

# Structural Changes in the *Baolis* of Delhi as Reflecting Shifts in the Political Land Scape of the Delhi Sultanate

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Research Question: How did the structural changes in the *baolis* of Delhi reflect the changes in the state formation and political consolidation in the Delhi Sultanate from 1206 – 1526 C. E. ?

**Abstract:** *Baolis (stepwells) underwent several structural changes during rule of the Delhi Sultanate from 1206 – 1526 C. E. to ensure easier access to water and more efficient storage facilities. As agrarian society assumed a more feudal model, the few who controlled the land also controlled its scarce resources, including water. Through the investigation, I will be considering whether the changes in the baolis of Delhi were a reflection or a result of the political changes of the time, as well as the degree to which these changes impacted the political landscape of the Delhi Sultanate.*

**Keywords:** Medieval India, Historic waterworks, Structural changes, Baolis, Delhi, State formation, Political consolidation, Delhi Sultanate, Political landscape

## 1. Introduction

A dream. The location of the Hauz - i - Shamsi was revealed to Sultan Iltutmish in a dream. According to medieval myths, the Sultan was alerted by the visions of Islamic prophet Muhammad, claiming to find the hoof print of the prophet's horse at the site and consequently, erecting a domed pavilion bordered by twelve pillars, marking the auspiciousness of the vicinity. This perfectly encapsulates the religious underpinnings in the architecture of the Delhi Sultanate, intricately linked to the political landscape of the time. *Baolis*, stepwells that have a flight of stairs descending into a water storage facility, too mirror these influences, which will be further delineated through this research paper.

My research on the *baolis* of Delhi and the context in which they were constructed reveals that they are, in many ways, a reflection of changes in state formation and political consolidation in the Delhi Sultanate. When contemplating the manner in which the structural changes in the *baolis* of Delhi reflected these shifts, one must first outline the scope of this historical investigation and examine the meaning of certain key terms in the research question. *Baolis* underwent several structural changes during rule of the Delhi Sultanate from 1206 – 1526 C. E. to ensure easier access to water and more efficient storage facilities. From ancient times, agriculture has formed the basis of Indian society, giving prime importance to the management of water as a tool for irrigation. With the evolution of tribe - based society in India and the gradual formation of a class and caste system, there was a growing trend in land ownership, giving rise to a feudal model<sup>1</sup>. This meant that the few who controlled the land also controlled its scarce resources, including water. For the purposes of this research paper, state formation will be defined as the centralisation of power in the Delhi Sultanate, in the context of the expansion of Delhi as the capital. Political consolidation, on the other hand, refers to the strengthening and securing of this centralised power.

Three broad categories of the usage of *baolis* will be explored through various examples in this discourse, with an emphasis on their implications for state formation and political consolidation: political, religious, and communal usage. Through the investigation, I will be considering whether the changes in the *baolis* of Delhi were a reflection or a result of the political changes of the time, as well as the degree to which these changes impacted the political landscape of the Delhi Sultanate.

### The Rise of the Delhi Sultanate: A Background

There were several socio - political factors that contributed to the Central Asian invasion and conquest of North India in the 11<sup>th</sup> century, which provide an important background for this research. The feudal structure of Indian society meant that a disproportionate amount of power was in the hands of a few rulers at the expense of the poorer masses, creating an atmosphere conducive to political dissent. The Rajputs, who were of foreign descent but became integrated into the Hindu caste hierarchy, often sought war as a means to further their own prestige. Historian Riazul Islam corroborates this perspective in '*The Delhi Sultanate*'<sup>2</sup>, elucidating how 'The Rajput political structure, feudal and hierarchic in character and lacking a strong central force, encouraged fissiparous tendencies'. There was no real central authority in the Indian subcontinent, which contributed to divisive military and political elements that prevented unified action in the face of foreign invasion. Following the invasions of the Ghurid Dynasty, the Delhi Sultanate was born as one of many principalities, divided between various slave generals including Qutb ud - Din Aibak, Taj al - Din Yildiz and Nasir - ud - Din Qabacha, with the evolution of dynasties forged from in - fighting and revolution, from the Mamluks (1206 - 90 C. E.) to the Khaljis (1290 – 1320 C. E.) and the Tughlaqs (1320 – 1414 C. E.).

### Growth and Expansion of Delhi as a Political and Urban Centre

<sup>1</sup>*The Age of Achievement: A.D. 750 to the End of the Fifteenth Century.* Weinheim, Germany, Beltz Verlag, 1998.

<sup>2</sup>Ibid.

Delhi was the seat of the Tomara Rajputs from the 8<sup>th</sup> – 12<sup>th</sup> century, who were eventually defeated by the Chauhans of Ajmer. After Muhammad Ghori's victory over Prithviraj Chauhan in the Second Battle of Tarain in 1192 C. E., the Delhi Sultanate was established under Qutb ud - Din Aibak, with Delhi as the nodal centre for rule over North India. With the shifting of the capital from Ajmer to Delhi in the early 13<sup>th</sup> century, a large political and military establishment was set up in Delhi, thus causing an influx of military men, families, animals and slaves into the city. In addition to this, a vast number of resources, including large volumes of water, were required to sustain a growing population of scribes, traders and Sufi and Chishti saints in the region. However, there was a major obstacle that the rulers of the Delhi Sultanate had to face: despite having a perennial river, Delhi suffered from a water deficit due to a very low water table. To further accentuate the problem, the administration had poor hydraulic systems in place, with little to no idea about efficient water management and storage in the region. There were initially limited water systems owing to a smaller establishment, which expanded with the coming of the Sultanate. This necessitated experimentation, ushering in a new age of innovation in water management.

#### Experimentation in Water Management: A New Age in the Sultanate

Despite initial challenges for the Sultanate in terms of water storage and distribution, it is critical to note that a large part of water management technology that came to India can be traced back to Central Asia, Persia, and the Arab world. The arid conditions in these lands required efficient water storage and management, a prerequisite for survival in harsh terrains. Even the Quran sites water as the basis of life: "We made from water every living thing. . . ." (Surah 21, verse 30)<sup>3</sup>, underlining the importance of using it in a sustainable manner. In a similar way, Muslim warriors were trained to consume less water than their Hindu counterparts<sup>4</sup>, lessening the strain on the scarce resource. Despite this, the huge army along with stationary families, settlers and animals meant that an immense amount of water was still required. Delhi was, to a large measure, not in a position to provide it. The flood prone Yamuna River together with the issue of a low water table meant that safe access to water became a problem. In many ways, Dr. Nirmal Kumar puts it aptly in his '*Negotiating water: Baolis of Delhi, A Historical Perspective*': "They went with the time and grew in dealing with water as it came."<sup>5</sup>

Although the issue of managing water was a constant, there seems to be a clear historical progression in addressing the problem. What began with the creation of reservoirs by digging land as can be seen with Hauz - i - Shamsi and Hauz - e - Khas eventually developed into a system of hydraulic engineering that facilitated greater control by means of sluice gates and barrages. This meant that the popular

consumption of water became easier to supervise, similar to Satpula in Malviya Nagar. Gradually, the engineers of the Sultanate became more skilled in their distribution of water through artificial channels. However, it is essential to raise the following question to add a nuanced perspective on causation to this study: prior to the rise of the Delhi Sultanate, there were already existing water bodies in Delhi like Anang Tal and Surajkund, so why did the Sultans decide to configure new water structures in the form of *baolis*?

On the surface, one may site demographic factors as the underlining cause for the shifting attitudes towards water storage. The rulers became more concerned with community access to micro - bodies of water. With the passage of time, Delhi as a city expanded horizontally, with each new generation of rulers building on the foundations of the city, causing population growth with a rise in residential settlements, which meant a multifaceted usage of water. On the whole, the general population was better - off and hence, could often pay for the water consumed. This is what caused the emergence of localized bodies of water in Delhi, in the form of *hammams*, *baolis* and *talabs*. It is interesting to consider the gradation in the degree of the public usage of water in these structures, with the *hammams* (a type of steam bath) being the most private in nature, followed by the *baolis* and finally the *talabs*, which were water reservoirs largely open to the general public. In a sense, this made water more of an economic good, giving the ruling elite immense economic power, with an emphasis on the communal storage of water. Since the bricks required for the building of *baolis* were expensive and difficult to procure, there were initially very few *baolis*, a reflection of the few who controlled water storage and had disproportionate amounts of power. This brings us to the crux of the reason for the construction of *baolis*: they were, as historians Subhash Anand, Pankaj Gautam and Harish Kumar write, 'center [s] of socio - cultural and political discussion'<sup>6</sup>. In an age where economic power was intricately connected to political status and control, the *baolis* could be considered tools for political domination.

#### Political Factors in the Construction of Baolis

Contrary to popular perception, the *baolis* of Delhi were usually simple in design and use. However, in some cases, affluent communities constructed elaborate *baolis* that were a display of architectural prowess and innovation, especially those in Rajasthan and Gujrat, emphasizing the might of the rulers and leaving little scope to question their power. These ornate *baolis*, to a great measure, assumed the form of 'tools and symbols of social domination and perpetuation of hold over the society'<sup>7</sup>. Water is essential to human survival; anyone who had control over its storage could hypothetically shape socio - political structures based on access, especially in a tropical country like India with erratic monsoons. In this

<sup>3</sup>Haleem, Abdel. *The Qur'an (Oxford World's Classics)*. Reissue, Oxford UP, 2008.

<sup>4</sup>Kumar, Nirmal. "Negotiating Water: Baolis of Delhi, a Historical Perspective." *International Research Journal Commerce Arts Science*, vol. 9, no. 4, 2018, doi.org/10.32804/CASIRJ.

<sup>5</sup>Ibid.

<sup>6</sup>Anand, Subhash, et al. "ECOHYDROLOGICAL PERSPECTIVES OF DEGRADING BAOLIS DURING MEDIEVAL PERIOD IN DELHI: Traditional Practices of Water Management." *InterEspaço: Revista De Geografia E Interdisciplinaridade*, vol. 2, no. 6, Universidade Federal do Maranhão, Mar. 2017, p. 143. https://doi.org/10.18764/2446-6549/interespaco.v2n6p143-162.

<sup>7</sup>Ibid.

regard, the distribution of water was used to extract political and social benefits for a select few individuals of power, namely those who controlled a 'circle' of water structures in the region. The historic waterways of the Sultanate were cohesive, depending on the existence of each other for support, mirroring a symbiotic relationship with a sense of circularity. The *bunds*, the royal tanks (*hauz*) and the *baolis* all worked in a harmonized manner, aiding the evaporation and condensation of water, which would later be captured during the monsoons, as underscored by Tanvi Gupta in 'Ancient networks of water harvesting structures in Delhi, India'<sup>8</sup>.

### Case Study 1: The Nizamuddin Baoli

Built over 800 years ago by the renowned Hazrat Nizamuddin Auliya, the Nizamuddin Baoli is over 160 feet deep and constructed in the characteristic style of the 14<sup>th</sup> century, surrounded by walls on three sides, with a flight of stairs descending into the storage facility. Its vicinity is filled with single storied units, enhancing the old - world character and charm of the medieval structure. Located at the mouth of Nizamuddin's Dargah, this site was the cradle of the genius of poet Amir Khusro. Apart from these intriguing features, the Nizamuddin Baoli is of particular interest in this investigation because of the political circumstances that led to its development. This waterwork was, to a large extent, built to strengthen political dominance over a local community, a contest between Nizamuddin Auliya and Ghiyasuddin Tughlaq. According to legend, the dispute was over the allocation of workers between the Tughlaqabad Fort and Nizamuddin's Baoli. During the day, the labour constructed the fort and at night, they worked on the stepwell. However, Tughlaq grew impatient and banned the sale of oil to Nizamuddin: this meant that no lamps could be lit and the *baoli* construction came to a halt. In turn, Nizamuddin cursed the Tughlaqabad Fort.

### Case Study 2: Hauz - e - Khas

With a rising density, there was a need to store water locally in Delhi. Nearly all political structures and settlements of renown had *baolis*, including the Old Fort, the Red Fort, and the Hauz Khas Complex, which housed the Hauz - e - Khas, an ancient reservoir derived from the Persian word for 'royal tank'. First built by Alauddin Khilji and originally dubbed Hauz - i - Alai after his dynasty, it aimed to supply water to the residents of city of Siri. However, in an effort to cement his place in the Sultanate and the annals of history, Firoz Shah Tughlaq of the Tughlaq Dynasty reworked the site by means of a re - excavation programme and the cleansing of inlet channels. Firoz Shah, who ruled from his city of Firozabad, was celebrated for the configuration of new monuments on the banks of the *baoli* and the modification of the reservoir. The example of Hauz - e - Khas best encompasses the idea of building over existing water structures for political consolidation, as they came to encapsulate the generosity and prosperity of a ruler that cared for his people. In addition to this, these *baolis* were recognized as political centres where local administrators or Amirs solved disputes and collected revenue, echoing the

political and economic functioning of medieval waterways in the Delhi Sultanate.

### Baolis: Religious and Communal Usage

As focal points of cultural import, *baolis* regularly attracted many visitors to the Dargahs of the Sultanate. Said to have magical qualities, flocks of pilgrims came to these water structures believing that they would cure diseases and secure lasting good health and longevity. Other saints were convinced that the *baolis* of Delhi had exorcist powers typical of Islamic communal practices. Jinns, sometimes considered Hindu deities, were said to have been removed from *baolis* through ritualistic practices, perhaps reflecting the religious contentions of the time. Indeed, *baolis* were, in essence, used as tools for religion as devout practitioners were said to have been blessed after using the water from these units. As Dr. Nirmal Kumar highlights: 'nobles and powerful Sufi dargahs played [an] important role in spread of Baolis in Delhi'<sup>9</sup>, mirroring their religious use and its connection to political power, with several important gatherings.

### Case Study 3: Gandhak ki Baoli

The Gandhak ki Baoli, built by Sultan Iltutmish in the early 13th century, entails decorative architectural features and was constructed in a 'taper down' fashion, with a staircase of a length of 40 metres leading down to the water level. The ornate pillars and use of alcoves in the walls for lamps indicate that this historic stepwell was likely used as a place for cultural gatherings, echoing the religious influences on water management in the Sultanate. It is interesting to note that, according to local guides, the waters of the Gandhak ki Baoli were said to have magical properties, changing colours during times of calamity, turning black during plagues and red during wars.

### The Exchange of Ideas: A Nascent Perspective

Another intriguing perspective to consider when discussing waterworks in the Delhi Sultanate is that of the slave trade between India and East Africa, which, taking into account the nature of such transactions, would likely have led to the exchange of new ideas, including those pertaining to water resource management. An example that highlights this is the story of Malik Ambar<sup>10</sup>, who was very much a product of the slave trade between Africa and India. Sold into slavery as a young boy, Ambar was educated in Baghdad (a technological hub, particularly for water innovation). Eventually, he rose through the ranks, finally becoming a military and political leader of great significance in the Deccan. To a great measure, Malik Ambar exemplifies the spirit of the Deccan against the onslaught of the Mughals and the cosmopolitan cultural trends present in the subcontinent, which has political resonances with the Delhi Sultanate due to the exchange of ideas between the North and the South via trade routes. Therefore, Daulatabad was linked closely to North India and its politics, especially Delhi through the flow of technology and ideas, as can be

<sup>9</sup>Ibid.

<sup>10</sup>Mubayi, Yaaminey. "ELLORA- KHULDABAD- DAULATABAD Water and Sacred Spaces." *Academia*, www.academia.edu/29682870/ELLORA\_KHULDABAD\_DAULATABAD\_Water\_and\_Sacred\_Spaces?email\_work\_card=title.

<sup>8</sup>Delhi Sultanate Waterworks – Circular Water Stories. circularwaterstories.org/analysis/ancient-waterworks. Accessed 29 Oct. 2022.

seen with the disastrous shifting of the capital by Muhammad bin Tughlaq. With Malik Ambar sometimes being considered a hydrological genius of sorts, the evolution of water management in Daulatabad was closely reflected in state formation and political consolidation. It is imperative that one does not forget that, even in Medieval times, we lived in an interconnected and interdependent society that continues to shape Indian diversity even today, which, ultimately, evolved with water.

To conclude, it seems reasonable to confirm that the structural changes in the *baolis* of Delhi were indeed a reflection of the changes in state formation and political consolidation in the Delhi Sultanate, as these sites were focal points of political and religious import, designed specifically as symbols of political power and economic prosperity for the ruling elite, as is outlined through the examples of the Nizamuddin Baoli, Hauz - i - Shamsi and the Gandhak ki Baoli.

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