

AYLA AT THE MILLENNIUM: ARCHAEOLOGY AND HISTORY

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"The city of Ayla is a great city on the shore of the salt sea and in it gather the pilgrims of Syria, Egypt, and the Maghreb. There are numerous merchants and common people" (al-Yaqubi 340).

Structure and Chronology

The archaeological project of the University of Chicago and Department of Antiquities of Jordan pursued the discovery of the early Islamic town in 'Aqaba from 1986 until 1995. These excavations produced the formal plan of Ayla, a foundation which presents important evidence for the earliest "Islamic city". One hypothesis is that this foundation was under the Caliph 'Uthmān ibn 'Affān (ca. 650AD), and this urban center might contain the earliest mosque, palace, and other elements.¹ The second historical episode with structural implications for Ayla was the 748 earthquake;² apparent evidence of this event ushered in a period of prosperity and trade under Abbasid influence (reconstruction and connections in ceramics, ie, storage jars are local, Iraqi blue-green, Far Eastern stoneware). This seems the civilized apogee witnessed and described by al-Maqdisi in the late 10th century, historically known as the late Abbasid or Fatimid period.

The structure and character of the mature city in its latest period of decline has not been discussed in detail. Yet this remains the last chapter in the cyclical history of the city, the logical outcome of a foundation with the beginnings of Is-

lam, the sophisticated prosperity of the Caliphal empire of the Abbasids, and the complexities of a changing world of the medieval world of the Fatimids and other dynasties. Archaeological data gives evidence of these social stresses, symbolized in the odd juxtaposition of a lustre bowl of a man with a turban and humble tupperware, a handmade product imitating products of the Chalcolithic era, some four millennia earlier. This was an untidy period when causes may be evoked from historical records: the sacking of the town in 1024 by the Banu Jarrah, the extraordinary violence of the 1068 earthquake, and attack of Crusaders in 1116. An archaeological perspective allows a more nuanced documentation for the experience of Ayla, and by extension the nature of cities and their populations during these times.

Archaeological Sequences

One may begin with a chart of the periodizations of the history and archaeology from the perspective of the Ayla excavations. The archaeological periods seemed to fall into Early Islamic 1, Early Islamic 2, and Middle Islamic 1 at the time of the excavations; the historical periods differed in a random fashion (**Fig. 1**). More recently it appears to the author that the seventh century and the eleventh centuries should be considered archaeological transitions and the intervening centuries labeled Early Islamic 1, 2, and 3. This provides a very good fit with the presumed dating of the archaeological

1. Walmsley 2007: 94-95; most scholars are more comfortable with an Umayyad, and preferably Marwanid, date for this urban beginning in keeping with traditional interpretations.

2. One is reluctant to rely on earthquakes excessively as a chronological mechanism in archaeology. Neverthe-

less, the quakes of 748 and especially 1068 (for which the epicenter was at the head of the gulf of Aqaba) were particularly affective for the stratigraphy. A recent citation to the earthquake of 873 at Ayla may be more questionable (see al-Tarazi and Korjenkov 2007)

	Archaeological periods	Revised	AQABA phases	Historical Period	dates
700	Early Islamic 1	7th c. trans.	A	Rāshidūn	632 - 661
800		early Islamic 1	B	Umayyad	661 - 750
900	Early Islamic 2	early Islamic 2	C	early 'Abbāsid	750 - 868
1000		early Islamic 3	D	Tūlūnid	868 - 905
1100	Middle Islamic 1	11th c. trans.	E	middle 'Abbāsid	905 - 969
				late 'Abbāsid	969 - 1116
				Fātimid	

1. Archaeological phases in the Ayla excavations, compared to historical and archaeological periodizations.

phases on the site of Ayla. The chart also indicates a cultural lag of perhaps fifty years of material culture after significant historical change. Finally it might be noted that this city was both founded in a period of transition and ceased during an even longer period of transition, or perhaps better, decline. The purpose of this paper is to attempt a preliminary understanding of this penultimate phenomenon through a brief description of select architectural features, following each not as it was excavated but as the strata were deposited.

1. The Square Tower

This was tower 19 on the sea wall (Area K, L8b), which flanked Sea Gate of Ayla to the southeast. This tower presented an anomaly and, as such, demanded to be investigated; it was completely excavated in 1989 (Whitcomb 1995). The original U-shape tower was found near the water-table (Whitcomb 2006; **Fig. 2**). This tower was replaced by a square building using the original walls, which may have been damaged by the 748 earthquake. The interior had a plaster floor and was subdivided into a series of bins; this was replaced by a second floor and bins. Likewise the doorway showed two construction phases of continued use as a shop above the beach facing the sea during the Abbasid period (phase C).

The decline of this structure was in two phases the first characterized some fallen debris and

dark brown occupation materials (phase D). The final collapse of this structure was a massive stone fall from the city wall (**Fig. 3**) accompanied by ca. 1.5-2m of late Abbasid or Fatimid



2. The square tower, showing the original U-shaped tower, door through the city wall, and water table.



3. The square tower, showing fallen stone debris in upper levels (with Hugh Barnes).

depositions (phase E), including a Fatimid dirham (L8b-3, RN 464). One storage jar with vertical lines of an impressed Kufic inscription (identical with a jar from Area C; RN 87-1564) may have been suggested to imitate Chinese painted jar inscriptions. An 11th century date is reinforced by the presence of Qingbai ceramics.

The square tower was one of a series of shops along the beach front. A first interpretation as concession stands for Abbasid tourists yielded to a more serious attention to sea-borne commerce commonly associated with the Fatimid revival of Red Sea trade. The Sea Gate which is wider than other gates may be expected to have led directly to warehouses (still to be uncovered).

2. The Central Pavilion

The central building for the entire city was discovered and completely excavated in 1987 (Area A, G10-G11; Whitcomb 1988). Further excavation on the southeast exterior revealed jambs and the arch of a tetrapylon (confirmed with a partial arch in the wall of the south west iwan; **Fig. 4**). The entire building was reinterpreted using the walls (but filling the arches) and laying new floors. The layers associated with these floors had earliest glazes and Mahesh wares, giving a ca. 750 date, also consistent with the 748 earthquake.

The new building would seem typical of a residential structure: entered from a formal stairway and door into a bent axis, past a corner

3. These hand-made wares, very common during the last period, have prompted much discussion. The simple forms of bowls, cups, and small jars seem to be modular and can nest in sets (prompting the nickname). Many were made with little or no vegetal temper and have been repaired; often impressions of reed matting

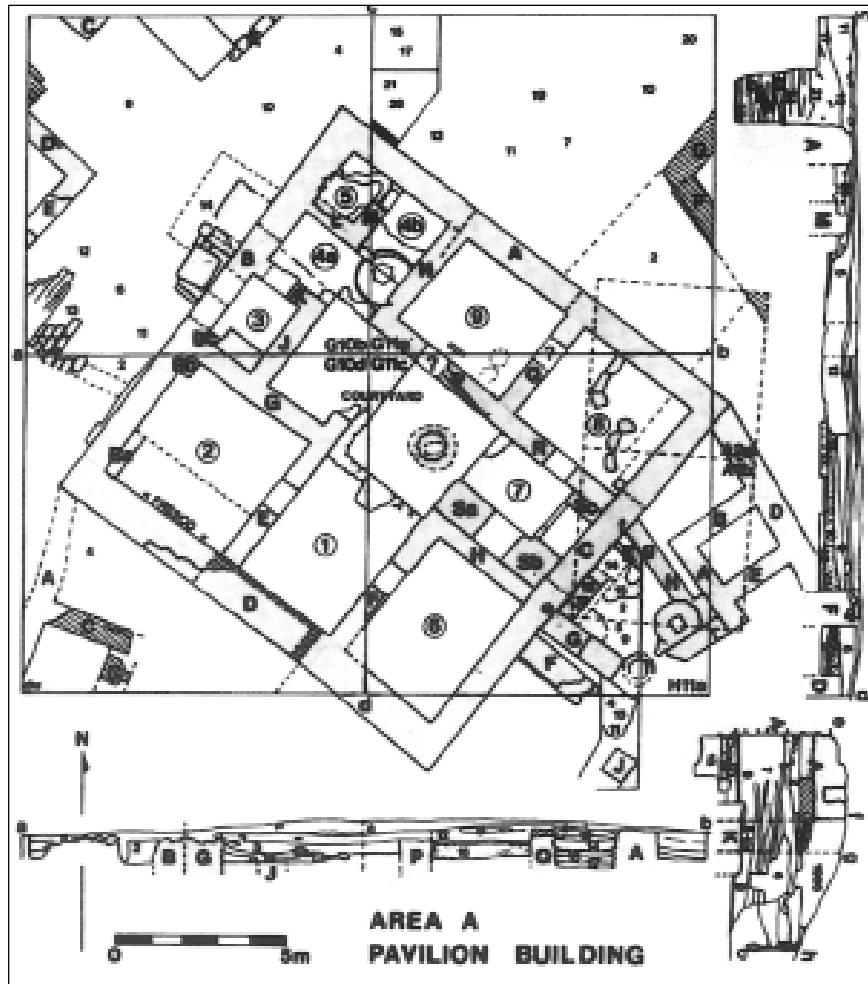
lavatory, into a central yard with its own well; on the south east was a formal iwan with frescoes and two side chambers; and on the north-east was a kitchen, storeroom, and stairway to the roof (**Fig. 5**). One suspects this was kept clean and functioning for a considerable period of time (perhaps much of phase C).

The artifacts indicate destruction through burning, though relative lack of objects *in situ* does not suggest sudden violence (**Fig. 6**). Indeed, there seem to be secondary depositions before and during the disintegration of the mud brick upper walls (and vaulting?). The occupation on the floor antecedent to ash deposition is more difficult to determine but should fall within the 10th century and probably the latter half (phase D). While these depositions have some Abbasid materials, the presence of Fatimid storage jars and “tupperware” (Whitcomb 1988, fig. 5a-i)³ suggest that



4. The southeast wall of the Central Pavilion, showing original arch and late blockage.

are found on the base. A number of pieces, particularly small bowls, have irregular decorations in red paint and may represent the beginnings of painted geometric tradition, a recognized characteristic of the following Ayyubid-Mamluk era (**Fig. 16**).



5. Plan of the Central Pavilion building.



6. The Central Pavilion building, from the north corner looking south.

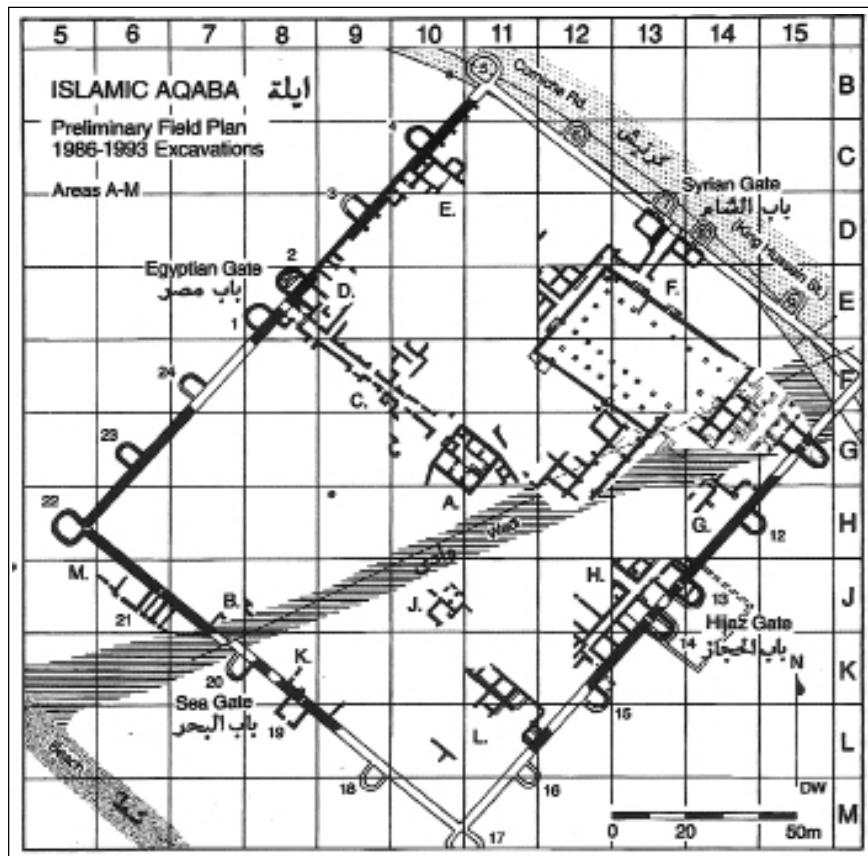
deposition ended near the beginning of the 12th century that is during phase E transition.

3. The Egyptian Street

The original plan of the town seems to have stipulated main, axial streets, running from the

gates to the crossing through the tetrapylon (**Fig. 7**). As we shall see in the Egyptian gate, the foundation street was some 3+ meters in width (Area C, E8d, E9c, F9b, F9d, F10c, G10b; Whitcomb 1995). A deep test was excavated in 1987 in F9d, over four meters deep to the original street level (**Fig. 8**). It was clear from the excavation that subsequent re-buildings of adjacent structures tended to encroach upon the width of the street; and as the street tended to become increasingly narrow as time passed, its alignment was likewise less measured and more crooked (**Fig. 9**). As might be expected, a street is kept relatively clean and is not a prime location for datable artifacts.

Nevertheless the latest building phase may be characterized by the street façades and their attached structures. These latest walls, which came just to the surface of the ground, were a patchwork of granite cobbles with limestone



7. General plan of the Ayla excavations, 1986-1993.

facing only the door and window openings. This façade opened onto passages and a large courtyard entirely constructed of mudbrick. Within the courtyard were several bread ovens (*tābūn*)

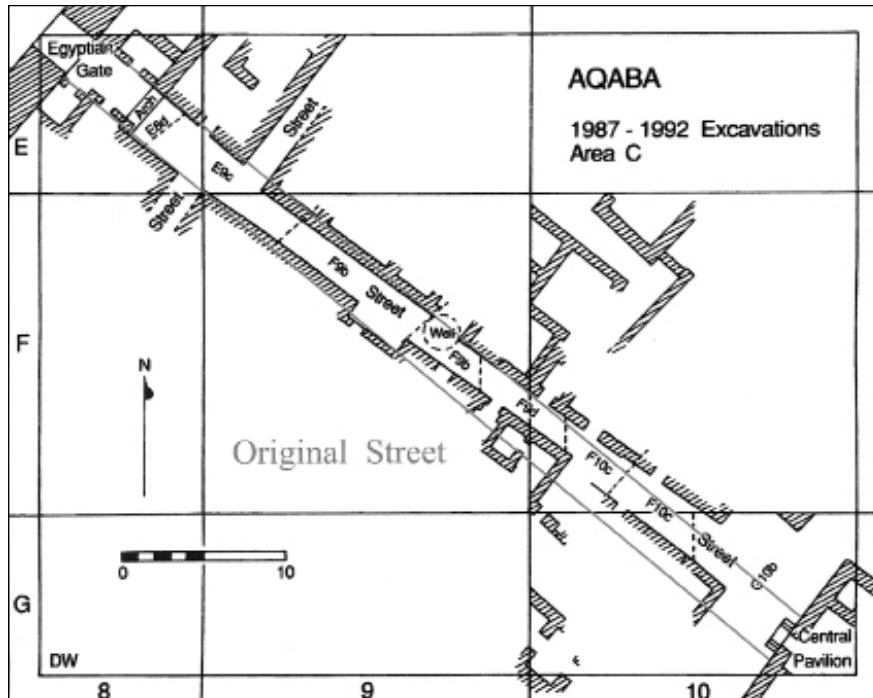


8. Section across the Egyptian Street (F9d), showing stone façades of buildings.

placed near the walls. A large flat stone was nearby, apparently used for making the bread; upon turning it over, this proved to be a tenth century tombstone. Naturally most of the ceramics were cooking vessels but among the other refuse were a number of Qingbai sherds of the 11th century.

4. The Egyptian Gate and Inner Arch

The arch crossing the Egyptian Street was semi-circular and apparently identical to the original arch of the Egyptian Gate (see below). The two arches seem to have formed a vestibule between the gate and the town proper, though its precise form is now obscured with later walls. Both to the southeast (Area C, E8d-31-35, excavated in 1989) and to the northwest (Area D; E8d-6-24, excavated in 1987) one have walls constructed of alternating layers (each of two to four courses) of limestone and basalt stones. This decorative use of stones, known as *ablaq*, is most typical of Ayyubid and later architecture (and thus stratigraphically impossible); an alternative derivation might be from Byzantine architecture (with courses of stone and baked



9. Plan of the Egyptian Street, showing the original alignment between the Egyptian Gate and Central Pavilion.



10. Northwest face of inner arch, showing *ablaq* walls of shops in the earlier vestibule.

brick).⁴ The decorative walls narrowed the street filling the vestibule with a series of shops (**Fig. 10**) and, beyond the arch, a large building with benches (mastaba) on either side of a doorway (**Fig. 11**). On both sides of the inner arch, the latest street level, upon which there was fallen stone and refuse, was usually 1.75m below surface and contained 11th century materials (phase E; Whitcomb 1995: fig. 3).

The Egyptian Gate began as a formal structure; the northwest entry into the city was a



11. Building with *ablaq* and blocked doorway, east of inner arch (E8d, E9c).

grand affair, over 3m in width with carefully carved voussoirs in its rounded arch (**Fig. 12**). Architectural alterations to this city gate may be balanced with a stratigraphic sequence (Area A; E8a-4-38). Soon after its completion, the width of the gate was deemed excessive and cut in half; a rounded column was placed in the center and the north side blocked. A series of walls were placed against the flanking towers, forming small rooms or shops on either side of the narrowed, exterior street (not unlike

4. An even more interesting speculation might be a derivation from al-*Ablaq*, the name of a pre-Islamic castle near Tayma, some 400km to the southeast. Whether

Byzantine or Hijazi in inspiration, one must accept an early use of *ablaq* decoration at Ayla.



12. Exterior of the Egyptian Gate, showing original wide gate with arch, early blockage of half with column, complete blocking preceding insertion of narrow doorway and pointed arch.

the interior shops described above, but without decoration).

Abbasid artifacts were antecedent to a definitive break in this early gate sequence. New walls formed reconstructed shops and, more importantly, complete blockage of the gate with rubble formed the foundation for a redesigned gate. This must represent the destruction of an earthquake, presumably that of 1068 to judge from subsequent artifacts. This destruction must have brought down the wall above the gate and the blocks of the Ayat al-Kursi (**Fig. 13**).⁵ The rooms between the towers were replaced, but the gate itself was reconstructed as a narrow doorway with pointed arch (partially reus-



13. The Ayat al-Kursi inscription, originally above the Egyptian Gate, showing cursive repairs to Kufic original.



14. The Syrian Street looking northeast toward modern Corniche (city wall lies beneath modern pipes).

ing very old voussoirs). This last gate gradually filled to a higher threshold with a basalt pipe of drain running through it⁶. These latest layers (E8a-9-20) are marked with Fatimid materials of the late 10th and 11th centuries.

5. The Syrian Street

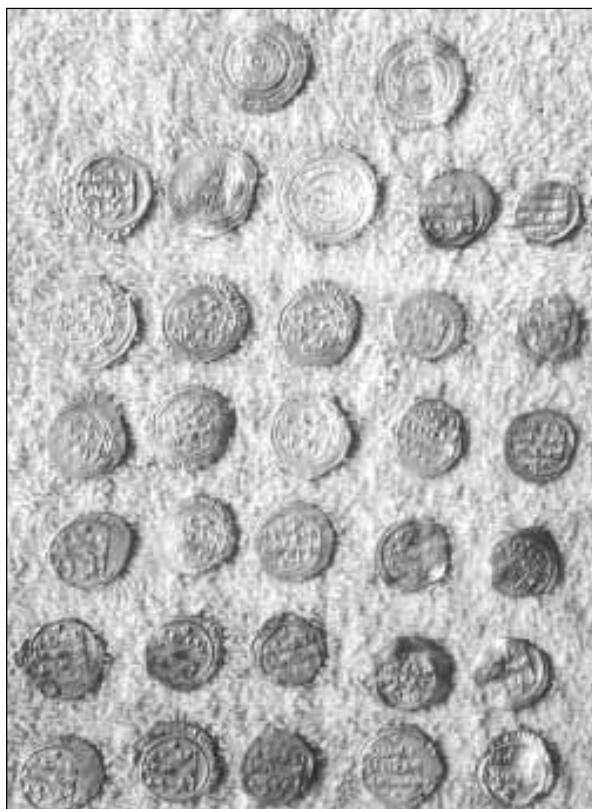
In 1992 an effort was made to investigate the Syrian Gate (Area F; D13; Whitcomb 1993). This was complicated by the fact that the Corniche sidewalk and roadway passed over the gate and towers (and a water pipe was laid onto the wall itself; **Fig. 14**). Nevertheless the inner face of the gate and entry into tower 7 were exposed. Most of the excavations concentrated on

5. This inscription must date to the original construction with its early Kufic lettering; it seems to have suffered earlier *in situ* damage from cracked stones and re-carving of block J (**Fig. 13**) surface with a more cursive script after spalling of the original.

6. The excavations of the Sea Gate in 1988 (Area K, K8c, K8d) revealed a remarkably similar architectural and stratigraphic history of replacement by narrowed gates over time.

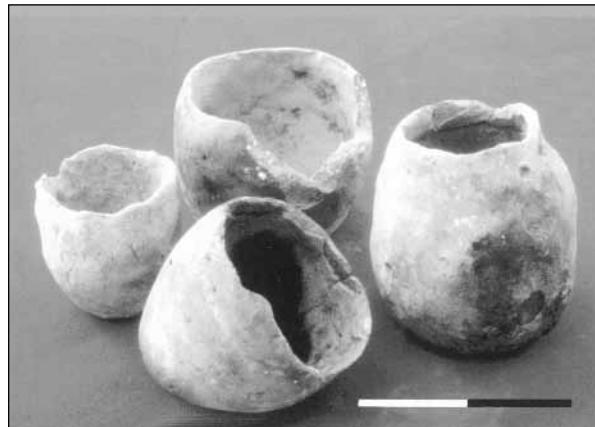
the latest phase of the flanking rooms of the Syrian street, connecting the gate to the northeast entry into the mosque (Whitcomb 1994a). As seen above in the Egyptian Gate, by the Fatimid period (phase E), this street had narrowed and a drain passed through the Syrian gate. Less than 20cm from the surface in this upper street the Ayla hoard was found; this was a purse of 32 coins minted at Sijilmasa in north Africa (now located in southern Morocco; Whitcomb 1994b).

The twenty-nine of these dinars minted at Sijilmasa (**Fig. 15**) were uncirculated, all die-linked and attributed to Khazrunid vassals of the Spanish Umayyads (976-1055).⁷ Three Fatimid coins seem to have been added in Qayrawan, Tunisia (all datable from 970 to 1004); these additional coins would seem to have been necessary to create a purse of 30 dinar value (possibly sealed by an exchange in Qayrawan). The purse might have been lost by a pilgrim from Morocco



15. The Ayla hoard found in the Syrian Street, with 29 coins from Sijilmasa and three from Qayrawan.

7. These coins are discussed in a numismatic study by Choukri Heddouchi, *The Medieval Coins of Sijilmasa, Morocco: A History of the Mint and its Minting*



16. Examples of common, handmade vessels, called "tupperware".

on his way to Mecca; but the find-spot in the middle of a main street might suggest deposition at night. One might construct an historical narrative to account for this discovery: that the purse was hidden during the attack on the Maghrebi (north African) pilgrimage of the year 1024; this attack by the Banu Jarrah, who were in revolt against the Fatimids, is said to have acquired slaves and 3000 dinars. This narrative might account for this curious discovery, but its broader implication is the continuing connection of Ayla with the commercial (if not pilgrim) interactions across the Islamic world, even during its (relative) decline.

Summary

The archaeology of Ayla ('Aqaba) has been studied for its foundation and prosperity, that is, its role in the history of urbanism in the Middle East. After less than four hundred years this complex of institutions, the population force in political and economic life of the head of the Gulf, declined and ceased. Archaeological excavation has an irony in beginning at the ending, and therefore that most elusive phase in its cultural history lies just beneath its present surface. This was composed of destruction debris associated with large amounts of trash accumulation within the first 1-1.5m. Virtually all-Chinese sherds have been found in this phase in Ayla (**Fig. 17**), coinciding with the much vaunted

Techniques. M.A. thesis, Middle Tennessee State University, 1998.



17. Examples of Chinese porcelains, especially *Qingbai* and *Sung* incised wares.

opening of the Red Sea to Indian Ocean and Far Eastern trade under the Fatimids. Chinese and Fatimid luxury wares (e.g., lustre; Fig. 18) are in sharp contrast with the declining quality of life (an economic contradiction explored in Whitcomb 2001, 510).

What is the role of Ayla for the archeology of Jordan? Ayla was debated as a having a mixed identity in Maqdisi's presentation: did this port belong to Egypt, the Hijaz or Bilād ash-Shām? Could regional interactions in its final phase be expressed as diverse social identifications, that is, with the Fatimids, Seljuqs or Bedouin tribes? Regional contributions during the preceding Abbasid prosperity were probably similar but less dramatic in comparison to the dysfunctional pressures of this transitional period. Both documentary and archaeological evidence agree to



18. "The Man with a Turban," a luster-ware shard from Fatimid Egypt.

the anomaly of commercial expansion and social collapse during this period. Morony's recent study of Arabia in the 11th century notes that "drought and famine in the Hijaz caused emigration and the cancellation of Hajj caravans" (n.d.). At the same time, al-Idrisi calls Ayla a small town and center of bedouin trade that was soon abandoned (al-Wohaibi 1973: 49, 51). More generalized regional social problems and disruption of occupational patterns may be directly reflected in the breakdown in the sanitation system of this town.

Walmsley has demonstrated the new archaeological interest and evidence being brought to bear on the Fatimid period in Jordan (2001). He cites the results from Ayla in parallel with those from the citadel in 'Ammān. In both cases, the implications remain to be fully analyzed. Indeed, the half-century both before and after the millennium show dramatic developments in urban organization. Damgaard has recently shown, in his new excavations at Ayla, the presence of a wide, subsidiary street maintaining the original grid of the city (n.d., 6). This may be balanced with the "massive urban dislocation" apparently attributable to the 1068 earthquake (Walmsley 2001: 524). Clearly the archaeology of Ayla reflects the complex events of the latest period, one, which held both prosperity and decline as minor fortunes typical of most historical periods. The common tendency of archaeologists to seek the beginnings (or "origins") and most famous epochs may lead to neglect of interesting transitions which may be of more value to broad historical understandings. These are their true contributions of archaeology to the medieval history of Jordan.

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References

- Damgaard, K.
n.d. Between castrum and Medina: A Preliminary note on spatial organization and urban development in medieval Aqaba (ms).
- Heddouchi, C.
1998 The Medieval Coins of Sijilmasa, Morocco: A History of the Mint and its Minting Techniques. M.A. thesis, Middle Tennessee State University.
- n.d. Observations on Die-preparation of Sijilmasa

- coins (ms).
- Morony, M.
- n.d. Economic change in Arabia: 4th to 6th century A.H. (ms).
- Al-Tarazi, E.A. and Korjenkov, A.M.
- 2007 Archaeoseismological investigation of the ancient Ayla site in the city of Aqaba, Jordan. *Nat Hazards*. Springer Science+Business Media B.V.
- Walmsley, A.
- 2001 Fatimid, Ayyubid and Mamluk Jordan and the Crusader interlude. Pp. 515-59 in D. MacDonald *et al.* (eds.), *The Archaeology of Jordan*. Sheffield.
- 2007 Early Islamic Syria: An Archaeological Assessment. London, Duckworth.
- Al-Wohaibi, A.
- 1973 *The Northern Hijaz in the writings of the Arab geographers, 800-1150*. Beirut: al-Risalah.
- Whitcomb, D.
- 1988 A Fatimid Residence in Aqaba, Jordan. *ADAJ* 32: 207-224.
- 1993 The Fourth gate at Ayla: A Report on the 1992 Excavations at Aqaba. *ADAJ* 37: 533-47.
- 1994a The Ayla Mosque: Early Islamic remains in Aqaba, Jordan. *Fondation Max van Berchem Bulletin* 8: 3-6.
- 1994b *Ayla: Art and Industry in the Islamic Port of Aqaba*. Chicago, The Oriental Institute.
- 1995 A Street and the beach at Ayla: The Fall Season of Excavations at 'Aqaba, 1992. *ADAJ* 38: 499-507.
- 1997 The Town and Name of 'Aqaba: An Inquiry into the Settlement History from an Archaeological Perspective. *SHAJ* 6: 359-63. Amman: Department of Antiquities.
- 2001 Umayyad and Abbasid Periods. Pp. 503-513 in D. MacDonald *et al.* (eds.), *The Archaeology of Jordan*. Sheffield.
- 2006 The Walls of Early Islamic Ayla: Defence or symbol? Pp. 61-74 in H. Kennedy (ed.), *Muslim military architecture in Greater Syria, from the coming of Islam to the Ottoman period*. Leiden: Brill.