THE MYSTERIOUS MAROIÇOS ON TRINDADE ISLAND, SOUTH ATLANTIC, BRAZIL

OS MISTERIOSOS MAROIÇOS DA ILHA DA TRINDADE, ATLÂNTICO SUL, BRASIL

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Resumo Este artigo apresenta as primeiras evidências arqueológicas e fotográficas de construções de pedra anteriores a 1957 na Ilha da Trindade, Atlântico Sul, Brasil, que exibem fortes semelhanças morfológicas e funcionais com os maroiços, estruturas agrícolas de pedra seca encontradas na Ilha do Pico, nos Açores, Portugal. Essas estruturas são anteriores à instalação do Posto Oceanográfico pela Marinha do Brasil em 1957 e aparecem em raras fotografias de 1916 e 1959. Fragmentos cerâmicos encontrados no local reforçam a hipótese de uma origem no final do século XVIII. Paralelos etnográficos com os Açores sugerem que essas construções tinham função agrícola, sendo utilizadas para limpar o terreno e viabilizar o cultivo. Sua semelhança com os maroiços, por vezes interpretados como estruturas megalíticas ou cerimoniais, reforça seu papel utilitário em um ambiente insular hostil. Propomos que essas construções sejam reconhecidas como patrimônio cultural e protegidas pelas autoridades brasileiras, como evidência material da pouco conhecida presença açoriana na Ilha da Trindade. **Palavras-Chave:** Colonização açoriana. Agricultura tradicional. Preservação arqueológica. Construções em pedra seca.

Abstract: This article presents the first archaeological and photographic evidence of pre-1957 stone constructions on Trindade Island, South Atlantic, Brazil, which exhibit strong morphological and functional similarities to maroiços, the dry-stone agricultural structures found on Pico Island in the Azores, Portugal. These features predate the Oceanographic Post established by the Brazilian Navy in 1957 and appear in rare photographs from 1916 and 1959. Pottery fragments recovered from the site support a late-18th-century origin. Ethnographic parallels from the Azores suggest these structures were likely agricultural in nature, used to clear land and facilitate cultivation. Their resemblance to maroiços, sometimes misinterpreted as megalithic or ceremonial in function, reinforces their utilitarian role in a harsh, insular environment. We propose that these constructions be recognized as cultural heritage and protected by Brazilian authorities, as material evidence of a little-known Azorean presence on Trindade Island. **Keywords:** Azorean colonization. Traditional agriculture. Archaeological preservation. Dry-stone constructions.

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https://doi.org/10.26892/noctua.v2i10p35-42

Introdução

Trindade Island, situated approximately 1,200 km off the southeastern coast of Brazil, is a remote volcanic island in the South Atlantic Ocean (20° 29.3–31.7' S, 29° 20.6–17.9' W) that has historically attracted attention due to its strategic location and ecological singularity within the Brazilian oceanic island system (Alves and Silva, 2016; Marinha do Brasil, 2025). Discovered by Portuguese navigators around 1501 and disputed by Britain in the 18th century, the island was the target of multiple short-lived settlement attempts (Silva and Alves, 2011). Notably, a failed Portuguese initiative in 1782 sent 200 soldiers and six Azorean couples to occupy and cultivate the island, but the endeavor was abandoned by 1797 due to ecological and logistical limitations, including infertile soil, lack of firewood, and limited freshwater availability (Brito, 1877; Azevedo, 1898; Ribeiro, 1951).

Despite the limited duration of the Azorean presence, the material legacy of this colonization has been largely neglected by scholars. Brazilian historical archaeology has traditionally prioritized urban, coastal, and indigenous contexts (Funari and Ferreira, 2016), while archaeological investigation of remote insular sites remains marginal. Nevertheless, the Azorean diaspora played a fundamental role in shaping the rural landscape of southern Brazil and Atlantic islands, introducing specific architectural practices and land-use systems that reflect resilience in adverse environments (Roger, 1947; Poubel, 2023). Dry-stone constructions such as *maroiços* and *currais*, widely documented in the Azores, exemplify adaptive strategies for farming in volcanic environments. Trindade, with its scarcity of soil and harsh terrain, presents a unique case study for evaluating the potential transposition and functional persistence of these cultural practices within an isolated island ecosystem.

This study presents the first detailed documentation of stone structures on Trindade Island that closely resemble *maroiços* found on Pico Island, Azores. Through comparative morphological analysis and historical correlation, we argue that these constructions are likely remnants of the Azorean colonization attempt between 1785 and 1797.

Historical context and Azorean settlement

From 1617 to 1930, many Azoreans migrated to Brazil, often driven by economic hardship and political motivations (Poubel, 2023). The Portuguese Crown, aiming to prevent foreign control

over strategic territories, promoted the settlement of remote islands, including Trindade. While colonization efforts in southern Brazil are well documented (Silva, 1994), the Azorean occupation of Trindade Island remains notably underexplored in historical and archaeological literature.

Discovered around 1501 and appearing in nautical charts from 1504 (Alves and Silva, 2016), Trindade Island was contested between Portugal and Britain in the 18th century. A British garrison was stationed there in 1781–1782, surviving on local crops and animals, including goats and pigs previously released by Edmond Halley in the 1690s (Ribeiro, 1951). Following British withdrawal, Portugal reasserted its claim by sending 200 soldiers and six Azorean families in 1782. The settlers attempted small-scale agriculture and fishing, but harsh conditions quickly took a toll. The thin volcanic and guano-enriched soil was chemically aggressive, leading to widespread crop failure by 1783 (Azevedo, 1898). The settlement persisted for over a decade, but by 1797 was deemed unviable due to firewood scarcity, water shortages, and accelerating ecological degradation, likely exacerbated by the growing feral goat population. The Brazilian Navy ultimately eradicated the feral goats in 2005 (Silva and Alves, 2011).

Evidence of Azorean stonework

Over 40 research expeditions to Trindade Island between 1994 and 2024 led to the documentation of mortarless, human-made structures built prior to the formal Brazilian occupation. Some appear in unpublished photographs by Bruno Lobo (1884–1945) (Figure 1a), a Brazilian scientist and physician who directed the National Museum (1915–1923) (Santos-Lobato and Pittella, 2021), and in images from 1959 by Johann Becker (1932–2004), a National Museum entomologist (Gil-Santana, 2009) (Figure 1b). These images provide early visual evidence of structures the location and characteristics of which remain consistent with features observed today. The structures, some of which appear in a 1916 photograph by Bruno Lobo (Figure 1a), predate the official Brazilian naval occupation of the island in 1957 and offer valuable insights into early transatlantic rural architecture.

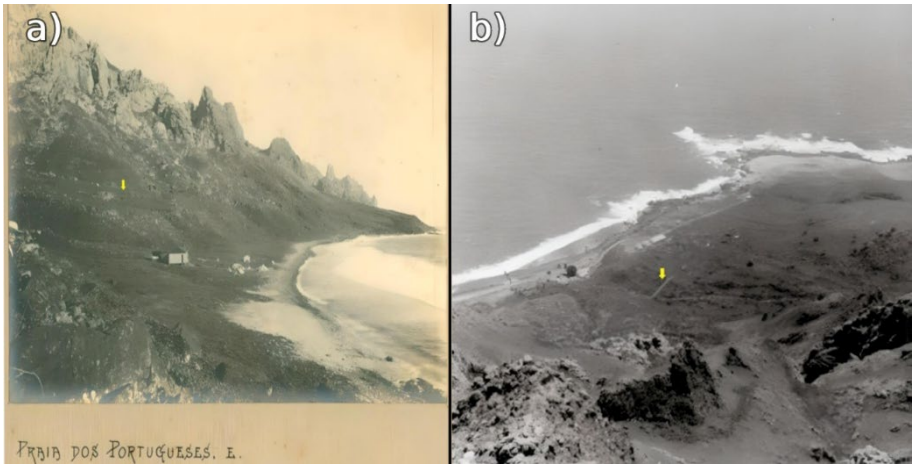

Figure 1: (a) Ancient rock construction on Trindade Island (arrow). Photo: Bruno Álvares da Silva Lobo (1916, Ruy José Válka Alves digital archive; The originals burned in the National Museum fire of 2018); (b) Ancient rock construction above the *Posto Oceanográfico da Ilha da Trindade* viewed from Desejado Peak, Trindade Island. A single *Terminalia catappa* L. tree appears to the left of it. Photo: Prof. Johann Becker (1959, Ruy José Válka Alves digital archive).

Recent satellite imagery confirms the presence of several prominent rock piles in the area above the Oceanographic Post, arranged in both linear and clustered patterns (Figure 2a). These formations include elongated segments resembling roads or walls (Figure 2b-c and 3a), and enclosures that suggest possible use as pens or *corrals* (Figure 3b-c). The tallest of these piles exceeds 2 m in height (Figure 3d).

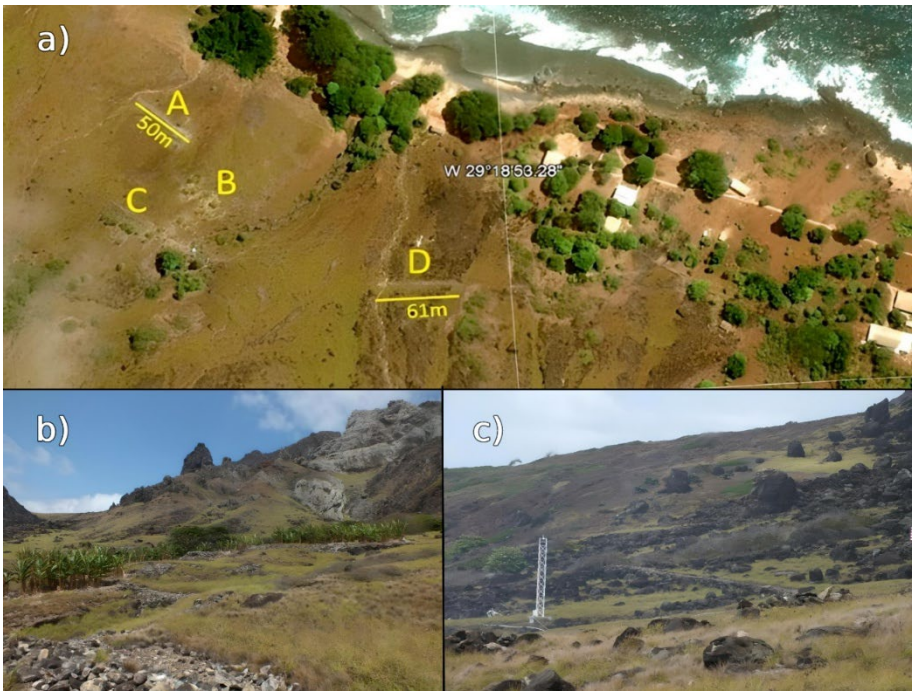

Figure 2: (a) Google Earth satellite image exhibiting the rock piles (A-D). February 2015. A, C and D: linear structures; B: enclosure and tallest pile; (b) Various rock piles on Trindade Island. October 2023. Photo: Nílber Gonçalves da Silva; (c) Road-like wall of piled rocks on Trindade Island (D in Figure 2a, at center). October 2023. Photo: Nílber Gonçalves da Silva.

https://doi.org/10.26892/noctua.v2i10p35-42

Figure 3: (a) Road-like rock pile (A in Figure 2a) on Trindade Island. October 2023. Photo: Nílber Gonçalves da Silva; (b) Pen enclosures on Trindade Island (B in Figure 2a). October 2023. Photo: Nílber Gonçalves da Silva; (c) *Currais* (pen enclosures) on Pico Island. October 2023. Photo: Ruy José Válka Alves; (d) The tallest extant rock pile above enclosures on Trindade Island (B in Figure 2a). October 2023. Photo: Nílber Gonçalves da Silva.

The resemblance to Azorean landscape architecture is striking. On Pico Island, maroiços (from marouço, meaning high sea waves or high tide [Dicionário Português-Espanhol, 1974]) scatter the terrain near sea level and serve primarily as rock disposal piles to prepare land for agriculture (Alamy, 2020). Informal accounts collected by Ruy José Válka Alves in 2023 indicate that rocks were manually removed from fields and stacked into mounds, while soil was imported from other locations, including Faial Island. These structures coexist with mortarless *currais* for viticulture, similar in layout and function to those found on Trindade. Smaller *maroiços* on Pico exhibit irregular or conical shapes comparable to Trindade's mounds. Larger ones, some reaching up to 13 m in height, are shaped like step pyramids (Figure 4), with 1 m terraces allowing vertical expansion while conserving arable land. This architectural feature, while

sometimes misinterpreted as vestigial signs of ancient civilizations (Matos, 2013), is consistent with pragmatic rural engineering.

Figure 4: Step pyramid-shaped *maroiço* (upper left) and cleared corn field in foreground. Pico Island, October 2023. Photo: Ruy José Válka Alves.

Field evidence also includes archaeological findings. During expeditions in 1994 and 2010, pottery and glass fragments were encountered within or near the stone piles (Figure 5). Earlier, Prof. Johann Becker had reportedly collected and restored ceramic pieces from the same area, including entire pots and plates of varied provenance. These incidental findings corroborate human activity consistent with occupation or repeated presence.

Figure 5: Pottery and glass fragments from the rock piles on Trindade Island, found by our team in March 2010. Photo: Nílber Gonçalves da Silva/Ruy José Válka Alves

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Final Remarks

The architectural, historical, and archaeological evidence presented robustly supports the hypothesis that the stone structures on Trindade Island were built by Azorean settlers during their occupation from 1785 to 1797. The parallels with traditional Azorean features such as *maroiços* and *currais* are compelling. These findings broaden our understanding of Atlantic island colonization and highlight the persistence of vernacular architecture even in the most remote contexts. A more detailed discussion on Trindade's colonization attempts is presented in Alves and Silva (2016). We recommend that these structures be formally cataloged and protected by Brazilian cultural heritage institutions, such as IPHAN. Their preservation not only honors the memory of an overlooked chapter in Brazilian history but also provides material evidence of the transatlantic diffusion of land-use strategies. Further interdisciplinary studies, including archaeological excavation and chronometric dating, would greatly enhance our understanding of this heritage.

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