At-Tuwāna - the Development and Decline of a Classical Town in Southern Jordan (with a Note on the Site Preservation)

Introduction

The site of at-Tuwāna is located ca 5 km south off the road between aṭ-Ṭafīla and Jurf ad-Darāwīsh, in southern Jordan (FIG. 1). Despite the considerable ruins on the site, at-Tuwāna has received only limited scholarly attention in the past. The site was visited and described by Brunnow and Domaszewski (1904: 88-91), Musil (1907-8 I: 31-32), Glueck (1934: 80-81; 1939: 53) and Hart (1986: 340), and accorded brief notes by Wenning (1987: 87) and Negev (1977: 608).

The settlement at at-Tuwana is generally identified with Thana / Thoana of Ptolemy's Geography, and with Thornia of the Tabula Peutingeriana (Bowersock 1983: 175). The major Roman highway in Jordan, the Via Nova Traiana, passes through the site. Previous descriptions of the site were largely inadequate, and concentrated on the so-called "temple," the most impressive and best preserved structure on the site. General implication of these early researches was that the settlement flourished during the Roman times as a result of its location on the trade route from Petra to Syria. However, the earliest as well as post-Roman occupational periods at at-Tuwāna are equally shrouded in uncertainty. Thornia was seemingly not mentioned by either the Notitia Dignitatum or the Bi'r as-Saba' Edict. The early Arab historians do not mention at-Tuwāna in their accounts on post-seventh century Syria-

The rapid agricultural and urban development in the aṭ-Ṭafīla region deemed it necessary to launch an intensive field investigation at at-Tuwāna, assisted by the survey of other archaeological sites and roads in the area. The first season of the at-Tuwāna and the *Via Nova Traiana* Project was conducted in March-May 1992. The following remarks are based upon the preliminary results of that season.

The area of at-Tuwāna presents optimal environmental conditions for potential inhabitants. The northeastern part of Edomite Plateau (the Jabal) enjoys an abundance of

1. At-Tuwāna and some major sites, roads and tracks in southern Jordan, during the Nabataean-Roman period.

rainfall - up to 400 mm per year. Loess, Gray Steppe and Terra Rosa soils, prevalent in the area, are conducive to the cultivation of non-irrigated winter and summer crops (Feinbrun and Zohary 1955: 8-9, 14). Despite the relative severity of the winter climate in the entire aṭ-Ṭafīla region, the area of at-Tuwāna is well-known for the production of fruit trees which can withstand sub-freezing

Darawish, the Inspector of Antiquities at aṭ-Ṭafila. Glen Peterman, ACOR, should be credited with the GIS-generated computerized landscape modelling. The author is also grateful to Dr Khairieh 'Amr, DAJ, for pottery readings, and to Drs Geoffrey Clark and Gary Rollefson for the information on dating of stone tools. The final report, which will include the catalogue of sites, will appear at a later date.

Mampsis

Khanaziri Khannur i Khed-Darih

Tahi Iafila Avdat

Haseva Khed-Deir Oel-Ruweihi Qal'at el-Hasa

Khed-Deir Oel-Ruweihi Qal'at el-Hasa

Abu Dhibana

Shobak Dosaq

Ali Neji Dosaq

Ali Neji Dosaq

Ali Neji Dosaq

Ali Neji Abu Dana

Basia

Akia

Qana

Rasi

Qana

Gharandal

Qana

Rasi

Qurein

Qana

Gharandal

Qana

Kithara

Auti

Qurein

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temperature. Limestone, basalt, chert and marl are abundant, with sandstone implementing the list of superb construction material available in the area. Traces of extensive quarrying were noted to the northeast and south of the site. Although no substantial natural springs were located during the site survey, nor was their existence known by the local population, numerous cisterns at the site, some of them utilizing natural bedrock cavities, imply the extensive water conservation methods employed by the inhabitants of ancient *Thana*.

The region of at-Tuwāna must have already been frequented or inhabited during prehistoric times. Several samples of Middle Palaeolithic (ca 40 000 BP) through Neolithic periods stone implements (blades, scrapers, flakes, lithic shatter) have been collected from the surface of the site. The nearby quarries and rock outcrops contain good flint and chert stone material. Despite Glueck's claims (1939: 53), the site displays little of the possible pre-Classical urbanistic evidence. Some of the structures may have originated in the Iron Age, but the ceramic material of that time period is much less than 1% of the total sample collected from the surface.

Urban Origins and Development

While the environmental conditions were clearly suitable for the foundation of a settlement at at-Tuwāna, its expansion beyond village-size would have been due to socioeconomic factors. As stated elsewhere "..the characteristic small town of the ancient Mediterranean is a peasant settlement, though in certain circumstances it may become a market town.." (Sherwin White 1944: 8). It is postulated that the incentive for the rapid urban development of the settlement in the first century BC was trade.

Relevant information is provided by sites, mainly watchtowers, located along the surveyed sections of the Via Nova Traiana, north and south of at-Tuwāna. The pottery collected at the sites is predominantly Nabataean through Byzantine. Numerous sherds date to the first century AD, which should indicate that this communication route was already used in the times prior to the annexation of the Nabataean Kingdom and the construction of Trajan's road, that is well before AD 106-114. While the Via Nova largely follows the course of the old Nabataean caravan route commonly known as "King's Highway" (Graf 1995: 264), the Roman road in this part of southern Jordan runs on a more easterly although roughly parallel course (see FIG.1). The relationship between the King's Highway and that postulated predecessor of Trajan's road during the Nabataean-Early Roman Period is not fully understood. It is apparent, however, that that branch was sufficiently important and convenient for the Romans to set their all-weather highway there rather than to use the course of the King's Highway, as was done south of ash-Shawbak and north of Wādī al-Hasa. At any rate, that branching off benefited settlements in the eastern part of the Jabal Plateau, such as at-Tuwāna.

To be situated on the major Roman highway meant receiving a constant traffic of travellers, both military and commercial. Despite a relatively small ceramic sample – ca 1200 sherds collected from the surface - the abundance of painted, and imported wares on the site is impressive. Fine examples of the first through fourth century AD Nabataean Painted and Plain Ware (including Nabataean rouletted ware, Nabataean sigillata and pseudo-sigillata) are abundant. The surface ceramics also include imported wares, such as Eastern Terra Sigillata A (first century BC/AD) and B (first century AD), Western Terra Sigillata (Arezzo Ware), and Late Roman Red Ware. Although the evidence for the existence of a city wall is very fragmentary, the settlement and the traffic passing through it were guarded by watchtowers located on the high spots in the outskirts of the town.

When coupled with the evidence of monumental architecture at the site, the ceramic material confirms the suggestion that the settlement at at-Tuwāna had passed the phase of being a local village of simple agriculture-related economy, and entered the stage during which it performed a function of a service town located on a major highway of commercial and military importance. Imported wares and monumental architecture further suggest the emergence of a social elite, probably wealthy landowners who could have become actively involved in trade and/or provision of services to travellers passing through the town.

Intrasite Spatial Organization

At-Tuwāna is located on the slopes of the two opposite hills separated by the Wādī at-Tuwāna which runs roughly in a north-south direction. The *Via Nova Traiana* passes between these hills, ca 2m above the wadi bed. The site measures roughly 800 m (E-W) by 450 m (N-S), thus belonging to the group of largest sites in Jordan. The remains occupying the NW hill of the site are less impressive than those on the opposite hill, yet clearly contain several monumental structures of public character, built of well-carved lime and sandstone (FIG. 2). Also the spatial distribution of architectural complexes there suggests a more intensive and widespread occupation than on the opposite hill's slope. It is suggested that the urban foundations of at-Tuwāna developed first on the slopes of the NW hill, and only later the town spread to the other side of the wadi.

The rapid development of the town stimulated by the intensive traffic on the *Via Nova* in the Nabataean-Roman period resulted in the emergence of a large commercial and travel-related infrastructure on the SE hill (FIG. 3), opposite the residential quarter of the town located on the slopes of the NW hill. The occupation on the SE hill seems to be of low density; architectural complexes are relatively far apart from each other and more isolated, especially on the top of the hill. The higher density of occupation is noticeable only on the NW slopes of that



Architectural complexes at the NW hill at at-Tuwāna. (Photo by Z. T. Fiema).

hill, facing the wadi. The hill itself is dominated by C14, the most impressive structure preserved on the site.² Brunnow and Domaszewski considered the complexes 14, 15A and 15B as one unit, and had published a highly idealized sketch-plan which showed a large rectangular building, a Nabataean temple in their opinion, associated with two adjacent courts (1904: 89). Recent analysis suggests that these are three separate entities. Complex 14 is a tripartite, rectangular building with walls of welldressed and embossed ashlar blocks, preserved up to 4m high. The internal division, and architectural details suggest at least two phases of use, and largely exclude its supposed sacral character. The author tends to support the opinion of Hart (1986: 340) who suggested a caravanserai. Ceramics found inside C14 range from Nabataean through Mamluk material, with the Roman-Byzantine periods predominant. At least one of the courts (C15B) seems to be contemporary with C14, on the basis of architectural analysis. The other court (C15A) may have been constructed at the later date.

Complex 11 is a large court (ca 120 x 80m) surrounded by a massive wall (ca 3 m thick). Within this court Complexes 14 and 15A, B are located as well as some other structures and subdividing walls. The construction of the enclosing wall - basalt and limestone, roughly hewn, slabs - is, however, much different from that of C14 and 15, suggesting, perhaps, a later date. All three courts, however, could have served as marshalling yards, storage places, or even market spaces auxiliary to the main caravanserai building. On the same hill, Complex 16 is notable for the large number of ceramic pipe fragments found on the surface. The center is occupied by a robbers' pit in which a face of a well-preserved brick wall is exposed. Together with the adjacent fragment of an octagonal stone wall, the brick construction could have been a part of a large bathhouse, possibly a caldarium. This suggestion is also supported by the evidence of a large number of square and round bricks which were probably used as the posts in a hypocaustum system.



3. The view of the SE hill at at-Tuwāna. Complex 14 (caravanserai) is visible at the top right site. (Photo by Z.T. Fiema).

It is evident that the settlement existed in the Byzantine period, although Late Byzantine wares (sixth century AD) are very few, and the transitional types into the Umayyad period, practically non-existent. Although the final demise of the town cannot be fully understood without excavation, it is highly probable that the settlement declined considerably or ceased to exist toward the end of the Late Byzantine period. This assumption is supported by the finds at sites located along Trajan's road, both north and south of at-Tuwana. Although Late Byzantine sherds were also found there, their frequency seems to decrease with the increasing distance away from at-Tuwana. In fact, the watchtowers and/or fortlets located furthest north and south of at-Tuwana, within the survey area, did not produce any Late Byzantine sherds. Apparently, some sections of the Roman road in the area could have become defunct, while the others (closer to at-Tuwāna) were still used in traffic, maintained, and guarded by attendant military structures.

The evidence of the Ayyubid-Mamluk pottery on the site indicates that some parts of the Classical-Byzantine period town had been reinhabited, and some ruins consolidated. This observation is also supported by the presence of numerous secondary walls and masonry of simple type in complexes associated with these ceramics. That limited occupation is reflected by the general contraction of the inhabited area and its concentration only in the southern part of the classical site as well as in the lower slopes of both hills, close to the wadi bed.

Conclusions

The origins of human settlement at at-Tuwāna should be associated with particularly suitable environmental conditions. The area had experienced relative prosperity during the Nabataean-Late Roman periods (first century BC-late third century AD), associated with an intensive long-distance commercial traffic, and reflected in the urbanistic growth of at-Tuwāna and the well-maintained and guarded road system, as well as evidenced through

² The entire area of the site has been divided into architectural complexes (C) – spatially recognized clusters of structures, or isolated structures.

imported items. Long-distance trade was probably the dominant factor in the transition from an agricultural village into a large market town at at-Tuwāna.

It is probable that the town continued to flourish in the Early Byzantine period (fourth-fifth century). That period is marked by well-developed settlement patterns, reflecting the unparallelled expansion into marginal lands, and the intensive agricultural production, as well as the continuity of interregional trade (Fiema 1991). However, the Late Byzantine period (sixth - early seventh century) must have witnessed a gradual decline in urbanism, disappearance of main communication routes and the abandonment of military infrastructure. The decline of the intensive trade-related traffic in southern Jordan would have seriously affected the life of communities such as at-Tuwāna. Possibly, the town was largely deserted already before the invasions of the early seventh century. Future studies to be conducted on the site and in the environs of at-Tuwāna should further strengthen these conclusions.

A Note on Site Preservation

Although the site was spared the interference of modern housing, it still suffered much from other modern activities. Numerous walls were dismantled in the process of field clearing for farming, or were modified as animal corrals. The greatest damage was done by the construction of a new road leading south of the at-Tafīla-Jurf ad-Darāwish road, toward Gharandal. Although the exact date of construction is not clear (1988?), it is apparent that these activities were conducted with a total disregard for archaeological remains. As opposed to the old beaten track which runs in the valley, ca 1m above the wadi bed, this new road is located higher up the slope of the NW hill, and it cuts through numerous ancient structures located there. Deep bulldozer cuts into the slope, and construction dumps situated on both sides of the road, further obscure the ancient remains. It is also obvious that the wadi bed was extensively exploited for sand and gravel used during the construction, and that much of the bulldozer excavated material was dumped in the wadi. During that process, two of the wadi cisterns mentioned by early travellers must have been covered up, and thus disappeared.

A similar deterioration was also observed during the survey of the *Via Nova Traiana*, directly north and south of at-Tuwāna. While this section of the Roman Road is one of the best preserved in Jordan, the road itself and

archaeological remains along it face almost certain extinction through human activities. New roads are being constructed, fields cleared of stone structures for farming and stone material reused. It was noticed in several spots that the Roman road became clearly visible only through the activities of bulldozers which expanded the existent tracks. Through the same activities, many milestones were displaced, overturned, or, unexpectedly, resurfaced.

At least in two cases, the author was able to record more fragments of milestones spotted on the ground, than the German scholars did at the turn of the century.

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