

Excavations at Jawa, 1973

A preliminary Report

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The site Jawa, about 15 kilometers northeast of the pumping station H5 on the IPC pipeline, was described by F. V. Winnett in 1950.¹ G. W. L. Harding, a member of that expedition, noted in the records of the Jordanian Department of Antiquities that Jawa, the fortified settlement in Wadi Rajil, might date to the Early Bronze Age. He also informed the British School of Archaeology in Jerusalem under whose auspices the present writer surveyed the site in 1966² and again in 1972. The results of the surveys showed that Harding's date was relatively accurate and a first season of excavations took place at Jawa in the summer of 1973.³

Region

The region about Jawa is part of the Basalt Barrier straddling the most direct east — west route between Mesopotamia and the Levant. It consists of a volcanic outflow originating in Jebel Druze to the north and other volcanic peaks to the south. Rain, ca. 200 mm. annually, comes only during the winter months and springs are rare. Even those existing today are often insufficient. Modern land-use entails some agriculture under very difficult conditions and pastoralism which is the major industry.

This desert region received some attention after the first World War when pilots noted structures along their route east from Azraq.⁴ It was supposed that these structures indicated an early permanent population there. No dating was apparently attempted at that time. Since then, up to 1950 and subsequent surveys, only N. Glueck⁵ passed near the site without, however, seeing the fortified town. The area stretching from near Damascus as far south as the Nafud Desert of Saudi Arabia was therefore quite unknown as far as pre-Roman occupation was concerned.⁶

Jawa (Fig 1, site plan)

The settlement at Jawa is built on a rock outcropping with Wadi Rajil on the east and a subsidiary wadi to the west, the latter forming a natural catchment basin. The entire site is fortified with two lines of walls enclosing an upper and lower town. To date, six main gates and many posterns have been found. Within both lines of fortifications are the remains of houses and at the highest point in the upper town was built a rectangular 'citadel'. The catchment basin beside the town was closed off at its southern end by a stone dam retaining a large water reservoir fed by run-off from surrounding

(1) F. V. Winnett, "An epigraphical expedition to North-Eastern Transjordan" **BASOR** 122 (1951)49ff.

(2) S. W. Helms, "Jawa: An Early Bronze Age Fortress?" **Levant** V (1973)127ff.

(3) The excavations were sponsored by the British School of Archaeology in Jerusalem, supported by the School and a travel grant from the Central Research Fund of London University. The writer is grateful to the Jordanian Department of Antiquities and its representative for the support and assistance offered him in the field and in Amman. The team in 1973, as during the 1972 survey, consisted of the writer, Mr. A. G. Walls architect and Miss. L-A. Hunt site-supervisor.

Mr. Abdel Jalil 'Amr and Mr. Hussein Qandil were the Department of Antiquities' representatives.

(4) Result were published, among others, by: R. A. Maitland, "The 'Works of the Old Men' in Arabia" **Antiquity** I (1927)127ff.

L. W. B. Rees, "The Transjordan Desert" **Antiquity** III (1929)389ff.

A. S. Kirkbride, "Desert Kites" **JPOS** 20 (1946) 1ff.

(5) N. Glueck, "Explorations in Eastern Palestine", IV, Part I, **AASOR** XXVIII-XXV (1952)30ff.

(6) Many explorers recorded such sites in the region. See for instance, H. C. Butler, **Ancient Architecture in Syria, Div. II** (1910).

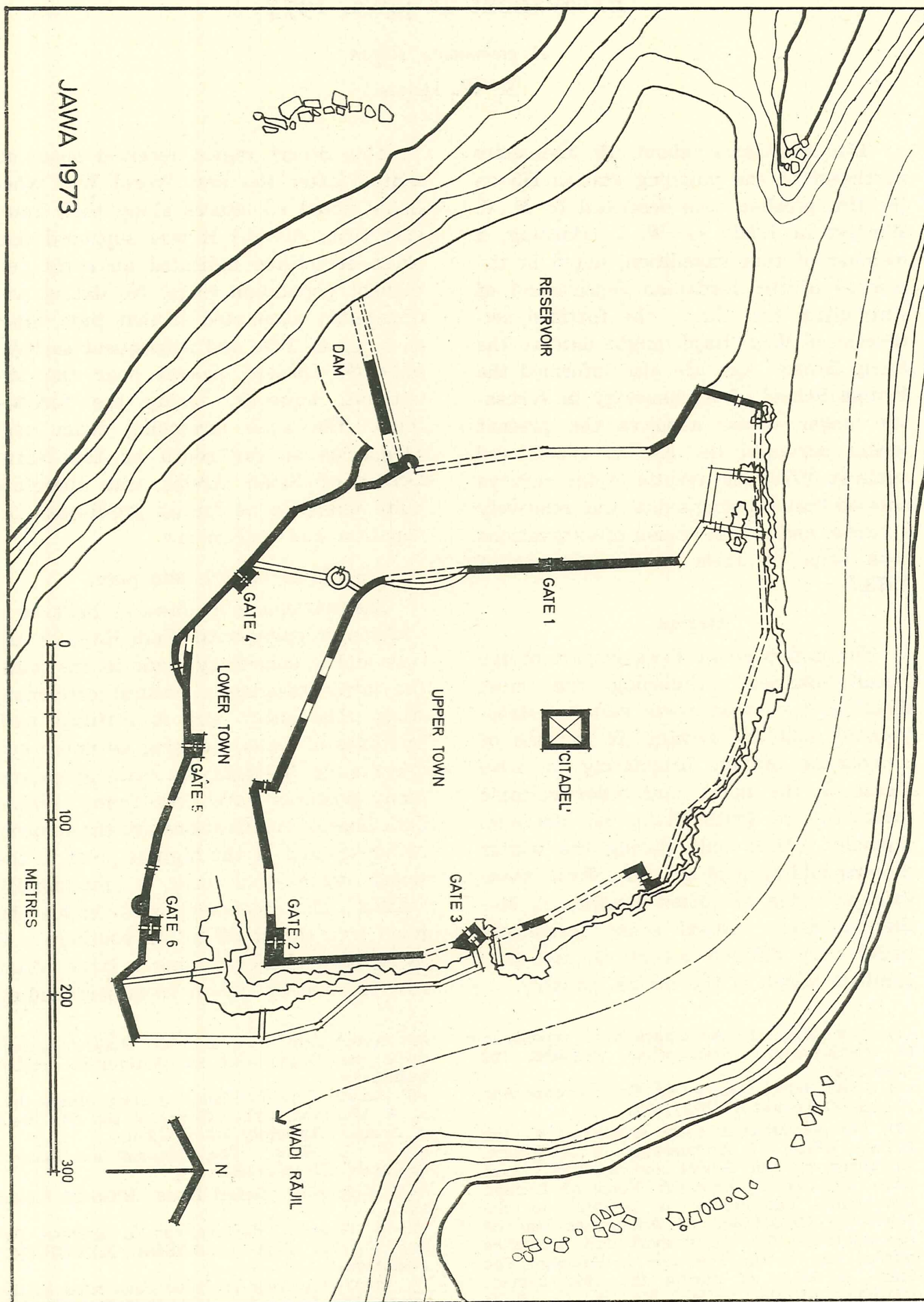


Fig. 1

hills and possibly redirected water from the main wadi.

The fortifications of the upper town consist of long straight walls with occasional offsets, enclosing the highest ground at the site. The exterior face of the walls is made of large basalt boulders, roughly coursed; the interior of smaller ones; while the core is rubble filled. Over four metres wide and battered on both faces, the fortifications stand up to five metres above the ground today.

Three of the six gates occur in this line, gate (1) having been excavated and planned. The gate is a single chambered structure with two sets of internal buttresses, the outer projecting beyond the curtain. This type of gate is known in the Levant during the Chalcolithic period⁷ and the Early Bronze Age.⁸ The other gates at Jawa appear to be multi-chambered and in some socket stones are still in situ.

Houses within the upper town which have been excavated are semi-rounded or 'apsidal' in plan.⁹ Some of these were built onto the fortifications which were still in use. The houses represent the last known occupation of the fortified town.

The fortifications of the lower town are essentially similar to those of the upper, although less well preserved. Their original width has not been established with certainty, but it must be in excess of three metres. The walls enclose the gentler western and southern slopes of the site and join the upper fortifications at the north and south-east. A series of rounded towers may have been built against

the outside of the lower line;¹⁰ while a round straddle tower was built over an apparently internal fortification wall dividing the lower town. Three of the six gates mentioned above occur in this line, the lower fortifications.

Houses within the fortifications are similar in plan to those behind the upper line and likewise were built close to the town wall after that had partly collapsed. Again these houses appear to be the last occupation.

The dam across the catchment basin must be contemporary with the town. It is ca. 14 metres wide, the internal face being straight while the downstream side consists of a curved revetment. This dam could have also functioned as a causeway across the wadi to the lower town. At present the large reservoir, ca. 250 x 150 metres, is dry; but clearly it must have retained sufficient winter rain to support the population of the town. The apparent over-crowding during the last phase of occupation there perhaps exceeded the capacity of the dam to provide water and this may in part explain the subsequent abandonment of the town.

The 'citadel' is the latest structure at Jawa. It is rectangular in plan, ca. 28 x 25 metres, and consists of three sections: a southern wing with a door leading to a chamber in which an oven was found, three transverse roofed corridors, and a series of oblong roofed cells in the north. The roofing is made up of stone slabs on cantilevers supported on stone piers. Elements of a second floor have been found.

(7) D. Ussishkin, "The 'Ghassulian' Temple in Ein Gedi and the Origin of the Hoard from Nahal Mishmar" *BiAr* XXXIV (1971) 23ff.; fig. 12.

(8) R. P. de Vaux, "Les fouilles de Tell el-Far'ah" *Revue Biblique* 69 (1962) 212ff.; Pl. XXI.

(9) Apsidal houses appear at many sites in the Levant and are dated to the Proto-Urban period there.

(10) For Early Bronze Age examples see: J. Marquet-Krause, *Les fouilles de 'Ay (et-Tell)* 1933-1935, Plate C.

K. M. Kenyon, *Digging up Jericho*, p. 178; Pl. 35A.

R. Amiran and Y. Aharoni, *Ancient Arad*: introductory guide to an exhibition held at the Israel Museum, January - April, 1967.

R. Amiran in Volumes of *IEJ* for preliminary reports and notes and news.

Conclusions

On the basis of the artifactual material recovered and the structural/stratigraphical phasing, the following preliminary sequence of events may be suggested:

1) Jawa was occupied during the Chalcolithic period (ca. 3750-3350 BC) when a large probably unfortified village was built. The evidence for this comes from below the town walls, from thick ash levels over which the fortifications were built later.

2) The fortifications of both towns, as well as the dam were built during the Late Chalcolithic period. This was perhaps still before ca. 3350 BC.

3) The town population grew so that houses were built more closely together and partly on the fortifications. This occurred during a period contemporary with Proto-Urban (A)¹¹ in the Levant

and Hama K¹² in Syria, ca. 3350 - 3050 BC. The town was abandoned by 3000 BC.

4) After a long gap in occupation the 'citadel' was constructed on the ruins of the earlier town. This occurred during the Middle Bronze Age, that is after ca. 1900 BC.

5) The next occupation, after a very long gap, is indicated by Safaitic inscriptions and rock drawings on and near the site. No evidence for structures dated to this era has been found.

A corollary of these conclusions may be that urbanisation in the Levant beginning shortly after the end of the town at Jawa, may have been influenced by direct immigration from the Basalt Barrier where it is likely that more town sites will be found.

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(11) K. M. Kenyon, *Jericho I*, (1960). Note especially Tomb A 13; fig. 21/4.

(12) E. Fugman, *Hama, L'Architecture des périodes préhellénistiques*, (1958)31; fig.30:6B979.