

THE ARCHAEOLOGICAL LANDSCAPE OF THE BALIKH VALLEY, SYRIA

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Introduction

By the close of the 1994 field season a large portion of the central Balikh Valley had been mapped and checked in the field. During 1995, still operating out of our shared facilities with the team from the National Museum of Antiquities, Leiden, we extended our studies to the northern extremity of the valley within Syria, as well as to the southern part virtually down to its confluence with the Euphrates River. Although work continued within the central part of the valley, we primarily endeavored to enhance details of settlement and irrigation systems not tackled in sufficient detail in previous field seasons.

The 1995 field team was comprised of Tony J. Wilkinson as team leader; Eleanor Barbanes (University of California, Berkeley), surveying, drawing and field assistant; and Jerry Lyon, as field assistant. This season provided an opportunity for Jerry to put in groundwork on his forthcoming Ph.D. dissertation devoted to a study of the Middle Assyrian frontier on the Balikh Valley. Tell Sabi Abyad provides an excellent center for study, with its Middle Assyrian fort, which yielded numerous artifacts together with cuneiform texts detailing transactions and official communications conducted within this western part of the Middle Assyrian empire. As in previous seasons we received an immense amount of help from our colleagues of the Sabi Abyad field team from The Netherlands National Museum, Leiden under the directorship of Peter M. M. G. Akkermans. Thanks must also go to the various members of the Directorate General of Antiquities and Museums, Syrian Arab Re-

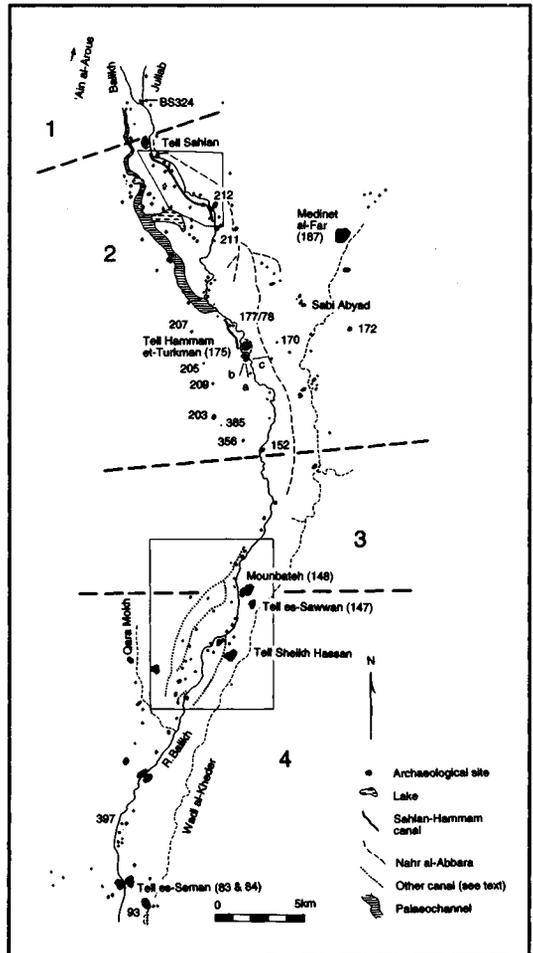


Figure 1. Northern part of Balikh Valley, Syria showing the main Sahlan-Hamman canal (solid line to the north), and the area of settlement receiving water from it (dotted line to the south)

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public, without whom the field season would have been impossible: Dr. Sultan Muhesen (Director General of Antiquities), Dr. Adnan Bounni (Director of Excavations), Mr. Mohammed Muslim (Aleppo Museum), Mr. Murhaf al-Khalaf (Director Raqqa Museum), and our representative Mr. Naurus al-Mohammed, also from Raqqa Museum. We are again extremely grateful to the National Geographical Society for providing major funding, and to the Oriental Institute for additional funding and support.

The Upper Valley

Part of the 1995 field season was spent “in the footsteps of Mallowan,” examining sites and geomorphology in the vicinity of former sources of the Balikh River at ‘Ain al-‘Arous and Tell Abyad (located a little to the north of the northern limit shown in fig. 1). Unlike 1938, when Sir Max Mallowan and his wife Agatha Christie breezed through the area to sound five sites in six weeks, today the river is entirely dry, and sites such as Tell Jidle (one of those investigated by Mallowan) stand stark and white above the now desiccated channel (fig. 2). Nevertheless, the natural terraces that fringe the upper valley include traces of earlier climates in the form of thin peaty beds with contained shells



Figure 2. Upper Balikh Valley with Tell Jidle in background and the terraces of the now dry Balikh River in the foreground

of freshwater mollusks and hard lime/calcium carbonate crust layers that accumulated during intervening dry periods. This sequence of climatic change is undated, but its presence in levels below aceramic Neolithic sites suggests that they result from the Pleistocene ice age when climate in this region fluctuated between extended wet and dry phases.

The recent drying of the riverbed is not, however, a result of climatic aridification but rather has been caused by over-pumping of water for the irrigation of cash crops. Standing as stark testimony

to higher flow in the area was a double water mill of Ottoman date located immediately to the south of Tell Jidle (fig. 3). Curiously, this year, for the first time that we have seen it, the eastern branch of the valley down from Turkey was carrying water, probably because the Turkish GAP project (i.e., the Attaturk Dam on the Euphrates to the north) was releasing some excess water. This resulted in water being diverted along the early Islamic-Ottoman Nahr Turkman (fig. 4).

The Middle Valley

In the past, the well-watered upper valley was tapped by a number of canals that distributed flow to settlements downstream. As described in the *1994/95 Annual Report*, one of these, the Hammam-Sahlan canal, was excavated by Fokke Gerritsen, whose investigations demonstrated that the canal was in use during the Hellenistic-Roman and early Byzantine periods. Part of the 1995 campaign was therefore aimed at examining the central Balikh Valley downstream of the verified canal in order to trace its lower

reaches, together with sites that were apparently dependent upon it for irrigation water. The inferred route of the canal, based on short stretches of remaining channel, is indicated in figure 1 as a dark line to the southeast of Tell Sahlan, and again to the northwest of Tell Hammam et-Turkman. After this the canal can only be traced as intermittent segments of relict channel along the right (western) bank of the channel, until further fragments within the central valley enable it to be inferred running to the west of the river (dotted line in lower rectangle figs. 1 and 5 [detail]). Settlements that grew up in this formerly un-irrigated and uninhabited area comprised low mounds of small farmstead and village-size communities dated between the Hellenistic and early Byzantine periods (that is of the same date as the excavated canal). With the exception of a single Iron Age site straggling over several hectares, no earlier settlements were found along the canal's course and it seems reasonable to conclude that these were pioneering communities established with the construction of the Seleucid canal. Even more subtle in the landscape than these bumps of sites with intervening depressions of canals were sparse scatters of sherds that extended over much of the terrain between sites. These scatters appear to have been introduced as a result of the spreading of ash, organic refuse, manure, and composts on fields in antiquity. Inevitably such materials gathered from within the ancient villages or farms included pottery and other artifacts that then remain in the soil. When sampled and mapped such scatters can, however, give a hint as to which lands were most intensively fertilized and cultivated.

Now that those areas which were under long-term irrigation are known, it is possible to differentiate between lands that were irrigated and others in which settlement and cultivation were possible using rainfall alone. In figure 1 the northernmost zone 1 shows evidence for settlements away from canals; these sites clearly relied upon rain-fed cultivation. In zone 2, sites of all periods were closer to the river and canals, but from the presence of a few sites away from such channels, I conclude that settlement and cultivation were still feasible without irrigation. Zone 3 represents a transition zone, and zone 4 is that area where during all periods settlements were along either the river



Figure 3. Eleanor Barbanes drawing architectural details of Ottoman period water mill near Tell Jidle



Figure 4. Water flowing along the Nahr Turkman canal for the first time in several years

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or canals. It is in such areas that traces of former canals are most common, therefore within zone 4 and farther to the south agricultural communities could not survive without recourse to irrigation.

The Lower Valley

To the south of Tell es-Seman (at the southern limit shown in fig. 1), smaller archaeological sites become less visible because sedimentation from the Balikh River has resulted in the accumulation of 0.5–1 m of alluvial silt and clay over the former flood plain. This burial was illustrated by the discovery of a number of archaeological horizons and, most dramatically, by a single late Ubaid site beneath thick layers of alluvium (fig. 6). Clearly in this area the survey archaeologist confronts two problems. First the landscape and smaller sites are partly buried, and second, any canals bringing water

from the upper valley would have distributed most of their water by this point. Consequently less water would have been available for cultivation and the sustenance of settled communities.

Farther south still, however, where the valley is considerably narrower, smaller sites again become more evident, and here on the fringing bluffs two newly discovered sites are of particular interest. The first was nothing more than a scatter of tiny sherds of southern Uruk type from the fourth millennium B.C. In contrast to the coarse local chaff-tempered wares of

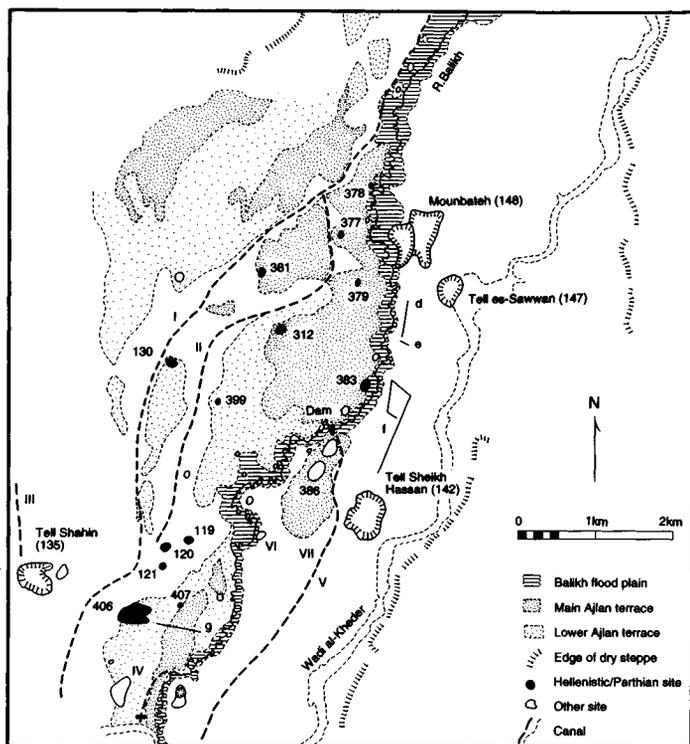


Figure 5. Detailed map of part of central Balikh Valley showing probable route of Hellenistic canal (broken line) and Hellenistic/Parthian sites that developed along it

this period that dominate the larger tells of the Balikh Valley, this distinctive wheel-thrown pottery is fine and well made (except for the unfortunate and artistically-challenged beveled-rim bowl). What is remarkable about such sites (and a similar one was discovered in the 1992 field season) is their size. This particular site, BS 414, was unexcavated, spread over a few tens of meters, and after a scrupulous search of some forty-five minutes, yielded five beveled-rim bowls, five other distinctive southern Mesopotamian forms, and one possible figurine fragment. Virtually nothing else of any period was found except for a few scraps of Late Bronze or Iron Age sherds. Guillermo Algaze has suggested that such sites with southern Mesopotamian-type pottery were

stations aligned along trade routes linking larger “enclaves” developed as part of a process of economic colonization of the regions peripheral to southern Mesopotamia. Interestingly Algaze, in his book, *The Uruk World System* (1993), predicted that further discoveries of such sites would occur along the Balikh Valley. Therefore although small to the point of being almost archaeologically invisible, the two Uruk sites of BS 414 (in the southern valley) and BS 355 (ca. 1.5 km to the south of Tell Hammam et-Turkman) appear to form part of a pattern of developing southern influence in the fourth millennium B.C. In this case they must have developed along the extending communication systems of the Uruk system of settlement, but whether such vestiges were way stations along trade routes, hunting stations outside larger enclaves, markets, or had some other function is difficult to determine from their scrappy remains.

An additional discovery of some importance was that of a hilltop fort dated to roughly the mid-third millennium B.C. This site of Tell Hassan (BS 418) was found along the western edge of the narrow southern valley, immediately to the west of the important square fort Tell Mahlas (BS 21). Because Tell Mahlas had a defensive function, perhaps to guard the route from or the territorial boundary of Tell Bi‘a (Old Babylonian Tuttul), it seems reasonable to conclude that Tell Hassan performed a similar function. Thus in the mid to late third millennium B.C. the southern Balikh Valley must have been guarded by either a pair of forts, or if they were not precisely contemporary, by two sites that operated to guard the up-valley route at slightly different times.

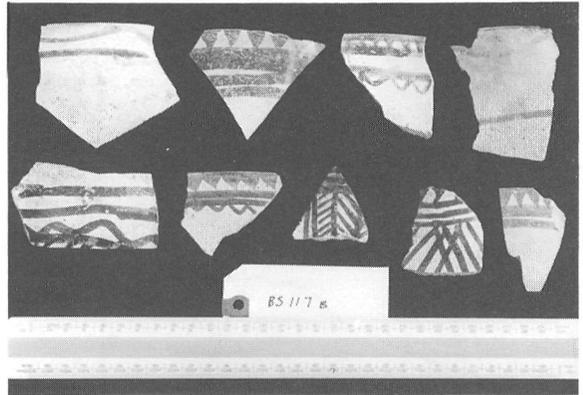


Figure 6. Painted pottery from Ubaid in the lower Balikh Valley (BS 117). Note this is not from the buried site mentioned in the text