

Exploring Architectural Resilience and Future of Toda Tribe of Ooty

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ABSTRACT: *This dissertation explores the connection between tribal architecture and the identity of indigenous communities. It understands the deep cultural significance of architectural styles and practices in representing their heritage and values. It also confronts the challenges posed by urbanization and globalization happened, which threatened the continuity of these traditions. The research traces the historical development of tribal architecture and its ongoing relevance in the modern world. It puts practical strategies aimed at conserving, adapting tribal architectural heritage, seeks to find a balance between preserving cultural and addressing the evolving needs of tribal populations.*

KEYWORDS: *Architecture, Culture, Impact of Globalization, Indian Tribe, Toda Tribes*

1. Introduction

Settled in a visually attractive Nilgiris Hills of southern India, the Toda tribe's architectural heritage is complex with their cultural identity. Their unique structures, referred to as "Munds" and "shrines," have symbolized tradition and spirituality for generations. However, the encroachment of modernization and the emigration of younger generations in search of better opportunities has caused threat to the preservation of these architectural marvel. As the knowledge of construction and maintenance is primarily held by a number of elder community members, there's an urgent need for the government to recognize this issue and provide support them. This dissertation being on a journey to explore the Intense connection between Toda architecture and cultural identity, researching into its historical significance, scrutinizing the challenges it faces, and the important role that governmental collaboration plays in safeguarding this valuable cultural heritage.

1.1 Aim

This study aims to investigate how these elements are indicating of their cultural heritage and

demonstrate adaptability to their environmental surroundings. And its endeavours to provide valuable deep understanding into the prospective Future of the Toda tribe.

1.2 Objective

Exploring the impact of urbanization, tourism, and globalization on Toda architecture, which is connected to their cultural heritage.

1.3 Research gap and scope

Insufficient research into the materials utilized in Toda tribe architecture, the different construction methods applied in the crafting of their "Munds" and "shrines," along with a scarcity of comprehensive studies examining the future and the numerous problems faced by the Toda tribe in the Ooty region, have resulted in a substantial created a void in our understanding ability and efforts to preserve this indigenous community's architectural legacy and culture.

1.4 Limitations

- The process of accessing and gathering comprehensive data may encounter certain limitations, particularly in terms of traditional knowledge and building techniques that could be restricted to elder members within the community.
- Conducting field visits to remote tribal areas can be challenging due to their geographical isolation. Such endeavours cause a considerable allocation of resources, Limited amount of time and travel commitments but also financial funding for transportation, accommodation, and other essential aspects.
- The outcomes of this study might possess a degree of a unique characteristics of the Toda tribe, which could limit their direct applicability to other indigenous tribes with other alternative architectural traditions. The findings may be more contextually bound to the Toda tribe's distinct cultural and architectural context, potentially will be requiring

further research to determine their relevance to other indigenous groups and architectural practices.

- The potential for translation difficulties can introduce a set of new challenges, particularly when communicating with tribal communities. Language barriers may present obstacles in conducting interviews or capturing oral history, accurately, potentially leading to misinterpretations or loss of data within the gathered information. These translation issues become crucial to ensure the reproduced and richness of the data collected during the research achievement.

2. Methodology

The methodology employed for this research encompasses three key components.

- An extensive literature review will be conducted to establish a strong foundation for understanding tribal architecture within its cultural contexts and to gain perception into existing conservation efforts.
- Architectural documentation will be carried out within selected tribal communities to provide data on their architectural traditions. All interactions with indigenous communities will be guided by ethical considerations to ensure the utmost respect for their cultural heritage and privacy.
- Qualitative methods will be used to research into the depths of tribal architecture, cultural significance, and conservation challenges. while quantitative techniques will be applied where to address specific research objectives and questions in the study. This comprehensive methodology aims to provide a understanding of tribal architecture, its cultural significance, and effective strategies for its preservation.

3. Literature Review

3.1 Origin and Early Influence

The Nilgiri Hill, situated in the south Indian states of Tamil Nadu, Kerala, Karnataka form a Visual attractive mountain range within the Western Ghats (designated as a UNESCO World Heritage Site). These hills are known for their lush greenery, dense forests, and temperate climate. Nilgiri Hills region, has a diverse array of indigenous tribal communities, each characterized by its distinct cultural heritage and practices.

Several notable tribes residing in the Nilgiris Hills includes the origins of the Toda tribe in the Nilgiris, settled within the Western Ghats, are cloaked in mystery. Approximately 1500 years ago, it is believed that climate change in peninsular India compelled this pastoralist community to migrate to the highest Nilgiris Hills, seeking refuge from shifting environmental conditions like change in temperature. However, the Toda tribe themselves remain uncertain about the exact motives behind their ancestral migration. Furthermore, the confirmation of coprophilous fungal spores in the region provides arousing evident presence of cattle within their culture, emphasize the profound relationship between the Toda people and their traditional way of life.

3.1.1 Toda Tribe

Known for their unique parabolic huts known as "Munds" and their pastoralist lifestyle, the Toda people possess a rich cultural heritage centred around buffalo-based livelihoods and interesting customs.

3.1.2 Kurumba Tribe

The Kurumba community, deeply connected to agriculture, staple crop cultivation like ragi, boasts a culture closely related with the land, complete with its language and traditions.

3.1.3 Irula Tribe

The Irula people are skilled snake catchers. Expertise in handling reptiles and they also possess a wealth of folk medicine knowledge and are known for their complex beadwork and basket weaving.

3.1.4 Badaga Tribe

Among the large tribal groups in the Nilgiri hill, the Badaga community has its own language and traditionally engages in tea cultivation and dairy farming. Their culture is also enriched with distinctive customs, festivals, and rituals.

3.1.5 Kota Tribe

Their agricultural practices and unique headgear worn by men during cultural ceremonies provide them a unique identity, the Kota tribe maintains a governance system and proudly preserves its traditional customs through generations.

These tribal communities have established their roots in the Nilgiris Hills for centuries, with their cultures deeply entangled with the natural environment. While facing various challenges such

as land encroachment and modernization, they persevere in safeguarding Nilgiri Hills for generations. Therefore, provide a glimpse into the rich indigenous cultures and traditions that enrich India's cultural and ecological diversity.

4. Anthropology

The Toda tribe members are known for their unique physical characteristics. They typically have a rich brown skinned individual, which harmonizing with their natural surroundings in the Nilgiris Hills. Their black, wavy hair frames their faces, which are typically characterized as dolichocephalic (long and narrow) head shapes and long oval faces. Brown eyes, reflecting the depth of their cultural heritage, while full lips convey warmth and friendliness. Toda women often beautify themselves with tattoos on their faces, hands, and legs, enhancing their distinctive appearance.

In contrast, Toda men may bear scar marks on their shoulders, signifying their tribal identity and traditions. These attributes not only signify their tribal heritage but also contribute to the rich diversity of India's tribal communities.

5. Culture and rituals

As per the belief the emergence of the first Toda man and woman, the tribal tradition and legends of the Toda community recount a strong opinion that their origins are related with the divine Energy. According to their traditions and documented legends, the tribe holds a deeply rooted connection between nature and the sacred buffalo, (a cornerstone of their culture), was fashioned and present upon them by the gods themselves. This mythological narration not only underlines the sacred significance of the buffalo within Toda culture but also the spiritual connection that the people maintain with their ancestral beliefs and deities. Some of the rituals which they currently follow:

- It is mandatory ceremony happens during the wedding in which the groom is required to lift 180kg spherical stone and throw backwards to show strength
- They do not believe in the concept of idol worship and the idea of God to them is Nature itself.

- During funeral the corpse is burned and before this process a small amount of hair is removed from head and as per second ritual the left-over bone (after crimation), hair is burned again finally they attain peace.
- On the marriage day groom is supposed to make a bow and arrow with branches of a specific tree in the forest and present it to the bride
- Scared Buffalos are one of a kind of buffalos found in Nilgiris Hills. These are also killed in numbers as per the death bed wish of people.
- As per belief of Todas, women in tribes are not allowed to go near to temple.
- The younger Individual should knee down to get the blessings from the elder member as they bless with their toe to head.

6. Existing Architectural Structures and its Location

6.1 Location

The Toda tribe's temples, known as "kovils"(Regional Language) as they are primarily located in the Nilgiri Hills of southern India, specifically within Tamil Nadu's Nilgiris district. These temple structures are present in Muthanadu village. These parabolic structures, with conical thatched roofs symbolizing the significance of sun in Toda culture, featuring buffalo horns on the rooftops, representing the tribe's close connection to their buffaloes and pastoral lifestyle. These temples are constructed using natural materials, serve as a sacred space for religious-cultural rituals. Involving offerings of milk and dairy products. They hold cultural and spiritual importance in preserving Toda heritage and reflecting their deep connection with nature.

6.2 Architectural Structures

6.2.1 Paluvarsh (The temple structure)

All Toda tribe temples are uniformly oriented to face the west. Their architectural shape closely resembles that of their dwelling units, although with slight variations. These temples typically consist of two rooms separated by a distinctive arch-shaped wall within the structure. (fig1)

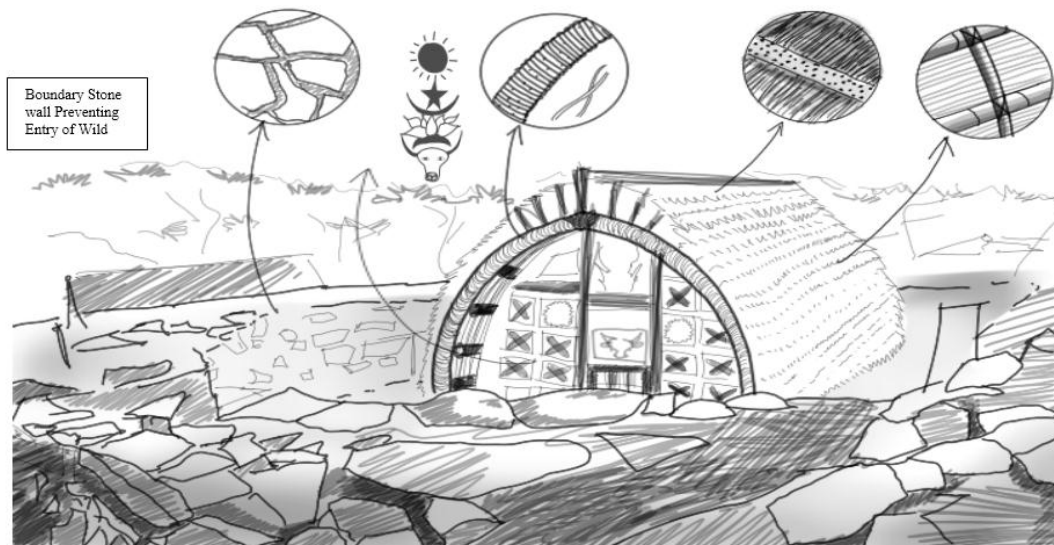


Figure 1. schematic sketch of paluvarsh, symbols on the entrance wall, roofing systems

6.2.2 Poovarsh (The main temple structure)

The primary entrance to the temple is through a small door measuring 3 feet by 3 feet, covered by a stone, and featuring a thatched roof with ragi dried grass. This entrance holds a profound sacred important, as it serves as the focal point for main festivals only. The area around this entrance is

strictly restricted to individuals other than the priest. Granite stone is used for the temple's walls (east-west façade), while the roofing materials match those of the "Arsh", underscoring the temple's distinctive architectural elements and cultural importance. (Fig 2)

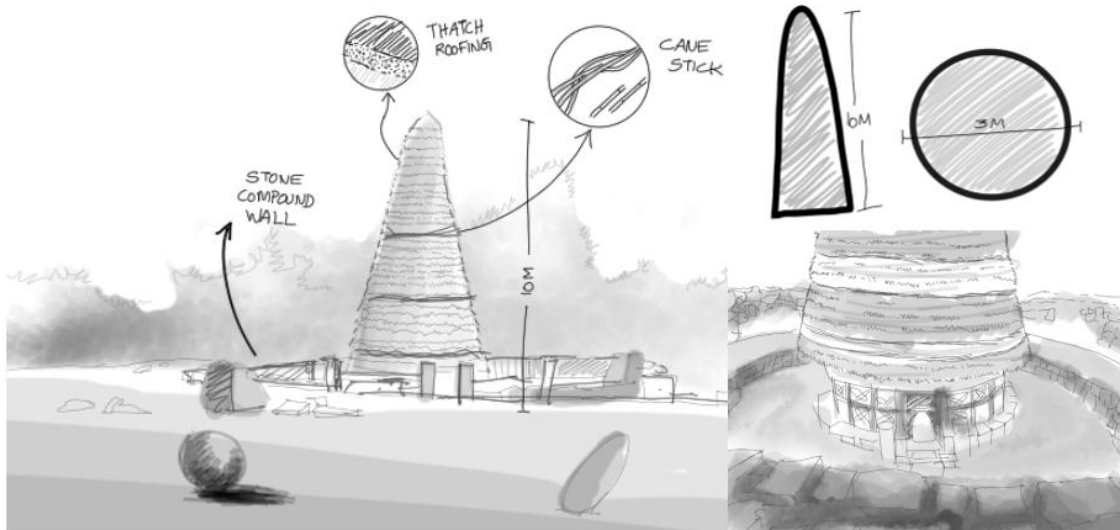


Figure 2. schematic sketch of poovarsh, plan

6.2.3 Arsh (Residence)

The traditional dwelling unit of the Toda tribe is known as the "Arsh," it is characterized by its architectural features. The Arsh huts have a unique curvilinear roof that extends from the ground to the apex, forming a rectangular plan. These huts are consistently oriented to face the east, which is

significantly followed within Toda culture. The arch shape of the roof is achieved by supporting it with two opposing walls at either end of the hut. Wooden planks/ stones are firmly embedded in the ground and secured with mud mortar, maintaining the structural integrity of these remarkable huts. (Fig 3) (Fig 4)

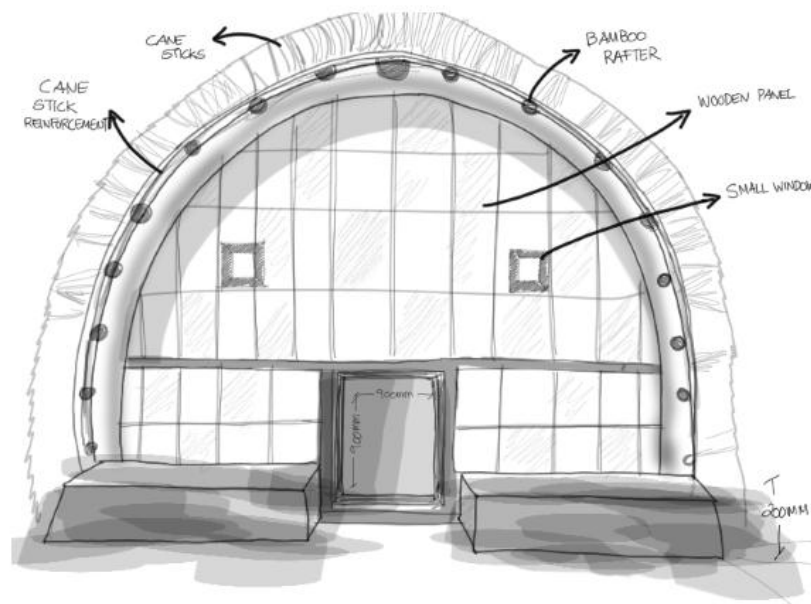


Figure 3. schematic sketch of Arsh

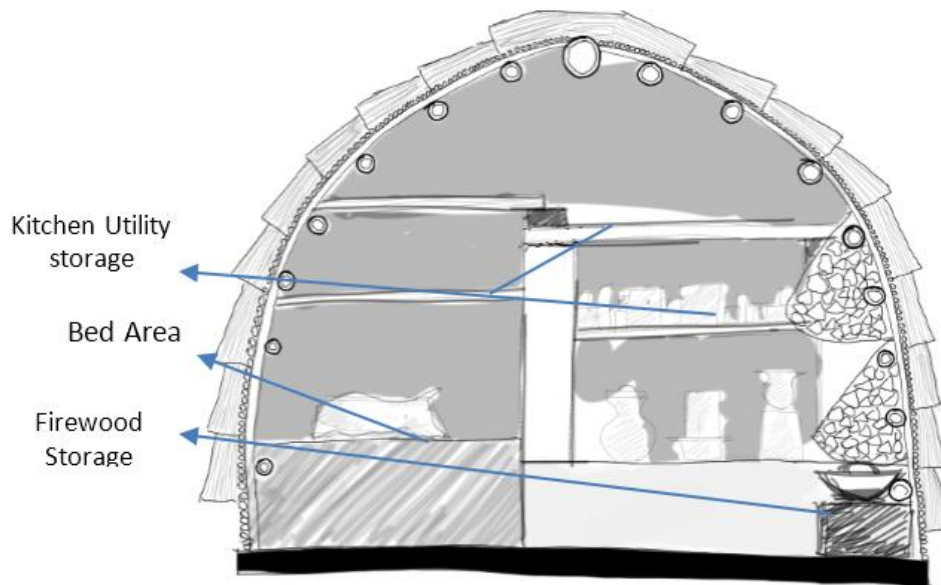


Figure 4. schematic section of Arsh

7. Material

7.1 Mud as a Material

Mud has been kept as a time-honoured construction material within Toda tribe communities for centuries. Abundant of mud in the region and cost-effectiveness has made it as a versatile resource. Often, they combined with straw or other organic materials for reinforcement and gains strength and durability, making it a prime choice for building. Tribal homes crafted from mud are renowned for their energy efficiency, naturally insulation against

extreme temperatures. Additionally, mud plastering is a common practice for the facade of these structures, filling in gaps between flat stones, further enhancing their stability and insulation.

7.2 Cane Sticks in Construction

Cane sticks are known for their lightweight, flexible, and strong properties, have become a needed material in construction for the Toda tribe. These sticks are frequently used in the creation of dwellings, where they are either woven or securely lashed together to form roofs. Their High tensile

strength ensures the structural rigidity of Toda homes, contributing to the longevity, durability of these dwellings.

7.3 Bamboo

Bamboo is a remarkably material which adapt with respect to their uses. So, it holds a special place in the construction steps of tribal communities, including the Toda tribe. The features like the strength, durability, and rapid growth rate make it as an eco-friendly Material. Bamboo's flexibility in design allows for innovative construction techniques, enabling the creation of functional and aesthetically pleasing structures that blend timelessly with the natural surroundings of Nilgiris.

7.4 Thatch Roof in Dwellings

Thatch roofs are a traditional roofing method among the Toda tribe. Crafted from dried grass and reeds of ragi, they are very thoroughly layered to form a waterproof and insulating barrier. These materials are also known for their lightweight nature, providing effective thermal insulation, ensuring a comfortable interior even in cold climates. It is mandatory to require periodic maintenance for thatch roofs and are highly sustainable, perfectly suited to the Toda tribe's architectural traditions.

7.5 Flat Stone (Granite)

Flat stones, particularly granite, play a pivotal role in Toda construction. These stones are often used for building foundations and walls due to their remarkable sturdiness, longevity. In the Toda tribe, foundations are developed to prevent capillary action from soil to wooden structures, ensuring their structural integrity these changes only introduced

70yearsago. Beyond their practical uses, Todas incorporate flat stones into artistic patterns and designs, infusing their architectural creations.

8. Impact of urbanization

8.1 Problems faced by the toda tribe

As time goes, the traditional huts of the Toda tribe have undergone a gradual transformation with respect to time, giving way to concrete structures while preserving the original architectural forms. Although some older huts have been preserved for cultural heritage, modern construction has become more widespread. The inhabitants of these "Munds" or villages relied heavily on nearby water bodies for their daily water needs. However, with the introduction of new structures, the government has taken measures to regulate water supply and provide electricity to these tribal communities in remote locations, Sudden changes that reflect the evolving landscape of Toda tribal life. (Fig 5) (Fig 6)

The grassland traditionally owned by the Toda tribe has been acquired by the state government of Tamil Nadu and the landscape has undergone a sufficiently great transformation. In place were the grasslands existed, the government has planted endangered tree species in 1964, leading to the degradation of the grassing meadow. This alteration has had effected notably declination in the population of the Toda buffalo, a species deeply bonded with nature, with the tribe's culture and livelihood. Currently, the existing Toda population numbers fewer than 2000 individuals across 50 plus villages, emphasizing the challenges faced by this indigenous community due to changes in their environment and land ownership.



Figure 5. schematic sketch of Modern Residences



Figure 6

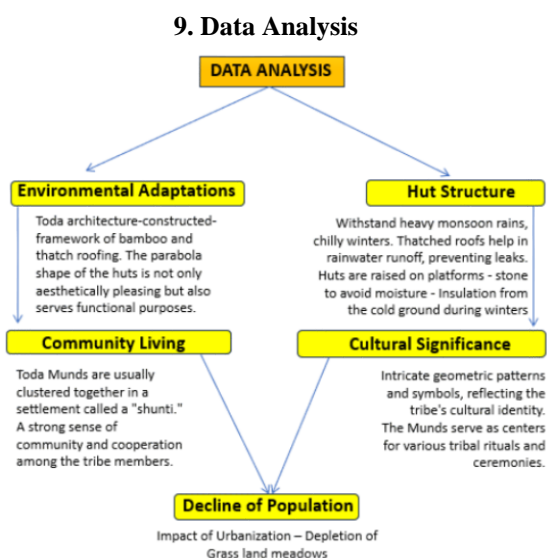


Figure 7. Flow chart of Data Analysis

10. Findings and inference

Preservation of the Toda tribe's architectural heritage stands as a big concern within their community, although the government's stand on the matter remains less than satisfactory even though many reforms schemes were introduced. The Toda tribe's rich cultural heritage is woven into their architectural wonders, yet the challenges of neglecting and rapid urbanization pose significant problems to these invaluable historical elements. It is crucial for the government to acknowledge the great significance of these structures and extend support to empower the Toda tribe in supporting their cultural legacy. Additionally, the younger generations in pursuit of improved livelihoods creates a void in the future of the Toda tribe. The essential knowledge required to maintain the existing temple architecture primarily known within the hands of a select few elder family members, underscoring the importance and urgent need for cultural preservation and knowledge transfer to secure the Toda tribe's architecture.

11. Conclusion

Preserving Toda architecture is very important in many ways.

- Firstly, there is a need for the restoration of existing structures, addressing damage from weathering, insects, and all other factors to ensure their longevity of the structure. Simultaneously,

documenting traditional construction techniques becomes crucial task to safeguard this knowledge from being lost in time.

- Establishing training institutes for interested young individuals to learn these traditional techniques ensures the emergence of a new generation capable of maintaining and repairing Toda structure. Moreover, the creation of educational materials focused about Toda architecture serves to raise awareness about its cultural significance.

It is very important for active engagement of the Toda community in these preservation efforts. Their input should be considered, and their perspectives carefully considered throughout the process. Collaboration efforts between the government, the Toda community, and other stakeholders are essential in the protection of this invaluable cultural heritage for generations to come.

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