59 - INTERDISCIPLINARITY AND PATRIMONY: ISAAC NEWTON ENTERS A FIELD IN THE MUSEU CIÊNCIA E VIDA

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The world notion of private patrimony is something that appears initially in ancient Rome and concerned everything that belonged to the father of the family (pater familias). (FUNARI; PEGEGRINE, 2006). There was no such definition of patrimony or public good. Unlike our society, the Romans' view of heritage was a little more exacerbated by the historical context of their time. It is logical that we do not intend to compare the current concept of private property criticizing the ancient Roman concept. When we speak the word "exacerbated" we do not have the slightest intention to make a criticism, even because it would be a gross anachronism, however we use the word to understand that if we were to relate the goods of a person today in the XXI century, with those of A person of ancient Rome, about the third century, with the vision we have today we would look at the Romans with a certain look of panic since for them heritage was all material, immaterial goods (beliefs and customs), as well as all that Was moving, that is, we are not talking about a herd of animals only, but of people; Children wives, slaves, "people" in the real meaning of the word.

So think today, in the twenty-first century that people have already been part of wills without the historical view takes us from the tragic impact to panic, so the use of the word "exacerbated." The notion of patrimony today differs only from that of Rome by not including people, thanks to the advancement of humanity.

Our intention to think about the city and, consequently, the right to the city, calling here the discussion of Henri Lefebvre (2001), author of The Right to the City. The text of Lefebvre (2001), part of the historical question regarding the city and the transformations undergone by the process of industrialization. In addition, the author draws attention to the philosophical dimension that involves the construction of the right to the city, as well as the problems that the urban reality presents. It reminds us of the need to understand how the population interacts daily with its spaces. As urban bodies move consciously and unconsciously in the perspective of interaction with their spaces, whether in relation to the Museum as a movement, or with their exhibitions.

In order to do so, we must consider the question of patrimony within the interdisciplinary perspective. It is to understand that the historical and cultural heritage of a particular people is not something natural, that survived, that persisted and fought against time for permanence, but rather Chosen to be there and this choice is what legitimizes a struggle for permanence in the contemporary world, where the new one surprises every day leaving many times the margin, the importance of cultural heritage is material or immaterial. Both in the work of Le Goff (1996) and in Maria Cecilia Londres Fonseca (2005) we find the agents responsible for safeguarding memory, which are historians, state forces, intellectuals and the users themselves. It is important to emphasize that this choice is not only related to the construction of national symbols but also to cultural values, linked to the formation of a national and social identity, however, it is necessary that our eyes turn to the question of choice again.

In this sense, interdisciplinarity is considered as a counterpoint to the compartmentalization of disciplines and knowledge. There is a movement to reunite the concepts that cross the different scientific areas. Can this movement also be perceived in publicly accessible exhibitions in the various museum spaces? How sports such as football, volleyball, gymnastics and swimming can have connections with modern physics and be influenced by it? And Physics! One of the most unpopular disciplines among Brazilian high school students.

The Museu Ciência e Vida, anticipating sport-oriented interest at the time of the Olympics, offered the public an exposition where the laws of the Isaac Newton movement enter the field. The exhibition "Move! Sports Physics "had as a proposal to unite what athletes and Newtonian physics have in common. The exhibition covering an entire floor (700m2) was divided into two large areas. The first, called the Knowledge Stadium, encouraged participants to learn about the laws of Newton's movement and to realize that these concepts are part of our daily lives, especially the everyday life of athletes. Consecrated names of the sport illustrate the laws of motion, starting with the famous "Pele's bicycle" immortalized in the Stadium of Maracanã on 06/02/1965.



(Photo: Museu Ciência e Vida)

The second part, more interactive, proposed that visitors "put into practice" the concepts learned in the Olympic Arena through five modalities from the Olympics to the Paralympics (7-a-side soccer, seated volleyball, swimming, artistic gymnastics and running) .



(Photo: Museu Ciência e Vida)

The opening of the exhibition took place on September 30, 2015 by Prof. Carlos Eduardo Bielschowsky (President of CECIERJ) and Profª. Mônica Santos Dahmouche (Vice-President and Director of the Museum) and was widely disseminated through the medium media (both on the museum's own website and CEDERJ, CECIERJ, RJ), as well as on-line newspapers and well-known scientific magazines - Science Today and Science Today for Children).



(Photo: Museu Ciência e Vida)

The Museu Ciência e Vida is the main reference in scientific dissemination of the municipality of Duque de Caxias, located in the Baixada Fluminense, in the State of Rio de Janeiro. The museum was inaugurated in 2010 on the initiative of the CECIERJ Foundation and has several activities that are attractive to the different publics (from children to adults) of the place and its surroundings. According to information published in the magazine Ciência Hoje online by Profª. (And physics!) Monica Dahmouche - director and curator of the museum --- Move was the first large exhibition developed in the museum and whose purpose is "to spread science in a fun and attractive way." Anticipating the interest of the population for the Rio 2016 Olympic Games, it affirms that science and pleasure can be linked and subjects of daily life attract much more the public.

“As science museums, we want to talk about science and contribute to it being understood by all and associated with pleasurable movements. [...] We know that all the attention is focused on this event, so talking about science and sport is a good hook to attract the public." (Prof. Monica Dahmouche - CH - Ed. 2141 - 08/10/2015)

We perceive that the museum's proposal echoes the pedagogical practice of teachers. Various materials have already been published developing this subject. An example is the lesson plan of Prof. Gustavo Isaac Killner (Presence and influence of physics in sports), published in "Veja Sala de Aula" in 2006. Using the problematization and the choice of a sports modality - pole vault - the teacher's proposal is developed through reflections on The possible applications of physics in sports modalities in a way that helps athletes to overcome limitations. Contemplating an interdisciplinary proposal the didactic sequence also involves: research of preferred sports and periodic physical activities of the students; The history of sport and the influence of technology on sports; The relationship between food and energy; The transformation of kinetic energy into potential energy, the cultural construction of the concept of gender in sport, and gender issues, regular physical exercises). Another is the article "Physics in Sport" published on 09/26/2012 and still available on the website of the Physics Institute of São Carlos (University of São Paulo). Although not following the interdisciplinary path, it follows the same scheme of reflection - Sport, Physics and Technology - and relates the concepts of this discipline as "basic science that is involved in everything that surrounds us" and, therefore, an ally in our daily life.







In this sense, our proposal is to observe how some thematic projects within the perspective of studies in the Baixada Fluminense region, in Rio de Janeiro, are using, above all, the paradigm of the struggles for recognition and rights of the subjects in the urban body. This position has allowed the members of this process and other citizens to participate in the knowledge and perspectives of the orientation of educational policies, aimed at a new way of living, preserving, guaranteeing sustainability and promoting knowledge in this region.

The consideration of the relation between city - body - monument should be examined in the spaces of sociability existing

in the city of Duque de Caxias that can be found in its historical patrimony, as is the case of the Museu Ciência e Vida, as spaces of interrelation Between bodies and the city in its architectural dimension and in the expression of culture and education in search of freedom and presentation of the existing cultural and scientific diversities.

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INTERDISCIPLINARITY AND HERITAGE: ISAAC NEWTON ENTERS A FIELD IN THE MUSEU CIÊNCIA E VIDA

This work is part of an interdisciplinary project developed in NURBS (Center for Urban Studies) created in PPG in Humanities, Culture and Arts, UNIGRANRIO coordinated by one of the authors and composed by other authors, from the Program Jovem Cientista do Nossos Estado / FAPERJ, a project that reflects on current issues of the Duque de Caxias city, in Rio de Janeiro, including the Museu Ciência e Vida, as an expression of monumentality that expresses and embodies a defined project for the City. Thus, we will discuss here the question of heritage within the interdisciplinary perspective, understanding how something that was chosen to be built as a fighting chance by staying in the contemporary world, where new surprises every day often leaving the bank, importance of cultural heritage is material or immaterial. To do so, choose here the Museu Ciência e Vida, as a monument to be studied not only for its architecture but also for its activities. In this case, specifically, the exhibition where the laws of Isaac Newton movement were shown as a way to work the scientific and physical perspectives. The exhibition "Move around! The Physics of Sports "had as proposal to unite the athletes and Newtonian physics have in common, encouraging participants to know the laws of motion Newton and realize that these concepts are part of our daily lives, especially everyday athletes. Thus, we show how memory, heritage and science go together in interdisciplinary perspectives in the desire for a scientific publication from a cultural perspective.

Key Words: Interdisciplinarity - Body – Museu Ciência e Vida

INTERDISCIPLINARITE ET PATRIMOINE: ISAAC NEWTON EST DANS DOMAINE DE LA SCIENCE MUSEU CIÊNCIA E VIDA

Ce travail fait partie d'un projet interdisciplinaire développé en NURBS (Center for Urban Studies) créé en PPG en sciences humaines, Culture et Arts, UNIGRANRIO coordonné par l'un des auteurs et composé par d'autres auteurs, de l'expert scientifique Programme Jovem Cientista do Nosso Estado / FAPERJ, un projet qui se penche sur les enjeux actuels de la ville Duque de Caxias, à Rio de Janeiro, y compris le Museu Ciência e Vida, comme une expression de monumentalité qui exprime et incarne un projet défini pour la ville. Ainsi, nous allons discuter ici la question du patrimoine dans la perspective interdisciplinaire, comprendre comment quelque chose qui a été choisi pour être construit comme une chance de se battre en restant dans le monde contemporain, où de nouvelles surprises chaque jour laissant souvent la banque, importance du patrimoine culturel est matériel ou immatériel. Pour ce faire, choisissez ici le Museu Ciência e Vida, comme un monument à étudier non seulement pour son architecture mais aussi pour ses activités. Dans ce cas, en particulier, l'exposition où les lois du mouvement Isaac Newton ont été présentés comme un moyen de travailler les perspectives scientifiques et physiques. L'exposition «Déplacez-vous! La physique des Sports "avait comme proposition d'unir les athlètes et la physique newtonienne ont en commun, encourageant les participants à connaître les lois du mouvement de Newton et de réaliser que ces concepts font partie de notre vie quotidienne, les athlètes en particulier de tous les jours. Ainsi, nous montrons comment la mémoire, du patrimoine et de la science vont de pair dans des perspectives interdisciplinaires dans le désir d'une publication scientifique dans une perspective culturelle. Mots clés: Interdisciplinarité - Body – Museu Ciência e Vida

LA INTERDISCIPLINARIEDAD Y PATRIMONIO: ISAAC NEWTON ESTÁ EN EL CAMPO EN EL MUSEU CIÊNCIA E VIDA

Este trabajo es parte de un proyecto interdisciplinario desarrollado en NURBS (Centro de Estudios Urbanos) creada en PPG en Humanidades, Culturas y las Artes, UNIGRANRIO coordinado por uno de los autores y compuesto por otros autores, desde el científico del programa Jovem Cientista do Nosso Estado / FAPERJ, un proyecto que reflexiona sobre temas de actualidad de la ciudad de Duque de Caxias, en Río de Janeiro, incluyendo el Museu Ciência e Vida, como una expresión de la monumentalidad que expresa y encarna un proyecto definido para la ciudad. Por lo tanto, vamos a discutir aquí la cuestión de la herencia dentro de la perspectiva interdisciplinaria, la comprensión de cómo algo que fue elegido para ser construido como una oportunidad de luchar por permanecer en el mundo contemporáneo, donde las nuevas sorpresas cada día a menudo dejando el banco, importancia del patrimonio cultural es material o inmaterial. Para ello, seleccione aquí el Museu Ciência e Vida, como un monumento a ser estudiado no sólo por su arquitectura sino también por sus actividades. En este caso, en concreto, la exposición donde las leyes del movimiento de Newton se muestran como una manera de trabajar las perspectivas científicas y físicas. La exposición "Mover alrededor! La Física de los Deportes "tuvo como propuesta para unir a los atletas y la física newtoniana tienen en común, alentando a los participantes a conocer las leyes del movimiento de Newton y darse cuenta de que estos conceptos son parte de nuestra vida cotidiana, especialmente los atletas de todos los días. Por lo tanto, se muestra cómo la memoria, el patrimonio y la ciencia van de la mano en perspectivas interdisciplinares en el deseo de una publicación científica desde una perspectiva cultural.

Palabras clave: Interdisciplinariedad – Cuerpo – Museu Ciência e Vida

INTERDISCIPLINARIEDADE E PATRIMÔNIO: ISAAC NEWTON ENTRA EM CAMPO NO MUSEU CIÊNCIA E VIDA

Este trabalho faz parte de um projeto interdisciplinar elaborado no NURBS (Núcleo de Estudos Urbanos) criado no PPG em Humanidades, Culturas e Artes da UNIGRANRIO coordenado por uma das autoras e composto pelos outros autores, a partir do Programa de Jovem Cientista do Nosso Estado/FAPERJ, num projeto em que se reflete sobre questões atuais da Cidade de Duque de Caxias, no Rio de Janeiro, compreendendo o Museu Ciência e Vida, como expressão de uma monumentalidade que expressa e concretiza um projeto definido para a Cidade. Deste modo, vamos discutir aqui a questão de patrimônio dentro da perspectiva interdisciplinar, o compreendendo como algo que foi escolhido para ser construído como uma possibilidade de luta pela permanência no mundo contemporâneo, onde o novo surpreende a cada dia deixando muitas vezes a margem, a importância do patrimônio cultural seja material ou imaterial. Para tanto, escolhemos aqui o Museu Ciência e Vida, como monumento a ser estudado não somente por sua arquitetura, mas também por suas atividades. Neste caso, especificamente, na exposição onde as leis do movimento de Isaac Newton foram mostradas como forma de trabalhar as perspectivas científicas e corporais. A exposição "Movimente-se! A Física dos esportes" tinha como proposta unir o que atletas e a física newtoniana tem em comum, incentivando os participantes a conhecerem as leis do movimento de Newton e perceberem que esses conceitos fazem parte do nosso cotidiano, especialmente do dia a dia dos atletas. Sendo assim, vimos evidenciar como a memória, o patrimônio e a ciência, andam juntas em perspectivas interdisciplinares no desejo de uma divulgação científica de uma perspectiva cultural. Palavras-Chaves: Interdisciplinaridade – Corpo – Museu Ciência e Vida