



An Archaeological Study on Megalithic Burial Architectures in Sri Lanka: Focusing on *Ibbankatuwa, Padavigampola, and Haldummulla*

Uduwila Uparathana
Academic scholar
Bhiksu University of Sri Lanka

Abstract

The Megalithic Culture, representing the proto-historic era of Sri Lanka, reveals unique technical and social information through its burial traditions. This study attempts to analyze the nature and diversity of burial architectures in *Ibbankatuwa, Padavigampola, and Haldummulla* from an archaeological perspective. A qualitative analysis conducted using secondary sources revealed that 'Cist burials' are prevalent in *Ibbankatuwa*, the 'Dolmenoid' architecture in *Padavigampola*, and 'Canoe burials' and clay urns in the *Haldummulla* area. Attention is focused here on the regional geographical factors and the availability of raw materials that influenced the creation of these architectures. Furthermore, the imported beads, iron weapons, and Black and Red Ware (BRW) found within these burials confirm the existence of advanced metal technology as well as a formal 'Social Stratification' during that era. Accordingly, this research concludes that these megalithic monuments were utilized not merely for honoring the dead, but also for symbolizing elite power and social status.

Keywords: *Black and Red Ware, Burial Architectures, Iron Age, Megalithic Culture, Social Stratification,*

Introduction

In studying the human history of Sri Lanka, the transitional phase existing between the Prehistoric period and the Historic period can be identified as the Protohistoric period. This era, which evolved within the timeframe from 1000 BC to 300 BC, is archaeologically defined as the 'Iron Age' in terms of technology and the 'Megalithic Culture' in terms of culture. Derived from the Greek words 'Mega' (Large) and 'Lithic' (Stone), this terminology signifies that this culture is distinguished by monuments or burial customs created using large stone slabs.

This culture in Sri Lanka shows a strong relationship with Megalithic factors found in places such as *Adichchanallur, Brahmagiri, and Arikamedu* in South India. There is evidence that this was not merely a migratory wave from India, but a complex social structure built by mixing with indigenous population groups. The primary component of this culture is the "complex customs of honoring the dead" (Cult of the Dead). The practice of interring the physical body or remains (Secondary burial) of the deceased, along with clay vessels used in their daily life, food, beads, and iron weapons, clearly reflects their strong belief regarding rebirth or the afterlife.

Nearly 50 Megalithic burial sites have been identified within Sri Lanka, and the burial architectures observed in them take forms distinct from one another. The burial grounds of *Ibbankatuwa* (Dry Zone), *Padavigampola* (Intermediate Zone), and *Haldummulla* (Hill Country Zone) have been primarily selected for this research. The primary reason for selecting this trio of locations is the ability to study how the burial architectures in these sites, which represent three geographical zones, have diversified based on the environment and raw materials (Seneviratne, 1984).

For instance, while 'Cist Burials' are found in *Ibbankatuwa*, 'Dolmen' monuments built above ground level are found in the *Padavigampola* area. Furthermore, in areas such as *Haldummulla*, where stone slabs are scarce, clay vessels and 'Clay Canoes' have become the primary burial medium. Is this diversity merely a random occurrence? Or does it reflect the regional identity, technical knowledge, and Social Stratification of the society of that time? This is inquired into broadly through this research paper.

Literature Review

Archaeological research regarding Sri Lanka's Megalithic culture and its burial architectures has been conducted by many local and foreign scholars for several decades. Important theories regarding dating, distribution, and social background have been presented through these studies. The most extensive study on the evolution from the Prehistoric period to the Iron Age in Sri Lanka has been conducted by Dr. Shiran Deraniyagala. According to his work "The Prehistory of Sri Lanka" (1992), it has been confirmed through radiocarbon dating (C-14 dating) of the Anuradhapura Citadel (Gedige) excavations that the beginning of the Iron Age in this country runs as far back as 900-1000 BC. He points out the relationship existing in Sri Lanka with the Megalithic culture of South India.

Ibbankatuwa and Cist Burial Architecture. A formal scientific research regarding the *Ibbankatuwa* burial ground was conducted jointly by the German Archaeological Institute (KAVA) and the Department of Archaeology of Sri Lanka in the 1980s. As pointed out by H.J. Weisshaar, the *Ibbankatuwa* burial ground was not merely a cemetery, but one linked with a settlement located nearby (Weisshaar, 1982). He classified the stone cists there as clusters and expressed the opinion that they may have been created based on families or clans.

Social Stratification and Resource Usage Professor Sudarshan Seneviratne has interpreted the Megalithic culture not merely as a funeral ritual, but as a socio-economic process. According to his research (Seneviratne, 1984), the various burial architectures found in hill country areas and the dry zone (Ecological Zones) are directly connected with the distribution of mineral resources and raw materials in those areas. He identifies the "Black and Red Ware" complex as a technical tradition that came from South India. He argues that the labor control ability of leadership groups within the society influenced the construction of massive monuments in places like *Padavigampola*.

Haldummulla and Hill Country Burials In recent times, extensive research regarding the *Uva* Province and the *Walawa* basin was conducted by Professor Raj Somadeva. He points out that the 'Canoe Burials' found in the *Haldummulla* area and the clay house models in the *Ranchamadama* area reveal information about a group of people who were transitioning from the hunting age to the agricultural age (Somadeva, 2010). This research confirms that due to the geographical positioning of the hill country, clay technology was widely utilized for burials instead of stone slabs.

Although these previous studies have presented facts regarding each location individually, the specialty of this research is the comparative study of the architectures of these three locations taken simultaneously.

Research Problem

The architectural forms found within Megalithic burial grounds discovered in various parts of Sri Lanka are not uniform. The primary problem of this research is: "What are the geographical and socio-cultural factors that

influenced the diversity of burial architectures found in Ibbankatuwa, Padavigampola, and Haldummulla?" It is inquired here whether these architectures served complex purposes beyond merely burying the dead.

Research Objectives

1. To identify the technical features of the burial architectures in Ibbankatuwa, Padavigampola, and Haldummulla.
2. To comparatively study the similarities and discrepancies existing between those architectures.
3. To analyze the social organization and belief systems of the time as reflected by the burial architectures.

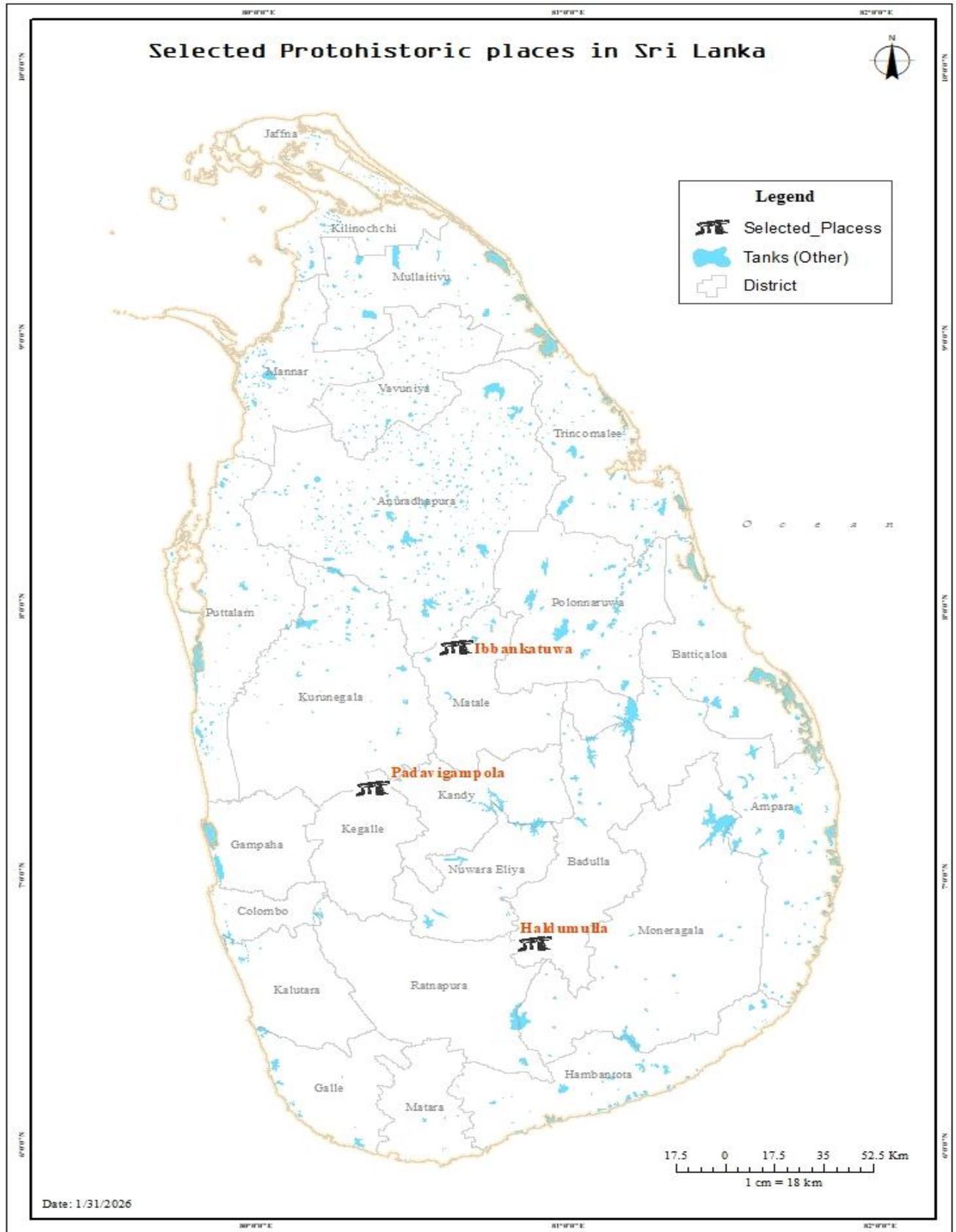
Methodology

This study is conducted via a Qualitative Research methodology. Primarily using secondary sources, archaeological excavation reports, research papers, and books are consulted. Data has been obtained specifically by analyzing reports from scholars such as Dr. Shiran Deraniyagala, Professor Raj Somadeva, and Professor Sudarshan Seneviratne. The obtained data has been subjected to a comparative analysis.



Results and Discussion

Sri Lanka's megalithic burial architectures can be primarily classified as Cist burials, Cairn circles, Dolmens, and Urn burials. The architectures of the three selected sites can be analyzed as follows:



The map is showing the main burial places

Results and Discussion

Sri Lanka's megalithic burial architectures can be primarily classified as Cist burials, Cairn circles, Dolmens, and Urn burials. The architectures of the three selected sites can be analyzed as follows:

Ibbankatuwa: Cist Burials

The *Ibbankatuwa* burial ground, located in the Dambulla area, is Sri Lanka's largest and best-preserved megalithic site. The primary architectural feature of the *Ibbankatuwa* burial ground is the 'Stone Cist' technology. Here, four dressed granite (Gneiss) stone slabs are planted vertically to form the shape of a box or a small room, and the upper part is covered by a large flat stone slab (Capstone). In some tombs, a stone slab is used for the bottom or small gravel is spread out; the placement of clay urns containing the cremated remains of individuals within these cists indicates that this is not merely a placement of stones but a formal engineering technology (Weisshaar, 1982).



Figure 1: Structure of *Ibbankatuwa* cist burial

(<https://tropicallifedambulla.com/ibbankatuwa>)

Placement of Tombs and Land Use

This burial ground demonstrates a land use pattern similar to clear town planning, rather than being random. The tombs here are distributed in 'Clusters' containing about 10 stone cists. Boundaries are marked around each cluster using a small row of stones, and scholars point out that this reflects the family or clan-based social structure (Kinship-based society) that existed at the time (Seneviratne, 1984). Spread over a large area of about 13-15 acres separated from settlements, the maintenance of specific open spaces between tomb clusters for rituals or pathways within this complex indicates characteristics of an advanced society (Deraniyagala, 1992).



Figure 2: Placement of megalith burials at Ibbankatuwa
(<https://tropicallifedambulla.com/ibbankatuwa>)

Local raw materials that could be easily found in the surrounding environment were primarily used in the construction of the *Ibbankatuwa* tombs. The granite rock known as 'Gneiss' has been used to construct the stone cist, which is the main structure of the tomb chamber, and stone slabs that were either naturally occurring or dressed using iron tools have been used for this purpose. Furthermore, a special feature is the spreading of smooth gravel and pebbles sourced from rivers or waterways to prepare the interior floor of some stone cists.

Padavigampola: Dolmenoid Cist Architecture

The Padavigampola burial located in the *Rambukkana area of Kegalle* exhibits unique architectural features. It is accepted that the specific type of tomb found at the Padavigampola archaeological site belongs to the 'Dolmen' or 'Stone Table' model. This takes a different form compared to the 'Stone Cist' tombs found at Ibbankatuwa which are completely buried underground. The special feature here is that it is constructed by using 3 or 4 stone slabs planted vertically on the surface as supports, and placing a large flat stone slab (Capstone) horizontally on top of them to take the shape of a table. Archaeologists technically classify this as a "Dolmenoid Cist". Although characteristics of both a stone cist and a dolmen are shown here, these dolmen characteristics appear very clearly emerging above the ground level in the Padavigampola tombs more than in other places in Sri Lanka (Seneviratne, 1984).



Figure 3: Dolmen burials at *Padavigampola*
(<https://www.google.com/search?q=halduummulla+megalith>)

Construction Technology and Material Usage

The technology used to construct these tombs is at a very advanced level. Gneiss rock, which can be easily sourced from the surrounding environment, has been primarily used for construction, and some capstones are massive stone slabs weighing tons. Evidence has been found that the technique of using fire and water or the technique of using iron wedges was employed to quarry these stone slabs from natural rock outcrops (Deraniyagala, 1992). Furthermore, it is believed that simple mechanical methods, such as earthen ramps and wooden logs (levers), would have been used to lift such heavy stone slabs above ground level and place them on vertical stones.

Land Selection and Placement

When selecting land, this society paid close attention to the availability of raw materials and geographical location. The *Padavigampola* cemetery is established in the vicinity of a large rock outcrop. The main reason for doing so was the ability to easily quarry the large stone slabs required for tomb construction from that very location. It appears that a clear separation between the living and the dead (Separation of living and dead spaces) was maintained by choosing this location situated slightly away from settlements (Manatunga, 1987). This may have functioned not merely as a place for burying the dead, but also as a sacred ground based on some pattern of belief or ritual.

Haldummulla: Canoe Burials & Cairn Circles

The burial architectures found in the *Haldummulla* area of the *Uva* Province take a different form from other locations. The most distinctive burial model found around *Haldummulla* is the 'Canoe Burial'. Here, a structure shaped like a canoe has been created using fired clay slabs or rings, and the ash and bone fragments of cremated bodies have been deposited inside these clay canoes. In addition to this, 'Cairn Circles', prepared by placing stone blocks in a circle as a surface marker, are also seen in this burial ground. The aforementioned clay vessels or canoe-shaped structures have been deposited in the center of these stone circles (Somadeva, 2010).

Material Usage & Technology

A special feature here is that the use of large Stone Slabs, as seen in places like *Ibbankatuwa* or *Padavigampola*, is not observed. Instead, the use of advanced fired clay technology (Ceramic technology) can be predominantly seen here. Very strong clay slabs have been used to create the vessels holding the bones and the tomb structure. The inhabitants of that time possessed technical knowledge advanced enough to fire these clay canoes at high temperatures to ensure their durability during the creation process (Somadeva, 2010).

Geography & Layout

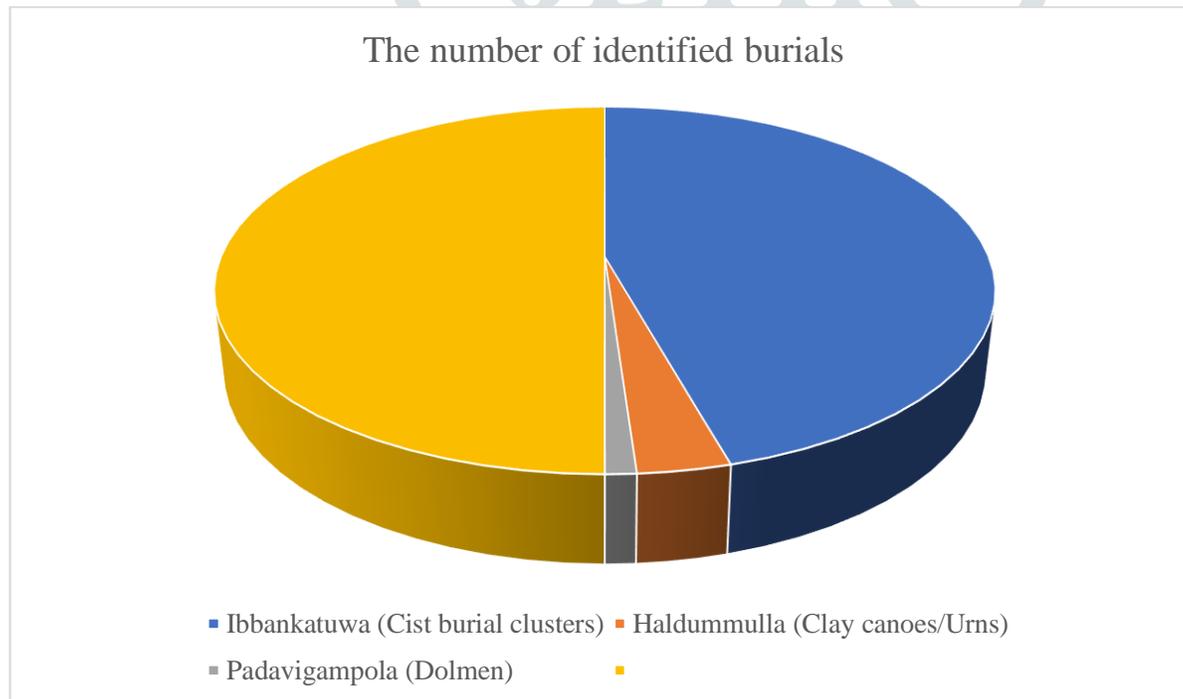
The geographical location of the area has heavily influenced the determination of the nature of these tomb designs. Since *Haldummulla* is a mountainous area in the *Uva* Province, finding and transporting the large, flat stone slabs required to construct tomb chambers would have been a very difficult task. Therefore, it is surmised that they turned to using clay, which could be easily found in the environment. Regarding the placement of tombs, it can be observed that specific land areas were separated near settlements, where these Cairn Circles were positioned in clusters.

Comparative Analysis

When comparing these three locations, it appears that *Ibbankatuwa* and *Padavigampola* have given priority to Lithic usage (stone slabs). However, the *Padavigampola* architecture takes on a more Monumental nature. In the *Haldummulla* area, the architecture has changed to clay canoes based on geographical factors. The discovery of "Black and Red Ware" (BRW) within all these architectures confirms that they belong to the same cultural stream (Deraniyagala, 1992).

The number of identified burials

Location	Approximate No. of Units/Forms Identified	Percentage
Ibbankatuwa (Cist burial clusters)	42	91%
Haldummulla (Clay canoes/Urns)	03	7%
Padavigampola (Dolmen)	01	2%
Total	46	100%



Material Culture and Artifacts

In addition to the architectural forms, the artifacts found in these megalithic sites provide a broad understanding of the technical advancement and foreign relations of the time. These factors have been found abundantly, particularly in association with *Ibbankatuwa*.

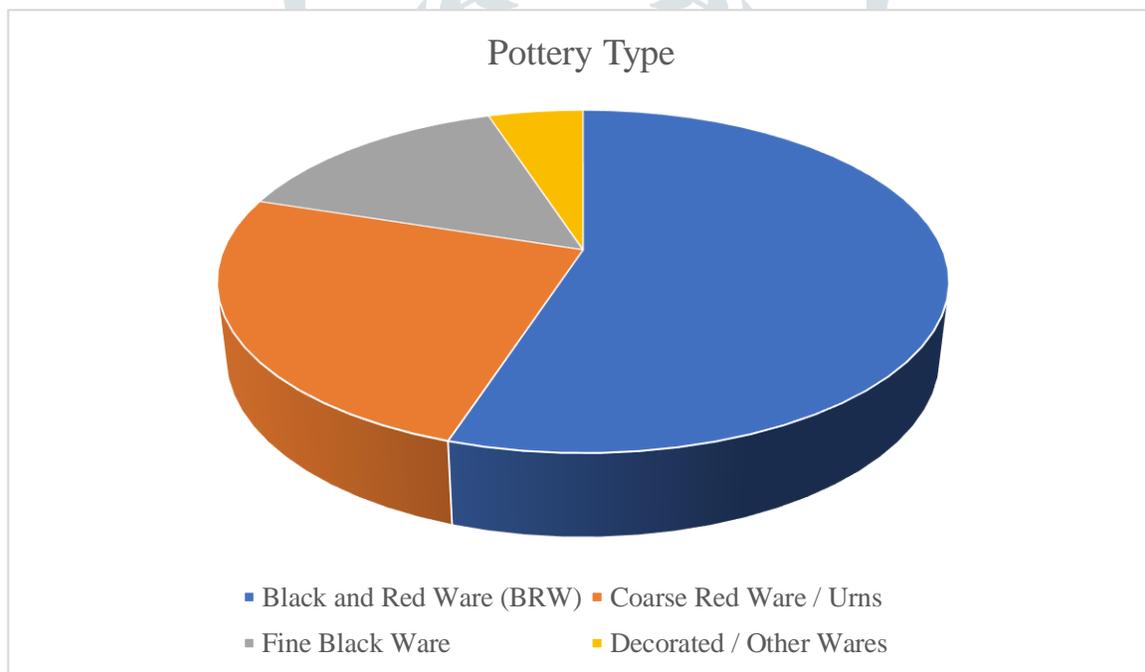
Ceramic Technology

"Black and Red Ware" (BRW) can be identified as a common factor in all these locations.

Production Technology:

These vessels were created using the "Inverted Firing Technique." By controlling the oxygen supply, the inside and the rim of the vessel were turned black, while the remaining exterior was turned red (Seneviratne, 1984). Single or composite symbols (Graffiti marks) are found on many discovered clay vessels. Scholars interpret these as indications of ownership or the beginning of a proto-writing system. Large clay urns and Clay Canoes made specifically for funeral rites have been found uniquely in the *Haldummulla* area, and their surface technology is at a very high level (Somadeva, 2010).

Pottery Type	Technology Used	Approximate %
Black and Red Ware (BRW)	Inverted Firing Technique - Double Colour	55%
Coarse Red Ware / Urns	Open Firing / Oxidation	25%
Fine Black Ware	Reduction Firing (Oxygen-free)	15%
Decorated / Other Wares	Painted / Incised Graffiti	5%
Total		100%



Beads and Ornaments

A large quantity of various types of beads and ornaments was found during the Ibbankatuwa excavations. Semi-precious stones such as Carnelian, Agate, Quartz, and Onyx have been widely used for this (Weisshaar, 1982). Specifically, since the technology to produce "Etched Carnelian" beads was not widely available in Sri Lanka at the time, it is considered that these were received through trade relations with regions like Gujarat in India. Advanced technical tools (Diamond drills) were used to drill these beads very finely.

Metallurgy

The discovery of Iron slag and metal tools clearly demonstrates the technical advancement of the Iron Age. Iron chisels, knives, points, and arrowheads have been found in *Ibbankatuwa and Padavigampola*. Research has confirmed that high temperatures were used (Hardening and Tempering) when forging these. In addition to iron, decorative Kohl sticks and small jewelry parts made using Copper have also been found. This reflects the knowledge of metal alloying of the time (Deraniyagala, 1992).

The analysis of these artifacts reveals that these megalithic settlements were not isolated villages, but a social segment with advanced industrial technology that engaged in trade and cultural exchange with distant regions.

Metal Type	List of Artifacts Found	Count of Types
Iron	Chisels, Knives, Points, Arrowheads	4
Copper	Decorative Kohl sticks, Small jewelry parts	2

Technology and Social Stratification

When analyzing the physical factors found in *Ibbankatuwa, Padavigampola, and Haldummulla*, it appears that the society of that time was not homogeneous but one with a complex hierarchy. This is confirmed by the following factors:

Unequal Distribution of Grave Goods:

Not all stone cists or canoes contain goods of equal quantity or value. "Etched Carnelian Beads" produced with high technology, gold-plated beads, and iron weapons of various shapes are found abundantly in some burial chambers. The possession of such rare and imported materials (Prestige Goods) implies that those individuals belonged to an Elite Class possessing high wealth or power in society. Burials that can be considered as belonging to the common people contain only simple clay vessels.

Mobilization of Labor:

Great labor is required to transport and install the massive stone slabs found in places like *Padavigampola*. The construction of such Monumental structures is possible only when there is a political or regional leadership (Chieftain) capable of controlling a large labor force. Therefore, the owners of large and complex tombs can be concluded to be a group at the ruling or leadership level of society.

Control over Resources:

There is evidence of a group that controlled metal technology, such as iron and copper, and foreign trade (import of beads). This group that controlled resources likely existed in the upper stratum of society, and these specific burial architectures and artifacts were used to symbolize that power and prestige after their death (Seneviratne, 1996).

Accordingly, these megalithic burials can be identified not merely as places of worship for the dead but as a medium that displayed the social power, wealth, and class divisions of the Iron Age.

Conclusion

The inquiry conducted regarding the archaeological sites of Ibbankatuwa, Padavigampola, and Haldummulla reveals that the Megalithic people of Sri Lanka possessed advanced architectural and engineering knowledge. Regional geographical factors and the availability of resources influenced the creation of diverse architectures such as stone cists, dolmens, and canoe burials. Furthermore, since a large labor contribution was required for these massive creations, it can be concluded that a formal Social Hierarchy existed in the society of that time.

References

- Bandaranayake, S. (1984). *Sigiriya Project: First Archaeological Excavation Report*. Colombo: Central Cultural Fund.
- Begley, V. (1981). Excavations of Iron Age burials at Pomparippu. *Ancient Ceylon*, 4, 49-96.
- Coningham, R. A. E. (1999). *Anuradhapura: The British-Sri Lankan Excavations at Anuradhapura Salgaha Watta 2*. Oxford: Archaeopress.
- Coningham, R. A. E. (2006). The early Iron Age of Sri Lanka: a new perspective. *Journal of Indian Ocean Archaeology*, 2, 85-98.
- Deraniyagala, S. U. (1972). The Citadel of Anuradhapura 1969: Excavations in the Gedige Area. *Ancient Ceylon*, 2, 48-169.
- Deraniyagala, S. U. (1992). *The Prehistory of Sri Lanka: An Ecological Perspective*. Colombo: Department of Archaeological Survey.
- Deraniyagala, S. U. (2005). The protohistory of Sri Lanka: an interdisciplinary perspective. *Journal of the Royal Asiatic Society of Sri Lanka*, 51, 1-32.
- Gunawardhana, P. (2010). *Archaeology of the Megalithic Burials in Sri Lanka*. Colombo: Godage Brothers.
- Hocart, A. M. (1924). *Archaeological Survey of Ceylon: Memoirs Vol I*. Colombo: Government Printer.
- Kennedy, K. A. R. (2000). *God-Apes and Fossil Men: Paleoanthropology of South Asia*. Ann Arbor: University of Michigan Press.
- Manatunga, A. (1987). Sri Lankawe Purana Yakada Thakshanaya. *Archaeology Department Publications*.
- Parker, H. (1909). *Ancient Ceylon*. London: Luzac & Co.
- Ragupathy, P. (1987). *Early Settlements in Jaffna: An Archaeological Survey*. Madras: Thillimalar.
- Seneviratne, S. (1984). The Archaeology of the Megalithic - Black and Red Ware Complex in Sri Lanka. *Ancient Ceylon*, 5, 237-307.
- Seneviratne, S. (1996). Peripheral Regions and Marginal Communities: Towards an Alternative Explanation of Early Iron Age Material and Social Formations in Sri Lanka. *Tradition and Archaeology*, 265-312.
- Sitrapalam, S. K. (1988). The Megalithic Culture in Sri Lanka. *Ancient Ceylon*, 7, 143-156.
- Somadeva, R. (2010). *Archaeology of the Uda Walawa Basin*. Colombo: Postgraduate Institute of Archaeology.
- Somadeva, R. (2014). *The Prehistoric Hunter Gatherers in the Transition to the Food Producing Stage in Sri Lanka*. Colombo: PGIAR.
- Weisshaar, H. J. (1982). The megalithic graves of Ibbankatuwa. *Beiträge zur Allgemeinen und Vergleichenden Archäologie*, 4, 215-220.
- Wijesekara, N. (1964). *Early Sinhalese Sculpture*. Colombo: Department of Cultural Affairs.