

edited by Joaquim Rodrigues dos Santos

PRESERVING TRANSCULTURAL HERITAGE:

YOUR WAY OR MY WAY?

Questions on Authenticity, Identity
and Patrimonial Proceedings in the
Safeguarding of Architectural Heritage
Created in the Meeting of Cultures



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TITLE

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Heritage Created in the Meeting of Cultures

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THE SAINT SEBASTIAN FORTRESS ON THE ISLAND OF MOZAMBIQUE

THE CONSERVATION OF A FOREIGN HERITAGE

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ABSTRACT

To discuss the conservation of the Saint Sebastian Fortress on the Island of Mozambique we can focus on three problematics. The first one deals with cultural identity and the Mozambique's policies for architectural heritage inherited from the colonial period. The second issue has to do with the ability to keep in good condition and to practice common maintenance of historical monuments of great dimensions, as the fortresses of the Early Modern World. The third theme refers to the fortress reuse through new nonmilitary functions.

KEYWORDS

Saint Sebastian Fortress; Conservation; Rehabilitation; Reuse; Cultural identity

Historical studies and heritage

Keeping in mind the conservation of the architectural heritage, the analysis of a Modern Age fortress is necessarily accompanied by the analysis of its main constructive phases and the transformations received over time. Along the past two decades, the Saint Sebastian Fortress of the Mozambique Island has been the subject of renewed academic interest, with special attention to the unique character of its architecture. More recently, the scientific contributions to its knowledge, as part of the architectural heritage of Mozambique, come mainly from Europe and Brazil with prominence of Portuguese academics.

However, it seems clear that the increased digitization of archival documents, made available to all scholars in recent years by public and private proprietary institutions, has expanded the research on Portuguese expansion architectures involving more international research centers.

We talk of a renewed academic interest in this monument, because the general interest in the ancient Portuguese heritage experimented a great increase in the last decades. Master's thesis and doctoral programs have been increasingly devoted to the study of ultramarine Portuguese architecture, built since the early colonial period, until the years immediately preceding independence of the Portuguese-speaking African countries. It is in this broad and problematic context that a local monument such as the Saint Sebastian Fortress must be studied, allowing its historical understanding, expanding the sharing of its identity and its cultural capital. Cultural foundations and academic associations such as the Calouste Gulbenkian Foundation and the Association of Portuguese Language Universities with the Fernão Mendes Pinto Award, encourage research in many areas of built heritage with the institution of academic awards or funding for scientific research projects. In the case under study, the recent research by Vera Félix Mariz suggests that historical studies carried out on Saint Sebastian Fortress and other Mozambicans monuments have reached a certain primacy on the subject of the historical awareness¹.

The knowledge to strengthen the cultural identity

The attention to materials and structures often seems to dull the restorer's sensitivity to the formal values of an architecture. This can happen sometimes when the architect looks at architecture as a historical document rather than as a monument. Not only the fortress, but all the historical architecture in the Island of Mozambique should be considered as the result of persistence and stratification, largely in line with the studies of the historian Alexandre Marques Lobato (1915-1995) and the architect Pedro Quirino da Fonseca (1922-2001). This approach to the multicultural complexity of architectural heritage, incorporating some of the results of archaeological excavations, has been put into practice in the Mozambique context since 1943, with the creation of the *Comissão de Monumentos e Relíquias Históricas de Moçambique*². For the reconstruction of this period, it is particularly interesting the monograph of Alexandre Lobato *A Ilha de Moçambique (Monografia)* dated 1945, in which the news of archaeological excavations carried out within the Saint Gabriel bastion are presented, as well as the writings of Fonseca published in the *Monumenta* bulletin between 1972 and 1973.

In the *Monumenta* articles, Fonseca analyzes a series of historic buildings on the Island of Mozambique, such as the *Misericórdia* Church which he describes as an extension of an older chapel called *Espírito Santo*; The Governor's Palace where the Saint Paul Chapel will

include part of the old Saint Gabriel Fortress and also the Saint Sebastian Fortress. According to this author, part of the parapet that in present time surrounds the chapel of *Nossa Senhora do Baluarte* corresponds to the primitive fortification built on design instructions of D. João de Castro, from 1545³. The method used by Fonseca was already, therefore, the most suitable for a restoration architect, accustomed to critically compare the archival sources with observations of the constructions *in situ*. He did not recognize himself as a historian, and perhaps he was not even a restorer of ancient architecture as we understand it today, but he certainly was a precursor, revealing in his writings to be a cultured architect, and sensitive to the best methods of historical architecture research.

Historical sources, gathered from the 1940s to the present, began to offer a clear image of the main transformations of the fortress. However, and taking into account the systematic analysis of documentation made by the recent work of Nuno Simão Gonçalves on Miguel de Arruda's project (d. 1563), we can deduce that the historical reconstruction of the initial project of this fortress is still an open theme⁴. The historical documents that refer to the origins, the design and the construction of the fortress should continue to be analyzed in view of a more comprehensive understanding of the monument. But this research already allows opportunities to proceed with comparative analyses of this modern military architecture with several other cases inside and outside the Portuguese military influence, identifying differences and analogies. Gonçalves reconstructs the network among Italian military engineers and Portuguese military engineers that made possible the realization of this and other overseas fortresses with the most updated rules for the military architecture of the time, in a political context in which the Portuguese monarchy could count on good diplomatic relations with other relevant European monarchies⁵.

Saint Sebastian demonstrates that the engineers followed the defense techniques acquired by the Italian and European military engineering who, already during the first half of the sixteenth century, adopted the geometry of walls with bastions and the use of embankments. This can be seen in the four bastions and partly behind the curtains of the fortress. In this way, the curtains and the faces of the bastions, although affected by the artillery, would have the capacity to absorb the bullets instead of shattering and even collapsing.

Building this fortification as a set of ductile materials instead of fragile materials was maybe a consideration not only present in the transformations of the seventeenth century or later, but also present from the initial construction, considering the marine environment of the site. This would respond to the D. João de Castro (1500-1548) notes in the report sent to the king in 1545. Castro suggested the construction of a '31 braças' wall to cut off the rocky extremity north of the island, from sea to sea. At both ends of this wall he thought the construction of two bastions, 'cheos' and 'teraplenados', from which the island and the port would be militarily controlled⁶.

Observation 1: where the stones were cut

Looking at the methodological approach of Fonseca, but focusing on the study of coral stone heritage conservation, we began to identify and quantify the presence of natural ridges of coral sedimentation incorporated, on the one hand, at the base of the curtains of the fortress and, on the other hand, in the walls of a significant number of houses along the streets between the *Hospital* and the *Praça dos Heróis*. Although the initial purpose in our observations was to verify the preservation of these natural ridges comparing the different effects of rainwater and seawater, our attention has focused on an important soil excavation work done for the fortress construction as well as for the latest architectural interventions on the island⁷.

With reference to the *Planta da ilha e perspectiva da cidade de Moçambique* by J. Faustino, dated *circa* 1835⁸, we think that the southern part of the island was leveled in relatively recent times, just as the excavations where nowadays the neighborhoods called *macuti* are located, excavations documented in the well-known photograph published by Carlos Bento Freire de Andrade (1893-1956), in 1929⁹. Looking at the cartography of the island, produced during the 19th and 20th centuries, we can deduce that the excavations of the central and southern areas of the island are related to urbanization of the eastern sector of *Cidade de Pedra* and certainly not to build the fortress.

Outside the fortress and close to the four curtains, some areas of excavation were identified. While on the one hand they refer to the excavations of initial phases of the fort building itself, on the other they do not correspond to the '*debuxo*' described in the report for the new fortress João de Castro sent to the king of Portugal in 1545, even if they satisfy the general criteria suggested there for the use of the area as military defense. The natural rocky crests embedded in the fortress curtains testify the updated forms of the modern military architecture that consist of the adaptation and use of the topography present at the site of the plant. In the absence of the graphic design mentioned in the report of 1545 with the word '*debuxo*', through the geometric survey of the set of these natural rock ridges embedded in the walls, perhaps it is possible to arrive at the design of the architect Miguel de Arruda that King D. João III had ordered João de Castro to use for the construction of the fortress, in the letter of March 8, 1546¹⁰.

Observation 2: works for leveling

The theme of leveling the island and that of rock excavations for the foundation of buildings or to obtain the necessary materials for their construction is of great interest if we pay attention to the physical preservation of the Island of Mozambique in a long period of time. Among the studies carried out during the period of restorations between 1960 and 1970 on the Mozambique Island, the architect Fonseca analyzed the problem of the initial phases of the fortress construction. In this way he transcribed a letter of 1547 Captain-General Fernando de Sousa sent to the King D. João III, searching in this text references of the old tower of Saint Gabriel and the new fortress not yet begun. Interested in the problem of the old and new fortification project, Fonseca barely mentions the matter of the soil preparation for new construction, without treating the subject. The matter is present in the same letter, where it is also mentioned the employment of sixteen workers specially selected and transferred there to cut the hard rocks, squaring the stones and producing the lime. In the letter it is also referred that manpower reinforcements were foreseen and they would have arrived with architect Francisco Pirez responsible for the construction in Mozambique Island, then occupied with the yard of another fortress in Ormuz¹¹. From Fonseca's studies it is not possible to deduce the amount of time and resources actually spent on preparatory work, as preparing the foundation soil or building materials. Fonseca just says that the construction was started in 1558 and that works continued for some 60 years before having a final structure. These dates are confirmed in recent Gonçalves revisions based on different sources¹².

In addition to excavations for leveling the soil of the island, filling operations were also carried out, in particular to eliminate the natural channel that once divided the island into two parts. Two historical documents attest to this ancient orographic condition: the description of the Mozambique Island in *Livro de Lisuarte de Abreu* and the map contained in *Roteiro de Lisboa a Goa por D. João de Castro*¹³.

Another important leveling work was probably carried out to fill the ditch identified in the historical maps of the island. Alexandre Lobato, in his illustrated *Monografia*, confirms that this ditch really existed and coincided with the slight soil depression, visible in his time, near the fortress curtain oriented to the *Campo de São Gabriel*. In the same book, Lobato reports the existence, in 1945, of a project to restore this ancient ditch¹⁴.

During the rehabilitation works carried out in 2009, it was decided to build a new water tank connected to the fortress cistern over the area of the ditch mentioned by Lobato. Later, with another project, the wall of the football field was also executed. These two new buildings conceal the view of the oldest entrance gate of the fortress, making it difficult to visitors the perception of the geometry formed by the *Baluarte Santa Bárbara*, the curtain and the *Baluarte São Gabriel*: the architectural ensemble designed to control and defend the hypothetical ditch and the whole northern area of the island.

In addition to these aspects, it is also relevant to consider the fill, perhaps very old, of the ephemeral channel that divided the island into two parts during high tide. The existence of this lagoon channel may have conditioned the structure of the first settlement, probably the location of the old fort *São Gabriel* and therefore the successive development of the island urban structure. For the purpose of a sustainable conservation of the island, it is useful to think that the wave action that maintained the channel of communication between the sea and the lagoon still exists today. On the walls and on the east ring road embankments, in the old channel section, the same tide has caused and continues to cause cyclical problems of coastal erosion. In this sense, the contour lines of the island were drawn using the Google Earth algorithms, and we can see that the longitudinal profile of the island has two protrusions within which there is a depression, that may most likely correspond to the old channel.

The long-term conservation

In 1991, UNESCO included the Island of Mozambique on the World Heritage List, in accordance with criteria IV and VI of the registration procedures:

Criterion IV. The town and the fortifications on the Island of Mozambique, and the smaller island of St. Laurent, are an outstanding example of an architecture in which local traditions, Portuguese influences and, to a somewhat lesser extent, Indian and Arab influences are all interwoven. – Criterion VI. The Island of Mozambique bears important witness to the establishment and development of the Portuguese maritime routes between Western Europe and the Indian sub-continent and thence all of Asia.

and with a summary motivation as follows:

The fortified city of Mozambique is located on this island, a former Portuguese trading-post on the route to India. Its remarkable architectural unity is due to the consistent use, since the 16th century, of the same building techniques, building materials (stone or macuti) and decorative principles.¹⁵

This inscription was preceded and followed by many initiatives, both in the cultural field and in the political field. However, the document that expressed the best opportunity to enhance the island's heritage, in a period of negligence and general disinterest, was the '*Relatório-Report – Ilha de Moçambique*' published in English and Portuguese, dated 1982-1985 with the initiative of the Secretariat State of Culture of Mozambique and the Arkitektskolen i Aarhus of Denmark.

Edited by Sylvio Mutal in 1999, the 'Final Report: Ilha de Moçambique – World Heritage Site. A programme for Sustainable Human Development and Integral Conservation' is another important reference documenting significant and complex activities to prepare the rehabilitation of the island from 1991 to 1999.

The intense institutional activity of UNESCO, the generosity and perseverance of donor countries, the political foresight of the Mozambican government and the cultural interest of local and international groups created the conditions in 2003 for the agreement between the Mozambican government and UNESCO for the rehabilitation of the Saint Sebastian Fortress.

From the competition papers for rehabilitation work, issued by UNESCO in Maputo in 2007, it is clear that the strategy is a comprehensive program of both cultural conservation and social promotion. Rehabilitation of the monument was conceived as an opportunity to improve the conditions of the whole society, in a process that extends over time and is divided into successive stages of work. Through studies and restoration work carried out in similar cases, it was possible to experiment and confirm the idea that the restoration of a large historical monument requires a long-term programmatic approach¹⁶.

Fifteen UNESCO official reports on Mozambique Island document the successes and mistakes in the conservation process of this monumental site marked by the No. 599 code in the World Heritage List. These periodic reports also show that the recovery program management did not occur in a linear manner. It was not always easy for UNESCO and supporters to communicate with donor agencies. On the other hand, it has been difficult for local administrators to obtain the funds needed to keep in good condition the parts of the fortress that have already been restored. However, after the first restoration works of the fortress, for some time the island community benefited of more potable water and benefitted in the sector of tourism and cultural events.

One of the major problems that the rehabilitated heritage of the island implies is the economic weight and the technical capacity to maintain over time functions and integrity of the old architectures by their owners. In the case of the fortress, it was observed that there is no commensurability between economic government resources and costs required for proper regular maintenance. From the point of view of techniques, it seems insufficient to write a maintenance manual for users, clearly more adequate to promote the maintenance of simple private houses, but unsuitable for maintenance work of this large and sophisticated fortress.

The maintenance of the monumental building, restored with works carried out in successive stages, seems to be underestimated with respect to the importance attributed by the institutions to other topics such as archeology, history, social organization and tourism. Historically and archaeologically, the patrimonial value of an ancient architecture is expressed by its peculiarity as a history document, but from an architectural point of view it is given by its unique architectural qualities. If we decide to keep the formal and structural quality of an architecture, then it is necessary to adopt appropriate means for this purpose.

The adoption of methods suitable for the maintenance of historic buildings and the San Sebastian fortress now partly rehabilitated, has been attempted in recent years with the training of artisans and technicians in the local traditional techniques in the former *Escola de Artes e Ofícios da Ilha de Moçambique*. However, the way forward is not easy, due to the discontinuity of donor funding.

The difficult issue of new functions

Today the restorers are able to easily identify the most appropriate technical solutions for a correct restoration, even in overlapping structures or missing architectural components. However, it is often more difficult to imagine durable new features to replace the obsolete ones, as in the ancient fortifications. To this difficulty we must add the lack of financial resources needed for restoration work.

In the 2007 UNESCO¹⁷ program for the rehabilitation of the Saint Sebastian fortress, the idea of restoring the great monument in a unique campaign was set aside and the architects designed a project, the first of several operations planned in the general program, maintaining a hierarchy of priorities. The general program is conceived in the form of functional projects which can in fact be funded and then activated in successive phases over a period of several years.

Between 2008 and 2009, the works of the first functional project were carried out. They are the priority works of the general program, focusing on the rehabilitation of battery platforms and terraces throughout the fortress. Two important goals have been achieved with these works: the reduction of structures' degradation and their effective protection against heavy rains, also reducing the phenomenon of disintegration of the walls by the action of soluble salts and, on the other hand, the rehabilitation of the rainwater collecting and storage system for domestic use.

In the second phase of rehabilitation work, according to the general rehabilitation program, the restoration of the soldiers barracks located between the *Baluarte de São João* and the *Baluarte de Nossa Senhora*. In this second functional project the installation of a university center for studies on the Island of Mozambique and its context is planned. With this second executive project, UNESCO proposes a very convincing solution to establish a new and compatible function for a space originally created for a military function that has ceased to exist. This solution, in fact, leads us to assume and offer the possibility of transforming the fortress into a permanent laboratory for architectural restoration, able to accommodate studies and to promote technical and scientific training of personnel responding to the highest national and international requirements.

The execution of specific interventions, such as consolidating structural failures, counteract the erosion of rocks at the base of the chapel of *Nossa Senhora da Conceição* or to protect the curtains to prevent the penetration of rainwater, requires expertise and sophisticated technologies. On the other hand, a conservation program, integrated with maintenance practices, seems to be the best way to get a lasting beneficial effect on a monument of such great size. And perhaps the permanent presence of a specialist laboratory for architectural restoration, inside the fortress, can guarantee both the quality of specialist restorations and the good practice of continuous maintenance.

This idea is not new because, as has already been said, a long-term program exist, and it is a good program. We are confident that an effective preservation of this monument will be carried out, at least for as long as it is under the attention of the international community. The rehabilitation of the fortress of Mozambique Island should not be included in a policy of improvised, often disastrous restorations, since it is conditioned by the criteria with which the Mozambique Island, with its coastal context, was inscribed in 1991 in the UNESCO World Heritage List.

Conclusion

Still undervalued, the Saint Sebastian Fortress in Mozambique Island is now the focus of attention of the international academic community, in a long process of historic heritage knowledge. Despite long and complex, the UNESCO architectural restoration process underway has, so far, ensured that the abandonment condition has not become a ruin condition.

Using the fortress only to stimulate tourism seems insufficient to guarantee its conservation. To be preserved, the fortress needs new functions compatible with its historical importance. And this is still an unsolved problem¹⁸.

NOTES

- 1 Mariz 2016, 468; Mariz 2016, 493.
- 2 Mariz 2012, 1-10; Mariz 2013, 237-244.
- 3 Sanceau 1955, 90-101; Costa 1940, 9-48.
- 4 Gonçalves 2011, pp1-pp2.
- 5 Gonçalves 2011pp1-pp2.
- 6 Project consulted in two transcriptions: Costa 1940, 19-21; Sanceau 1955, 97-100.
- 7 Berti 2016, 144-179.
- 8 Faustino 1835 ca.
- 9 Andrade 1929, fig.77.
- 10 Costa 1940, 25.
- 11 Fonseca de 1972, 60-61.
- 12 Gonçalves 2011, V.1, 42-44.
- 13 Corvo 1882, 306.
- 14 Lobato 1945, 42.
- 15 <http://whc.unesco.org/en/list/599>.
- 16 Berti 2004, 992-996; Berti, Carbonara 1994, 89-106; Berti 2003, 93-110.
- 17 UNESCO 2007.
- 18 I would like to thank my colleagues Jens Hougaard, João Mascarenhas Mateus, João Velez do Amaral and Fernando G. Branco.

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Image 1 – Survey of madreporic ridges embedded within the curtain between the bastion of *Nossa Senhora* and the bastion of *Santa Bárbara* (source: *M. Berti*)



Image 2 – Excavations traces near the bastion of *São João* (source: *M. Berti*)

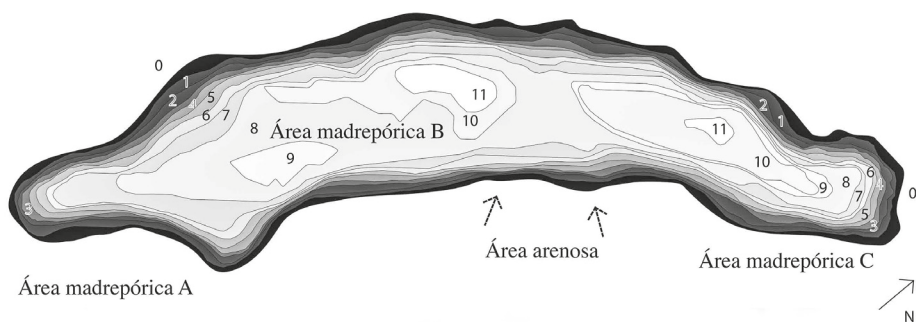


Image 3 – Contour lines of the Island of Mozambique using Google Earth algorithms (source: *M. Berti*)

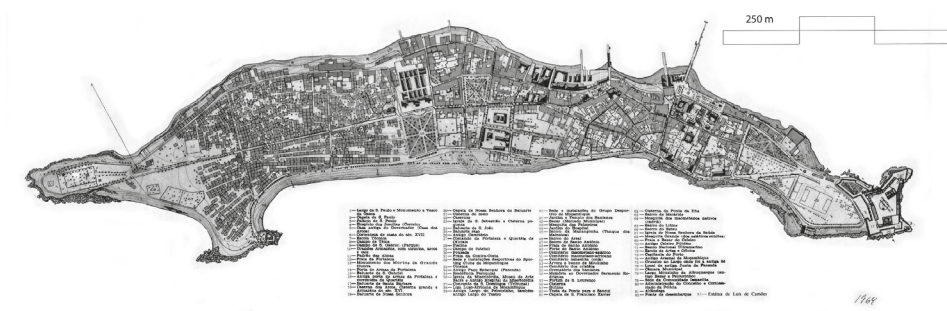


Image 4 – Mozambique Island Map (source: *Lobato 1945*)

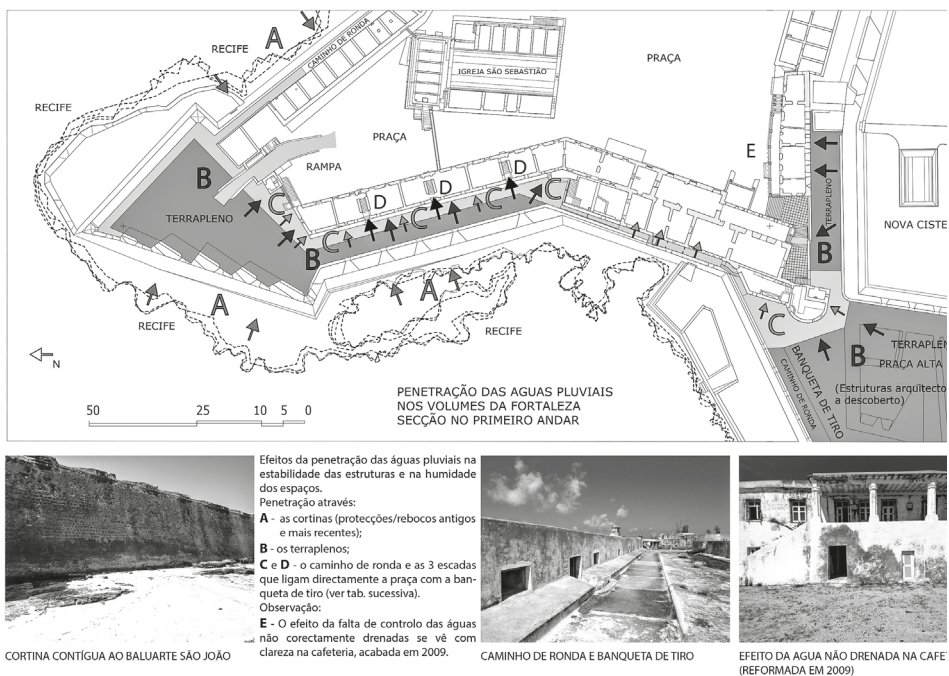


Image 5 – Preliminary thematic research to test the hypothesis of using the rooms of the fortress of São Sebastião for university activities (source: M. Berti 2016)