor-subject of social action who pursues their goals in a rational manner, our basic reference - and therefore our fundamental value criterion as described by Aron - will be Bourdieu's work and, more importantly, his concept of field. In this sense, the field of research and education in Physical Education must contain communal characteristics; its members are able to recognize one another, share a *habitus* and compete with their peers, either individually or by forming internally acknowledged groups, for an increase in their material or symbolic capital. Additionally, we will take into account the concepts of performance as established by Lyotard when analyzing scientific production, and of alliances and reference groups as proposed by Gutierrez,

in order to help illustrate the phenomenon and not interfere with Bourdieu's basic proposition, instead conversing with it.

Always moving towards the construction of a conceptual grasp of Physical Education as a field, we also consider that, in the contemporary society, scientific production follows a reproduction format marked by bureaucracy, as pointed out by Tragtenberg and Feyerabend. Tragtenberg's work characterizes bureaucracy according to the presence of two aspects: evaluation and control. Broadly, every evaluation process inevitably incorporates a scale of values which, if we consider its insertion in social reality, can never be neutral or unbiased. In his most well-known book, *Against Method*, Feyerabend points to the evaluation and control trend in scientific production at the same time he warns about its threat to future originality and creativity in scientific endeavors.

Despite the relevance of this subject, it is not the intention of this paper to examine the effects of evaluation and control of scientific production as argued by the aforementioned authors. Here, specifically, the authors are quoted in order to illustrate the existence of a minimal level of homogeneity of the field to be studied that will validate the representativeness of the research sample and its results. Thus, to summarize, the concept of field (in relation to those of performance and formation of alliances and reference groups), along with the concept of bureaucratization (as the existence of a formal model of evaluation and control of the academic production) form the basis for this study and its final conclusions.

This article starts by giving a broad explanation about the history of Science and reaches its specific goal of examining the incorporation of discourses produced by the humanities by the field of Physical Education. In order to do so, it will discuss scientific autonomy within a bureaucratic universe, interdisciplinarity and the defining features of a scientific field. Lastly, it systematizes academic production that use the humanities as a reference in Physical Education journals, in this case, namely the journals *Movimento* and *Motriz*, as well as the *Brazilian Journal of Physical Education and Sport (RBEFE)* between 2007 and 2012. Such a choice is supported by the relevance of those journals within the field of Physical Education in Brazil, by the fact that they encompass a broad range of research subjects and by their impact factor score in the area number 21 of the *Qualis/Capes* foundation during the period analysed in this study. This decision was merely methodological, with the aim of illustrate the Brazilian scenario based on a sample of journals, what

do not disqualify the importance and contributions from others Brazilian journals on this period.

According to an analysis of the titles and abstracts, the articles published in the selected journals within the chosen time range were submitted to the following classification of fields or group of fields: a) education and Physical Education in schools; b) psychology, body image and body; c) social sciences, culture and gender; d) leisure and tourism; e) philosophy; f) history; g) dance and music; h) language and linguistics; i) disregarded due to specificity; j) disregarded: remaining fields.

In the occasions when an article used more than one reference method, the classification was made according to the keywords of the paper. When such a criterion could not provide conclusive results, and only then, the decision was made based on bibliographic references. Some articles were disregarded due to focus on very specific subjects within Physical Education (see letter "i"), despite using the humanities as reference, because they are highly unlikely to be included in humanities journals - e.g. articles about sport pedagogy, quality of life, the job market in Physical Education, inclusion and adaptation, or even epistemological and characteristic issues regarding scientific production and academic policy. Letter "j" encompasses the rest of the articles, which use biological and exact sciences as reference. In cases of uncertainty, the lack of reference to the humanities in the keywords was the criterion used to file articles under this category. Articles about quality of life, as well as ones about adapted Physical Education, weren't disregarded only when they presented a clear connection to the humanities. Aside from that, reason was applied. For instance, on the one hand motor development is mostly related to biology and on the other motor learning is related to education, although there might be exceptions according to the terminology chosen by the author who can be identified by checking the keywords and the abstract of the paper.

## Theoretical framework

### The scientific field

A social field is molded by the definition of discussion subjects and by the specific interests of this space, which are understood only by its members. Within a field, agents clash over the right to symbolic violence, that is, the power to guide the preservation or perform changes to the distribution of capital based on their acknowledged legitimacy as a socially prominent subject due to their possession of capital<sup>3</sup>. Therefore,

each specific field is relatively independent, that is, although it is influenced by the social environment that surrounds it to an extent, it has its own rules and history<sup>4</sup>. An example of that is the existence of the scientific field, in which subjects struggle for the legitimacy of their participation, academic acknowledgement, economic and political power within the set of principles and criteria established by their agents<sup>5</sup>.

The different types of capital are the powers that define the probability of success within a determined field. There are four fundamental forms that guide competition and which are interconnected<sup>3</sup>: economic (amount of money owned by an agent), social (regarding their social circle and interpersonal relationships), cultural (formal education and knowledge - related, among other forms, to regular education and knowledge obtained within a household) and symbolic (specific to each field, determined by what's deemed valuable by the *habitus* and customs within a space). Currently in the scientific field, for instance, some forms of symbolic capital are the quantitative productivity index of a researcher, their ability to attract funding for research or the relevance of their theory to a certain field of knowledge.

In this structure, the competition for acknowledgement and for the right to symbolic violence exists as in any other social space. The analysis of the behaviors of agents is done based on the comprehension of the social rules regarding competition and of the object of desire (symbolic capital). The shared understanding of the behaviors of agents and groups forms their *habitus*, which are structured and structuring frameworks, established according to the laws of a field and to the specific pathways to the competition for and acquisition of capital<sup>3</sup>.

The contemporary production of the scientific field is rooted in the philosophical and political development of the classical period, goes through the foundation of the first-ever universities in Muslim societies and in Europe between the 10th and 11th centuries and reaches current times in the form of modern science, which is largely defined by the scientific method and by the works of researchers such as Descartes, Galileo, Newton and Darwin. It is characterized by the clear definition of a research subject and by the adoption of a scientific method in order to produce systematic knowledge about a certain subject. Science presents explanation models, or theories, which are based on premises or paradigms by means of which it advances in the knowledge about the reality that surrounds us. In general terms, the subdivision into natural

sciences (basically the exact and biological ones) and society or human sciences is accepted as true. Looking at the current norms of the scientific field, we can often see clashes around capital assets among agents belonging to some of these subdivisions, be it through the questioning of the validity or scientific relevance of a certain field of knowledge, or through declaring support to the criteria for granting awards and rewards within a field<sup>5</sup>. Natural sciences are also referred to as hard sciences, due to its widespread usage of experiments and calculus, although there exists speculative research in this field (for example the discussions regarding the expansion or the contraction of the Universe) and also research in the humanities which are focused on experiments (some examples can be found in behaviorism) or statistic analysis (in political studies, for instance).

In the humanities, it is not possible to recognize and control every variable in a research, which unavoidably creates a factor of uncertainty. Let us take for example various researches that involved the identification of socio-cultural variables and the establishment of human relationships such as ethnographic studies or discourse analysis papers. In this example there can be observed a pursuit of rigorous method for perceiving and analyzing information by means of procedures often created or modified during the process - such as, for example, semi structured interviews<sup>6</sup> or procedures for generating grounded theories<sup>7-8</sup> - which take into account the intersubjectivity and even the relativity and specificity of the cultural environment surrounding the analysis.

Based on this structure, the examination of a social reality in the form of an account, is not performed in a social void, but subject to structural constraints, which means it is not only specific and objective as a microcosmic analysis of the subject, but it also considers all of the macro space around it in order to understand its drivers and the structures that frame it<sup>9</sup>. Such an analysis seeks to understand the social world from the perspective of contextualizing relationships that permeate the objects and the struggles for power in different spaces where social interaction occurs.

Thus, in order to scrutinize a social object, it is crucial to, from the beginning, understand its production, that is, the space where it is produced and its usage by the agents involved in it. At a conference held in the University of San Diego in 1986, Bourdieu used the act of observing a tree from a very close distance as an example. This makes it impossible to see and consider the forest around



it, and since this background was not determined before the analysis of the subject, there is no possibility of understanding from which perspective it is being looked at and what is, in fact, being seen.

According to Bourdieu<sup>3</sup>, it is futile to try to comprehend a work without knowing the history of the reality in which it has been produced. To understand the deepest logic of the social world, it is necessary to construct it as one among a world of possible configurations.

This mindset seeks to negate the substantive view of social subjects, which ascribe their existence within a group to biologic or cultural reasons. An example of this is that the nobility might drop a custom as it is adopted by the bourgeoisie and by lower classes. Likewise, an initially popular practice might be later adopted by the aristocracy<sup>3</sup>.

### The scientific autonomy, the bureaucratic world

Since the foundation of the first universities in the West in the 11th century, academic autonomy has been a central aspect of the development of science by providing an environment that favors freedom and creativity, where scientific evolution abides by its own logic of disinterested search for truth. History is rich in conflicts between the university and constitutional power. Currently, in Brazil and in the countries that produce the most knowledge, there is, to an extent, consensus regarding the importance of academic and research institutions having autonomy in order to advance in the pursuit of knowledge independently of any individual's political, religious or cultural stance. Those characteristics reinforce the definition of field provided by Bourdieu.

The autonomy described here is not an absolute one, but relative to the university's core activities: research, education and extension. In the specific case of universities within the State of São Paulo, Brazil, there also exists the issue of freedom from public financial management, due to the existence of a tax over the trade of goods and services (ICMS), which covers the state universities, as ruled by state legislation. Financial management freedom is determined by the university's core activities, which means the university is responsible for its own financial management as long as it stays focused on the functions it was created to perform.

The censorship, the political repression and the mandatory retirements seem to be in the past now. With regards to society and the constituted powers, paradoxical situations arise, such as when a crime

wave in University of São Paulo's (USP) campus in 2011 resulted in the death of a person, causing a significant part of the academic community to claim for the presence of the Military Police in the campus, thus generating a scenario of internal conflict. To summarize, the university has autonomy regarding the content of lessons, research programs and extension activities, but it also has to report to society and seek to improve the communication channels, even with the market. Academic autonomy must not transform the institution into a sort of Autonomous Republic of Knowledge, or worse, into a village of indomitable Gauls. The theoretic construction of Brazil's state-funded scientific production is contained by this scenario and is somewhat autonomous regarding the policies for functioning and distributing specific capitals, bestowing power upon prominent agents, but also has to, mainly due to its public nature, contribute to the improvement of society as well as abide by its laws.

In a progressively commercial and institutionalized society, the boundaries of scientific autonomy can be found in different instances, such as in the definition of policies that regulate research funding, in institutions that evaluate the performance of teachers, in the legitimacy of indices that nearly demand that researchers publish their work in certain publications to the detriment of others, or even in the relationship with the market and the presence of private funding and of foundations that are external to the academic policy of scientific development, among others. This process, which can be label as bureaucratization, constitutes a complex situation, whose description is not among this paper's goals. However, it is important to reaffirm that the current situation is not strange or surprising. In the 80's, authors such as Maurício Tragtenberg and Paul Feyerabend critically described issues that now became apparent.

TRAGTENBERG<sup>10</sup>, in his "*A delinquência acadêmica: o saber sem poder e o poder sem saber*", warned about the political use of science in favor of constituted power, its subservience to the market and a bureaucratic tendency that turns means (evaluation processes, for instance) into ends and ends (endorsing novelty and creativity, for example), are lost. FEYERABEND<sup>11-12</sup>, on the other hand, in his "*Against method*" and "*Farewell*" questions the mythical aspects of contemporary science when it presents itself much more encompassing and cohesive than it actually is, its conservative tendency of favoring the oldest hypothesis and not necessarily the best one, as well as its ignorance regarding other perceptions of reality, including popular and traditional knowledge.

It also accuses scientists of following the easiest path to proving a hypothesis and, therefore, more easily published and more profitable to the researcher, as opposed to seeking more original ways which would require longer research processes, impose a bigger challenge to publication, but which also would bring more knowledge and benefits to the society in the long term.

In this article we will assume that scientific knowledge maintains its legitimacy within contemporary society and, despite the criticism and the obstacles, keeps expanding its space and importance in the professional world. The central issue here is to understand, within our limits, this process of evolution and expansion of science in order to address the specific issue of the relationship between Physical Education and the humanities.

### Interdisciplinary

The evolution of research in the humanities within Physical Education is characteristic of a multidisciplinary field, where the connection among references from different backgrounds allows for one of them to make advances in the study of the new research subjects. This setup, which can also be classified as interdisciplinary, presents a form of colonization, as described by HABERMAS<sup>13</sup> in "*The theory of communicative action*", of subjects and methods from another field of knowledge by a constituted and institutionalized field, where the intellectual quality of production must be observed, as well as the political relevance of the field within the academy, in order to legitimize new knowledge being produced and allow for researchers to access funding sources and positions in the field of work organizations.

In this paper, we will consider Physical Education's hard, fundamental core primarily concerns the preparadness for physical activity, the relationship between exercise and health, as well as sports. Those matters must be seen from two perspectives: a) in relation to the evolution of society as a whole, including its cultural, political and commercial dimensions, which present new requirements and values; and b) in the dialogue established by the research field as institutionalized within the academy with the other scientific fields. This process leads us to the current state of Physical Education as a higher education program, which has a curriculum defined by competent organs and an important presence in its specific fields, either due to a professional element or to its development of theory and intervention.

The humanities are, in general, composed of the following subjects: social sciences (anthropology, sociology and politics), philosophy, history, geography, education, psychology, linguistics, law, administration, economy, accounting and architecture. Such a diverse set of subjects is united by their concern with human beings and their ways of interacting and expressing themselves, and by the perpetual debate among different schools of thought, or paradigms, given the difficulty of applying experimental methods for ultimate proof. Furthermore, there are important differences among them regarding their development, academic validity, quality and quantity of systematic production<sup>14</sup>.

Keeping in mind the relationship between Physical Education and the humanities, we can state that, initially, there is a constituted field which, in order to expand, begins to incorporate resources which were developed outside of it, according to the concept of expansion within the field and to which publications are considered legitimate, what are its funding institutions and what careers are defined in the academic institutions. That means the ability of research field "A" to successfully incorporate subjects and methods belonging to field "B" depends on the possibility of validation of the new tools within field "A" institutionalized scientific space. Therefore, this movement starts and ends within field "A". Accordingly, this relationship cannot be regarded as an equal one, since the end goal is the expansion of knowledge in publications specific to one of the fields, and not the creation of a common area or a third research field, although these processes may occur naturally<sup>14</sup>.

The array of researches in Physical Education related to the humanities reveals these movements in a relatively clear manner. The process as a whole, though, develops in an unequal fashion. There exists, for instance, a strong exchange with sociology which is displayed in congresses and publications, and basically none with the field of law. This means the interaction between the field of Physical Education and the humanities is not linear, although it cannot be said that it is random or dependent on phenomena that are impossible to observe. This study aims to examine the nature of such heterogeneity<sup>15</sup> from the point of view of the political interpretation of scientific development.

The development of a research field does not simply exist in a vacuum, but derives from the influence and specific interests of valid research groups, recent history, funding lines, new researches in the field and the media as a showcase for current

issues. Specifically with the field of Physical Education, it is important to know it is focused on placing its graduates in the job market. In this respect, perhaps the first element for understanding its remarkable rapport with other fields, mainly with the humanities, is the core curriculum of graduation.

In general, the humanities courses included in Physical Education's core curriculum and which reached a relevant level of development and presence in the scientific field are:

- a) social sciences (politics, sociology, anthropology);
- b) psychology;
- c) research method/theories of knowledge/epistemology;
- d) philosophy/ethics;
- e) education/pedagogy/didactic/structure and operation of education;
- f) leisure/recreation;
- g) management/ sports marketing.

The presence of a certain field in Physical Education's core curriculum seems to be essential for understanding the relationship with human sciences, but it doesn't seem to be enough to shed light on the internal heterogeneity of this movement. It is important to consider the internal sensitivities, the agency of people and important institutions and the inverse appropriation process of the field being incorporated by Physical Education.

That is, in a relationship in which field "A" (Physical Education) aims to incorporate subjects and methods from field "B", there are the following explanatory criteria:

*Criterion #1:* presence in the core curriculum and previous tradition of exchange between the fields. Fields that practice this exchange tend to stand the test of time, in a kind of inertia.

*Criterion #2:* internal sensitivities of field "B". The rapport with sociology may serve as an example. In the 1990's, when several groups originated in Physical Education began organizing systematic research in the sociology of sport, based on authors such as Norbert Elias and Pierre Bourdieu, sociology itself was going through an intense paradigm crisis, which resulted in a crossroads where the choices were to either revise the field and incorporate new concepts in authors or to go back to the classics and deepen and/or take their views to an extreme.

Sociology as adopted by Physical Education did stay out of this debate, since specific authors were chosen and it was adapted specifically to sport as a subject.

*Criterion #3:* legitimacy and complexity of field "B": for a validity conflict, we can take the relationship between Physical Education and education as an example. In "school-level Physical Education", it is hard to identify the central element - is it Physical Education or the school? The legitimacy of the production knowledge about all the aspects of education, along with ties to institutional power and the fact that people who graduate in it exert formal power over the structure of education may lead to an incompatible, unequal partnership.

*Criterion #4:* complexity of field "B": An example for this is the fact that Law is largely absent from the core curriculum, but is indeed important. The increasing presence of law issues in every sphere of social life, it is quite plausible that current Physical Education students may face some sort of legal dispute. Rapport with this field is almost inexistent, which is probably due to the complex and specific nature of knowledge in Law.

As it was stated before, this incorporation starts and ends within the original field, in this case Physical Education. It is necessary, aside from observing the qualities of the other fields, take the heterogeneity in the original field itself into account. This means that the expansion of Physical Education through the incorporation of subjects and methods from research in the humanities faces resistance from different groups which are established and acknowledged in the humanities as well as internal resistance within Physical Education.

Economy teaches us that resources are scarce in society. The field of Physical Education is no exception to this rule. The advancement of Physical Education researches in the humanities is shown in relevant articles and journals. Its validity depends, however, on recognition within their own field, where the two conflicting forces will clash. On the one hand, the field needs to expand, but, on the other, expansion could mean the diminishment of material resources being distributed in the field and result in the endangerment of status quo. This might be seen as the biggest example of struggle for symbolic capital within this field.

## Results and discussion

The various Physical Education journals and their most recurring subjects will be interpreted here as a significant indicator of reality in order to illustrate the academic political relationships we talk about. This choice was made based on the fact that the scientific field is a space where there are clashes and struggles for material and symbolic rewards. In this field, the success of a social agent greatly depends on their holding a position as a professor in post-graduation courses, to which they need to publish in peer-reviewed journals. Due to the way science and knowledge have evolved in contemporary society, every researcher must reach a high level of specialization in certain subjects, which makes renewals much more difficult. This means that the success and ascension in ever researcher's career depends as much on their individual competence as on the expansion of their specific area. Thus, both valid journals from a certain research field and the articles published in it symbolize a long chain of articulated behaviors where all subjects are rationally seeking results that are specific and useful for their purposes, by foreseeing movements and expectations arising from other subjects, aiming to amplify their material and symbolic rewards by forming alliances<sup>16</sup>.

When a Physical Education researcher finishes an article about a humanities subject, they have to choose between: a) submit it to a humanities journal published by a group unrelated to Physical Education; or b) submit it to a Physical Education journal that covers this kind of subject.

Choosing option a) might occur, basically, because of the following possibilities:

- 1) Due to its specificity the subject would not be well received outside from the humanities' field;
- 2) The author might be interested in achieving validation in a certified journal in the humanities;
- 3) Being published outside the Physical Education field may create new professional options that might be useful in the future;
- 4) They hold a specific social relationship capital that facilitates their entrance in that field. In other words, they stand a better chance with that group than with the alliances which formed in their reference group.

Choosing option b) on the other hand, might occur because:

- 1) The search for higher evaluation from CAPES, since publications in the field are better rated than external ones;
- 2) Although the subject interacts with human sciences, it is much more fit to the field of Physical Education;
- 3) They hold a specific social relationship capital that facilitates their activity in that field. In other words, they stand a better chance with the alliances which formed in their own reference group.

Let's take the presence of journals regarding the humanities in area 21's Qualis (area 21 encompasses Physical Education, Speech-language Pathology, Physical Therapy and Occupational Therapy):

TABLE 1 - Quantity and classification of journals regarding the humanities in area 21's Qualis/Capes in 2012.

	B5	B4	B3	B2	B1	A2	A1	Total	Position
Education	11	4	3	3	8			29	1st
Psychology	9		5	5	7			26	2nd
Social sciences/Culture/Gender	9	1	2	5				17	3rd
Leisure/Tourism	3	2		1	2			8	4th
Language/Communications	3	2	1					6	5th
Philosophy	4			1				5	6th
History	2	3						5	6th
Music/Dance	1	1						2	7th
Geography	2							2	7th
Library science	1							1	8th
Architecture/Urbanism	1							1	8th
Administration/Economy	1							1	8th
Social services	1							1	8th



TABLE 2 - Distribution of Human Sciences journals into the different segments of Qualis/Capes in the area 21 in 2012.

Qualis Level	B5	B4	B3	B2	B1	A2	A1
Percentage of journals	46.00%	11.00%	10.00%	11.00%	21.00%	zero	zero

These data are based on an approximation, since no journal has a strictly defined profile, which means they encompass many areas or even explore the borders among them. It is also important to consider that area 21 in CAPES contains, along with Physical Education, the fields of Physical Therapy, Occupational Therapy and Speech-language Pathology, which may explain, for instance, the high number of psychology journals. We must highlight the issue of the evaluation of humanities journals at B1 maximum, even if they have achieved higher scores in their field of origin. However, what is seen in the table above does not correspond to biological sciences, since medical journals are sometimes rated A1 and A2 within area 21.

TABLES 1 and 2 depict the difficulty faced by humanities journals in that period in going from a B1 to an A2 rating in area 21, no matter how highly regarded it was in its field of origin<sup>a</sup>. If the relativity of this analysis is taken into account, some possible causes for that can be suggested. Firstly, it has to be made clear that this is a process through which Physical Education validates external journals. What are its most evident consequences? It is a shift in the criteria for qualification to receive Qualis scores, which has an impact on the formation of a field's elite and, correspondently, on the internal distribution of material and symbolic assets. The observable undervaluation of humanities journals on that period, if compared to biology journals, can be thus seen as part of a well-established competition between those fields within Physical Education. Another consequence can also be identified. In theory, humanities journals should be more strict and

updated (and eventually more entrepreneurial too) when evaluating research in the field, that is, when publishing a humanities article in a field-specific journal, the Physical Education researcher would be proving themselves more competent and up-to-date. In reality, by under evaluating Human Sciences journals, Physical Education may be discouraging its professionals from improving research quality through competition with evaluators who are specialized in those subjects and methods. This means that this practice could entail a decrease in the level of quality of Physical Education's potential production.

Another interesting approach regards the presence of articles focused in humanities subjects in the some of the main Physical Education journals. In order to fill in the following tables, the presence of humanities-specific subjects in the abstract and among the keywords was considered, as explained before. Articles that had a central subject or method originated in the humanities were separated from articles classified under "Physical Education + humanities subject", which concerned humanities subjects but were too focused on Physical Education (as they would hardly be accepted for evaluations outside this field). "Physical Education + exact or biological references" contains articles in Physical Education that answer to references from the hard sciences. We also present a total number of humanities articles separate from specific Physical Education articles that referenced the humanities. Evidently, this evaluation is not as precise as a lab test. Its results must be interpreted as a broad depiction of the scenario in the field, pointing to the existence of some trends (TABLE 3).

TABLE 3 - Article distribution by area and journal between 2007 and 2012.

Journal	Motriz	%	Movimento	%	RBEFE	%
Subject and method specific of the human sciences	200	41.1	192	72.7	64	26
Physical Education referencing the humanities	81	16.7	37	14	62	25.2
Physical Education referencing the natural sciences	205	42.2	35	13.3	120	48.8
Sum of categories "Subject and method specific of the human sciences" and "Physical Education referencing the humanities"	281	57.8	229	86.7	125	51
Total	486	100	264	100	246	100

These numbers reveal the editorial guidelines of each journal. The journal *Movimento* focused on the transmission of human sciences subjects, while *Motriz* sought to maintain a balance between the humanities and the hard sciences. In turn, *RBEFE* presented the

largest distribution of subjects and areas, which might point to a bigger diversity within the possibilities for research in the field of Physical Education (TABLE 4).

The results of comparing the profile of the three journals can be seen in TABLE 5.

TABLE 4 - Production in the field of human sciences by journal and subject (from 2007 to 2012).

Journal	Motriz	%	Movimento	%	RBEFE	%
Education and school-level Physical Education	74	37	72	37.5	24	37.5
Psychology, body image, body	37	18.5	13	6.8	6	9.4
Social sciences, culture and gender	28	14	51	26.6	15	23.4
Leisure and tourism	37	17	20	10.4	4	6.2
Philosophy	5	2.5	8	4.2	2	3.1
History	10	5	15	7.8	12	18.8
Dance and music	10	5	12	6.2	1	1.6
Languages and linguistics	2	1	1	0.5	zero	zero
Total articles using subjects and references from the humanities	200	100	192	100	64	100
Total of published articles	486		264		246	

TABLE 5 - Overview of humanities references in articles in the field of Physical Education.

	Movimento		Motriz		RBEFE	
1º	Education	37.5	Education	37.0	Education	37.5
2º	Social sciences/ Culture/Gender	26.6	Psychology	18.5	Social sciences/ Culture/Gender	23.4
3º	Leisure/Tourism	10.4	Leisure/Tourism	17.0	History	18.8
4º	History	7.8	Social sciences/ Culture/Gender	14.0	Psychology	9.4

A relevant aspect here is the importance of the field of education as the main source of exchange of Physical Education with the humanities, followed by Social Sciences/Culture/Gender, Leisure and tourism, Psychology/Body image/Body and History. The dialogue between education and school-level Physical Education constitute the core of interaction between those fields, not only due to the historical dimension of school-level Physical Education, but also to the fact that education has a great number of journals in the different areas of *Qualis*.

The fields that show the least interaction indicate the possibility of exploring less common subjects which might, exactly because of it, become branches for researchers and research groups that specialize in the future, given the low competition rate they present. It is worth noting, for example, the lack of

a dialogue with Law and even with administration. Nevertheless, it is also important stating that the qualification system for post-graduation courses does not encourage innovation. An education article will be conveyed in a space that corresponds to 40% of all Physical Education journal, which offers the author a vast array of options as plan. Philosophy- and languages-related texts take up about 5% of Physical Education journals and have specialized journals, which do not interact with Physical Education, as plan B.

This setup cannot be considered strictly conservative. It accommodates innovation as long as it comes from constituted, legitimate fields, that is, the conventional innovation. However, as pointed out by Tragtenberg and mainly Feyerabend, innovation as violent disruption with paradigms, even if they

converse with new and original perspectives, tend to have a hard time finding listeners. This path is a risky gamble for the researcher who needs to survive in a system of constant evaluation, if we compare it to the mere innovation of conventional matters.

Scientific production is complex and dynamic. The constant search for the construction and transmission of scientific narratives is added to the political character of organizations and institutes and to the personal peculiarities, not to talk about the randomness. Trying to understand this framework in real time makes the task even harder.

Understanding the incorporation of humanities elements into Physical Education depends on the observation of internal aspects of the field itself and its challenges, as well as specific features of the human sciences and, lastly, of the society that surrounds it and has an impact on the whole process.

This article sought to outline some of these features and put them in perspective in order to advance in the discussion, not aiming to reach a definite conclusion. Essentially, it purports to contribute to the discussion and establishing a dialogue with the different agents in the scientific and academic community. It also aims to relate Bourdieu's thought to that of some scholars who, in spite of being recent, are seldom part of the debate, such as Feyerabend and Tragtenberg, and constitute *value system*, as defined by Aron, without which the analysis could not be developed.

As closing arguments, we mention the importance of understanding education and research within Physical Education, the subjects who achieve prestige in the field, groups and their researches, as well as the habitus of scientific production in the field. The concept of performance when analyzing scientific production and the concept of alliances and reference groups illustrate the strengthening of certain research field to the detriment of others.

The field of Physical Education between 2007 and 2012 as analyzed by this study represents a

reproduction format marked by institutional, or bureaucratic, values, which are characterized by the establishment of evaluation and control, where the incorporation of biological sciences and the insertion of subjects into the core curriculum of the course. Therefore, scientific production in this period follows a value scale that is not neutral and could (or still can) pose obstacles to the potential originality and creativity of scientific work. These factors support a space where there are struggles for power guided by criteria for evaluation and distribution of capitals which do not reward all fields uniformly. The consequences of this scenario are solidified into differentiations and struggles for distinction that affect spaces such as post-graduation programs and the organization of journals. Some products of this process are adaptations and transformations in some fields of human sciences related to Physical Education so they could adapt to the power distribution logic of this field.

In recent times, there have been some actions within area 21 towards finding methods and criteria for evaluating journals that allow for less difference in access to highly-regarded publications in the different research fields within Physical Education. The result of these changes derived from, among other causes, the characteristic struggles and imbalances of the area being studied, cannot be measured yet. This is why new researches in a near future are important, so that they complement this diagnosis about the academic production in area 21.

Nevertheless, it is important to consider the field is composed of rational people, endowed with initiative, freewill and ethics, which means reaching consensus, even if relatively, is not impossible, in order to make evolution, growth, originality and preservation goals of less represented sectors in one area matter more than the specific and immediate interests of people and groups in the field. This might be the biggest challenge being currently faced.

## Note

- a. It is important to observe that this paper regards a period, between 2007 and 2012, that precedes the adoption of some measures by CAPES in 2015 which changed some criteria for the scoring of journals in order to diminish the inequality in the access to the most highly regarded publications in the various research fields within Physical Education. The results of this measure will only be available for analysis in the future.

## Resumo

Apropriação das ciências humanas pela Educação Física: análise dos processos de classificação no Brasil entre os anos de 2007 e 2012

Este trabalho problematiza a posição ocupada pelas ciências humanas dentro do campo da Educação Física e questiona como se dão as relações entre o conhecimento próprio das humanidades, socialmente estabelecido e exposto em seus veículos de divulgação, e as interfaces com os objetos de pesquisa desta área em específico. O objetivo foi propor uma reflexão sobre o desenvolvimento científico, tendo como referência concreta a interação entre a produção geral do campo da pesquisa em Educação Física e sua interação com objetos e metodologias originais do campo das ciências humanas. Para tal, é apresentada uma análise da relação entre o campo de pesquisa em Educação Física e sua apropriação de temas e métodos originais das ciências humanas. Foram organizados e categorizados artigos publicados por três importantes periódicos da área de Educação Física no Brasil, entre os anos de 2007 e 2012, de modo a subsidiar a discussão sobre a abrangência e utilização de referenciais das ciências humanas nesta área de conhecimento. Como conclusão, aponta-se que a compreensão da apropriação de temas e referenciais das ciências humanas pela Educação Física depende da observação de aspectos internos à própria área e suas disputas, como também de características específicas das ciências humanas e, por fim, da sociedade mais ampla que rodeia e interfere em todo o processo.

**PALAVRAS-CHAVE:** Pesquisa; Educação Física; Ciências Humanas; Política de publicação.

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