



## MUSHKI, TALL-E

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**MUSHKI, TALL-E**, an early Pottery Neolithic site in Fars Province, southwest Iran. Located approximately 11 km southeast of Persepolis, this eponymous site for the Mushki culture forms a small and low mound, occupying an area of about 75 m by 70 m and rising approximately 2 m from the surrounding field. Its first archeological investigation was conducted in 1951 by Louis Vanden Berghe (1951/52, pp. 214-15), who placed Tall-e Mushki in the Neolithic period. The site was again test excavated in 1959, by Namio Egami from the University of Tokyo, through two small pits (TM and TMB pits) (Sato, pp. 57-58); his more substantial excavations followed in 1965, in an area of 170 sq m (Fukai et al., pp. 1-100). An additional sounding was made by Abbas Alizadeh (2006, p. 42) in 2004, principally to obtain data on Neolithic subsistence.

As the repeated fieldwork suggests, Tall-e Mushki holds a particular significance as one of the earliest farming settlements in Fars Province. Egami's 1965 excavations have been the primary source of information about its cultural remains. The site contains five occupation levels of the Mushki culture, which are overlain by another level of the subsequent phase, designated as the TMB (Maeda, pp. 67-72) or the Bashi phase (Pollock et al., pp. 92-96). The architecture of the Mushki phase consists of either rectangular or curvilinear *chineh*-walled structures (i.e., made of built-up layers of mud), directly built on the ground. The curvilinear buildings occurred in later levels, which may suggest changes in traditional architecture. The buildings were often relocated in each level rather than built directly above the previous ones in succession; this fact, along with the thin walls, indicate intermittent,



impermanent occupations rather than intensive, continuous occupations. The chronological position of the Mushki levels has been the subject of much debate over the years, yielding several different opinions (Vanden Berghe, 1953/54, pp. 400-401; Fukai et al., pp. 74-83; Voigt and Dyson, pp. 135-37; Alizadeh, 2004, p. 104; 2006, pp. 7-10). However, the most recent analysis of the charcoal samples from the 1965 excavations finally placed the site of Mushki within a period of ca. 6400 to 6050 cal. BCE (Nishiaki, p. 5).

Pottery was in evidence from the beginning of the occupation. It is represented by a painted ware, with geometric designs in black (Figure 1). The paste was principally plant-tempered, and carinated bowls were the most common form. While the manufacturing technology and styles changed little throughout the sequence, the buff-slipped ware slightly increased in later levels (Fukai et al., pp. 31-33). The lithic implements represent a microlithic industry characterized by numerous pressure-flaked bladelets; these were often manufactured into lunates that were used as barbs for hunting tools. In addition to the locally available chert, obsidian imported far from the north was also utilized. Grinding and ground stone tools, made of limestone and sandstone, also comprised the tool kit but were not common. Among the small finds, bone awls and needles, copper pins, clay objects, the objects that excavators of the Neolithic report as “ear-plugs,” and shell ornaments are noteworthy. Clay objects include animal figurines probably depicting goats. There were no female figurines of the “mother goddess” type. The “ear-plugs” (Fukai et al., pp. 57-63), made of either stone or clay, are enigmatic in their use. They can also be described as spools, tokens, cosmetic mortars, etc. The meaning of their abundant occurrences (about 400 specimens) is yet to be explained. Shell ornaments were made of seashells such as dentalium and cowrie, most likely derived from the Gulf of Oman. As in the case of obsidian, this exotic material provides evidence of long-distance contacts.

Domesticated plant remains testify that the inhabitants of Tall-e Mushki cultivated wheat and barley, as well as wild plants such as nuts (Miller and Kimiaie, p. 116). It has been unknown how much their subsistence depended on cultivated plants. On the other hand, faunal remains indicate much dependence on wild animals, notably donkeys, bulls, and gazelles. The scarcity of domesticated animals at this site is remarkable in comparison with the faunal assemblages from the later Neolithic settlements (Mashkour et al., p. 105). The overall impression from these organic remains and the features of the cultural assemblages is that the site of Tall-e Mushki was a short-term



occupation settlement of a non-sedentary Neolithic community. This particular way of life could have been related to the cool and arid climatic conditions of the late 7th millennium BCE, when the abrupt climate event that is termed the 8.2 kiloannum occurred on a global scale (Nishiaki, pp. 7-9).

The Mushki cultural levels were followed by the TMB or the Bashi level, which was recovered only in a sounding pit (TMB). This phase is considered to represent an interface period between the Mushki and the subsequent Jari cultures. Of particular note, the recovered pottery assemblages show intermediate features of the two better-defined phases, and the progressive changes to the Jari pottery are incontestable. Conversely, the cultural phase preceding Mushki remains poorly defined in Fars Province. As at Tall-e Mushki, a dozen Mushki-related sites thus far known in the region, including the Mamasani plain (Weeks et al., pp. 9-13), usually do not have earlier remains. One exception is the site of Rahmatabad, some 40 km northeast of Persepolis, where an aceramic Neolithic layer was recovered below the Mushki levels (Bernbeck et al., pp. 37-39). However, since the aceramic layer dates from the very end of the 8th and the early part of the 7th millennium BCE, there remains a chronological gap before Mushki. This gap could be filled by a Pottery Neolithic culture associated with another distinct painted ware, examples of which are known at Kushk-e Hezar in the Marv Dasht plain (Alden et al., fig. 9) and the cave site of A4-1 in the Arsanjan area (Ikeda, fig. 24). Yet, these surface finds cannot be dated, and the accompanying cultural assemblages are unknown.

See also [FĀRS ix. PREHISTORIC SEQUENCE](#).

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