



Element Analysis and Sustainable Development of Portuguese Architecture

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ABSTRACT: This paper mainly analyzes the elements of Portuguese architecture. Finally, according to the results of field investigation and historical data analysis, some reference suggestions are put forward from the perspective of cultural heritage protection.

Keywords: Portuguese Colonial City, Portuguese Architecture, Element Analysis

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INTRODUCTION

While elements of Portuguese architecture go back to the days before the founding of Portugal in the 12th century, they continue to resonate today not only in Portugal, but in other parts of the world as well (Eduardo Moerschbaeher, 2022).

The “Portuguese” style is however far from static and has changed innumerable times within history, with each ethnic group that lived in the Portuguese Empire implementing some of their own cultural and aesthetic adaptation across the different structures that were built – including ports, castles, shops, houses, squares, among others. As European architecture passed from the romantic to the contemporary style, certain elements remain “typically Portuguese”.

LITERATURE REVIEW

For the first time, culture was mentioned on the international development agenda in the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015. UNESCO hailed the move as an “unprecedented emphasis” on culture. The preservation and promotion of culture is a worthy goal in itself, but it also directly contributes to the achievement of many sustainable development goals, such as safe and sustainable cities, decent work, economic development, reduction of inequalities, environmental protection, greater gender equality and a harmonious and inclusive society. By taking a cultural perspective to effectively achieve development goals, there will be indirect cultural benefits. The Sustainable Development Goals (SDGs) embody a shift in thinking beyond economic development, envisioning a just, inclusive, peaceful and ecologically sustainable future. The realization of this daring dream depends on innovative development approaches that move away from the linear development model that has been adopted by most countries in recent decades, or the independent development of each sector. If the Sustainable Development Goals (SDGs) target the three pillars of the economy, society and the environment, culture and creativity make an important horizontal contribution to each pillar. At the same time, economic, social and environmental development in turn helps preserve cultural heritage and foster creativity. Cultural heritage (whether tangible or intangible) and creativity are resources that need to be protected and carefully managed. Creativity and culture can drive and enable the achievement of these goals, and culture-first initiatives can successfully intervene. The same goes for Portuguese architecture, which is also a unique cultural heritage.

METHODOLOGY

This paper analyzes and expands by examining historical archives. In addition, site visits to specific buildings are included.

RESEARCH RESULT

Tiles

Portuguese tiles, or “azulejos”, carry Moorish influence and are usually less thick and lighter than other tiles, with ceramic, glittering and impermeable

features. Initially, they were very colorful. Then, with later Dutch influence, the monochromatic blue came to dominate. They are currently used not only for their aesthetic value, but also because they are easy to maintain and offer impermeable protection to outer facades (Eduardo Moerschbaeche, 2022).



Figure 1. Portuguese Tiles (Image Source: Eduardo Moerschbaeche)



Figure 2. Portuguese cobblestone (Image Source: Eduardo Moerschbaeche)

Cobblestone

Portuguese cobblestone, or “calçadas”, is another common feature of Portuguese architecture. It represents floor covering used for paving of sidewalks, and sometimes used indoor with epoxy varnish. These traditional Portuguese sidewalks are made of small irregular stone blocks, often in black and white tones creating mosaics and designs on the floor. Due to the abundance of raw material in the region, the most used colors are black, white and brown. This kind of pavement continues to gain worldwide popularity and is considered a form of artwork in the pedestrian zones of the cities. The

sidewalks are also functional and often made up of easy to sourced raw materials(Eduardo Moerschbaeher,2022).



Figure 3. Portuguese Cobblestone in Zhuhai, China (Image Source: Photographed by the Author)



Figure 4. Portuguese Cobblestone in Macau Fisherman's Wharf Commercial Street (Image Source: Photographed by the Author)



Figure 5. Portuguese Cobblestone in Macau Fisherman's Wharf Commercial Street (Image Source: Photographed by the Author)



Figure 6. Portuguese Cobblestone in Macau Tap Seac Square (Image Source: Photographed by the Author)

Frames

"Cantarias" (another Arabic word) are very visible in Portuguese architecture. In the past, these were made of stones of the region and involved detailed work of craftsmanship. Particularly in the south of the country, more precisely in the Algarve region and in Andalusia, residential, commercial and small farm architecture continue to rely on cantarias inspired by the architectural legacy left by the Moors (Eduardo Moerschbaecher, 2022).

Plantibanda

The architectural term "plantibanda" is used to describe the upper decorative band. This traditional element of the Algarvian architecture is of decorative character and "crowns" the facade, hiding the roofs behind it. The lavish use of this decorative element symbolized the financial power of its

property owner, a symbol for wealth that would often be used in multiple colours(Eduardo Moerschbaecher,2022).



Figure 7. Frames (Image Source: Eduardo Moerschbaecher)

Chimneys

The distinctive Portuguese chimneys are visible for anyone who has visited Algarve in particular. In the old days, chimneys symbolized the personality and wealth of the owner of the house. All chimneys were distinct from each other, with the more detailed and expansive ones carrying the highest status symbol(Eduardo Moerschbaecher,2022).

Terraces

Known as “açoteias”, terraces carry Moorish influence as well and in the past served to observe the sea and the boats that arrived. Currently, many residents use this space to dry fruit and fish as well as a space to rest during hot summer evenings(Eduardo Moerschbaecher,2022).



Figure 8. Chimneys (Image Source: Eduardo Moerschbaecher)

Materials

Stone, clay, lime and wood were the elements that appeared the most in the construction of historic traditional Portuguese architecture and this materials continue to be popular. Lime, mainly, was one of the predominant material as it was easy to find in the region and continues to form the base for beautiful white facades.



Figure 9. Materials (Image Source: Eduardo Moerschbaecher)

While Portuguese architecture today is associated with famous Portuguese architects and their work around the world, anyone can get inspired by these elements to create a unique space with Portuguese charm. Tiles, side walks, bright colors and stone material can add a trendy, traditional character to any home(Eduardo Moerschbaecher,2022).

DISCUSSION

Well-known world tourist cities, such as Macau, have many cultural heritages. The protection of cultural heritage is a complex issue.Different types of cultural heritage (such as various types of architectural heritage, ruins, historical towns, industrial heritage and cultural landscapes, etc.) Important cultural carriers and will be affected by the development of tourism. Cultural heritage conservation organizations and the tourism industry should take a collaborative approach, encourage public participation, and ensure efficient management of valuable experiences for visitors and benefits for local communities.

CONCLUSIONS AND RECOMMENDATIONS

Different departments should carry out more protection of cultural heritage, fully analyze the elements of buildings, and prescribe the right medicine in order to achieve better sustainable development.

ADVANCED RESEARCH

In the future, we can cooperate with universities and enterprises to carry out big data methods to improve the sustainable development of cultural heritage protection.

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