University cultural heritage of Cuba: A methodology to preserve and promote the collections and landscape of CUJAE university campus, Havana

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Abstract
Many universities in Latin America and the Caribbean are engaged in projects that indicate an encouraging future for university cultural heritage. Cuba is in the initial stages of regarding the conservation and promotion of this kind of heritage. A general vision of Cuban university heritage and the proposition of a methodology to preserve and promote the cultural heritage of the university campus José Antonio Echeverría (CUJAE) in Havana are presented in this paper.
Introduction

Cuba, the largest island of the Antilles and the Caribbean, is located between the Gulf of Florida and the Gulf of Yucatán. Havana is its capital of about two million inhabitants. Cuba has a rich heritage in history, art, architecture, science and technology; these values have accumulated during the nation’s historical stages: the Spanish Colonial period (1492-1898), the Neocolonial period with the American intervention (1899-1958) including American military occupation (1899-1902), and the Cuban Revolution of Fidel Castro (1959-today).

Decree 118 of the Republic of Cuba’s Law on Protection of Cultural Heritage defines as cultural heritage of the nation, that composed by movable and immovable goods, which are the expression and testimony of human creation or evolution of nature and which are of particular interest in relation to archeology, prehistory, history, literature, education, art, science and culture in general.

In Cuba, there is remarkable interest in the cultural heritage of the nation. In 1977, the Law No. 1 of Protection to Cultural Heritage was promulgated with the creation of the National Register of Cultural Goods. This institution undertakes to establish, organize and supervise the general inventory of cultural property declared cultural heritage. In 1978, the National Monuments Commission was formed in Havana, under the legal guardianship of Law N. 2 of National and Local Monuments.

In 1995, the National Council of Cultural Heritage was founded. This council works for the protection, preservation, restoration, exhibition, research and disclosure of the cultural and natural heritage, as well as for the training of professionals in the field. Cuba has hundreds of museums distributed throughout the territory, between national, provincial and municipal museums. They are supported by the Law N. 106 of National Museum System of the Republic of Cuba, developed by the ICOM Cuba Committee in 2009, in Havana. Despite the difficult economic situation for many years, Cuba has obtained good results in the management of historic sites and heritage assets of the nation. However, much remains to do for the safeguarding of cultural heritage. For example, the theme related to university heritage is still little discussed in the national territory, notwithstanding the existence of universities throughout the country with a rich heritage. There is no law specified on the protection and conservation of university collections and museums in Cuba. The university heritage is protected by the Law N. 1 of Protection to Cultural Heritage of Cuba and the Law N. 6 Law of Museums. This law makes reference to national, provincial and municipal museums, but none of its articles takes into account the university collections, museums or historic rooms.

Cuban universities and university cultural heritage: Current situation and actions in favor of movable cultural goods

Cuba has a total of 60 universities distributed throughout the island. The first university was the current University of Havana, founded January 5, 1728, with the name Royal and Pontifical San Gerónimo University of Havana. From its creation date, it is the third Caribbean university and the sixteenth in Hispanic America (TORRES-CUEVAS 2014). In 1842, the Royal and Pontifical institution ceased to be Catholic and became a University of secular and colonial character, with the name of Real and Literary University of Havana. Years later, during the American intervention in Cuba, it was named National University or University of Havana (TORRES-CUEVAS 2014).

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6 Gustavo Cobreiro Suárez, “La Educación Superior y la Investigación Científica en Cuba” (Conference by the Rector of the University of Havana, at the University of Padua, Italia, April 17, 2015).
The University of Havana (fig. 1) has witnessed almost all historical stages of Cuba from the Spanish colonization to present. Its history and development are closely linked to the personalities and historical events that tell the struggles for the independence of the nation, especially in the first half of the twentieth century. Today, the university is a great complex of 18 faculties and 14 research and study centers dedicated to the natural sciences, education, social, economic and human sciences (NUÑES JOVER & BAUJIN 2014).

The University of Havana has accumulated a precious cultural heritage of historical, architectural, documentary, scientific, academic and artistic value during its almost 300 years of existence. Some of its movable cultural goods are part of collections integrated into the Natural History Museum Felipe Poey, the Anthropological Museum Montané, the Fragua Martiana Museum, the Astronomical Observatory and the collection of the herbarium of the National Botanical Garden.

The Natural History Museum Felipe Poey was founded in 1842 by the Cuban naturalist and scientist Felipe Poey, who was, at that time, the dean of the Science Faculty and Vice-Rector of the University of Havana. In 1939, the museum was moved to its current location, in a building that is part of the campus of the University of Havana. This museum is considered the oldest public museum in Cuba and has about 500 000 pieces - animals, shells, fossils, bones, books, magazines, and more manuscripts and original drawings by Felipe Poey (MONTERO CABRERA & ALONSO BOSCH 2014). The collections are associated with figures of science related to University and research by students of the Faculty of Biology. The museum's mission is to protect and enhance the rich heritage that has this old university and to promote in the current generations the need to know and safeguard the natural values and to disseminate the importance of funding heritage of the University of Havana (MONTERO CABRERA & ALONSO BOSCH 2014).

The Anthropological Museum Montané, also belonging to the University of Havana was founded in 1903 on the proposal of Antonio Bachiller y Morales, who had already launched the idea of an anthropological museum at the end of nineteenth century. Based on this intention, the Professor Luis Montané, Chair of Anthropology at that time, proposed the creation of this museum, which has archaeological collections related to pre-Hispanic cultures that populated Cuba, the Caribbean and America. Currently, the museum is “the center of research and archaeological exhibition which has the largest continuous tradition in our country”.

The Fragua Martiana Museum is the third museum of the University of Havana, founded in 1944. It is located in the old San Lázaro Quarry, where the Spanish colonial regime in Cuba had a political prison. This place has a great historical value for what it represents: Cuba’s national hero José Martí was imprisoned there because of his thoughts on independence. Declared a National Monument in 1996, mainly for its historical value, the museum is open to the public and is a community center attached to the university.

The University of Havana has another rich cultural heritage of scientific value in the Astronomical Observatory, located since 1939 in the Felipe Poey building of the same university campus. The goods that the observatory exhibits have French, German and American origin. Movable cultural assets include; astronomical, geodetic and meteorological instruments and didactic materials related to the academic function of the observatory. A collection of glass slides, planetary and celestial globes is a part of teaching materials useful for Higher Education at the university as well as for teaching in primary, secondary and high schools. In addition, the Observatory has a small collection of books, directories and astronomical catalogs of the XIX and XX centuries, basically from French and North American origin (MONTERO CABRERA & ALONSO BOSCH 2014). In July 2013, after a restoration that began in 2008, the observatory was open to the public. Through this work over a five year period, collector’s items like clocks, barometers, anemometers, didactic models, celestial globes and telescopes over 150 years in age, have been saved (GÓMES BUGALLO 2013). Several institutions have contributed to this important task to safeguard a rich cultural heritage with essential scientific and academic value.

Another complex of goods that are part of the cultural heritage of the University of Havana is the herbarium of the National Botanical Garden, consisting of a collection of plants and fungi. The current herbarium has its origins in Havana’s Botanical Garden, located in the Mansion of Mills (in Spanish language: Quinta de los Molinos) in the early twentieth century. In successive years, this collection increased with additions from Felipe García Cañizares, Professor in 1916 of the General Chair of Botany and Topography of the University of Havana (MONTERO CABRERA & ALONSO BOSCH 2014). Later, in the 1940s, a Herbarium was organized by Antonio Ponce de León and a group of students. Years later, with the triumph of the Cuban Revolution in 1959 and the massive exodus of professionals and teachers in the country, all goods that were part of the herbarium have undergone significant changes. The work of recovery and asset acquisition was developed in 1966. The result is the current National Botanical Garden Herbarium, transferred in 1968 to existing university buildings. Their collections of plants and fungi are a scientific and cultural heritage of the Cuban nation, of obligatory consultation for all those who are related to the natural diversity of Cuba (MONTERO CABRERA & ALONSO BOSCH 2014).

Moreover, the University of Havana, declared a National Monument in 1978 thanks to its historical, environmental, artistic and architectural value8, has a large number of movable cultural goods, evidence of almost three centuries of history. However, most of the university’s artistic heritage is concentrated in the goods produced during the 20th century (FELIPE TORRES 2014), between painter’s artwork, busts, reliefs, mosaics and classical archeology collections of renowned Cuban and foreign sculptors. One of the most valuable assets is all the paintings -oil on canvas- of the Cuban painter Armando García Menocal. These artistic panels located inside the Aula Magna, recreate allegorical subjects related to medicine, to science, to literature, commerce and justice in reference to the teaching and research of the University of Havana. Among the sculptures that the university has, the most emblematic is undoubtedly the Alma Mater (fig. 2), made in bronze in 1919 by the Czechoslovakian sculptor Mario Joseph Korbel.

All treasure that is kept at the institution is managed by the Heritage Department of the University of Havana. The department, (...) established in September 2010, aims to monitor, guide and advise management in its broadest sense about the cultural heritage of the institution. In addition, it develops studies of collections, proposals for cataloging and inventory goods, promotion strategies and different actions to encourage research in the field. The Department is the lead agency for the control and approval of all conservation and restoration activities, transfer or loan of any university heritage item.9

Among the most significant actions of the university cultural heritage of the University of Havana, we can cite the research on cultural assets of documentary values that the department is in the process of developing and the integration of the movable cultural heritage of the university into projects. The most recent action was the organization of the First and Second Seminar of University Cultural Heritage in 2015 and 2016, an initiative of the Heritage Department of the University of Havana under the auspices of the University College San Gerónimo and University Campus José Antonio Echeverría (CUJAE)11, supported by the most prestigious institutions dedicated to the cultural heritage of Cuba. University College San Gerónimo, mentioned earlier, is another faculty of the old university. Since its founding in 2007, this center provides the university curriculum in preservation and management of Historic and Cultural Heritage. The College has a small university history museum, created from the recovery of assets of the old convent of San Juan de Letrán, headquarters of the foundation of the University of Havana.

On the 15 September 2016, the Department, Direction of University Cultural Heritage of the University of Havana, had a meeting with the Alcalá de Henares University about the university heritage of both institutions. Today, this direction is working to obtain the registration of University of Havana as World Heritage and join the 5 universities worldwide that hold this condition: Alcalá de Henares, University of Virginia, Autonomous University of Mexico, University of Caracas and the University of Coimbra.12

The second official university founded in Cuba was the Eastern University (in Spanish language: Universidad de Oriente) in 1947 in the province of Santiago de Cuba (fig. 3). We emphasize its official character because, before 1947, there were few private universities that have remained outside the law 16, Law of Official Universities, which formalized the Eastern University (...) and the Marta Abreu University of Santa Clara (PÉREZ FRANCO 1996). As in the case of the University of Havana, the Eastern University has witnessed the historical facts of Cuba during the American intervention. Its students and teachers participated significantly in the opposition to the dictatorship of Fulgencio Batista, to the point that Batista himself ordered the closure of the university classrooms. In January 1959, with the triumph of the Cuban Revolution by Fidel Castro, the institution opened its doors again to receive students and teachers in higher education. From 1947 until 1958 the Eastern University hosted five faculties: Education, Philosophy and Literature, Law, Commercial Sciences and Industrial Chemical Engineering Industrial. Today, the institution has 11 faculties and 13 study and research centers.14

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The Eastern University keeps movable cultural goods in the three museums that were created a few years after its founding. The first museum, founded in 1952, is the Natural History Museum Charles Ramsden, in memory of naturalist Charles T. Ramsden de la Torre, born in Santiago de Cuba. After his death in 1951, his family donated part of his collection to the Eastern University. In this way, the Natural History Museum was created with an exhibition room, a study room and archives, hosting a total of 15,180 specimens of animals and one of the largest collections of butterflies of Cuba, all representing the fruits of the intellect and labor of the naturalist, Ramsden (CARLOS NARANJO & LAURANZÓN MELÉNDEZ 2012). The museum, which many students and university professors do not know, sees a critical conservation status of its movable cultural goods and building nowadays. The Museum lives now (and for years already) between oblivion and apathy, lacking in space, attending to the gradual deterioration not only of the property that houses it, but also of the values it possesses15. The Eastern University has a Museum of Archaeology and a Museum of the History of the University. They are in a difficult situation, which endangers the cultural heritage accumulated over more than half a century. According to Sansó Fernández: (...) the museums are not properly used. There are several reasons that conspire against this, in particular the lack of staff specifically dedicated to museums (...) (SANSÓ FERNÁNDEZ, 2003). This publication’s date means that the problem of university museums in general and the cultural heritage of the Eastern University is not a recent issue.

In 1952, in the central part of the island of Cuba, Marta Abreu Central University of Las Villas was created (fig. 4). It was the third university established in Cuba, which was formalized with the law 16, Law of Official Universities. Currently it has 12 faculties and 33 academic programs that cover the teaching of humanities, natural and technical sciences 16. The university has a little museum dedicated to Ernesto Che Guevara, historical personality of the process of Fidel Castro’s revolution and at the same time closely associated with the institution. The room occupied by the museum was Che’s command post before the battle of Santa Clara in 1958. The museum was opened in April 9, 2014 with a collection of photographs of the commander and other revolutionaries who participated with him in the liberation of Santa Clara and the triumph of the Cuban Revolution17. Historic moments from the university are also presented in the exhibition space with original photos of handing the title Honorary Doctor Ernesto Che Guevara by the Faculty of Pedagogy in 195918.

The University also has a botanical garden with an area of 10 hectares, to which a scientific, historical and environmental value is assigned. In 2009, the National Heritage Council of Cuba declared the Marta Abreu Central University as a National Monument, classified as an important example of the architecture of the modern movement in Cuba and a significant scientific institution (GARCÍA SANTOS 2009).
Cuba, and in particular its capital Havana, has other prestigious universities. For example, the National Schools of Arts (ENA) inaugurated in 1962 with the Higher Institute of Art (ISA) established in 1976 (fig. 5). This center, representing work by Italian architects Roberto Gottardi and Vittorio Garati and the French-Cuban Ricardo Porro, was declared as a National Monument of the Republic of Cuba in February 2013, due to its architectural and urban values of the Modern Movement of Cuban Architecture of 1960\(^1\). The ISA is a real architectural jewel. It contains an appreciable furniture, crockery, recognized and legitimated works of Cuban plastic artists. In addition, its documentary is largely of academic and methodological production of eminent professors (LIS FALCÓN 2015).

Other examples are the university campus José Antonio Echeverría (CUJAE) founded in 1964, with the Higher Polytechnic Institute established in 1976, and the recent University of Computer Sciences (UCI) born in 2002. This new university treasured works by significant national and international artists, such as the sculpture of Brazilian architect Oscar Niemeyer.

**The case study: university campus CUJAE (Ciudad Universitaria José Antonio Echeverría). Its movable cultural goods and its current situation**

The university campus CUJAE, is located in the municipality of Marianao in western Havana. This institution has its origins in 1900 with the creation of the former School of Engineers, Electricians and Architects of the University of Havana. Years later, this school became the Faculty of Technology in the same University of Havana.

After the Triumph of the Cuban Revolution in 1959, several initiatives have been taken to improve the country’s educational sector. The Faculty of Technology, formed in 1961 by the Faculty of Engineering and the Faculty of Architecture of the University of Havana, did not have sufficient space to accommodate the growing population of university students. For this reason, it was necessary to expand and modernize its facilities. That is why, in September 1960, Fidel Castro announced the construction of a new university: the José Antonio Echeverría University Campus, better known as CUJAE. Its inauguration was in 1964 with the first five completed buildings. In 1976 with the creation of the Ministry of Higher Education, the Higher Polytechnic Institute José Antonio Echeverría (ISPJAE) was established in the university campus CUJAE (fig. 6).

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Nowadays, it is considered as the main center of Technical Sciences of Cuba, and its campus one is of the most significant works of the Modern Architecture Movement in Cuba during the 1960s thanks to its architectural and urban values, together with the National Schools of Arts of Havana.

The ISPJAE has 7 faculties and 9 study and research centers. Each one of these faculties and centers produce movable cultural goods. It means that not only the oldest universities have a rich cultural heritage, but also the newer institutions, because the university continually generates valuable assets. Throughout the 52 years of the CUJAE and the 42 years of ISPJAE, a university cultural heritage of historical, academic, scientific-technical, artistic and documentary value has been produced. In 2006, the Extension Department of the University established an inventory of cultural property, in different parts of the campus, for easy recognition. From this study, 9 goods were declared as cultural assets of the institution and the nation by the National Office of Cultural Assets Records of the Republic of Cuba (PORTERO RICOL & MARRERO LEIVAS 2012). Part of this heritage is exposed in the historic room of the CUJAE, the only institutional museum space. There are goods with a remarkable historical value related to the construction, at the inauguration of the university campus, and in the foundation of ISPJAE. There are also assets acquired by university success, such as awards, certificates, medals, trophies. The small room is located in the senior administration building, but this does not mean that it is in good condition or has been conserved well. It is just the opposite. Today, this exhibition space is closed to the university community and the general public, due to its precarious condition, in particular from inundation by a rainwater filtration system.

On the other hand, the Faculty of Architecture has, in the Dean’s office, the Móviles sculpture (fig. 4), made by the famous American sculptor, Alexander Calder, and donated by him to the center. This faculty also has original furniture more than 100 years old from when architecture studies began at the University of Havana (fig. 7). These assets, however, do not receive maintenance and conservation and are in poor condition. Some of them are used as ordinary furniture, without recognizing their historic value.

Artworks by renowned Cuban artists such as the Relámpago sculpture by José Antonio Díaz Peláez, the mural paintings as Por un mañana by Raúl Martínez decorate the university landscape. A large part of these movable cultural assets are totally integrated into the architecture and in general into the landscape of the university’s campus.
All movable cultural goods of the institution and the campus should acquire more value by virtue of the fact that they belong to an institution of great prestige at national and international level, and because they are part of the urban-architectural whole of CUJAE, one of the most significant works in architectural conception, planning and campus institution that experienced the Cuban Revolution. That means we must see movable goods with a broader view, considering not only the value, which has itself as object, or piece, or to be a work of a recognized artist, but also for the physical environment, for the landscape and the history, where it belongs and to the accumulation of cultural values during its years of existence.

Unfortunately, the CUJAE’s cultural heritage faces several serious problems, for instance the lack of conservation and promotional activities. In 2010 the Group for the Protection and Conservation of CUJAE Cultural Heritage was born, thanks to the concern of its current director, the professor and architect Ada Esther Portero Ricol. This group of three specialists is responsible for promoting, protecting and preserving all material that is easily recognised as part of the cultural heritage of the university. But, like many other higher education institutions, the campus CUJAE and its institute, ISPJAE have unknown movable cultural assets dispersed throughout the campus. There are many yet to be discovered in faculties, departments, offices, laboratories and centers of research within the institution. Taking into account that the university was not really born in 1964 during its inauguration, but several years ago, in the University of Havana, many goods can still stay in the building of the former School of Engineers, Electricians and Architects and Faculty of Technology, becoming the current Faculty of Physics. Therefore, this group has two important tasks to develop: firstly to protect, preserve and promote the identified university cultural heritage and secondly to search and identify the unknown university cultural heritage, for future protection, preservation and promotion.

Since its creation, the group has worked on practical aspects with the community and the production of texts in favor of the protection of university cultural heritage in case of war and/or natural disaster and in the creation and application of diverse activities that involve the whole university community. In 2012, the specialists with the Provincial Direction of Cultural Heritage of Havana, developed the dossier for the declaration of the campus CUJAE as National Monument or Protection Zone (PORTERO RICOL & MARRERO LEIVAS 2012). It is important to emphasize that the National Monuments Commission of Cuba and ICOMOS-Cuba Committee showed, and still show, a great interest in giving a declaration to the campus CUJAE, because they recognize the institution’s values very clearly, especially the architectural and social values.

The survey
The work presented in this text has as its starting point the results obtained by the Group for the Protection and Conservation of CUJAE Cultural Heritage, of which the author was a member for two years (2011-2013).

During 2011-2012, a diagnosis and a survey of identified cultural heritage of the campus CUJAE was realized through data sheets. This work indicates problems such as:
- inadequate spaces for keeping assets as the storage room, which has a poor state of conservation, where there are goods officially belonging to the Registry of Cultural Property of the Republic of Cuba;
- departments and offices that keep goods without any conservation and promotion actions for objects; and
- a lack of interest by authorities to conserve and preserve the movable cultural property of the university.

As part of the research conducted before arriving at the proposal, during 2013-2014, a survey was realized with the collaboration of 271 persons of the university community (between authorities, teachers, researchers, students and employers).
This survey detected the following results (fig. 8):

- 60% of respondents do not know what are the movable cultural goods that constitute the University Cultural Heritage of campus CUJAE;
- 68% of respondents do not know of the existence of movable cultural goods officially registered as cultural heritage of the university and of the nation; and
- 71% ignore that these assets are officially registered.

These results demonstrate a higher percentage of ignorance about its cultural heritage due to: lack of promotional activities of the university heritage mainly due to the disinterest of the authorities to preserve and promote the movable cultural goods of the campus. The ignorance of the university community regarding their cultural heritage, influences the conservation of the material goods, because it is almost impossible to preserve heritage if its value is unknown. And this is what happens in the CUJAE campus and in most Cuban universities.
That is why a methodology for the conservation and promotion of movable cultural goods of University Campus CUJAE is proposed\(^\text{20}\), based on the study of current trends in Cuba with the University of Havana and in Europe with three case studies\(^\text{21}\).

**The methodology**

Starting from the current situation of university cultural heritage of campus CUJAE, there is an urgent need to act in favor of this heritage that has been overlooked for many years.

Considering the trends in conservation and promotion in European and Cuban universities, as well as the current situation with regard to the University Campus at CUJAE, the strategy lines were established. These lines are the starting point for the development of the methodology and are part of an emerging actualisation. As a first line strategy, this research proposal that the Group for the Protection and Conservation of CUJAE Cultural Heritage (GPCC) is the responsible group for applying the methodology, as well as directing all actions that are derived from it. Currently, the group is composed by three architects (two teachers and a technician). Teachers work for the Teaching Department of University Extension and the Faculty of Architecture. Therefore, they do not have enough time for the work that is required for this group. So it is necessary in the first place, a reinforcement of dedicated full time staff that are specialists and researchers without teaching responsibilities. Also, it is essential to guarantee a fixed staff location in the historic room or in a future museum where they can receive the daily visits of students, professors, researchers and all those who are interested to know more about ISPJAE and its university campus.

In the same group of already strengthened staff, we propose the creation of a commission that can make important decisions on the evaluation, cataloging, inventorying and registration of artefacts with the advice of experts and institutions of high national level (National Heritage Council, Provincial Chair of Cultural Heritage and Committee of ICOM Cuba). The involvement of the university community in all actions of the methodology, that is, all integral to the university case study: the authorities, professors, researchers, students and administrative staff and service are very important. Also, more the general public involvement in some actions that will be appropriate to strengthen the link between the university and the community, or the city, the country and abroad is another strategy under consideration. It’s fundamental to make people aware of the importance of university cultural heritage, where the conservation and development can contribute to sustainable development. We must start educating the highest level of ISPJAE so that the authorities, professors and researchers have an influence on students. In this case, it is essential to show institute authorities that the conservation and promotion of university cultural goods is a necessity for the future of the institution.

Another strategy is the creation of a management system to raise funds, taking advantage of resources and potentialities of the university, for example: the realization of projects and international conventions, the dissemination of Technical Sciences of Cuba since ISPJAE (the Rector Center of Technical Sciences of the country); and the utilization and rental of recreational areas, for example, theater and sports arenas. For this strategy, it is important to generate and promote scientific tourism. Also, it is important to make ISPJAE and its campus an attractive place for Cuban and foreign visitors who want to know about the history of over a century of education in Engineering and Architecture in Cuba, the main results, current and future projects, and also about the rich history of 50 years of the university campus CUJAE.

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\(^{20}\) This methodology was based on the study of the current trends in some European and Cuban universities. For the development of this research, we analyzed the different definitions and classifications of university cultural heritage, we identified actions and examined current trends in conservation and promotion of university cultural heritage in Europe, based on three universities; we established the variables of study and compare the three cases of European universities studied; we analyzed the current state of the university cultural heritage in Cuba and characterized and diagnosed the current situation of movable cultural heritage in our case study - the university campus CUJAE.

\(^{21}\) To learn about the actions for the conservation and promotion of university cultural heritage in Europe, the various experiments conducted by three universities were also studied: the University of Padua, the Complutense University of Madrid and the Higher Technical Institute of Lisbon. To study the actions made in these three European universities, a study was realized of two museums of the University of Padua and two museums of the Complutense University of Madrid, given the large amount of university museums they have. In the case of the Higher Technical Institute of Lisbon, the three museums that include the University Cultural Heritage Institute were considered. Following completion of the interviews, visits to university museums and bibliographic consultations, a comparison between the three European case studies selected according to the study variables was made. With the results of comparison, the strengths and weaknesses on the conservation and promotion of movable cultural goods belonging to the European universities studied were established. The results were used to develop the proposed methodology for the campus CUJAE, in Havana, Cuba.
Based on the proposed strategy, the phases of the methodology are presented below:

- Search for movable cultural goods, research into movable cultural goods hidden in all areas of ISPJAE and its campus. It is very important to consider that the origin of the institution is in the University of Havana. Therefore, this first phase included research in the old School of Engineers, Electricians and Architects and the Faculty of Technology. It is important to research information from a multidisciplinary perspective in all areas of the campus, including faculty, departments, offices, classrooms, workshops, laboratories, deposits, archives;

- Information collection and evaluation involves the realization of an information collection and extensive research on the properties found, using bibliographic and oral sources. After the group of experts committee will evaluate the goods and select those that can be considered movable cultural goods of ISPJAE;

- Cataloguing, inventorying and registration is to catalog and inventory all assets evaluated and considered movable cultural goods of ISPJAE. The cataloging and inventory will be realized from the official document by the National Council of Cultural Heritage of the Cuban Ministry of Culture. Later, the assets must be registered in an internal university control register book;

- Enhancing knowledge and training of staff of the university community of ISPJAE, which is unaware of its cultural heritage. Also, the development of knowledge of those who are not far from this area. This phase is one of the largest of the methodology and a more challenging because the main goal is to educate a particular community of engineers, relative cultural heritage;

- Conservation and promotion projects and their implementation for the recovery and conservation of all cultural assets and to the landscape (all architectural and urban university). For some actions of this phase we propose:
  . The creation of a virtual exhibition or website for the dissemination of movable cultural goods of the institute and university, in a step to medium term actualisation;
  . The creation of a university museum with new collections of movable goods. The museum will be dedicated to teaching and research in Engineering and Architecture in Havana (since the early 1900s have started when the Architecture studies, up to the present). This phase will be over a long term;
  . Ensure cultural promotion about the university cultural heritage of ISPJAE and the campus CUJAE.

This methodology is applicable not only to the case study presented here, but is also applicable to other higher education institutions and other universities.

Discussion
There are several problems that affect the university cultural heritage of Cuba. The main one is the economic aspect, considering that Cuba still suffers the consequences of an economic and financial embargo imposed by the United States since 1960. The effects of this embargo reach universities with the lack of basic resources for development of the daily activities of their community. This situation means that most universities do not receive a budget for the preservation and promotion of their cultural heritage, so the authorities do not see the importance that it has for the development of the institution. Therefore, many of the university heritage assets are in a state of neglect, mostly unknown to the university community. Despite these problems, about 6 years ago some universities in the capital have taken initiatives in favor of their cultural heritage, including the University of Havana and the campus CUJAE.
Although Cuba is a very different country in comparison with countries such as Italy, Portugal and Spain, studies in Europe, taking as cases of museum studies at the University of Padova, the Complutense University of Madrid and the Technical Lisbon Superior Institute\(^{22}\), tested positive and negative aspects regarding the preservation and promotion of its cultural heritage like some Cuban universities, for example by creating a group or department in charge of preserving and enhancing the university’s cultural heritage. A common problem that directly affects this type of heritage is that its conservation and promotion depend exclusively on a small group of people and not on the entire university community. Authorities are generally disconnected from what happens with university heritage and processes that influence their safeguarding are too slow either due to lack of economic and financial resources usually because it is not a topic of interest for directors of universities.

Whit the application of the methodology proposed in this paper we anticipate a university community identified with its cultural heritage, making ISPJAE and CUJAE a point of interest and attraction also for the general public, the declaration of the CUJAE as National Monument of the Republic of Cuba, the creation of a university museum ISPJAE with the recovery and safeguarding of movable cultural property, which tell the history of teaching and research in technical sciences in Havana. Because to successfully conserve and adequately promote a university’s cultural heritage, it is necessary to see it not as a thing of the past, but as an engine of development for the present and the future.

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