HUMAYMA 1983: THE REGIONAL SURVEY

by
John Eadie

Introduction

In this century a number of itinerant savants have published descriptions of the visible ruins and ancient artefacts of Ḥumayma—the extensive water system (reservoirs, cisterns, aqueducts), remains of several substantial buildings, diverse surface pottery—but it is only within the last decade that the significance of the site and its environs has been fully appreciated.[1] Located in the north-west quadrant of the Ḥisma, fifteen kilometres from the dramatic al-Shera escarpment that marks the descent from the Ma'an Plateau (1500 m.) to the desert (900 m.), Ḥumayma was the only Nabataean town of any consequence between the capital at Petra, forty kilometres to the north, and Meda'in Salih (ancient Hegra) (Fig. 1). A fragment of Uranius' *Arabicus* (F. Jacoby, *FGrH* 675 Flb) credits its foundation to Aretas III (87-62 B.C.), the son of the Nabataean King Obodas I, who responded to an oracular injunction to build a town on the site of Auara ("which in the Arabian and Syrian languages means white"). Compelling evidence that Auara was the ancient name of Ḥumayma is supplied by the Peutinger Table, which in its list of Arabian sites locates Auara twenty Roman miles from Zadagatta (Ṣadaqa) and twenty-three miles from Praesidio (Khirbet el-Khalde). These figures, thirty and thirty-six kilometres respectively, are in fact the exact distances between Ṣadaqa-Ḥumayma and Ḥumayma-Khirbet el-Khalde.[2]

Situated as it was on the main "highway" from Petra to Aila, which provided access to the Red Sea through the Gulf of Aqaba, Auara must have prospered early on from the passage of caravans and royal officials through the interior of the Nabataean kingdom. Apart from any inducement that Aretas III may have provided, settlers would have been attracted to a region that could support a life of sedentary pastoralism and agriculture and was generally more hospitable than the seemingly endless desert to the south. How the early inhabitants fared in the new environment is not recorded, but one may infer from the pottery scatter and remains of Nabataean buildings that Auara-Ḥumayma became a prosperous entrepôt soon after its foundation. Whether the submission of Aretas III to Scaurus, the governor of Syria and Pompey's emissary in 63 B.C., affected the development of the

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[1] Thanks largely to the survey conducted by David Graf in 1978-80: A Preliminary Report on a Survey of Nabataean-Roman Military Sites in southern Jordan, *ADAJ*, XXIII (1979) p. 121-126; The Nabataeans and the Ḥisma: In the Steps of Glueck and Beyond, in *The World of the Lord Shall Go Forth: Essays in Honor of David Noel Freedman*, 1983, p. 647-664.

The participants in the Ḥumayma project would like to thank the Jordanian Department of Antiquities, and especially its Director, Dr. Adnan Hadidi, for the exemplary assistance provided in 1983. This project has been granted affiliate status by the American Schools of Oriental Research and has been facilitated by the generous cooperation of the American Center of Oriental Research (Amman) and its Director, Dr. David McCreery. The 1983 field season was made possible by grants from the National Endowment for the Humanities, Dumbarton Oaks, The University of Michigan, the Dorot Foundation, the Gazelum Foundation, and private donors.

Portions of this report are based on interim reports prepared by several project specialists (William Farrand, John Oleson, Lucinda Neuru).

[2] The earlier suggestion that Ḥumayma should be identified with Ammatha, where the *ala antana dromedariorum* was stationed in late antiquity (*Notitia Dignitatum* or. xxxiv. 33), is problematic. As Jaussen and Savignac observed (*Mission archéologique en Arabie*, I [1909], 41ff.), on linguistic grounds Ammatha can be identified with al-Hammam, the late Roman/early Byzantine fort on the outskirts of Ma'an that would have been an equally appropriate station for an *ala dromedariorum*.

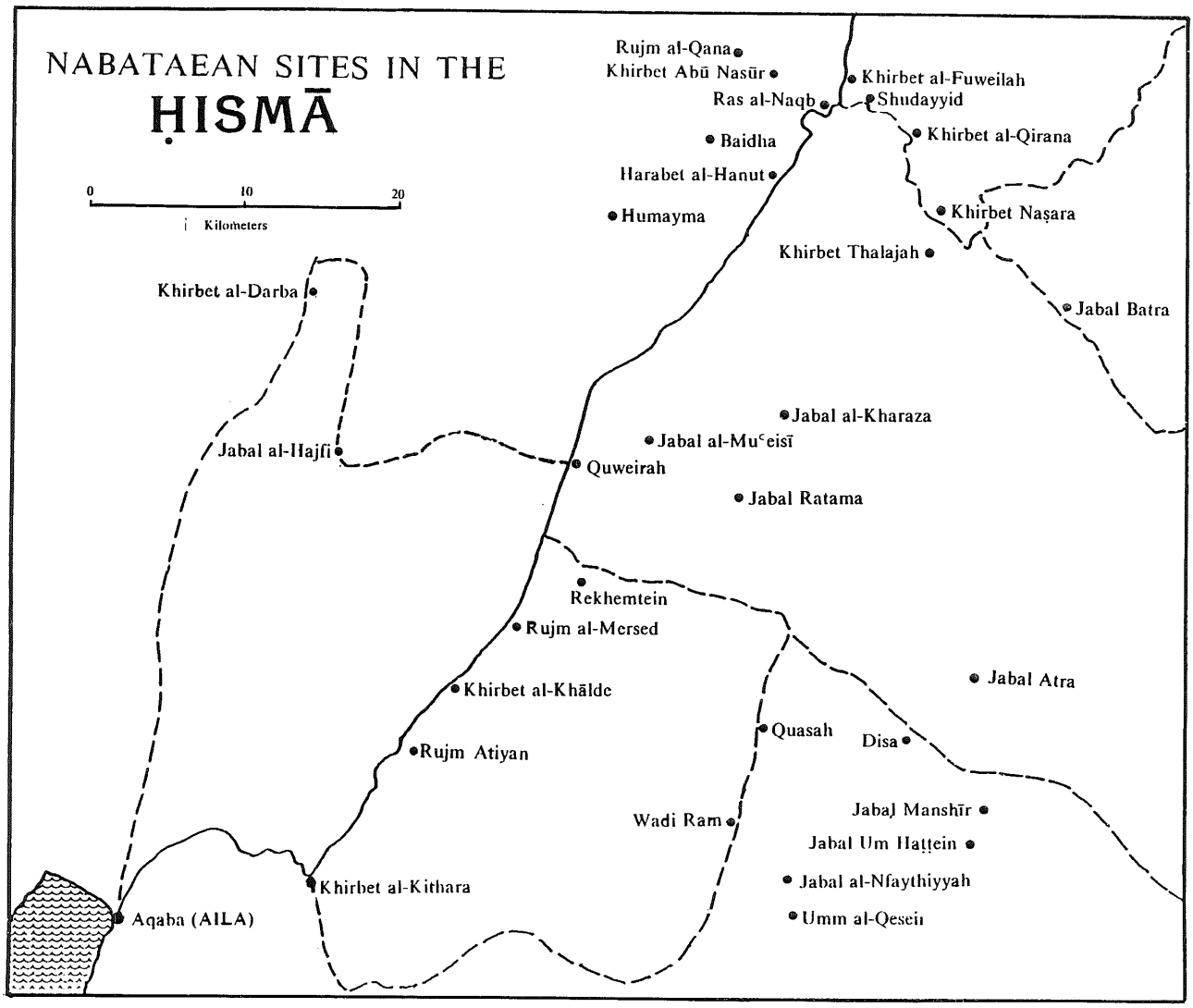

Fig. 1

town is uncertain.[3] Until the site has been excavated we will not be in a position to assess the transition from independence to client status, from Nabataean to Roman management. All that we can say at the moment is that with the construction of the via nova Traiana between A.D. 111 and 114, a finibus Syria usque ad mare Rubrum (*ILS* 2. 5834, 5845a), Auara-Ḥumayma became an important station on the great north-south highway that linked Bostra and Aila.

The Roman-Byzantine town is included in Ptolemy's list of settlements in Arabia Petraea (*Geography* 5. 16. 4), the Peutinger Table (as noted above), and the *Notitia Dignitatum* (Or. xxxiv. 25). The last certifies that a unit of *equites sagittarii indigenae* was stationed in Haua[r]ae around the end of the fourth or the beginning of the fifth century. From the contemporary Beersheba Edict, which records the annual taxes paid to the dux of Palestina III, we know that Auara was assessed the second highest sum of any of the Transjordan towns, forty-three gold pieces, exceeded only by the military garrison at Adrou-Udruḥ near Petra.[4] The appearance of Auara in these late documents indicates that the town remained an important and prosperous military post into the Byzantine period, although its precise role in the overall defence of the region remains to be determined (Fig. 2).

[3] On Scaurus' coins of 58 B.C. Aretas III, representing the new client-kingdom of Nabataea, submissively kneels beside his camel: M.H. Crawford, *Roman Republican Coinage* (1974) I, p. 446, no. 422.

[4] A. Alt, *Die Griechischen Inschriften der Palaestina Tertia Westlich der Araba,* 1921, 4. For a report on the recent survey/excavations at Udruḥ see Alistair Killick, "Udruḥ — The Frontier of an Empire: 1980 and 1981 Seasons, A Preliminary Report," *Levant,* 15 (1983), 110ff.

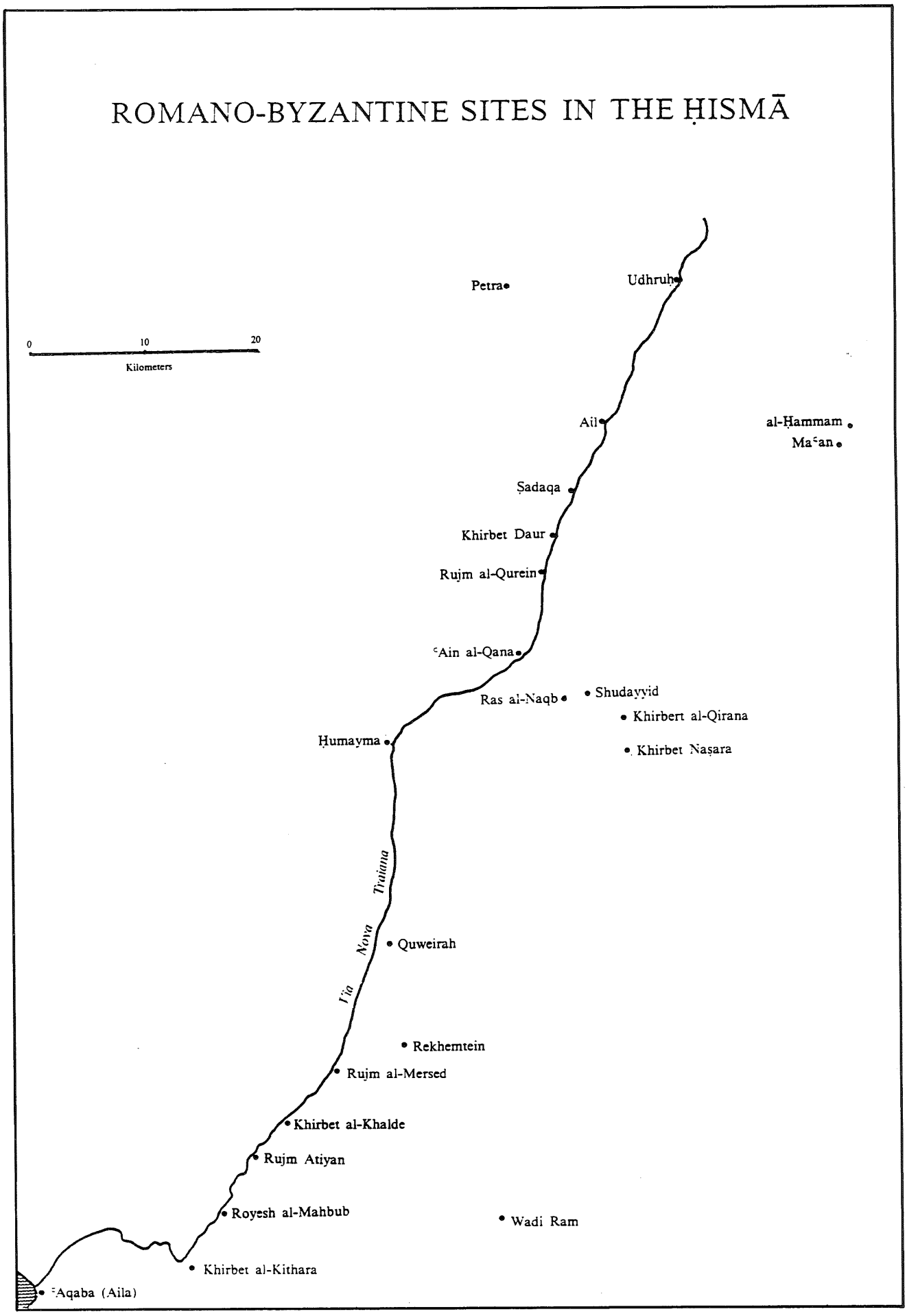
ROMANO-BYZANTINE SITES IN THE ḤISMĀ
0
10
20
Kilometers
Petra
Udhruh
Ail
al-Ḥammam
Maʿan
Ṣadaqa
Khirbet Daur
Rujm al-Qurein
ʿAin al-Qana
Ras al-Naqb
Shudayyid
Khirbert al-Qirana
Khirbet Naṣara
Ḥumayma
Via Nova Traiana
Quweirah
Rekhemtein
Rujm al-Mersed
Khirbet al-Khalde
Rujm Atiyan
Royesh al-Mahbub
Wadi Ram
Khirbet al-Kithara
ʿAqaba (Aila)

Fig. 2

Auara-Ḥumayma is attested for the last time in the early Islamic period. In 68/687, 'Ali b. 'Abd Allah b. al-Abbas, whose grandfather was an uncle of the Prophet, is said to have purchased the town and to have constructed somewhere on the site a fortified dwelling (Bakri, *Mu'djam* 83, 284). From this strategic redoubt, situated on the caravan and pilgrim routes, the 'Abbāsids allegedly plotted the overthrow of the Umayyads.[5] Unfortunately, it is impossible to determine from this account how much of the town was still occupied in 68/687 or how long it continued to exist as a private estate.

Such scraps of information offer little more than a framework for historical inquiry. They do not describe the material culture, document the successive transitions in local and imperial management, or reveal the response of the inhabitants to the hostile desert environment. Travellers' accounts can be used to supplement the meagre literary/documentary harvest, but caution must be exercised in drawing conclusions from reports that often reveal more about the motives and methods of the observers than the historical significance of Ḥumayma and its environs. Over the past decade, as archaeologists and historians have increasingly given attention to the history of the Nabataeans and to the evolution and organization of provincia Arabia, more systematic surveys have been conducted. The most instructive of these recent investigations is David Graf's inspection (1978-80) of Nabataean and Romano-Byzantine sites in the Ḥisma. Though he initially concentrated on the military installations along the *via nova,* as had most of his predecessors, Graf focused attention on the numerous graffiti found throughout the Ḥisma and on the culture that produced these "messages". In the quarries south of Ḥumayma he discovered graffiti (Nabataean, Thamudic, Greek) similar to those he had transcribed elsewhere, and in the town itself ample evidence of a thriving Nabataean community — characteristic pottery, sophisticated water system, distinctive stone work. Enough, certainly, to confirm the importance of Auara-Ḥumayma during the Nabataean period.[6]

Our first full season of fieldwork in Ḥumayma (May-June 1983) extended this preliminary investigation in both time and space. Our principal objectives were: (1) mapping of settlements of all periods and the transportation lattice in the region between Ḥumayma and the al-Shera escarpment; (2) investigation of the elaborate water system that sustained the inhabitants of the town; (3) completion of the master urban plan for the town itself and topographic surveys of the major structures; (4) preliminary assessment of ceramic material collected in surface surveys of the town and its environs.

Regional Survey (Fig. 3)

The survey area is demarcated on three sides by natural barriers: the al-Shera escarpment, Jebel Ḥumayma on the west, the Wadi el Amghar; and, on the fourth (east) by the aqueduct from the escarpment to Ḥumayma. Within this area the survey team (Eadie, Farrand, Graf, Oleson) mapped the settlements of all periods, activitiy-specific rather than satellite towns, and recorded their architectural and geological features. From this inspection, which will continue in the second season, it is clear that all of the Romano-Byzantine sites in the region were associated with the *via nova Traiana.* The earlier Nabataean forts and watchtowers, in contrast, were more widely distributed, situated as they were on hills and high ground rather than the level terrain chosen by Trajan's engineers for the via nova.[7]

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[5] As this was not accomplished until 132/749, several decades after the purchase, some scholars have questioned the central role in the rebellion that tradition assigns to Auara-Ḥumayma.

[6] Graf has now completed the transcription of 15 "inscriptions" (Nabataean, Thamudic, Greek) of varied length, from a few letters to several lines of text, that were discovered in the area of the quarries in 1981 and 1983. These have not been recorded previously, and though they do not provide fresh information about specific events they testify to the interests and skills of the inhabitants/transhumants who saw fit to express their thoughts "for all time."

[7] A full report on both the Nabataean and Romano-Byzantine sites in the region will be produced at the end of the second season.

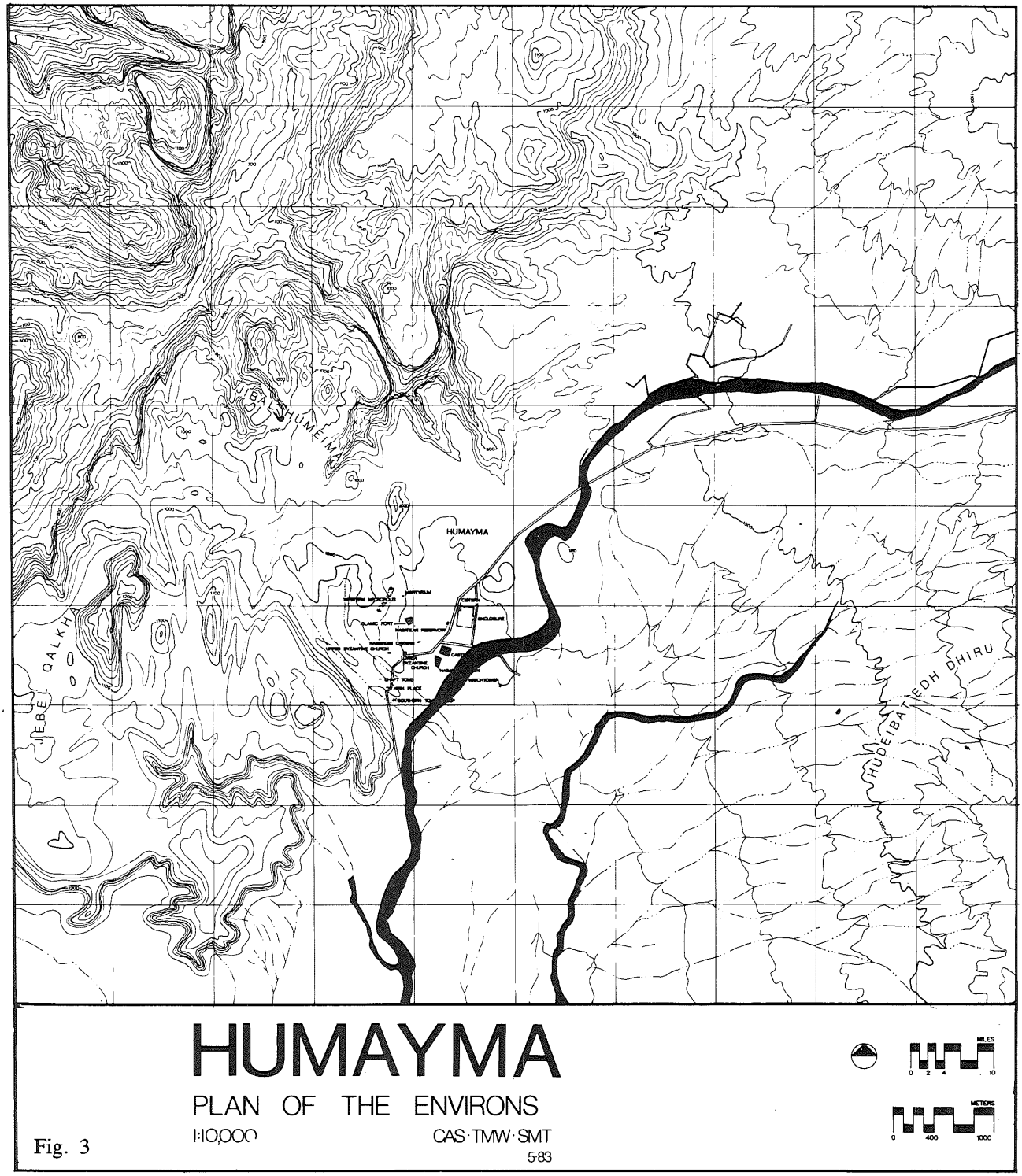

Fig. 3

A systematic investigation of the transportation lattice in the region, the *via nova* and secondary roads/tracks, is clearly a *desideratum*. That the *via nova* passed through the Ḥumayma region is attested by an inscribed milestone discovered near Quweira (A. Alt, *ZDPV* 59 [1963] 101: Imp(erator) [Caes(ar)] /divi Ne[r]va[e fil(ius Nerva)]/Traianus [Aug)ustus) Germ(anicus)] /[Da]ci[c]us.) The path of its descent from the Ma'an Plateau to the desert, however, has long been a matter for dispute. Some earlier scholars (e.g. Jaussen/Savignac, Glueck) believed that traces of the road could be discerned in the Ras-en-Nagb area. Laborde and Stein, on the other hand, insisted that substantial stretches of the *via nova* were visible on the western slope of Jibal el Ghana.[8] Our survey has confirmed the latter observa-

[8] Stein's account of the road, together with a discussion of the earlier hypotheses, is contained in his hitherto unpublished *Limes Report,* edited by D. L. Kennedy, *Archaeological Explorations on the Roman Frontier in North-east Jordan* (B.A.R. International Series 134, 1982), 271ff.

tion. We have traced a reasonably well-presrved segment of the road from 'Ain Ghana to the base of Jibal el Ghana, a distance of five kilometres, and have recorded no less than ten milestones (all anepigraphic) that mark its descent. The road ranges in width from 3.50 m. to 5.00 m. depending on terrain, and is demarcated on either side by stone borders. Trajan's engineers were obliged to construct five viaducts across small *awdiyah* along the escarpment and made good use of the bedrock throughout its course. That this road is indeed the *via nova Traiana* can no longer be doubted.

We were also able to trace the road further south, a stretch never before detected, as it crossed the "badlands"—an undulating terrain divided by numerous deep gullies—between Jibal el Ghana and Ḥumayma. Here, too, Trajan's engineers were confronted with serious challenges, and again they proved equal to the task.[9] Bridging gullies as they progressed, the engineers constructed an impressive all-weather road, in some areas more than 6.00 m. in width, that would permit travellers to move with relative ease from the escarpment to Ḥumayma and beyond. En route travellers would pass under the surveillance of Roman troops and officials assigned to adjacent watchtowers, castella, and mansiones. In 1983 we found several of these structures, none previously recorded, in the stretch across the badlands, and further inspection doubtless will reveal the rest. Before it crosses the Wadi el Amghar the road parallels a well-preserved segment of the aqueduct; in this region another milestone, unfortunately also anepigraphic, was found. Though we did not have time in 1983 to explore the road further south, it is clear from its north-south orientation that the *via nova* passes two kilometres to the east of Ḥumayma. The only secondary road discovered to date is the intermittently paved surface eight kilometres north-east of Ḥumayma that parallels the modern desert track. Clearance of one section of this road, and excavation beneath the pavement, did not produce conclusive evidence regarding the date of construction. Nor do the three anepigraphic milestones discovered near the road provide any clues, although their placement does suggest that an east-west road of some sort traversed the area in antiquity.

Integrated with the survey of the transportation lattice, but nonetheless distinct, was a comprehensive investigation of water resources and the water distribution system. The maintenance of a town in such an arid zone, where average annual precipitation does not exceed 90 mm., would clearly have been impossible without the careful mobilization of water resources.[10] Travellers to Ḥumayma have invariably observed and praised the elaborate water system (reservoirs, cisterns, aqueduct) the inhabitants developed to ensure survival in the harsh desert climate, but they have had little to say about the relative capacities of the water sources—local and distant springs, catchment areas, *awdiyah*—or the patterns of water consumption over time.

The only spring in the immediate environs of Ḥumayma that may have supplied potable water to the inhabitants is located at the base of the prominent sandstone range one kilometre southwest of the town. The Dushara niche carved into the rock wall a few metres from the spring attests its importance. Although dry during the summer, this spring must have produced a considerable volume of water in antiquity. The sill of the opening is coated with a thick crust of calcereous tufa (travertine), characteristically precipitated from spring water highly charged with calcium carbonate, and more calcereous tufa occurs in the rock-cut cistern (which

[9] A few years earlier, in preparation for Trajan's Dacian campaign, army engineers had repaired and enlarged a road twelve miles long cut into the cliffs along the Danube near the Iron Gates—montibus excisi[s] ... via[m re]f(ecit), *ILS* 5863; cf. splendid photographs in L. Rossi, *Trajan's Column and the Dacian Wars,* 1971, p. 24-25.

[10] Average rainfall: *National Water Master Plan of Jordan,* National Resources Authority, Amman; Federal Republic of Germany, German Agency for Technical Cooperation (1977) III A-2 9, p. 7 and maps. Geology of the region: F. Bender, *The Geology of Jordan*[2] (1974), 20ff; G. Osborn, J. M. Duford, *PEQ,* 1981, 1ff.

today contains water even during the summer) some ten metres in front of the spring.

The inhabitants of the town, however, did not restrict their search for potable water to local sources. Through extraordinary effort they conveyed to Ḥumayma the flow from two perennial springs in the escarpment, fifteen kilometres north/northeast of Ḥumayma. The springs of Jibel el Ghana and Jebel Jamam, still flowing and in use today, are situated in the cretaceous limestone that forms the upper part of the al-Shera escarpment, at approximately 1400 m. above sea level. The ground-level aqueduct between the springs and Ḥumayma—supported by walls, viaducts, and bridges where necessary for levelling—was constructed with blocks of fine-grained white quartz sandstone or friable yellow-marl, hollowed out to form a conduit *ca.* 0.10 m. wide and 0.13 m. deep. In the sandstone blocks the channel was lined with hydraulic cement. The conduit blocks were set in a packing of small stones fixed in grey mortar, framed by roughly squared blocks of sandstone. Covering slabs over the conduit were found only along the last 2.00 m. of its course.

A probe in 1983 demonstrated that the aqueduct supplied water for the large cistern or open reservoir located at the northern perimeter of the town. The cistern 27.60 m. x 17.00 m; 1.75 m. deep) is constructed of carefully squared blocks of local brown/red sandstone which exhibit the typical Nabataean pattern of diagonal trimming and are arranged in alternate courses of headers and stretches (another Nabataean characteristics).[11] The aqueduct exits the cistern at an angle, and after 87.00 m. crosses a badly disturbed structure that may have served as a *castellum dividiculum* or a settling basin. The conduit skirts a low hill two kilometres north of the cistern, parallels the *via nova* for several kilometres, and then follows a winding course up the gradually increasing slope of the foothills below the escarpment. Approximately eleven kilometres from the cistern, near the base of Jibal el-Ghana, a "spur line" goes off six kilometres to the east to the spring on Jebel Jamam. Poorly constructed, with a lining of granular terracotta rooftiles, this conduit rises 100.00 m. across a horizontal distance of 250.00 m. — a slope of some 40°–60°. The conduit was not covered, and it is not clear how the water was controlled when the slope levelled off at the base of the Jebel. The main aqueduct follows the contours of the Jibel el-Ghana for six kilometres — over bridges, viaducts, and rock-cut channels— and rises gradually, often parallel with the *via nova* below, to the Ghana spring.

Although probes near the aqueduct did not yield diagnostic material, the associated surface pottery throughout its course is uniformly Nabataean. Indeed, it is a fair inference from the construction technique of the aqueduct and the cistern it supplied in Ḥumayma that the entire water distribution system dates from the period of Nabataean occupation. The spur line to Jamam, on the other hand, appears to have been a later addition, necessitated perhaps by the growth of the town or by the breakdown or unreliability of the main aqueduct.

In addition to spring water for human consumption, large quantities of water would have been required for bathing, industrial processes, livestock, and agriculture. As a result of the 1983 survey, some twenty cisterns have been identified in the ruins of Ḥumayma and its environs. The suburban rock-cut cisterns, situated to take advantage of natural micro-catchments were probably used to supply water for livestock. Within the town the cisterns were constructed of cut blocks of local sandstone/limestone and were waterproofed with a layer of sandy white stucco. Most often rectangular in shape, and roofed by means of stone slabs supported by a series of closeset transverse segmental arches, these cisterns would have provided a fairly reliable source of water for general purposes during the summer months. Ac-

[11] With a capacity of 703,800 litres, the cistern could have been filled in 80 hours, if the flow were maintained at 2.43 litres/per second (J. Oleson's calculation).

cess to the cistern (30.00 m. x 14.00 m., at least 2.00 m. deep) in the northwestern corner of the fort would have been more strictly regulated. Constructed of regular courses of round-edged blocks of sandstone, and clearly too large to be spanned by the arches typical of the Nabataean cisterns in the town centre, it was designed to receive run-off from a catchment field, roughly one hectare in area, adjacent to the north wall of the fort. As this was located on "Roman" soil, it is unlikely that the civilian inhabitants were permitted to use this open reservoir except in emergencies.

The fertile loessal fields east and north of Ḥumayma may have been prepared for agriculture by the erection of low *wadi* barriers to hold back the run-off from winter rains. The numerous barriers in the broad, shallow water courses tributary to the main *awdiyah* that can be seen today trap some of the winter rain and allow it to seep into the ground. Such subsurface water accounts for the "greening" of the entire region that we observed in May, and the rich harvest of wheat that was produced in June. Barriers of this type, executed in stone, are found frequently on Nabataean sites in the Negev and must have been used by the inhabitants of Ḥumayma.[12] Though none of the walls presently visible is demonstrably ancient, the systematic inspection of nearby fields that we have planned for the second season shold produce evidence of parallel techniques.

The uplands to the west of Ḥumayma apparently receive more than the 90 mm. of annual rainfall recorded for the town and must have been in antiquity, as it is today, an attractive region for both pastoralists and agriculturalists. Although we did not discover in the course of the survey any satellite settlements, it is clear from the quantity of wheat under cultivation and from the herds of goats and sheep that this area has long been of vital importance to the inhabitants of Ḥumayma and to transhumants in search of pasturage for their flocks. Nor did we find any trace of an east-west road, one that might have linked the site with the Wadi ʿAraba, and quickly came to the conclusion that an all-weather road, as opposed to a camel or goat trail, simply could not have been constructed over such terrain. The western uplands are cut by deep *awdiyah* that would have defied even Trajan's intrepid engineers.

Although much of the region between Ḥumayma and the escarpment is underlain by soft Ordovician-age sandstone or unconsolidated alluvium of Quaternary age, minimal erosion seems to have occurred since the Nabataean period. The fact that the Nabataeans avoided the badlands in the construction of the aqueduct suggests that the landscape one sees today had already developed. Confirmation that the area has not changed significantly is provided by the aqueduct, which bisects the region on a north-south axis, and its remarkable state of preservation. Had significant erosion occurred, it can be argued, the aqueduct would have been destroyed where it crosses barren rock slopes, ravines, and gullies.

Some topographical changes, however, can be detected. Undercutting of the high bank of the Wadi el Amghar near the town has exposed unconsolidated alluvial deposits of several periods. Two distinct episodes of stream aggradataion can be discerned. The upper terrace, four to five metres above the present *wadi* basin, contains sediments marked by calcium carbonate nodules, evidence of a protracted period of soil formation that may have occurred 10,000 years ago. Nodules of this sort do not appear in the lower terrace, 1.50–2.00 m. above the *wadi* basin, which apparently was formed much later, certainly after the introduction of ceramics into the area. Some interruption of *wadi* deposition in the lower terrace is indicated by the weak paleosol (buried soil horizon) that separates two beds of alluvial sand/gravel. A single sherd, poorly-fired and fiber-tempered (Neolithic?), was found in the lower bed; several more recent (Byzantine) sherds were recovered from the upper bed. It is not inconceivable,

[12] Cf. M. Evenari, L. Shanan, N. Tadmor, *The Negev,*[2] 1982, p. 166ff.

therefore, that the interruption of *wadi* deposition, the period of soil formation marked by the buried paleosol, coincided with the Nabataean occupation of Ḥumayma. If so, the wadi may well have followed a different course in the Nabataean period.[13]

Topographic Survey of Ḥumayma

The objective of the topographic survey conducted by the architectural team (under the direction of L. Vann, assisted by S. Talaat, R. Ziek, and F. Hiebert) was to "gain control" of the site through an investigation (measurement and drawing) of major structures. Primary attention was given to the military installations associated with the Roman "occupation" of Ḥumayma, the most imposing of which is the enclosure (204 m. x 147 m.) in the northeast sector (Fig. 4). Though some earlier investigators identified this structure as a caravanserai, of uncertain date and without parallel in the Ḥisma, the majority have seen in it a conventional Roman fort. Our survey revealed external towers on the eastern wall (the façade that would have been seen from the *via nova),* four symmetrical gates, a number of internal buildings, and a thick perimeter wall—features that suggest that the enclosure was indeed a fort, and a major one at that. If so, it would have been the most important military installation in the Ḥisma, far more impressive than the ruins of *castella* at Quweira, Khirbet el-Khalde, and Khirbet el-Kithara to the south.

In the course of the survey we did discover a castellum (Fig. 5: A, B), similar in size (50.00 m. x 60.00 m.) and design to those mentioned, that had hitherto not been detected. Situated between the large fort and the "Nabataean" town, this *castellum* is large enough for a cavalry *turma* but not an *ala.* That it could accommodate the unit of *equites sagittarii indigenae* assigned to Auara-Ḥumayma by the *Notitia Dignitatum* seems unlikely. The relationship of this castellum to the larger fort, a few hundred metres to the north, is at present uncertain. We do not know the date of construction or garrison of either fort.

The function of the watchtower (11.00 m. x 15.00 m.) two kilometres southwest of the town, near the probable route of the via nova, is clear enough, but nothing can be said on present evidence concerning its relationship to the larger military installations in Ḥumayma or to other watchtower/stations on the via nova. From the pottery scatter — which includes fragments of high quality, imported African red slip of sixth century date — it is a reasonable inference that the watchtower was occupied in the late Roman/early Byzantine periods.

Clearly, much remains to be done. We hope that the excavations planned for the second season will enable us to trace the architectural history of each of these structures and to identify the unit(s) that served in this frontier town.

The presence of Roman military installations in Ḥumayma does not mean that the region was a conventional military zone. There is certainly no reason to believe, a priori, that interaction between Romans and Nabataeans was precluded or frequently interrupted by armed rebellion. The Romans were intruders, but their arrival apparently did not displace the local population or destroy the town that had developed over two centuries. Traces of the Nabataean town, often undisturbed by later construction, can be detected throughout the site.

During the 1983 season we conducted a preliminary investigation of what seems to have been the Byzantine sector of the civilian settlement. Though one cannot rule out the possibility that the Byzantine (and Islamic) buildings rest on Nabataean foundations, this area (clearly the dominant landscape) was developed long after the annexation of Arabia. As the only representatives of the Christian faith in the Ḥisma that have been securely identified, the two Byzantine churches in the area—lower (12.00 m. x 16.00 m.) upper (9.00 m. x 14.00 m.) — are important historical

[13] On the geology and prehistoric landscape of the Ḥumayma region see Donald O. Henry et al, "An Investigation of the Prehistory of Southern Jordan," *PEQ,* 115 (1983), p. 1ff.

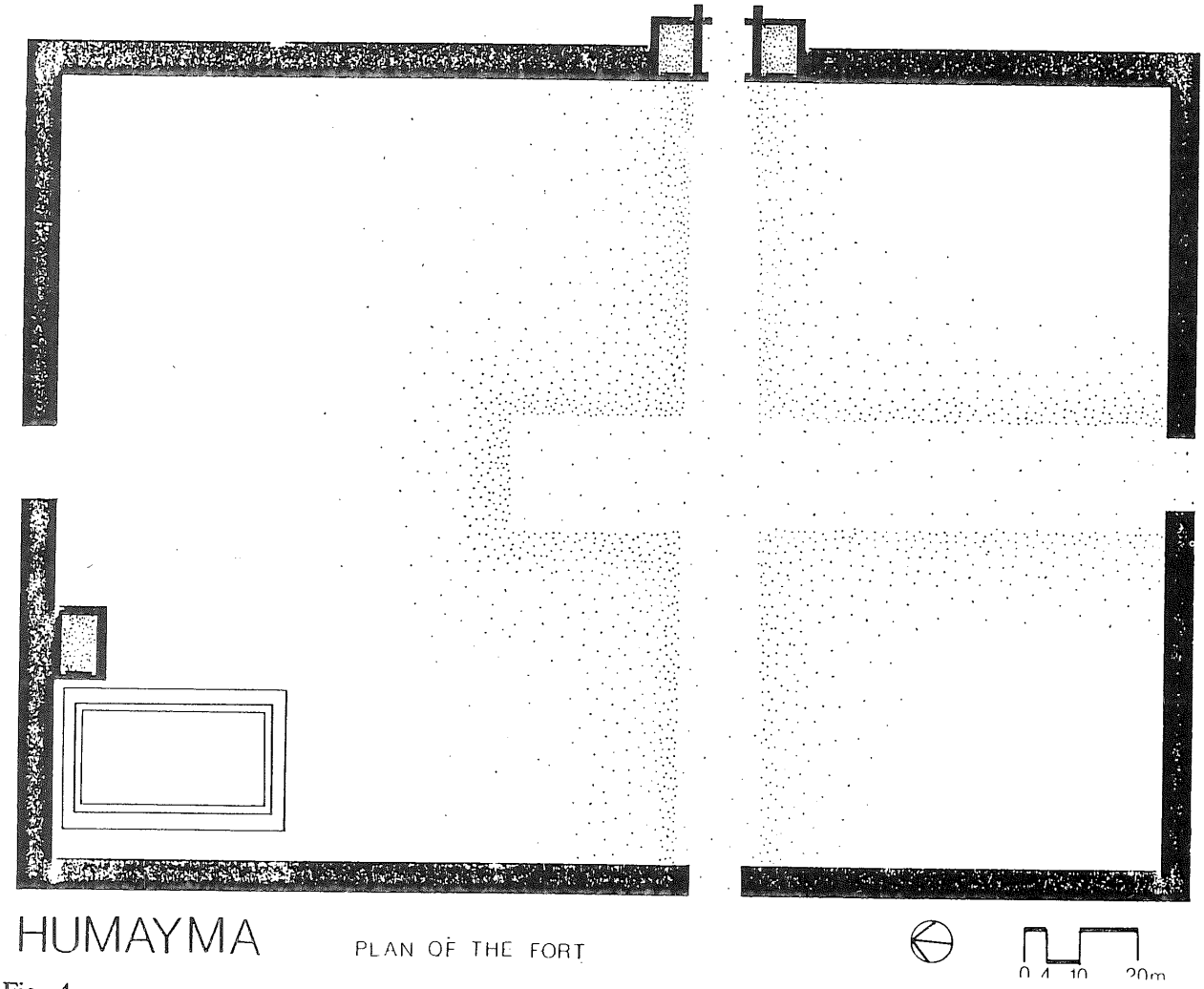

Fig. 4

"documents". Excavation of these two churches, which we have differed until the third season, is expected to produce new data concerning the development of Christianity in southern Jordan. Literary evidence (Nilus Doxopatrius) certifies the existence of a bishop of Auara-Ḥumayma in the sixth century, who was under the jurisdiction of the metropolitan of Bostra, but we do not know when the community was established or its size.[14] Whether the Christians buried their dead in the forty-five shaft tombs cut into the low sandstone hills that delimit the western boundary of the town must also be determined through additional investigation.

Pottery Project

By the end of the 1983 season we had collected sufficient quantities of surface sherds to create a preliminary catalogue of ceramic types. The earliest imported wares found to date, eastern sigillata A, suggest that Ḥumayma, more or less from its foundation, was in contact through trade with the wider world (1.1). The sprinkling of Ummayad sherds (11.1-11.3), collected from different sectors of the site and in the course of the regional survey, represent the latest ceramic (and habitation) horizon. Between these termini there was a rich harvest of surface sherds. Nabataean painted and plain ware (2.1-3.4) appear on virtually every square metre of the site and throughout the region. Local production almost certainly continued for some time after the annexation, and this pottery presumably was used simultaneously with the imported wares. it is only in the later centuries (third-fifth) that local "Nabataean" wares seem to give way to the

[14] On Nilus Doxopatrius see A. Musil, *The Northern Heğaz,* 1926, p. 59ff.

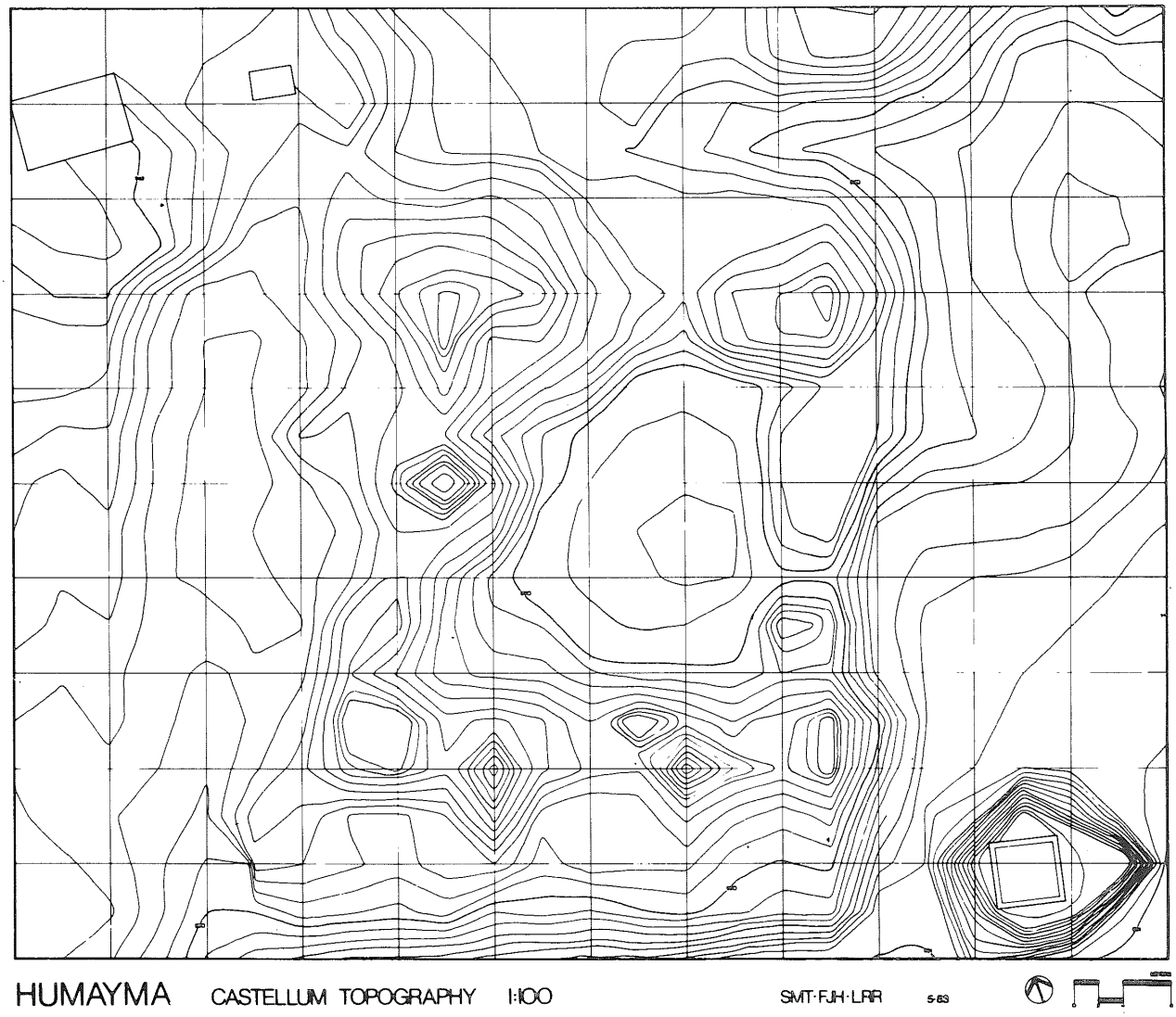

Fig. 5A

Roman (e.g., African red slip) and Romano-Byzantine ceramics (1.2-1.4). As one would expect, Byzantine pottery is found in abundance on the site. Whether the paucity of Ummayad pottery reflects a demographic decline following the Byzantine period or simply an accident of survival is at present uncertain (Figs. 6-9).

Stylistic changes in local pottery, increases in imported wares, and the appearance of amphorae of known provenance are important socio-economic data that must be taken into account in assessing trade, communication, agricultural productivity, and demography. If Ḥumayma's role in the larger political economy of the Roman and Byzantine empires is to be understood, it will be necessary to produce a multidimensional typology of ceramic material from stratified contexts. How did the arrival of Roman troops affect the local

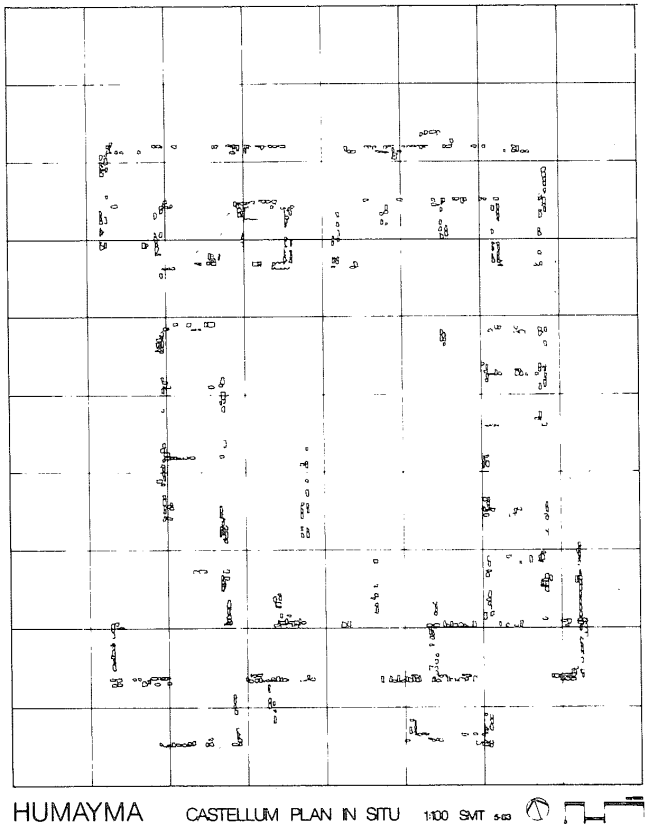

Fig. 5B

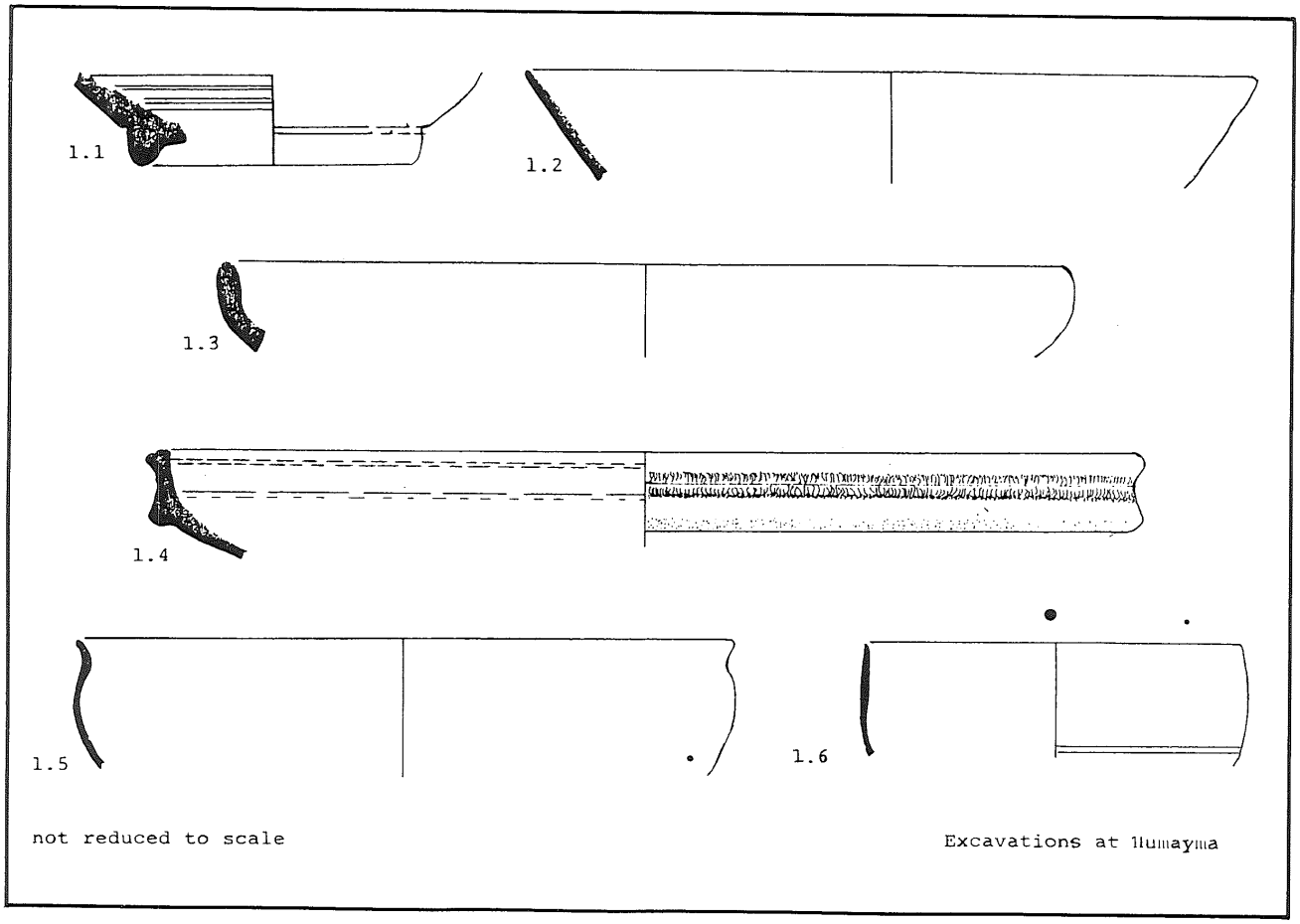
1.1
1.2
1.3
1.4
1.5
1.6
not reduced to scale
Excavations at Humayma

Fig. 6

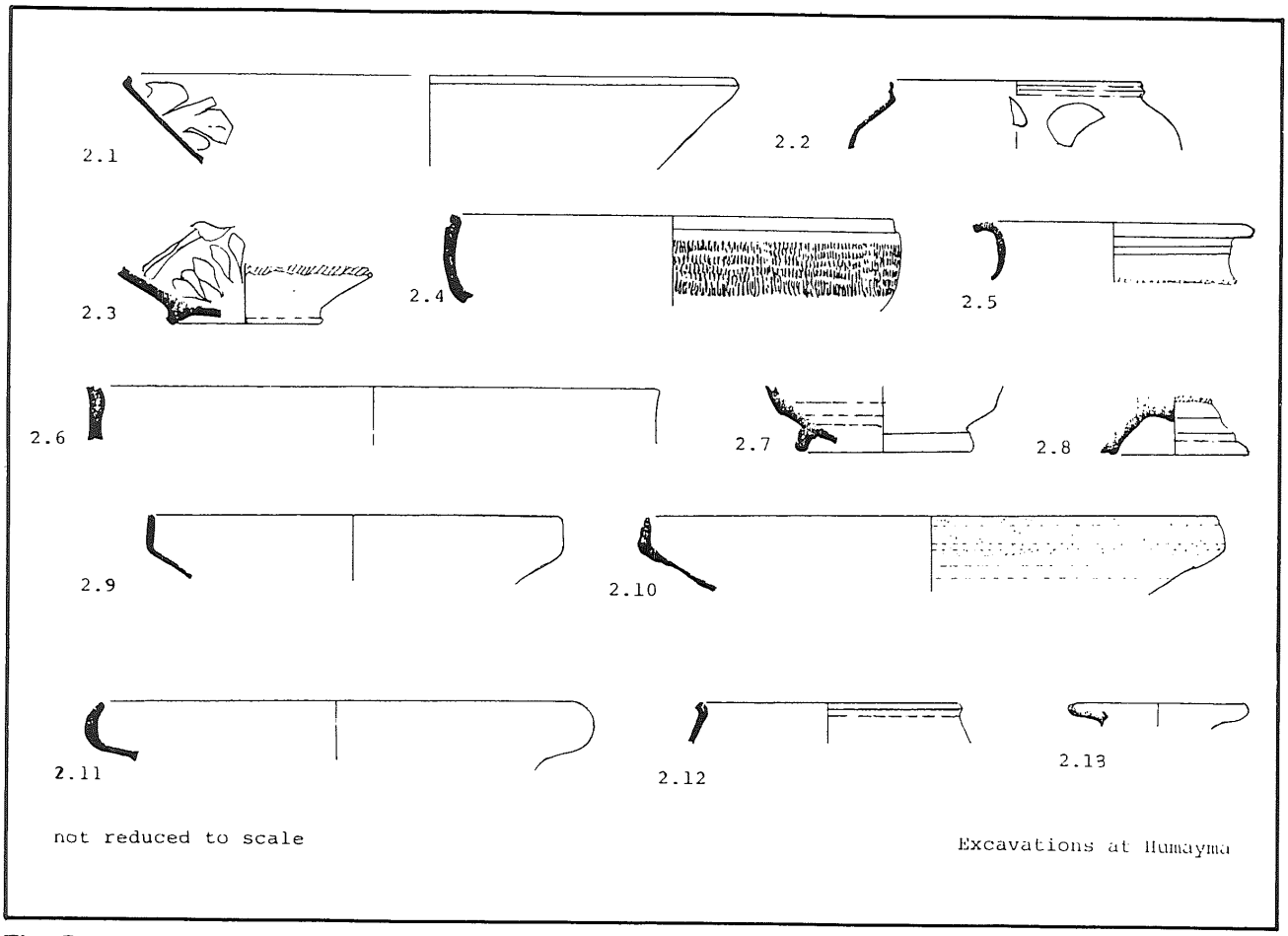
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
2.10
2.11
2.12
2.13
not reduced to scale
Excavations at Humayma

Fig. 7

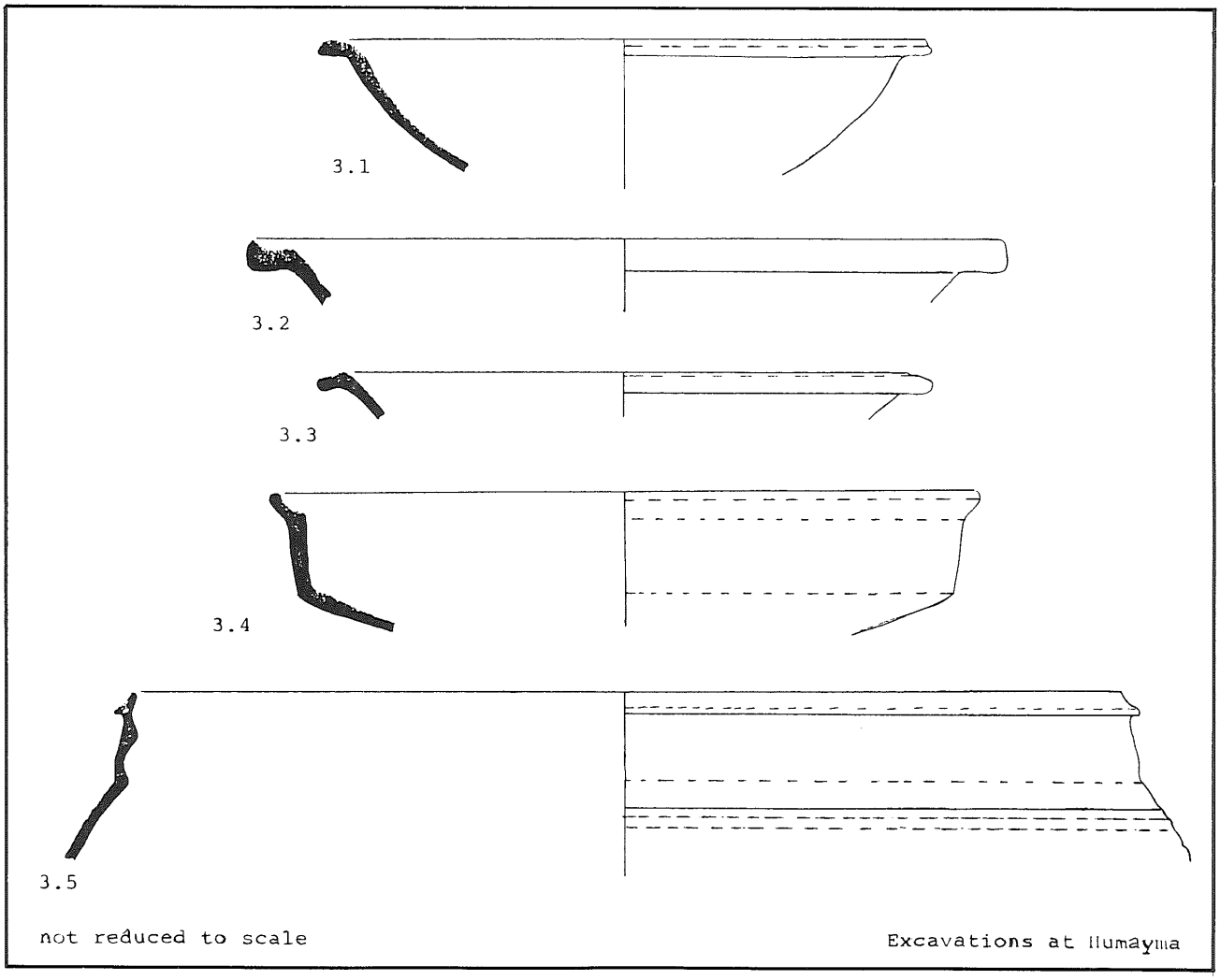
3.1
3.2
3.3
3.4
3.5
not reduced to scale
Excavations at Humayma

Fig. 8

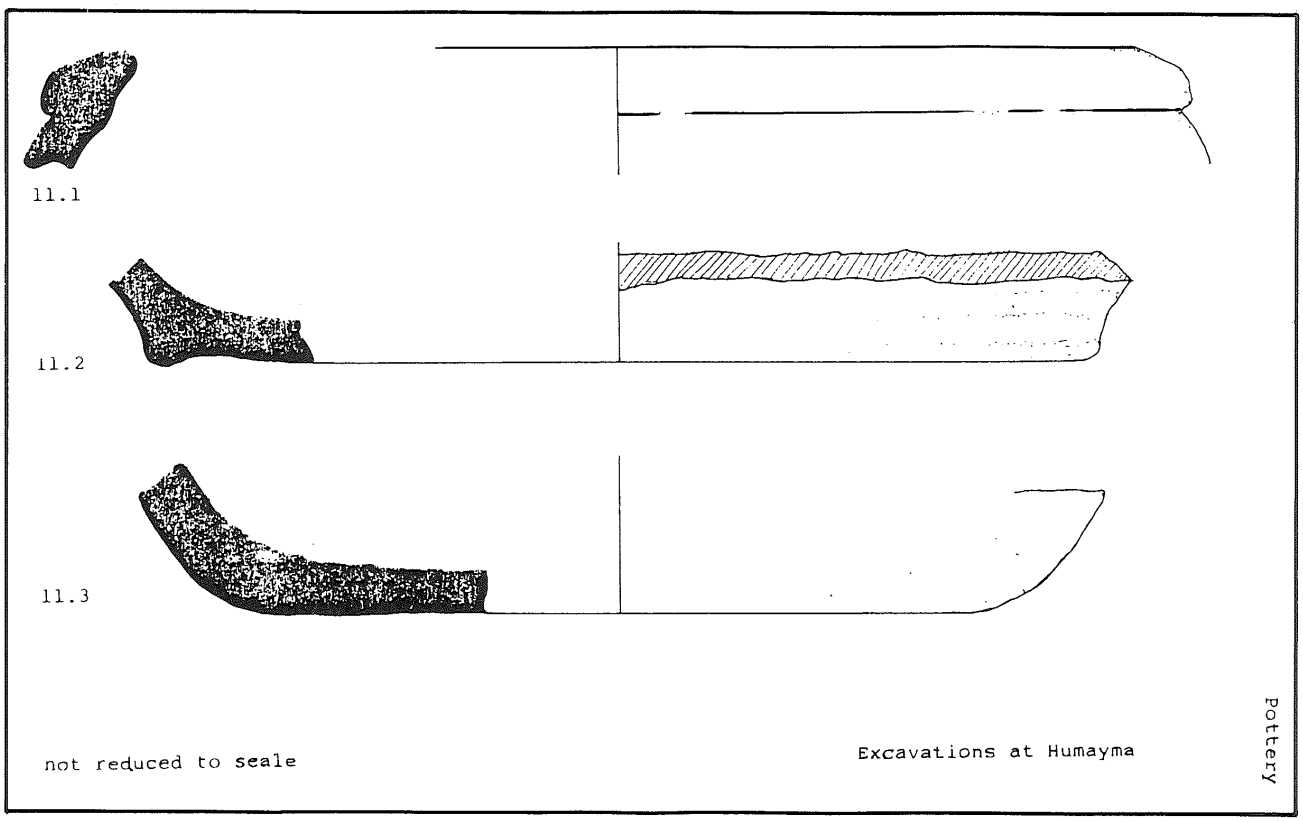
11.1
11.2
11.3
not reduced to scale
Excavations at Humayma
Pottery

Fig. 9

economy? Did local production of both fine and coarse wares continue after the annexation? Does the importation of African red slip in the third century signal the end of local "Nabataean" production and reflect the increasing Romanization of Ḥumayma? These are some of the questions that the analysis of ceramic material from stratified contexts should begin to answer in subsequent seasons of excavation.

We have only begun to scratch the surface. Most of the broader historical and archaeological questions that led us to undertake this investigation can be answered only through systematic excavation. Our first season has already demonstrated, however, that Ḥumayma is something more than "a dreary waste of tumbled blocks."[15] As Stein remarked at the end of his report, "brief as the description of the surface remains of Ḥomaima ⟨sic⟩ must be it may suffice to show the importance once attaching to the site."[16]

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[15] A. S. Kirkbride and G. Lankester Harding, "Ḥasma," *PEQ,* 79 (1947) p. 21.

[16] A. Stein (above n. 8), p. 275.