

---

## An Early Neolithic street plan at Sha'ar Hagolan, Israel

**Arthur Krim**, Boston Architectural College, 320 Newbury Street, Boston, MA 02115, USA. E-mail: [arthur.krim@the-bac.edu](mailto:arthur.krim@the-bac.edu)  
<https://doi.org/10.51347/UM25.0017>

The recent discovery of a fully-formed Neolithic street plan at Kibbutz Sha'ar Hagolan on the Yarmuk River in the Upper Jordan Valley of Israel, dated to 6500–6000 BC has revised the dating of early urban planning in the Near East. Originally discovered during the Second World War by Moshe Stekelis, the site was not fully excavated until 2002 by Yosef Garfinkel working for the Institute of Archaeology at the Hebrew University in Jerusalem (Garfinkel and Miller, 2002). The Sha'ar Hagolan site revealed an extensive street plan of 20 ha., with fully formed courtyard buildings set along straight streets and winding alleys beside the Yarmuk River, the border between Jordan and Israel. The prehistoric culture dating Sha'ar Hagolan was named 'Yarmukian' by Stekelis after the early clay pottery and symbolic figurines found at the site (Stekelis, 1950, p. 1).

### Yarmukian culture

The original site discovery by Stekelis was uncovered from an anti-tank trench for the kibbutz in 1943, exposing fragments of early clay pottery and microlith stone tools of the Neolithic period (Stekelis, 1943). Subsequent excavations by Stekelis during 1949–52 exposed further Neolithic artifacts and the remains of 'stone foundations of rectangular houses' indicating a fully realized urban form (Albright, 1954; Stekelis, 1950, p. 2). While the complete extent of the urban plan was not exposed, the Stekelis excavation did retrieve a number of remarkable examples of a 'Mother-goddess' figurine with cowrie shell slanted eyes of fired clay that established the Yarmukian culture as an early Neolithic art form of notable sophistication (Mellaart, 1965, Plate 37; Stekelis, 1972, p. 27). In 1952 the kibbutz established a Museum of Yarmukian Culture to display the mother-goddess figurines and other clay pottery found at the site, and other examples were acquired by the Louvre in Paris, the British Museum in London, and the Metropolitan Museum of Art in New York.

Following Stekelis's death in 1969 an English translation by Tamar Noy of his 1966 Hebrew report on Sha'ar Hagolan was published by the Hebrew

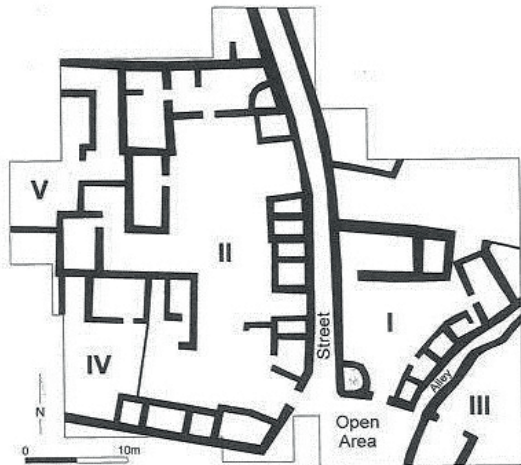
University in 1972 with a site map and diagrams of the microlith stone tools, but no overall plan of the Neolithic stone foundations (Stekelis, 1972, p. v). After this point Sha'ar Hagolan remained buried under the fish ponds of the kibbutz until 1979 when Emanuel Eisenberg of the Israel Department of Antiquities initiated a two-year excavation of the site (Eisenberg, 2012). Two areas were drained below the fish ponds revealing rectangular stone foundations that showed a complex of additive square rooms from the Early Bronze age of the Third Millennium (*c.* 2500 BC) with intact clay pottery, but otherwise no overall urban plan of the site (Eisenberg and Rosen, 2021, Plan 1 and 2).

### Garfinkel excavation

A third programme of excavation at Sha'ar Hagolan was mounted in 1989 by Joseph Garfinkel of the Hebrew University, inspired by the noted French archaeologist Jean Perrot and his work at the Yarmukian site of Munhata in the Western Galilee (Garfinkel, 1993, p. 132; Krim, 2021). The initial excavation of 1989–90 exposed Natufian subterranean circular hut foundations, while the primary effort was centered on 'Area E' along the Yarmuk River, where stone foundations of 'a massive building' were discovered (Garfinkel, 1993, p. 128). A fourth series of excavations was begun in 1996, extending to 2004. By 1999, work on Area E had exposed an extensive urban complex with a large courtyard public building (Building I) along a winding alley near the Yarmuk River (Garfinkel, 1999). More significant for urban morphology, a 'wide straight street' of some 3 m (10 ft) was gradually uncovered during the 1996–7 seasons oriented directly north to south from the Yarmuk River. Portions had been exposed as early as 1989 but were not recognized as such (Garfinkel, 2020; Garfinkel and Miller, 2002, p. 18) (Figure 1).

By 2002 the extensive site of Area E had been exposed, including the straight stone foundation of Buildings I and II bordering the 'street' extending some 140 m (560 ft) north of the Yarmuk River to a second excavated site at Area H (Ben-Shlomo and Garfinkel, 2009, Fig. 5). At the end of

---



**Figure 1. Sha'ar Hagolan, Area E, c. 6400 BC, after Garfinkel and Miller (2002) (source: Ben-Shlomo and Garfinkel, 2009, Fig. 2).**

the 2002 season a stone-lined well 4.2 m (14 ft) deep was discovered in Area G north of the river. This was a sophisticated construction reaching down to the water table, carbon dated 6400–6210 BC (Garfinkel *et al.*, 2006, p. 691). Such Early Neolithic engineering demonstrates the work of a planned urban society ‘carefully organized’ in a coherent network of streets, the largest urban plan yet discovered in the Near East (Garfinkel and Miller, 2002, p. 34).

### Çatalhöyük

Comparison with other contemporary Yarmukian sites in the Jordan Valley shows Sha'ar Hagolan to be the most complex of the region. Two notable sites show similarities in plan and objects. The first is Munhata, discovered in 1962 by Jean Perrot in Western Galilee, with mother-goddess figures and massive stone foundations defining a partial street (Perrot, 1966). The second site, at Ain Ghazel near suburban Amman, Jordan, discovered in 1982 by G. O. Rollefson of Yarmouk University, had similar large stone buildings and mother-goddess figures (Rollefson, 1998). The most significant comparison is to the Anatolian site of Çatalhöyük in Turkey, discovered in 1961 by James Mellaart, with a complex of tightly clustered mudbrick houses dated to 6500 BC, contemporary with Sha'ar Hagolan (Krim 2014; Mellaart 1967). Garfinkel had offered Çatalhöyük as an example of Neolithic urban form in 2002 (Garfinkel and Miller

2002, Fig. 6), with a recent comparison in 2019 (Garfinkel, 2019). In comparing Sha'ar Hagolan to Çatalhöyük, Garfinkel notes that Sha'ar Hagolan ‘required some level of preplanning and coordination’ for the system of streets and open courtyard houses (Garfinkel, 2019, p. 3). In contrast the compactive, additive clustered form of Çatalhöyük turned out to be a ‘dead end in the evolution of human architecture’ with interior circulation by rooftop access only, rather than by formal streets (Garfinkel, 2019, p. 85).

At present, the excavated site of Sha'ar Hagolan is covered for protection and further study. Plans are under way to transform the site into a museum complex by stabilizing the prime Area E of the riverbank streets as an open-air prehistoric village with the existing complex of the Museum of Yarmuk Culture at the kibbutz (Ben-Shlomo and Garfinkel, 2019, Fig. 9). Such a museum display would parallel the current museum complex at Çatalhöyük in Turkey with a covered shelter for the excavation area (Hodder, 2008).

### Conclusion

In the final perspective the street network of Sha'ar Hagolan displays a remarkably modern form for a Neolithic urban site. The organization of straight streets and alleys strongly suggests a planned concept of community effort for a riverbank town of the Early Neolithic period, far in advance of other early sites in the area. Beyond the distinctive clay pottery and mother-goddess figures, Sha'ar Hagolan also deserves attention as a landmark urban settlement of the prehistoric era in comparison with other complex period sites as Jericho and Çatalhöyük for innovative urban form in the Near East (Kenyon, 1979).

### References

- Albright, W. F. (1954) *The archaeology of Palestine* (Pelican, London).
- Ben-Shlomo, D. and Garfinkel, Y. (2009) ‘Sha'ar Hagolan and new insights on Near Eastern proto-historic urban concepts’, *Oxford Journal of Archaeology* 28, 189–209.
- Ben-Shlomo, D. and Garfinkel, Y. (2019) ‘Proto-historic sites in the Jordan Valley’, *Proceedings of the International Conference on Archaeology, History and Heritage* 1, 12–26.
- Eisenberg, E. (2012) ‘The Early Bronze Age IV site at Sha'ar Hagolan’, *Atiqot* 69, 1–73.

- 
- Garfinkel, Y. (1993) 'The Yarmukian culture in Israel', *Paléorient* 19, 115–34.
- Garfinkel, Y. (1999) 'Sha'ar Hagolan – a Neolithic village', Israel Ministry of Foreign Affairs (<https://mfa.gov.il/MFA/IsraelExperience/History/Pages>) accessed 3 June 2021.
- Garfinkel, Y. (2019) 'Çatalhöyük and Sha'ar Hagolan: a tale of two cities', in Marciniak, A. (ed.) *Concluding the Neolithic: the Near East in the second half of the Seventh Millennium BCE* (Lockwood Press, Atlanta).
- Garfinkel, Y. (2020) Email to A. Krim, 26 August.
- Garfinkel, Y. and Miller, M. A. (2002) *Sha'ar Hagolan, Neolithic art in context*, 1 (Oxbow Books, London).
- Garfinkel, Y., Vered, A. and Bar-Yosef, O. (2006) 'The domestication of water: the Neolithic well at Sha'ar Hagolan, Jordan Valley, Israel', *Antiquity* 80, 686–96.
- Hodder, I. (2008) '2008 season review', *Çatal News* 15, 1–2.
- Kenyon, K. M. (1979) *Archaeology in the Holy Land* (Norton, New York).
- Krim, A. (2014) 'Excavating the origins of urban form: Çatalhöyük', *Urban Morphology* 14, 81–2.
- Krim, A. (2021) 'Natufian pre-urban morphology of the Near East', *Urban Morphology* 25, 89–93.
- Mellaart, J. (1965) *Earliest civilizations of the Near East* (McGraw Hill, New York).
- Mellaart, J. (1967) *Çatal Hüyük, a Neolithic town in Anatolia* (Thames and Hudson, London).
- Perrot, J. (1966) 'La troisième campagne de fouilles à Munhata (1964)', *Syria* 43, 49–63.
- Rollefson, G. O. (1998) 'Ain Ghazal (Jordan): ritual and ceremony', *Paléorient* 24, 43–58.
- Stekelis, M. (1943) 'On the prehistoric stations in the Jordan Valley', *Bulletin of the Jewish Palestine Exploration Society* 10, 102–4 (in Hebrew).
- Stekelis, M. (1950) 'A new Neolithic industry: the Yarmukian of Palestine', *Israel Exploration Society* 1, 1–19.
- Stekelis, M. (1972) *The Yarmukian culture of the Neolithic period* (The Magnes Press, Jerusalem).
-