INSIDE THE POOL OF GIBEON

3D model reconstruction and some observations about finds

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GENERAL BACKGROUND

The ancient site of Gibeon, modern village of el-Jib, is located 8 kilometers northwest of Jerusalem along the *Patriarchs Route*, one of the most important inland tracks. Inhabited since the 4th millennium and well-known also thanks to the biblical sources (Joshua 10:12; 11:19; 1 Samuel 4: 1-22, 1 Chronicles 21:29), the site was first investigated in the mid-1900s by James Bennet Pritchard (1956-1962) who immediately recognized its importance and long occupation, also through finds dating back to the Ancient Bronze Age up to the modern period. The most noticeable phases are certainly those of the great Iron Age occupation (I-III, 1200-586 BC) which first developed within a single and then double-lined defensive wall and hosted significant public structures such as the so-called Winery, the large underground water system known as Stepped Tunnel, and the cylindrical pool.

THE SO-CALLED POOL

Located in the north-eastern part of the tell, few meters from the city wall, the rock-hewn pool shows a first cylindrical section about 10 meters deep (12.30 x 10.20 m in diameter) ending with a plain horizontal surface (fig. 1). The main access was regulated by a lateral spiral staircase provided with a thick parapet obtained from the rocky bank. Upon reaching the horizontal level, the stairs led down for another 13 meters, creating an underground vaulted tunnel leading to the *Water Room* dedicated to water collection. With a total depth of almost 25 meters, around 2,982 tons of stone were quarried!

QUESTIONS AND METHODS

According to Pritchard, the structure was in use during the Early Iron Age (1200-960 BC) and later abandoned because replaced by another supply system. The scholar also assumed that the tunnel did not belong to the original project, but it was added in progress as an alternative to the challenging project of the vertical pool or maybe due to the lowering of the water table. Following a preliminary study involving many Early Iron Age sites, including Gibeon, some doubts have emerged on dating the structure to the Iron Age I as proposed by Pritchard. A detailed re-examination of both the cylindrical pool and its earthy filling has thus started. The elevation of some finds represents the only way to provide the correct stratigraphical sequence of different dumps; in the mid-1900s the stratigraphical method was in fact not yet evenly employed, the reason why the Gibeon Pool underwent an indiscriminating emptying. It is only because of a typological analysis and a wide comparison carried out on these materials that it is possible now to shed light on use and abandonment stages of the pool, up to suppose a possible dating for its construction.

Figure 1. The pool looking from north (after Pritchard 1961, fig. 26).

ARCHITECTURAL ANALYSIS

The pool can be considered as a real enter shaft to the groundwater or as suggested by some scholars, direct entry to the nearby spring of 'Ain el-beled who fed the entire village. Its function as a water facility is also confirmed by the discovery, at the end of the tunnel, of two jars (fig. 2), probably evidence of the last draw of water made during the structure final stages. The position of the pool inside the city underlines moreover the need for protection and above all the certainty of having a water access even in case of siege attack. Comparisons between the Gibeon system and those of several sites of the first millennium such as Megiddo, Gezer, Jerusalem, Jokneam, Lachish, Arad, Beer Sheba, and Hazor underline the wide diffusion of this precise model. The similarities especially with the Hazor water system, with which affinity is particularly clear, would seem to relocate the Gibeon device at the beginning of the first millennium, to the latest phase of the Iron Age II citadel.

Figure 2. The two whole jars found on the bottom of the pool (after Pritchard 1961, fig. 48).

THE 3D MODEL RECONSTRUCTION

The 3D model of the pool here proposed (fig. 3) offers the possibility of a closer study of the structure, unfortunately today not entirely available and compromised by a state of progressive neglect. The model was recreated in *Autodesk Autocad 2021*, rendered in *Autodesk 3ds Max* and post-produced in *Adobe Photoshop CS4*.

FINDS AND STRATIGRAPHY

Findings are entirely dated between the 8th and 6th centuries BC and their distribution, apart from the two most superficial items, is homogeneous. Objects from the deepest levels suggest a voluntary filling activity that started during the 8th century and completed around the 6th century BC. Debris and scrap materials resulting from the enlargement activities of the residential quarter on top were probably discharged inside the pool up to reaching a thickness of 24 meters.

Two main object concentrations can be observed inside the filling (fig. 4): the first ranging from 2.20 and 4.45 meters of depth, and the second, most important, between 4.45 and 7.60 meters. These accumulations help to shed light both on the absolute chronology of the fill and its voluntary nature. While in the tunnel and the lower half of the pool finds were retrieved at various elevations suggesting a quite natural and randomized deposit composition, the two clusters appeared immediately unusual, maybe as a result of non-ordinary activities. Clustering together with typology and an uncommon combination of some artifacts has led to assume a symbolic interpretation of the two deposits.

Figure 3. North-eastern section reconstruction (© Archt. Francesco Posati).

fall, the association between heads and bodies was never identified, leaving to assume there was a voluntary breakage before their final 'discharge'. The combination of findings together with their presumed deliberate breakage, might suggest a votive dump hypothesis. Unfortunately, it is not easy to understand the reason why the statuettes were broken, according to some scholars probably as results of iconoclasm pursued during the 7th century BC.

Figure 4. Illustration of the two main clusters of objects into the pool as well as discovered by Pritchard (© Maria Tamburrini).

SIMPLE DUMP OR A CULTUAL DEPOSIT?

Layer between 2.20 and 4.45 meters is characterized by the presence of two inscribed pottery fragments and thirteen fragmentary cooking jar handles with a cross-shaped incision on the top (under study). This incision was interpreted in the first instance as a cult practice known as *terumah*. According to this habit, the temple offering was signed with an 'X' (tav letter), abbreviation indicating thus the destination of the container and/or its content. From this perspective the concentration of handles might thus indicate a symbolic dump related to cultic activities. The most reasonable hypothesis, even according to other scholars, does not seem related to *terumah*; these items could be interpreted as evidence of local administrative practices occurred in the city during the Late Iron Age. The accumulation is certainly unusual.

Anthropomorphic, zoomorphic clay statuettes and inscribed jar handles were found together in a second deepest cluster between 4.45 and 7.60 meters. Finds are fragmentary, and all the figurines were broken.

Not excluding the possibility of breaking during the fall, the association between heads and bodies was never identified, leaving to assume there was a voluntary breakage before their final 'discharge'. The combination of findings together with their presumed deliberate breakage, might suggest a votive dump hypothesis. Unfortunately, it is not easy to understand the reason why the statuettes were broken, according to some scholars probably as results of iconoclasm pursued during the 7th century BC.

Even if the hypothesis of a cultic dump seems to remain the most attractive given the presumed voluntary breakage and the uniqueness of context, it cannot be affirmed with absolute certainty because of the lack of more precise data. It is in fact not clear whether these objects were simply thrown away because they had finished their life at the time of their disposal, or they were deposited with a hidden symbolic value and thus still considered as 'active' cultic objects.

SUMMING UP

The stratigraphy sequence deduced from finds in association with the building technique comparisons place the construction of the cylindrical pool around the 10th-9th century BC and its uninterrupted use as water supply up to the 7th-6th century BC when probably it was abandoned. In this respect, the two jars found at the entrance of the Water Room can provide the chronology for the last use of the pool as a shaft and the *terminus post quem* for its subsequent abandonment; the filling and its objects groups located in the medium and upper half of the pool testified anyway the changing in nature of the structure and, indirectly, the ongoing growth of the settlement all around.

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