

# THE SITE OF ANCIENT BABYLON

## restoration, accessibility improvement and site musealization research project

Gianmarco Chiri, Federica Cucca

### MUSEOGRAFIA, NARRAZIONE SPAZIALE, PATRIMONIO ARCHEOLOGICO

La civiltà dell'antico Medio Oriente, con i suoi miti e figure, può ora riemergere attraverso il restauro e la musealizzazione del santuario babilonese di Ninmakh (Babilonia, IRAQ). Il tempio, situato a pochi metri dalla Porta di Ishtar, rappresenta una parte fondamentale della rete di connessioni rituali e processionali che sostengono la fondazione della città lungo la via sacra. Ninmakh (nota anche come Ninmhak o Ninursa e conosciuta come Mama/Mami) è la dea madre suprema per eccellenza. Nella tradizione sumerico-babilonese, plasmava gli esseri umani dall'argilla, mescolando terra e acqua: gli elementi fondamentali della materia umana e del suo spazio abitato. Tuttavia, la lettura di miti arcaici rivela una realtà che sfida la nostra sensibilità contemporanea e la prospettiva positivista. Il sito, a lungo dimenticato, è stato scavato relativamente di recente (R. Koldewey) e studiato con tecniche moderne ancora più recentemente (O. Pedersen). La struttura attuale è stata costruita sopra resti archeologici. In questi casi, il ruolo del museografo va oltre la semplice creazione di un allestimento per l'esposizione di reperti, oggetti o siti; implica la creazione di 'dispositivi narrativi': oggetti progettati per suggerire interpretazioni delle relazioni tra corpo e spazio, simboli e sequenze spaziali, guidando i visitatori in un'esperienza completa e immersiva, stimolante dal punto di vista intellettuale ed emotivamente coinvolgente a un livello più profondo. Accanto alle attività per il Piano di Restauro e Conservazione del sito, questo progetto di ricerca interpreta la musealizzazione collegando gli interventi contemporanei al più ampio ambito degli archetipi ancestrali — sia tangibili che psicologici — che hanno plasmato l'essere umano fin dall'inizio. Dal progetto di allestimento per il tempio di Ninmakh, la proposta si estende sino a comprendere una proposta metodologica per l'intero sito di Babilonia.

### MUSEOGRAPHY, SPATIAL NARRATIVE, ARCHAEOLOGICAL HERITAGE

*The civilisation of the ancestral Middle East, with its myths and figures, can now re-emerge through the restoration and site musealization of the Babylonian sanctuary of Ninmakh (Babylon, IRAQ). The temple, situated just metres from the Ishtar Gate, is a vital part of the network of ritual and processional connections that support the city's foundation along the sacred way. Ninmakh (also Ninmhak or Ninursa and known as Mama/Mami) is the quintessential supreme mother goddess. In the Sumerian-Babylonian tradition, she shaped humans from clay, blending earth and water: the fundamental elements of human matter and its inhabited space. However, reading archaic myths reveals a reality that challenges our contemporary sensitivity and positivist perspective. The site, long forgotten, was excavated relatively recently (R. Koldewey) and studied using modern techniques even more recently (O. Pedersen). The current structure was built over archaeological remains. In such cases, the role of the museographer extends beyond merely constructing a setting for displaying finds, artefacts, or sites; it involves creating 'narrative devices': objects designed to suggest interpretations of the relationships between body and space, symbols and spatial sequences, guiding visitors into a complete and immersive experience that is intellectually stimulating in terms of content and emotionally resonant on a deeper level. Alongside the activities for the site's Restoration and Conservation Plan, this research project interprets musealization by linking contemporary interventions with the broader realm of ancestral archetypes—both tangible and psychological—that shaped human beings from the very beginning. From the layout project for the temple of Ninmakh, the proposal extends to include a methodological approach for the entire site of Babylon.*

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The understanding of Mesopotamian civilisation, characterised by its historical figures and rich mythology, can now be renewed through the restoration and musealisation of the Babylon site in Iraq. The inscription of Babylon on the UNESCO World Heritage List in 2019<sup>1</sup> highlights its significance but also emphasises the challenges involved in managing and conserving such a monument. Preliminary studies and on-site surveys suggest that, despite extensive excavations and scholarly research (Koldewey 1899-1912; Pedersen 2021), the site remains fragile and requires measures to improve accessibility and safeguard its integrity. Furthermore, the complexity of historical layering, modern interventions, risks of deterioration, and the need to balance Preservation and public access present intricate issues that require targeted solutions. While local authorities and the international community collaborate to preserve archaeology, the research initiative seeks to establish methodologies for the musealisation of the site<sup>2</sup> and to provide a focused design for the recently restored Ninmakh's sanctuary.

Babylon was the political and symbolic centre of Mesopotamian civilisation and, by extension, of the original Mediterranean culture. The site, long neglected, was excavated between 1899 and 1917 by the German archaeologist Robert Koldewey<sup>3</sup> and studied with modern techniques more recently by Olaf Pedersen<sup>4</sup> (2021). Despite the damage inflicted on the site from the medieval period to modern times and the extensive interventions by Iraqi dictator Saddam Hussein, who aimed to reconstruct the city for political purposes,<sup>5</sup> archaeological investigations and some ancient urban traces—predominantly from the era of Nebuchadnezzar—still provide an authentic glimpse of the site. The original morphology of the town has now been substantially compromised.<sup>6</sup> Only through complex excavation and survey operations has it been possible to reconstruct the form of the settlement and the locations of the monuments referenced in ancient texts. Among these are the Ziggurat Etemenanki and the North Palace: iconic elements which, although this identification is not scientifically confirmed, have been respectively associated with the Tower of Babel, as

1 After a preliminary inscription on the UNESCO tentative list in 2009, it obtained the final inscription in 2019. This was followed by the drafting of a comprehensive site management plan that identified the area of maximum protection with buffer zones. It also identified the areas of greatest criticality and the areas now definitively compromised due to new settlements and military presences, especially during the second Gulf War. Today the site is under the control of the State Board of Antiquities and Heritage (SBAH) with the support of the World Heritage Committee nominated by the Government of Iraq in January 2018 for Inscription of the Site on the World Heritage List.

2 The project concerns a relatively small section in comparison to the entire original extent of the city, which extended over more than 1,000 hectares.

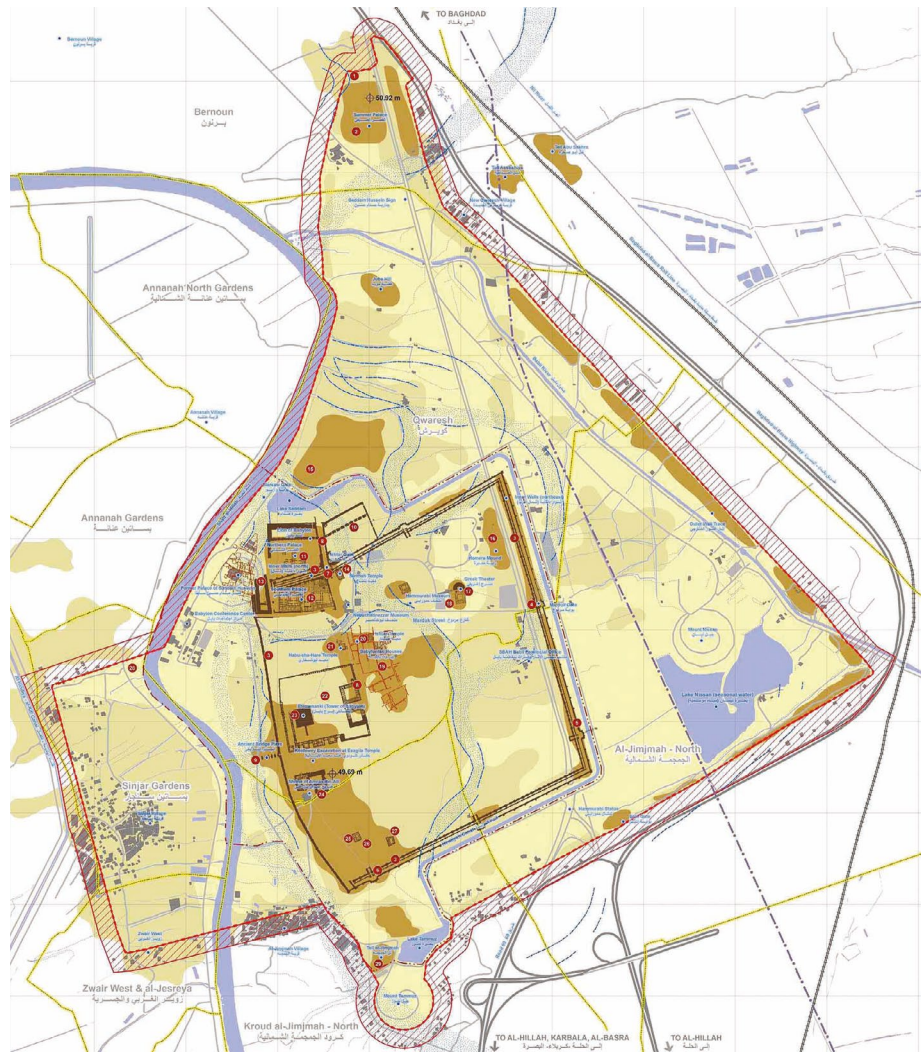
3 Robert Koldewey excavated Babylon between the end of the nineteenth century and 1917 with a series of expeditions aimed at finding the remains of the mythical city of Babylon and the temples and monuments described in the sacred texts.

4 Olaf Pedersen has recently applied the modern technological tools of the Geographic information system, returned a scientifically accurate cartography of the site and allowed a reliable three-dimensional reconstruction of the city as it appeared in the second half of the sixth century BC.

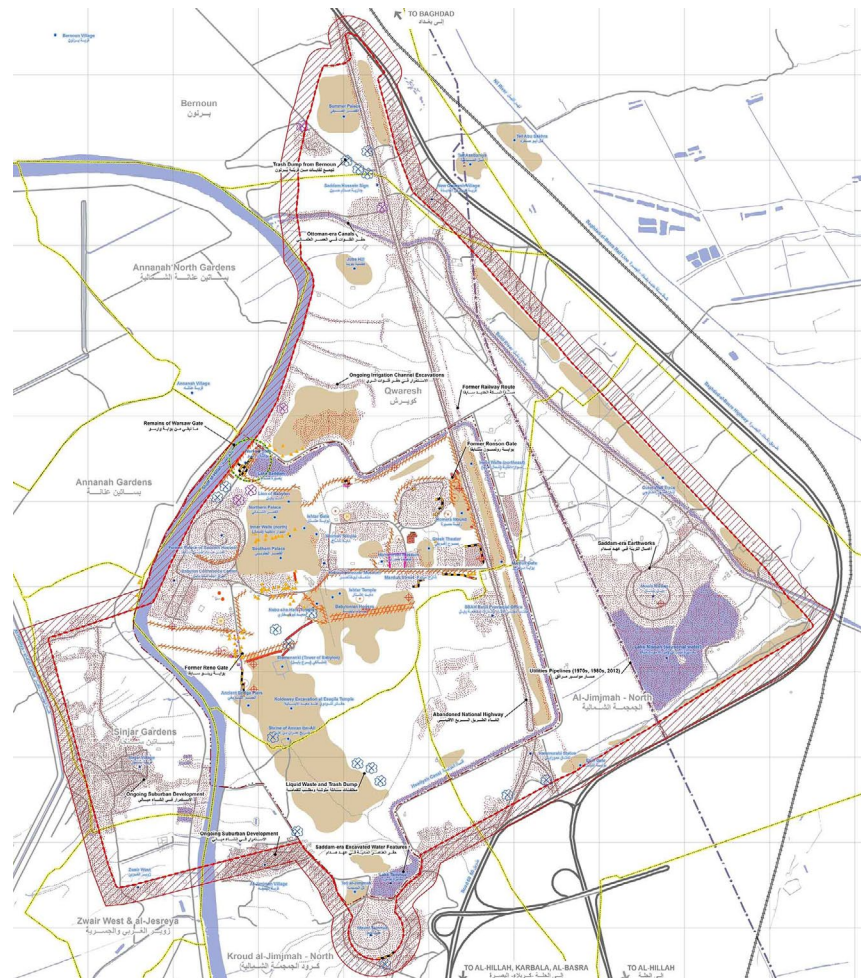
5 The so called "Revival of Babylon Project" was a 1980s-era reconstruction initiative by Saddam Hussein to rebuild parts of the ancient city of Babylon. Hussein envisioned himself as a modern heir to the ancient king Nebuchadnezzar II and sought to use the project to incite Iraqi nationalism. The project was controversial due to its use of new materials stamped with Hussein's name and its extensive nature, which damaged the site's historical authenticity and integrity.

6 After the second Gulf war, from 2003 until 2005 American and Polish troops used the site as a military camp: called "Camp Alpha"

1  
Site Conservation Plan.  
State Board of Antiquities and  
Heritage (SBAH). 2017-2018.  
Site archaeology.



2  
Site Conservation Plan.  
State Board of Antiquities and  
Heritage (SBAH). 2017-2018.  
Military remains.



depicted in the Bible, and with the so-called 'Hanging Gardens'. The palaces of Nebuchadnezzar, including the winter and summer palaces with their labyrinths, and ultimately the temple complexes dedicated to the deities of the Sumerian-Babylonian pantheon—including the temple of Ninmakh, which is notably well-preserved—complete this network of monumental landmarks. Through the exhibition of artefacts and reconstructions in major European museums,<sup>7</sup> the public has gained a comprehensive understanding of the culture that produced them and will learn about the city's urban and geographical extent, as well as its historical significance; however, understanding the city's form in relation to its symbolic meaning remains incomplete. It is, nonetheless, essential to preserve the heritage not only as material documentation but also as the core of the human experience of the place. In such a context, the role of museography goes beyond merely creating exhibitions to display artefacts, objects, or archaeological remains; it involves designing narrative tools—curated objects that evoke interpretations of the relationships between the body and space, symbols, and spatial sequences—to guide visitors towards a comprehensive and immersive experience that engages both their minds and emotions. Indeed, beyond carefully analysing factual data and accurately evaluating excavation results, it is crucial to establish a new connection between the site itself and personal awareness of the myths and dreams that unfolded here in their evocative power. In this narrative process, two levels are consistently distinguished: one of content and one of expression, namely, a story and a discourse. The latter is as important as the former, not only because it serves as a channel for conveying the content but also because, under certain conditions, it activates the individual's emotional sphere and stimulates ancestral memories and symbolic archetypes. Museology is responsible for organising content, aiding its transmission, and ensuring accessibility to a broader audience. Museography creates a narrative framework that guides the sequence of spatial events over time and the episodic structures that form the overall aesthetic experience of a place. Especially within archaeology, architecture mainly acts as a 'device' that quickly establishes a link between the human body and space, shaping both physical and psychological experiences. Through this form of sensitivity, architecture strives to interpret the intrinsic poetry of space, even without explicit references to cosmological myths or specific religious doctrines. Within this network, the proposal inserts small architectural structures that evoke the spirit and experiential essence of that legendary site.<sup>8</sup> The proposed visiting route is organised into seven stages, commencing at the current entrance and proceeding through the principal edifices along the processional pathway. The principal entrance to the archaeological site is located at the Marduk Gate. From this point, a lengthy, tree-lined promenade connects the eastern and western entrances. Approximately midway along this promenade, an office building and a small museum are currently being redesigned to function as a new reception and information centre for visitors. From this location, visitors can access the Processional Way, an ancient thoroughfare that, consistent with historical usage, serves as the central axis from which new pathways diverge, intended to link the "old" and "new" sectors. These pathways are bordered by a walkway constructed from white-finished wooden panels, providing a visual contrast

7 The excavations campaigns were organized and funded by the Deutsche Orient-Gesellschaft (DOG), founded in 1898 in Berlin. During these excavations the Ištar gate was transferred and partially rebuilt in the Pergamon Museum in Berlin.

8 The paratactic approach allows for maximum flexibility in configuration, does not impose new designs on the original urban matrix, and is amenable to deferred implementation over an extended period, fully compatible with the political, social, and economic conditions of present-day Iraq.



3  
Overlay illustrating the  
current state of the site  
and the city layout during  
Nebuchadnezzar's era.



4  
General layout of the  
musealisation proposal.







5  
Layout of the musealisation  
proposal, including details  
and pathways.

to the earthy tones predominant throughout the area. The main branch of this network directs towards Nebuchadnezzar's South Palace, one of the most distinguished architectural complexes of the ancient city, which was partially reconstructed during the "Revival of Babylon Project" and continues to be utilised during the so-called "Babylon Festival." Herein, visitors are granted the opportunity to explore and immerse themselves in the extensive courtyards of the palace, which formerly hosted royal court ceremonies and official functions of the Babylonian Empire Capital. The inclusion of small canopy elements made from white iron and Iraqi cotton evokes the regal environments where sovereigns were entertained and honoured with music and dance. The northern exit of the palace transitions into the remnants of ancient walls, now a linear mound of earth amid the surrounding ruins. The project along this historical pathway aims to reconstruct a plausible, albeit abstract, segment of the northern walls that once encircled the summer palace. The structure harmoniously integrates with the historical stratigraphy, employing the same steel-framed construction proposed in other sections of the project. Near what is presumed to be the foundations of the legendary Hanging Gardens, the proposal incorporates an element of a spiral pathway meticulously designed to restore the original vertical relationship. The narrative and discovery of the site extend along the initial segment of the processional route. This pathway is flanked by majestic walls adorned with residual reliefs depicting animals and mythological beings, symbols of authority and divine



6  
Nebuchadnezzar's palace canopy.

7  
Reconstruction of a small  
segment of the northern walls.





8  
The spiral pathway within the foundations of the supposed “hanging gardens”.



guardianship. These bas-reliefs serve as guides for visitors along the route, ultimately leading to the remains of the renowned Ištar Gate. As a result of gradual dismantling over centuries and the transfer of its principal components to the Pergamon Museum in Berlin, the gate no longer retains its original form.<sup>9</sup> The Ninmakh' temple,<sup>10</sup> situated a few metres from the Ištar Gate, constitutes a vital component of the network of ritual and processional pathways that delineate the city's configuration along the Sacred Way. The recently restored structure has been reconstructed primarily atop archaeological remains, allowing for greater flexibility in its reconstruction. New features have been incorporated to guide visitors through a structured, partly prearranged sequence of content, events, and experiences. The spatial sequence commences with a path from the south, running parallel to the sacred road, then curves toward the main entrance near the Ištar Gate. At this juncture, a small, paved enclosure with white ceramic relief tiles depicting Nebuchadnezzar's city plan marks the beginning of the sequence. From this point, visitors can observe the connection between the Gate area and the city's layout, as many remain unaware of the site's scale and urban and geographical configurations. The walls, pathways, and route components evoke the materials of the ancient city: earth, iron, and the original white paint of the structures. After departing from the outer courtyard, the pathway directs toward the entrance. Just prior to reaching the threshold, a secondary guiding element—a symbolic, abstract iron structure in the shape of a decagonal prism—conveys limited information about the monument in ten different languages. Visitors enter the atrium from outside—a dimly lit space they pass through to reach the courtyard, which remains external yet is enclosed by the building's walls. The courtyard is unquestionably

9 Recent interventions have been undertaken to improve the site; however, these efforts have not adequately addressed the particular requirements of the archaeological area, which is now deprived of one of its most significant architectural monuments.

10 Ninmakh (also referred to as Ninmah, Ninursa, and recognised as Mama or Mami) is esteemed as the supreme mother goddess; within Sumerian-Babylonian tradition, she is credited with crafting humans from clay through the mixing of earth and water—essential elements of human existence and inhabited spaces.



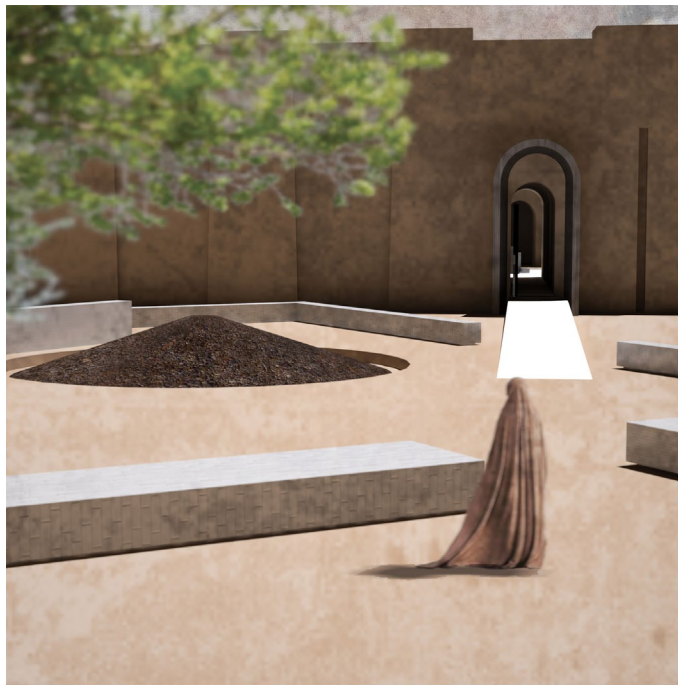
the most significant feature of the structure. When looking southeast along the main gate's axis, the view provides a glimpse of the courtyard with the sacred gate leading to the goddess's Cella. In the foreground, immediately beyond the atrium threshold, lies the ancient well from which water was drawn for ritual ablutions. The wall surrounding it now forms part of a new structure: a truncated pyramidal prism, slightly rotated to accommodate minor alignment discrepancies, enclosing a small omega-shaped pool that symbolises the goddess Ninmhakh, deity of the mountains. At this point, the sequence of visits becomes progressively more complex. The route is organised to optimise the visibility of the temple rooms, or at least the most important ones. Flanking the entrance, two rooms are designated for multimedia projections presenting introductory content for visitors. Identical digital devices provide more detailed information: the two central cellars and the adjoining rooms near the main entrance are dedicated to digital projections offering comprehensive insights about the goddess within the Sumerian-Babylonian mythological tradition, the history of the temple, its structural features, restorations or reconstructions, and finally, the history of excavations and archaeological investigations. After traversing the corridor that leads into a series of smaller chambers, one arrives at the door on the eastern side, which provides access to the Garden. From this point, a pedestrian pathway gently guides visitors to ground level at +34.00 metres. The third component of the composition, the garden, fulfils a dual spatial function: it signifies the conclusion of the route. It facilitates the organisation of public social activities under the shade of large existing trees. The enclosure, constructed similarly to the previous one, encloses a primarily earth-covered natural area, except for a designated space where a mound of clay is symbolically placed—an essential material for architecture and humanity, and symbolically associated with the myth of Ninmhakh.

9  
The ancient well for ritual ablutions, now incorporated into a new structure symbolising the goddess.

10  
The projection inside the goddess's Cella.

Proceeding along the ceremonial route, visitors enter the Merkez district. In this historic residential area, the dwellings of the most distinguished and affluent individuals were intermingled with prominent temples. Currently, it is possible to visit reconstructions of the temples of Ištar and Nabu, the god of writing and wisdom, and protector of artisans and scribes, situated amidst ancient houses within a vast area that remains to be excavated:









11

The precinct and the garden.

12

Reconstruction of a small  
segment of the sacred precinct.

13

The Koldewey's excavation and  
the foundation of  
Marduk's temple.

14

The "Tower of Babylon" parapet.

here, the project integrates a laboratory space dedicated to raw earth technology. Centuries of destruction and previous excavations have significantly altered the original topography: large mounds of fine sand and earth, known as "Tell," have been amassed across various districts, from which their name is derived. These mounds are abundant in ceramic fragments, some of which bear cuneiform inscriptions that remain clearly visible on the surface. The pathway advances through the city's central sites of worship: the Sacred Precinct. The act of passing through the portal assumes a highly symbolic significance, inviting the visitor to cross a threshold marked by variations in material and the sequential spatial progression of the vertical elements of the framed structure, which create resting points sheltered by cotton curtains. At the core of the site, an expansive and silent desert landscape envelops the visitor in a state of isolation, where the presence of ruins and the shadows cast by the curtains evoke memories of bygone eras. The ziggurat of Babylon, known biblically as the Tower of Babel, which has dominated the urban landscape for centuries, now appears as a mound of earth surrounded by a moat, shaped by archaeological excavations conducted at the end of the nineteenth and early twentieth centuries and by quicksand, complicating accessibility. This project acknowledges the inherent inaccessibility of this site, consciously avoiding imposed interventions to preserve its symbolic significance, particularly that of the tower and its myth. Mirroring the historic endeavour of humans to construct a tower reaching the divine, which challenged natural boundaries, the project opts not to transcend this natural limit. Although the original form of the ziggurat is no longer visible, it is commemorated through a pathway that meanders along the perimeter of the excavation. The parapet, initially serving as a protective barrier, now functions as a narrative device: inclined at the apex to resemble the presumed angle of the original ziggurat steps. The myth of the Tower of Babel is inscribed along its surface in all the languages of the world. Having traversed the boundaries of Etemenanki, the project advances toward one of the most enigmatic sites in ancient Babylon: the temple of Marduk. Here, visitors are confronted not with evident or reconstructed ruins but with an absence—a vast archaeological trench revealing solely a substantial void, thereby immersing visitors in a space where their perception of location is nearly lost. The depression, approximately 20 meters by 20 meters with a depth of about 7 meters, excavated

by archaeologists in the early 1900s, aligns with the ancient courtyard of the temple and discreetly preserves the few remaining relics—fragments of a vanished history that persist, albeit concealed among landslide walls. The ramp functions as a narrative and symbolic device: in the myth of Marduk, the primordial chaos Tiamat, depicted as a serpent or dragon, is defeated and transformed into the cosmic order; the curve of the ramp symbolises this transition through its sinuous form, which gradually ascends towards a central location- the temple courtyard- serving as the sacred and cosmological focal point of the site.

The proposed route ideally concludes at the so-called "Mount Saddam," a propagandistic structure erected in the 1980s within Saddam Hussein's residence. Currently deserted, it provides a strategic vantage point overlooking the entire archaeological zone. Once a symbol of the dictator's authority, this site has the potential to become a focal point in the city's historical consciousness: a museum dedicated to Babylon—honouring its rich history, mythology, and culture, and promoting an ongoing dialogue between the past and present. This space completes the site tour, providing visitors with an unprecedented perspective of the city's ruins.

The collection of small interventions presented offers an image of the site that encourages visitors to contemplate the relationships between humans and the built environment from the standpoint of a pre-modern civilisation, characterised by a profound and continuous dialogue with the divine. This was the world of Babylon, where rituals and myths governed the passage of time, and stars guided people's lives. Today, all these aspects may seem distant, abstract, or even superstitious, but focusing on them is essential to understanding the true essence of the place.

The musealisation and accessibility plan for the archaeological site of Babylon, as presented herein, should be regarded solely as a general methodological proposal intended to guide the enhancement of the site contingent upon the political and economic conditions of the country. Nonetheless, it may serve as a generalisable approach that is applicable in all contexts where a purely descriptive methodology fails to effectively communicate the complexity and depth of the site's contents.

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