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The CUJAE, a landmark of modern Cuban architecture

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Abstract: This research raised the question of whether the CUJAE is worthy of the status of National Monument of the Republic of Cuba, and had the objective of identifying its values, as part of modern Cuban architecture. By applying the logical- historical method, the starting point was a documentary analysis, supported by field work, and consultation of the provisions of current legislation. As a result, the history of the property is reconstructed, and its values are substantiated, defining the degree of authenticity and integrity in the preservation of the attributes that characterize it. The above is complemented by a comparative analysis with similar works, and recommendations for its management. The results show that the CUJAE is an emblematic work of Cuban architecture of the second half of the 20th century and it is concluded that it deserves the status of National Monument.

Key words: CUJAE; modern architecture; Havana; University City

1 Introduction

This article is a summarized version of the dossier prepared by the authors, in collaboration with other professionals, which was submitted to the National Council for Cultural Heritage to seek designation as a National Monument of the Republic of Cuba, a status granted to CUJAE on December 2, 2024[1].

The José Antonio Echeverría Technological University of Havana (CUJAE) has been cited as one of the most notable works of modern Cuban architecture in numerous specialized publications, including: *Ten Years of Architecture in Revolutionary Cuba* [1, pp. 90–92], *Architecture and Urbanism of the Cuban Revolution* [2, pp. 97–99], *Havana, Architecture Guide* [3, p. 220], *The Havana Guide: Modern Architecture 1925–1965* [4, p. 120], and *The Architecture of the Modern Movement: A Selection of Works from the National Register, Docomomo_Cuba* [5, pp. 142–143], among other texts. However, the exceptional values of this complex were not legally protected, hence the need and importance of establishing that CUJAE deserves National Monument status.

The intention to recognize the historical and architectural significance of CUJAE and to identify its principal values for the sake of protecting its heritage was a long-standing aspiration of the community of faculty and students at that university. The documentation presented was based on a report prepared in 2007 by Eliana Cárdenas Sánchez and Ángela Rojas Ávalos, with the collaboration of students, Marcos Serrano and Yoanny Rodríguez, which was never submitted to the National Heritage Council. Reviving that initiative was the motivation behind this research, whose initial hypothesis was

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that CUJAE deserves National Monument status, with the primary objective of identifying CUJAE's values within the context of modern Cuban architecture.

The research contributed to enriching the documentation on the history of the José Antonio Echeverría University City and its tangible and intangible heritage by establishing the basis for its exceptional values, taking into account the most current theories in the field of heritage conservation and the provisions of Law 155/2022. "General Law on the Protection of Cultural and Natural Heritage" [6], and its Decree 92, the implementing regulations for said Law, which is the most recent legislation governing heritage protection in Cuba.

The main result and contribution of this historical and theoretical research was, precisely, to demonstrate that the CUJAE complies with the provisions of that legislation and is therefore eligible for National Monument status.

2 Materials and methods

Given its nature, this study began with a search of primary sources: periodicals that chronicled the university's founding and significant moments in its history, the photographic collection of the former Ministry of Public Works, and the photographic collection of the CUJAE Communications Office, and, in particular, the consultations conducted over the years with founders, key figures, and participants in the process of building and launching the campus proved extremely useful. Additionally information cited in the national and international literature that has analyzed the complex was processed. In order to conduct the critical evaluation of the information by means of analysis-synthesis and the discussion of the results, the historical-logical method was employed.

In light of the interest in preserving the values of the CUJAE, the provisions of the new Law and its implementing regulations were taken into consideration; therefore, to fulfill the research objective, the historical and artistic values of the CUJAE, as well as the integrity and authenticity in the preservation of the attributes upon which those values rest, were considered as variables. Furthermore, through comparative analysis, it was possible to explain the significance of the property within its national context and to establish recommendations for its management, as set forth in those regulations.

3 Results and discussion

3.1 Historical value

The institution's continued operation and development bear witness to the continuity of a significant process in Cuba's political, social, and scientific history over the past 60 years.

The José Antonio Echeverría Technological University of Havana (CUJAE) was founded on December 2, 1964, as a new center for the study of architecture and engineering—fields that had emerged in Cuba in 1900— as the University of Havana's campus was no longer sufficient to accommodate the significant increase in enrollment that occurred after the triumph of the Revolution in January 1959. After evaluating various location options, construction began on March 13, 1961, on the José Antonio Echeverría University City, as a monument to the memory of the student leader[2]. Thus, on November 18, 1961, by resolution of the Higher Governing Board of the University of Havana, the Faculty of Technology was established, organized into six schools: Architecture, Civil Engineering, Electrical Engineering, Mechanical Engineering, and—in addition to the existing specializations—Chemical Engineering and Industrial Engineering [7].

The University Reform Act, enacted on January 10, 1962, ratified the structure of the Faculty of Technology and explicitly stated the need to train highly qualified architects and engineers. In 1964, the School of Architecture began its move from the University of Havana campus in Vedado to the buildings already constructed at the University City, and a year later, in October 1965, the other schools moved once eight buildings and their outdoor areas had been completed.

When the Ministry of Higher Education (MES) was created in July 1976, the University of Havana was subdivided into five universities, one of which was the José Antonio Echeverría Higher Polytechnic Institute (ISPJAE), which was

renamed, by Agreement No. 7943 of June 30, 2016, of the Executive Committee of the Council of Ministers, to the José Antonio Echeverría Technological University of Havana, and retained its acronym CUJAE, which refers to its conception as a University City.

Since its founding, the José Antonio Echeverría University City has counted among its primary missions opening its doors to anyone who wished to study.

"Its essential contribution lies in training professionals who work in the field of science, thereby developing the country's industrial sector. CUJAE is a monument to the student born of a revolution, a symbol of progress; it has achieved high prestige in education on a national and international scale. All of this is the result of efficient planning by the Ministry of Education through its curricula; and the perfect relationship between architecture and the student, between space and function, in an ideal context for social interaction and study."[3]

CUJAE holds great social value due to the quantity and quality of the engineers and architects who have graduated from its classrooms—both at the undergraduate and graduate levels—both nationally and internationally. Currently, there are 9 schools offering 13 degree programs. Beginning in 2022, in response to the Ministry of Higher Education's initiative to increase access to higher education and, above all, to broaden the range of opportunities for young people, several advanced technical programs were incorporated into the university.

3.2 The project and its beginnings

CUJAE is a landmark representing the best of modern Cuban architecture, built in the 1960s amid a period of great dynamism associated with the transformation of university education, driven by new concepts emerging from the triumphant Revolution. It was the second modern campus built in Cuba, following the Marta Abreu Central University of Las Villas. In keeping with the principles governing the design and functions of centers dedicated to university education on an international scale—particularly within the Latin American context—the construction of the José Antonio Echeverría University City in 1964 carried forward many of the criteria established by its counterparts in Bogotá, Caracas, and Mexico City.

To design the University City, a commission was established comprising:

"(…) the Minister of Public Works, Osmany Cienfuegos; the president of the FEU, Commander Rolando Cubela; and a member of the of the University of Havana, Dr. Abelardo Romero, and engineering students Luis Sotto and Luis Blanca" [8]. This fulfilled one of the five agreements reached at the first FEU meeting following the triumph of the Revolution: "(…) after an in-depth study of various areas of the capital (Eastern Havana, Husillo, and what is now Colina Universitaria), the Toledo Sugar Mill area was chosen for its geographical location, topography, proximity to metropolitan areas, and river transportation facilities"[8].

Based on the development plans for the city of Havana at that time, the area immediately adjacent to the former Toledo sugar mill—renamed the Manuel Martínez Prieto Sugar Mill in 1960—was identified as the ideal site for the CUJAE, as it was a sector with potential for expansion and offered the possibility of linking certain academic specializations to the mill's productive activities. The connection to practical experience was one of the fundamental principles underlying the design of the new plans for studies, which was revealed in the speech delivered by Fidel Castro on the very day of the CUJAE's inauguration in 1964, when he stated: "... the concept of a university must encompass research; but not research conducted solely in a classroom or laboratory, but rather research that must be carried out on the streets..."[9]. CUJAE represented a new type of university for Cuba, and its location away from the established city was intended to bridge the gap between the countryside and the city and to foster the connection between study and work.

A design team was formed for the project, led by Humberto Alonso, an architect of proven talent and the creator of

significant works of modern Cuban architecture, who, together with Antonio Quintana, founded Arquitectos Unidos in 1952—a group that promoted rationalist architecture on the island. Humberto Alonso left Cuba and was replaced by architect Fernando Salinas [1, p. 91] as head of the multidisciplinary team responsible for the design and construction of the CUJAE, which included José Fernández, Josefina Montalván, and Manuel A. Rubio, as well as engineers Esmildo Marín Antun (in charge of the structural design), Germán Gurfinquel, and José Altshuler, along with Luis Blanca Fernández and Luis Sotto Andraca.

The first buildings to be constructed were the two five-story structures. In March 1961, the first column of the current classroom building for the School of Industrial Engineering was erected. The official groundbreaking ceremony took place when the second column of that building was set on March 13, 1961, in commemoration of the fourth anniversary of the assault on the Presidential Palace and the seizure of Radio Reloj, led by José Antonio Echeverría. The ceremony was presided over by Osmany Cienfuegos (Figure 1), then Minister of Public Works, with the participation of leaders from the FEU, the government, faculty and students from higher education institutions, and members of the local community. CUJAE was inaugurated on December 2, 1964, and classes officially began in January 1965, with the various degree programs being introduced gradually, starting with the architecture students (Figure 2).



Figure 1. Official groundbreaking ceremony presided over by Osmany Cienfuegos, Minister of Public Works. Source: CUJAE History Room



Figure 2. Fidel Castro with students and professors from the School of Architecture. Source: CUJAE History Room

The architects and engineers in charge of the CUJAE's design and construction demonstrated not only extensive knowledge and creativity but, above all, commendable performance in undertaking a project of this magnitude, rising to the challenge posed by a virtually unknown construction system, the "lift-slab" method, which had only been used in Cuba in the hangars at José Martí National Airport. This turned the construction site into a training ground for both construction and the workers involved in the project.

During that first phase, between 1961 and 1965, the academic buildings and facilities in the area known as the main campus—or the oldest section—were constructed and completed. During a second phase, from 1965 to the late 1990s, several buildings supporting teaching were constructed, and in what could be considered a third phase, between the late 1990s and 2010, the unfinished building adjacent to the scholarship students' dining hall was completed to house the Integrated Technological Research Complex (CITI), which was inaugurated in 2010, and the five kitchen-dining halls were renovated by a team of professionals from various faculties, led by Gabriela Peterssen and Mabel Matamoros [10]. From 2010 to the present (2024), rehabilitation and maintenance work on the buildings and their outdoor spaces has continued (Figure 3).

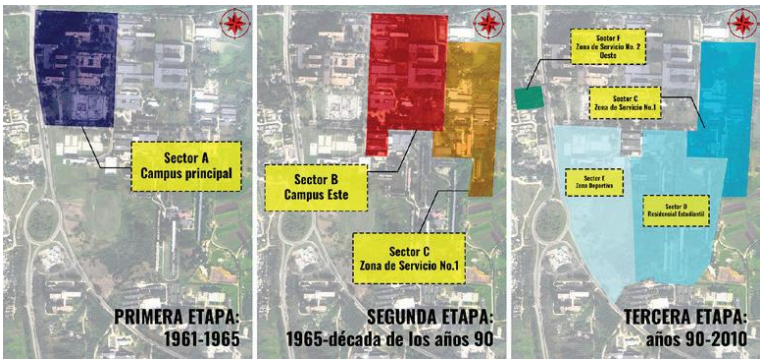

Figure 3. Stages of construction at CUJAE. Source: authors, 2024

3.3 Artistic value

3.3.1 The architecture

In the design of CUJAE, structural and technological elements play a leading role. The use of exposed materials—such as reinforced concrete and brick—and the visible plumbing and sanitary systems, among other details, make this complex an excellent example of Brutalist architecture, perhaps the most notable in the country, given its scale.

CUJAE stands out for its elegance, for the interconnection of its open and enclosed spaces through a system of galleries, and for its clear architectural and spatial coherence. Highly flexible connections were established through a kind of grid—one of the project's greatest achievements—which facilitated the creation of gathering and social spaces that are always bustling with student life, both on the open-plan floors and in its various outdoor parks. This compositional structure allowed for future expansion without compromising the existing buildings (Figure 4).

The university campus possesses both great unity and variety. The interplay between horizontal and vertical elements and the large spans employed created a wealth of possibilities and defined the formal aspects of the complex. The vertical circulation routes break up the purity of the blocks of varying heights, where the glass-enclosed staircases became diagonal, almost exposed axes, while the elevator towers of the tallest buildings interact with the horizontal lines, creating an image that defines the university campus. The combination of double and triple struts (Figure 5) is another element that contributes to this variety, along with the open ground floors used in nearly all the buildings, which allow for seamless connectivity within the university.

At CUJAE, the gray of the concrete predominates, accompanied by a palette of reddish hues applied to the woodwork, and white to highlight specific parts of each building, continuing a characteristic of Cuban modern architecture from the 1950s. Likewise, the subtlety of the details stands out, evident, for example, in the specific characteristics of the flooring depending on its location. Where there are double columns and in some exterior areas, washed terrazzo was used; where there is a single column, polished terrazzo was used; and ceramic tiles were used at the base of the staircases. Thus, a series of cues was created through architectural details that indicate the transition from one space to another.

The architectural solutions, woodwork, enclosures, gardens, plazas, parks, and street furniture were very well executed using high-quality materials.



Figure 4. Outdoor seating areas and parks. Source: authors, 2024



Figure 5. Outdoor seating areas adjacent to the rector's office building. The interplay between different levels and the variety of columns enrich the campus spaces. Source: authors, 2024

For the exterior enclosures, as well as the walls, aerated concrete and brick panels were combined. For the interior enclosures that do not serve as partition walls—since they do not extend from floor to ceiling—lightweight materials such as wood were used; therefore, they can be considered permeable or virtual enclosures.

A notable success of the CUJAE project lies in its environmental design, due to the quality of the solution regarding natural ventilation and lighting. The north facades of the academic buildings consist of enormous glazed window sections, which allow for good lighting in the classrooms, and this orientation specifically minimizes the disruptive impact of the sun. Furthermore, airflow is facilitated through the interior enclosures—whether lightweight panels or partition walls—which are positioned according to the requirements of each space, since the construction system allows for large structural spans and, consequently, great spatial flexibility.

As Eliana Cárdenas stated, the CUJAE "…is seen as a paradigm of new ideas in education in Cuba: the open layout, the continuity, the absence of monumentality, the buildings turned toward the landscape, constitute an architectural translation of these concepts... (which is why) it became the archetype for many other educational centers" [7].

3.3.2 The University City

The urban design of CUJAE formed a uniform fabric that harmoniously connects all its constituent elements. Professor Roberto Segre commented on this: "…The unity of the University City is achieved through the interconnection

of buildings and connecting elements; through the alternation between built-up areas and interior plazas; and through circulation routes linked to one another at various levels" [1, p. 92].

The project promoted rational land use, avoiding excessive expansion of the complex. The slopes created as a result of adapting to the topography, combined with stairways that blend into the outdoor areas, constitute another defining feature of the campus. Thus, throughout the complex, one ascends or descends as needed, creating a varied route; among these, the so-called "Paso de los Vientos" (Figure 6) is worth mentioning as a welcoming space for both circulation and rest.



Figure 6. Paso de los Vientos. Source: authors, 2024

Among the CUJAE's attributes, the quality of its gardens stands out. The green spaces, plazas, parks, and walkways serve as an excellent complement to the buildings, fostering the proper development of university education. This combination of built space and green space intentionally ensures that nature is ever-present. Since the campus is located on land that was originally part of a reed bed, the site's vegetation lacked features worth preserving or restoring; hence, a careful design was undertaken to create a unique landscape featuring mature species over 50 years old, which has been enriched throughout the university's history. In this regard, the sustainable landscaping project led by Professor Sergio Ferro in 1998. As part of the road improvements associated with the inauguration of Terminal No. 3 at José Martí Airport, a major project was developed and implemented that included the green spaces of CUJAE [11]. These efforts made it possible to utilize large tracts of land for the production of food and edible fruits, in addition to regenerating the landscape [12].

Each of these spaces was given a distinct approach to vegetation while maintaining the overall coherence of the complex, as part of the design of the various zones: teaching, teaching and research, services, student housing, and sports areas, among others. Thus, lawns and similar climbing plants are used in the teaching sector, while trees were planted in the services area and along the streets to create shaded spaces, connections, and pathways.

"… Among the species, we can mention plantings of non-tufted herbaceous plants that cover slopes—such as shady hillsides—and serve as ground cover and edging for sidewalks and paths. There are also plantings of shrubs that sometimes form virtual hedges, using species such as Brazilian coquito in clumps, or Bougainvillea spectabilis hedges; plantings of various types of palms, depending on the intended function of the location; and tree plantings in plazas and parks, including a grove of Grevillea robusta, a row of Sterculia apetala, a group of Erythrina abyssinica, as well as a solitary specimen of Tabebuhia rosea in the gardens between the Library building and the Electrical Engineering classrooms, in the area adjacent to the central theater…"[4] (Figure 7).



Figure 7. The varied vegetation helps identify the different areas of CUJAE. Source: Larisa Castillo Rodríguez, 2019

The state of preservation, cleanliness, and maintenance of the green spaces is one of the main achievements of the campus's management.

3.3.3 Works of art

CUJAE boasts a diverse collection of works of art, some of which are murals integrated into its buildings and others are freestanding, concentrated mostly in its central, and oldest areas. (Figures 8–15).



Figure 8 Mural "For Tomorrow," Raúl Martínez, 1987. Located on the ground floor of the Faculty of Chemical Engineering. Registered by the National Registry Office of the Ministry of Culture. Source: authors, 2024



Figure 9. Set of four murals dedicated to José Antonio Echeverría and Julio Antonio Mella, by Teresita Gómez Vallejo. 1960s. Located on the west facade of the Rector's Office building. Source: authors, 2024



Figure 10. Ceramic corner pieces by Agustín Villafaña, 1987. Located at the entrance to the Central Theater. Source: authors, 2024



Figure 11. "Casetones" mural by Antonio Mariano Souto (NIKO), 1987–88, along the Central Corridor, between the beginning of the Rector's Office building and the Central Theater. Source: authors, 2024



Figure 12. Sculpture "El Relámpago," by José Antonio Díaz Peláez, 1987. Located in green spaces adjacent to Ampere Park, near the staircase leading to the of Architecture. Registered by the National Registry Office of the Ministry of Culture. Source: authors, 2024



Figure 13. Untitled sculpture, Terracotta Group 4, 1985. Located between the gardens of the Rector's Office and the Central Theater. The university community refers to it as "The Hen and the Chicks." Source: authors, 2024



Figure 14. Kinetic sculpture by Alexander Calder, 1960s. Located at the Dean's Office of the School of Architecture. Source: authors, 2024



Figure 15. Memorial in Honor of José Antonio Echeverría, designed by professors Sergio Ferro Cisneros and Emilio Escobar Loret de Mola. Its location allows it to be seen from 114th Avenue. Source: Carina Marrero Leivas, 2012

3.4 Integrity in the preservation of CUJAE's attributes

The oldest area of the CUJAE, where the first buildings constructed between 1961 and 1965 are located, maintains a high degree of integrity. The main attributes upon which its values rest are complete, having undergone no significant modifications that affect their understanding.

All the buildings have been preserved, along with their connections via galleries and open floor plans, as well as their outdoor areas, street furniture, slopes, and vegetation—among other significant elements that have remained unchanged over time. The buildings, their urban structure, parks, and plazas all retain their original dimensions and materials. The colors and textures, and the balance between them, also remain intact.

At CUJAE, the volumetric and spatial characteristics of the buildings—with their open floor plans and systems of columns—have been preserved, as well as the original structural elements—columns, beams, slabs, polished terrazzo, washed terrazzo, or ceramic flooring—and the harmonious combination of concrete with exposed brick, the interplay of colors and textures, and the prominence of structural elements from an expressive standpoint (Figures 16, 17, and 18).



Figure 16. The built environment blends harmoniously with nature. Source: authors, 2024



Figure 17. The system of open spaces and the connections via galleries and stairways, as well as the visual interplay between the different spaces, remains a distinctive feature of the complex. Source: authors, 2024



Figure 18. The plazas and their benches retain their original design, and vegetation continues to play a prominent role in the outdoor areas. Source: authors, 2024

3.5 Authenticity in the preservation of the CUJAE's attributes

The fact that the complex has maintained its original function as a university center for training engineers and architects has allowed its values to be expressed in a reliable and credible manner through its main characteristics and has facilitated the preservation, with a high degree of authenticity, of the physical and spatial features of the spaces that bear witness to the historical evolution of the CUJAE, making it possible to understand both the original characteristics and those acquired over the years, as well as their meanings (Figure 19).



Figure 19. Classroom building of the School of Industrial Engineering. Left: photo taken in 1965. Source: MICONS Photo Archive. Right: authors, 2024

At CUJAE, the original design has been preserved, as no significant alterations have been made to its buildings or outdoor areas, nor have the layout and appearance of the buildings been altered. Likewise, the surroundings of the campus have undergone very few changes. However, due to the deterioration of the windows after more than 50 years of use, the window frames on 60% of the main facades of the eight buildings located on the main campus were partially replaced. The new windows retained the characteristics of the originals in terms of dimensions, spacing, type of closure, and the combination of metal and glass; thus, the buildings' architectural character and the good lighting and cross-ventilation of the spaces were preserved, even though it was not possible to replace them with the same aluminum used in the 1960s [10]. Similarly, the handrails and balustrades of the rectorate building were replaced with the same design and material as the originals.

Another intervention carried out in the oldest section was the addition of the perimeter fence and the statue of José Antonio Echeverría at the main entrance. Although the fence was constructed using metal elements to ensure transparency, it altered the open character of the campus; however, it could ultimately be reversed, as could other additions made.

At CUJAE, long-standing traditions are preserved, such as student festivals—the oldest of which is the Faculty of Architecture's "Fiesta de la Vela," with annual celebrations spanning nearly 50 years. Similarly, the tradition of student gatherings in open courtyards, parks, and plazas continues, particularly in the spacious double-columned area at the

university's entrance, which—because it is sunken and surrounded by benches—is known as "Cenicero" and also serves as the setting for numerous celebrations linked to university student life (Figure 20).

Other noteworthy aspects related to the intangible heritage and spirit associated with CUJAE are the cultural activities involving the university community, such as festivals featuring amateur artists—including both students and staff—as well as sociocultural projects that extend beyond the campus and, through the University Extension Program, reach out to local communities.



Figure 20. The area known as "El Cenicero" is an iconic part of CUJAE. Source: authors, 2024

To celebrate CUJAE's 50th anniversary, the Cuban singer-songwriter duo Buena Fe wrote the "Alma CUJAE" anthem, which has already become part of daily life and is played at all official events following the National Anthem.

Similarly, the annual "March 13" sports games, in which students from different grade levels within each college—and across all colleges—compete, is another enduring tradition that has been enriched by the addition of mascots featured on flags and T-shirts, symbolizing the students' sporting spirit.

3.6 Comparative analysis

In the regional context, the National University of Bogotá, the University City of Caracas, and the central campus of the University City of the National Autonomous University of Mexico (UNAM) preceded CUJAE. These complexes consist of high-quality spaces for staff interaction and also feature works of art by distinguished artists that highlight the values of these sites. The University City of Caracas and the Central Campus of the University City of the National Autonomous University of Mexico were inscribed on the World Heritage List in 2000 and 2007, respectively.

The CUJAE exemplifies the application of these principles in the Cuban context and, furthermore, demonstrates the influence of international trends in its Brutalist features, having been an early example in Cuba of the application in educational architecture of the precepts established in 1954 by the English architects Peter and Alison Smithson at the Hunstanton School.

To explain its significance, this paper analyzes the similarities between the CUJAE and other contemporary Cuban sites, which helps to understand its relevance on a national scale. Therefore, universities that have already been designated as National Monuments in Cuba have been selected: the Cubanacán National Schools of Art (ENA, 1961–1965), the "Martha Abreu" Central University of Las Villas (UCLV), the Antonio Maceo Campus at the University of Oriente, and other complexes such as the Camilo Cienfuegos Neighborhood Unit—also a National Monument—as well as the National Center for Scientific Research (CENIC) building and the Pabellón Cuba, all of which were built around the same time as the CUJAE.

The two most outstanding works of the 1960s nationwide, which over time have become paradigms of Cuban architecture in the second half of the 20th century, are the ENA and the CUJAE [13]. They represented two different, yet

equally valid, approaches in terms of expressive concepts based on the use of construction techniques and materials of varying character, with highly successful results.

CUJAE shares with the "Martha Abreu" Central University of Las Villas the characteristic of being a campus where buildings and green spaces are seamlessly integrated, offering both a sense of unity and a variety of design solutions that give each building its own distinct identity. Both campuses are characterized by a remarkable spatial fluidity achieved through the way the different building volumes are interconnected and the use of "modern" materials, such as terrazzo, large glass panels, and polished surfaces, although at CUJAE, greater articulation among the buildings is achieved through a sequence of galleries and open-plan floors that adapt to the uneven terrain, thereby better showcasing the concept of a university city. The Antonio Maceo campus of the University of Oriente, which coincides with the university's founding area, consists of buildings that were added over time; as a result, it lacks the unity found in the other examples analyzed.

Among these universities, CUJAE stands out for its unifying design and the coherence of its built fabric, achieved through the continuity of the building blocks via circulation galleries surrounded by gardens, plazas, and parks. Along with the ENA and the CUJAE, Neighborhood Unit No. 1 Camilo Cienfuegos in East Havana is also representative of the best of the architectural achievements of the period in which they were built. Like the CUJAE, it demonstrates the excellence of its construction, which carried forward the principles of modern architecture; both were pioneers in the use of prefabrication in a large-scale complex. Neighborhood Unit No. 1 Camilo Cienfuegos was the first work of modern Cuban architecture to be designated a National Monument, in 1996.

It is interesting to note the commonalities between the CUJAE and other contemporary works which, although not designated as National Monuments, are also widely recognized for their indisputable value. The National Center for Scientific Research (CENIC), built in 1966, stands out for the interplay of its constituent volumes and the use of sunshades not only to protect the building but also to serve an important expressive function. It is another example of Brutalist architecture—in this case, influenced by Japanese design—where the variations in column spacing are also used to enrich the building's spatial quality.

The expressive power of the reinforced concrete coffered ceilings links the CUJAE to the Pabellón Cuba, a connection accentuated by the clean lines and efficiency with which the structural elements—columns, beams, and slabs—were employed in both cases, regardless of differences in function, scale, and location. Spatial fluidity, the interplay of columns, adaptation to the topography through varying levels, and the unifying role of vegetation are among the common elements shared by the Cuba Pavilion and the CUJAE.

3.7 The management of CUJAE

The campus covers an area of approximately 640,529 m² and comprises some 80 buildings, including classrooms, laboratories, libraries, dormitories, cafeterias, sports fields, a medical clinic, a post office, a print shop, a student recreation center, theaters, and spaces for gatherings and leisure, among other facilities that contribute to the students' education. The complex of academic and administrative buildings, as well as the student residence, accounts for nearly 70% of the campus.

The institution's various administrative bodies have expressed their support for the preservation of the property. In this regard, two important periods are worth mentioning: between 2000 and 2005, a five-year period during which major construction work was carried out, with faculty and students contributing to technical assessments and project planning; and from 2010 to 2020, a period during which complex restoration and maintenance efforts were carried out under the direction of a multidisciplinary team that included professionals from nearly all areas of the university—particularly the schools of Architecture and Civil Engineering—along with specialists from project management and construction firms. These efforts were halted due to the COVID-19 pandemic.

Based on the university administration's understanding of the need to recognize the university's heritage, as well as to communicate its values to the student and faculty community and the general public, the CUJAE Cultural Heritage Conservation Group (GPCC) was created in 2011. Its primary mission is to advise and inform the university's top leadership on specific actions to be taken regarding the care, protection, conservation, and maintenance of the university's tangible and intangible heritage through scientific and technical activities and university outreach, with an emphasis on training students to become advocates for their own university heritage.

In accordance with the provisions of Law 155, the area where the university's first buildings and spaces were constructed—recognized as the main campus or founding zone—was designated for consideration as a National Monument, while the rest of the campus, as well as the buildings and spaces adjacent to 114th Street, was considered the buffer zone [14] (Figure 21).

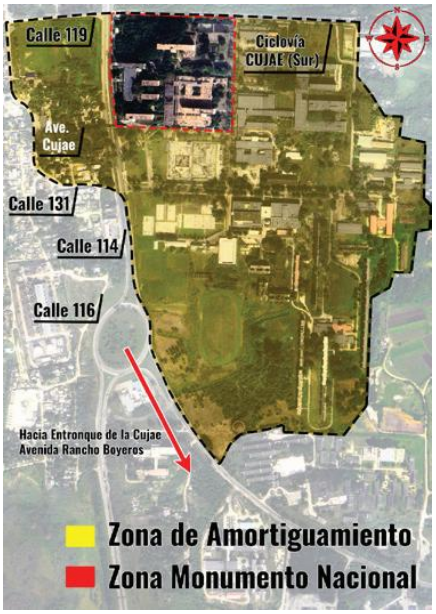

Figure 21. Area designated as a National Monument (in red) and buffer zone (in yellow) approved in Resolution No. 71, dated December 2, 2024, Ministry of Culture of the Republic of Cuba. Source: authors, 2024

4 Conclusion

The José Antonio Echeverría University City (CUJAE) is an iconic work of Cuban architecture from the second half of the 20th century, and due to its historical and artistic value, it meets all the requirements to be designated a National Monument.

It is evident, based on the actions and behavior of the CUJAE community, that what should be understood as a "social appropriation" of the heritage site has taken place.

The institution has declared its commitment to caring for the campus, and as a result, a management plan has been established to help preserve the attributes upon which the values of this highly significant work of modern Cuban architecture are based.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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Note

[1] Resolution No. 71, approved on 2 December 2024, Ministry of Culture of the Republic of Cuba.

[2] José Antonio Echeverría was a Cuban student leader and revolutionary, president of the University Students' Federation (FEU) between 1954 and 1957, who died in the actions of 13 March 1957, whose goal was to bring Fulgencio Batista to justice in the Presidential Palace.

[3] "CUJAE, Proposal for a National Monument". File prepared by Eliana Cárdenas Sánchez and Ángela Rojas Ávalos, with the collaboration of students Marcos Serrano and Yoanny Rodríguez, 2007. Unpublished manuscript.

[4] Lecture "The CUJAE Green- Space System: Culture and Landscape Serving University Education", delivered by architect Larisa Castillo Rodríguez within the postgraduate course "University Cultural Heritage, CUJAE", March 2019. Havana, Cuba.