

Planetario Habana: a cultural centre for science and technology in a developing nation

Oscar Álvarez¹

¹Ministry of Science, Technology and Environment, Havana, Cuba
email: oscar@citma.cu

Abstract. Astronomical education in Cuba is not widespread in the educational system; nevertheless the public interest in sciences in general but particularly in Astronomy issues is very high, as it has become reflected by the attention paid to educational and scientific program broadcasts in the national television channels. The "Planetario Habana" Cultural Centre for Science and Technology, which is under construction, is aimed at guiding the interest towards basic sciences and astronomical formation of the people, in the most populated and frequented area of the country. A key objective of this project shall be serving as an instructive motivation and entertainment for the casual or habitual visitors to these facilities, offering them the possibility to enjoy vivid representations, play with interactive amusement equipment and listen to instructive presentations on astronomy and related sciences, all guided by qualified specialists.

Another fundamental purpose shall be the establishment of a plan for complementary education in coordination with schools, in order to allow children and young people to participate in activities enabling them to get into the fascinating world of Astronomy, Exploration of Outer Space and Life as a Cosmic Phenomenon.

The setting up of the Planetario Habana Cultural Centre for Science and Technology is under the general administration of the Office of the Historian of the City of Havana, and methodologically is being led by the Ministry of Science, Technology and the Environment, and will show in operation the GOTO Planetarium G Cuba custom, obtained under a Japanese Cultural Grant Aid. It will develop into a an unparalleled centre in the national environment for scientific outreach and education of these sciences.

Surrounded by the attractiveness of the colonial 'ambience', it shall become a centre for dissemination of information about new discoveries and scientific programs developed at national and international level. Here we present a general view of the project, and its present and future development.

Keywords. Astronomy in Cuba, planetarium, public outreach in astronomy

1. Introduction

The Ministry of Science Technology and Environment of the Republic of Cuba in agreement with the Office of the Historian of the City of Havana are working together to facilitate the setting up of the Planetarium and Cultural Centre for Science and Technology at the Old Town of Havana, towards popularization among the students and general public on Astronomy, Cosmology, Astrophysics, Space Sciences, as well as other Sciences and Technology in general.

San Cristobal de La Habana Villa was founded in 1519 and shortly afterward became the capital of the island. For centuries the city was a strategic centre of colonial Spain. Owing to its characteristics as a port city and its unique geographical location at the mouth of the Gulf of Mexico, Old Havana still houses vestiges of its origins, such as the Alameda de Paula, next to the port, the Plaza de Armas and Cathedral Square,



Figure 1. View of the Havana Old Town Central Park and port entry

the Castillo de la Real Fuerza and the Morro and La Cabana castles, the Palacio de los Capitanes Generales, the Palacio del Segundo Cabo, la Plaza Vieja, where will be located de Planetarium, as well as the ruins of the walls that once surrounded it and the brick streets that have defied time in order to reveal all the greatness of the past. In 1982, the old historical area, the urban extension of 19th-century Havana, the port channel with its two developed shorelines, and the fortifications that served as its defense were declared a human heritage jewel by UNESCO, giving international recognition to the policy of safeguarding the city's historical and cultural value. Thus the foreign and national visitors inevitably explores brick streets and alleys; visits castles, forts, the ruins of city walls, buildings, monuments, museums, churches, mansions, elegant houses and squares; enjoys a view of colonial roofs, stained-glass windows, grates, low walls, balustrades, arcades and balconies in an astonishing profusion of styles. Traditions, legends and history have combined to make Old Havana a historical heritage jewel, renowned for its magnificent buildings, squares and churches, all of which date back to colonial times. City streets are still paved with cobblestones. With the legal autonomy granted by the Council of State of the Republic from Cuba to the Historian's Office in 1993, to self-manage the patrimony starting from the state declaration of the Old Havana as Prioritized Area for the Conservation, the action of this Institution, been founded in 1938, began the application of a new administration model. This new administration model's essence is the culture, and therefore the human being like creator and culture payee. He is the center of that process in development.

To this humanist and social and cultural vision it has been indispensable to add an economic vision, with the purpose of making sustainable the process.

In the structure of the Historian's Office, the new Cultural Center of Science and Technology (Planetarium) will be inserted inside the Cultural Patrimony Division of



Figure 2. Panoramic view of the Plaza Vieja. The pink painted building at the centre is the location where the Planetarium is going to be placed

The Office of the Historian of the City of Havana whose corporate purpose is the one of contributing to the knowledge of the history and the culture of the nation, to preserve the symbols, material and spiritual expressions of the Cuban nationality included in the patrimony to its care and to make them useful when propitiating its knowledge and understanding.

The Cultural Patrimony Division of The Office of the Historian of the City of Havana has also the mission to recover and to preserve the cultural historical memory of the city and especially of their Historical Center. To take care of the conceptual and formal validity of the tangible and intangibility values, objects of their exercise and especially of the institutional work, through the popularization of the same ones. To plan and to execute activities that propitiate the improvement of the emotional and cultural life of the community, especially of the population's more fragile groups as well as to advise in their specialty to the rest of the dependencies of the Institution, looking after the genuineness and coherence of the artistic and cultural life that it is promoted.

At the moment Patrimony administers more than 30 cultural facilities: Museums, Concert Halls, Aquarium, Theaters.

The development of this project will facilitate to the Historical Center to have one of the places more yearned by the population of the capital and of the whole country. This installation and their appropriate operation lean on the sure the bases of the programs that develop the Ministry of the Science Technology and Environment (CITMA) in the fields of science and the technology, the Academy of Sciences of Cuba (ACC), the Institute of Technologies and Applied Sciences (INTEC), the Havana University (UH) as well as the Office of the Historian of the City (OHCH). This system has human capital with enough potentialities to assume the setting in march of this Center, as well as to guarantee its economic, functional operation, providing competent personnel, wages, technical insurance, electricity, maintenance and constructive maintenance of the property rehabilitated for this cultural service.

The historical centre of the Havana City where the Planetarium will be located has 2.14 square kilometers and 72 000 inhabitants but the floating population reach 80 000 persons due to its historical and cultural interest for the visitors and for the commercial activity of the zone. Astronomical education in Cuba is not widespread in the educational system; nevertheless the public interest in Astronomy and Space related matters is very high as it has become reflected by the attention paid to educational and scientific program broadcasts by the national television channels. The Cultural Centre for Science and Technology and Planetarium project is aim to guide the interest towards elementary concepts on Basic Sciences and basic astronomical formation of the people, in one of the more populated and frequented areas of the country. A key objective of this project shall be serving as an instructive motivation and entertainment for the casual or habitual visitors to these facilities, offering them the possibility to listen to instructive presentations on Astronomy and related sciences, all guided by qualified specialists.

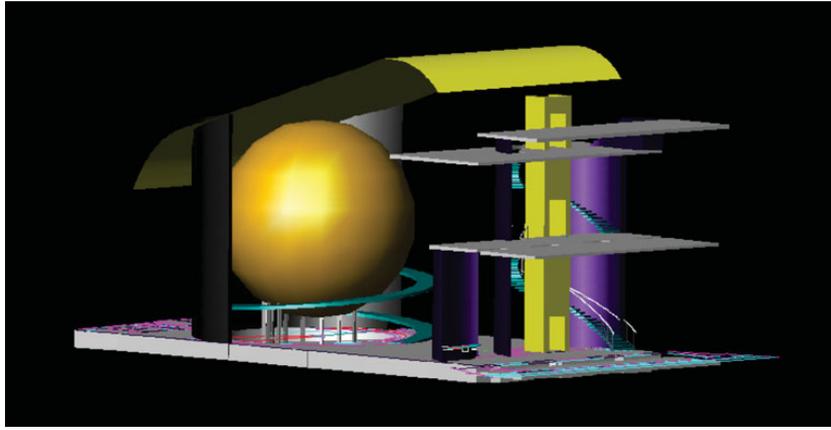


Figure 3. Cultural centre for science and technology: inner view

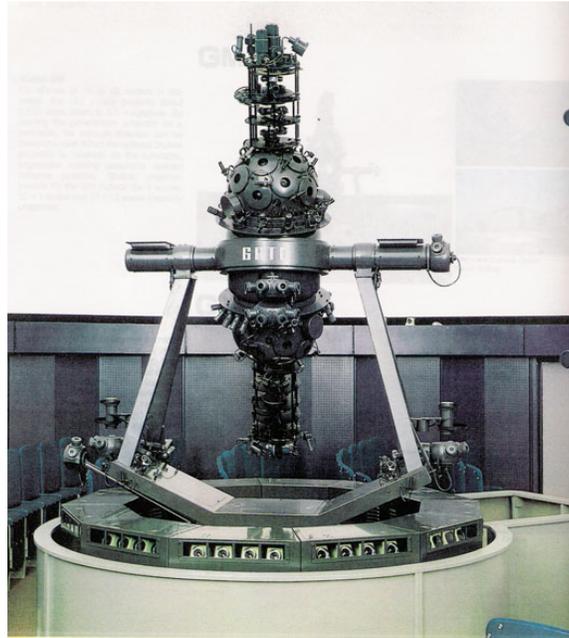


Figure 4. GOTO planetarium projector planned for Havana

Another fundamental purpose will be the establishment of a plan for educational opportunities in coordination with schools in order to allow children and young people to participate in activities enabling them to get into the fascinating world of Astronomy and Exploration of Outer Space. The setting up of the Cultural Centre for Science and Technology and Planetarium at the Old Town of Havana, provided with the specially designed GOTO G CUBA Planetarium obtained under the Japanese Cultural Grant Aid, will develop into a nonpareil pole in the national scenario for the scientific popularization and education of these sciences, surrounded by the colonial ambience's attractiveness, becoming a centre for the dissemination of information about new discoveries and scientific programs developed at national and international level.

Personal and institutional collaborations in this project are welcome.