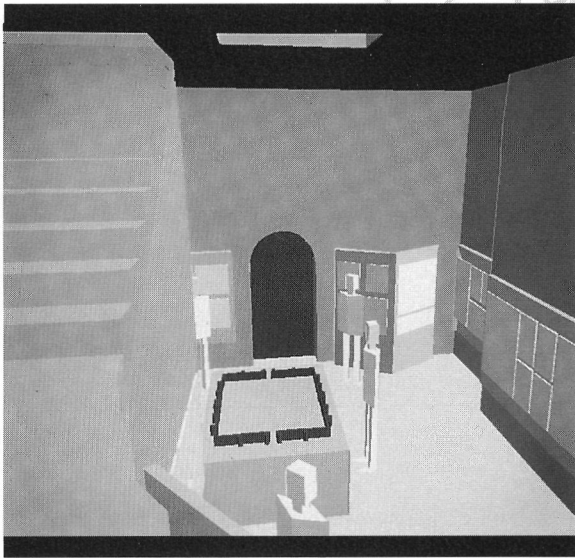


AQABA

Donald Whitcomb



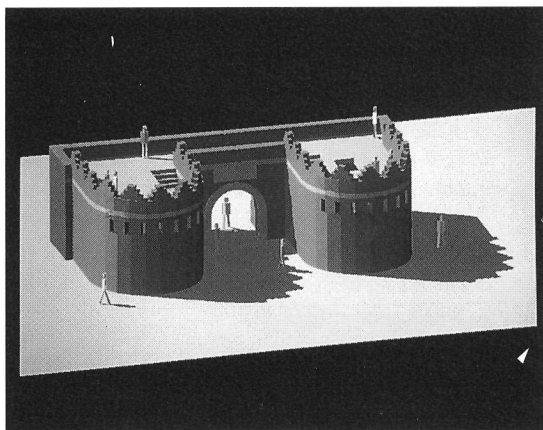
Computer simulation of the Visitor Orientation Center in Aqaba, view of interior of display area.

After four consecutive seasons of excavations at Aqaba (1986-1989), the year 1990-1991 was intended as a study season in an attempt to assess the results to date and prepare final publications. Despite the disruptions of the Gulf conflict, the program of consolidation and restoration has continued on the site, under the direction of the Department of Antiquities. The Annual Report for 1989-1990 concluded with preliminary ideas on the shape of future research in Aqaba. The present report will detail some of this year's research and development activities and will refine some of the goals for future field research in Jordan.

Augusta McMahon excavates part of the bakery in Area A8 on the Giza Plateau. Photograph courtesy of John Broughton.

VISITOR ORIENTATION CENTER

One continuing concern of this project is the interaction with tourism and education in Jordan. The first stage was the opening of a permanent museum on the archaeology of Ayla in the completely restored house of Sharif Hussein, one of the most important historical buildings in Aqaba. This was the cooperative work of Amar Khamash, Hanan Kurdi, and Jim Richerson. The second stage was a series of bilingual signs for a self-guided tour on the site explaining the archaeological remains. These signs have given an educational life to the site, but further materials are needed. Thus a third stage, the creation of a Visitor Orientation Center, is contemplated. With the strong financial backing of USAID, a bold



Computer simulation of the Visitor Orientation Center in Aqaba, air view.

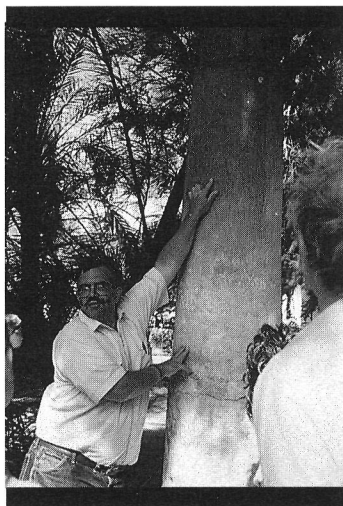
concept has been discussed and approved. This Center will be a reconstruction of the original Syrian gate, complete with its flanking towers, next to King Hussein Street (the Corniche Road). The position will be almost that of the original gate, now covered by the Corniche Road. Archaeological remains, already damaged by road construction, will be investigated in 1991 and 1992. The building itself will duplicate the original gateway, relying on vestiges of the other three gates discovered at Ayla and parallels from other early Islamic structures in Jordan.

The plans were submitted to John Sanders, head of the Computer Laboratory at The Oriental Institute. John was able to use a powerful new CAD graphics program to enable us to visualize the building. Some of the photographs in this report are taken from his computer screen; they show the gate and towers from street level and from above, accurate even to the shadows at a particular time of day. While one tower will be service facilities (restrooms, guard rooms), the other tower will contain the orientation displays. All the wall displays giving historical and archaeological information about this site and its relation to Jordan and Islamic archaeology have now been completed. The centerpiece will be a model of the medieval town (figure 1). The genius of Jim Richerson's design is that as one ascends the curving stairway to the roof, the model becomes smaller and more vertical. When one reaches the viewing platform of the roof and looks down on the archaeological remains, the memory of the model provides an

immediate understanding. The Center is not just another museum but an interactive part of the living use of ruins, a new way of conveying the excitement of archaeology in Aqaba.

ROMAN AQABA: A MILESTONE

In 1988 a standing column was found when work began on the area scheduled to become the marina of the Royal Yacht Club. This column proved to be a Roman milestone, originally set up in or near the Roman town of Aila (or Ailana). Most of the text is exceptionally clear: it commemorates the construction of the Via Nova by the Emperor Trajan, which extended "...from the Red Sea (*mare rubum*) to the limits of Syria." A French specialist in such milestones, Thomas Bauzou, is now publishing this monument. He has determined that this milestone dates to exactly 112 A.D., and that it provides important evidence for road construction linking Transjordan and the province of Palestine. Happily, the milestone (note the size next to the director, rarely dwarfed by anything) has been safely moved to the Aqaba museum.



Roman milestone, dated to 112 A.D., found at Aqaba.

CERAMIC STUDIES

Results of the excavations at Aqaba, the early Islamic town of Ayla, have progressed with a major study of the glazed ceramics found in these excavations. These ceramics were compared to regional glazed traditions and studied in the context of the impact of Chinese ceramic imports. While the foundation of Ayla dates from ca. 650 A.D., its subsequent history manifests prosperity in the eighth-tenth centuries and decline in the eleventh century. This period of prosperity directly coincides with the early development of an Islamic glazed ceramic tradition. Using some ten stratigraphic sequences from the Aqaba excavations, the development of early glazed ceramics may be traced from Coptic Glazed ware, through Hijazi, Fayyumi, and other regional traditions, to a more complex corpus of Red Splash wares. The final phase is characterized by the introduction of imported ceramics, blue-green jars, and lustre ware from Abbasid Iraq and Chinese ceramics.

The Chinese imports are mainly Qingbai and Yue bowls and coarse green storage jars. Some very few sherds of Northern White (Chaozhou?) and Changsha wares have also been found. Dating of these ceramic types in the late tenth and, more comfortably, in the eleventh centuries provides a date for the final phase of occupation at Aqaba, a century which witnessed military presence, tribal sackings, and a major earthquake. The appearance of Chinese wares at Ayla only in the eleventh century, in combination with relatively late Abbasid ceramics, suggests the Chinese wares lacked influence on western glazed ceramics.

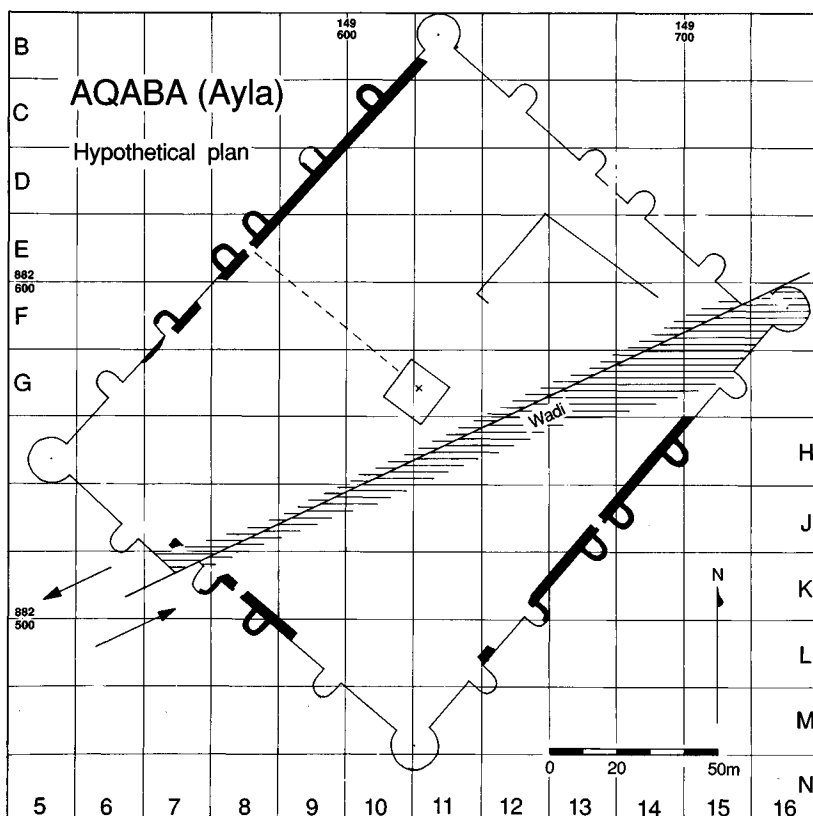
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Rather a case may be made for development of an indigenous (Egyptian?) tradition which may have exerted strong influence in the East, affecting Samarran and perhaps even Changsha ceramics.

Thus the understanding of glazed ceramics, an almost quintessential manifestation of Islamic culture, has been advanced by these excavations at Aqaba. The first phases of glazed Islamic ceramics reflect much more than a simple technological advance but may in fact indicate the strong connection between Egypt, Palestine, and the Hijaz during the sudden prosperity of the eighth century. The magnetic attraction of the Holy Cities slowly combined with the desire, and perhaps the need, for change in the material as well as social and political character of the early Islamic world. Although only a few changes in material culture, such as coinage reform, have been documented for the early Islamic period, glazed ceramics may be expected to make a major contribution through new programs of archaeological research.

FUTURE FIELDWORK

As noted in the last annual report, the fieldwork at Aqaba, particularly the 1988 and 1989 seasons, was under some pressure to save the site. The mentality which developed was akin to the limitations posed in salvage work, in which special-



Plan of the city walls and wadi of the Islamic city of Ayla, showing disjuncture fault hypothesized to be an earthquake fault.

ized scientific research areas were neglected. The studies of archaeobotany, fauna, shells, etc., were begun in 1987 and analyses of these materials are proceeding. The stratigraphic structure of this site is now more fully developed (e.g., the ceramic studies described above) and this context indicates a potential for valuable economic and social information to be derived from specialized studies. Since there is virtually no comparable material from medieval sites in this region, Aqaba has an opportunity to make major innovations in this research area.

One of the most important of these specialized studies will be the geomorphological. As noted in the Geo-historical Reconnaissance conducted by John Meloy and Basil Gomez in 1990, examination of the geology and geomorphology will be crucial for the history of Ayla and the Aqaba region. Basil has begun to investigate evidence for archaeoseismic damage, sea-level and water table change, and the origin of the wadi. A series of bore holes has been established on the periphery of the site to begin gathering data for these questions. During preparation of the site plan for the model in the Visitor Orientation Center, evidence was combined from all four seasons. This plan clearly indicates a major disruption in the city plan along the wadi. The implications of this plan are so dramatic that the plan must be regarded as preliminary and pending further confirmation.

This plan suggests that the final abandonment of early Islamic Ayla was caused, not so much from political turmoil, but from a natural catastrophe. This scenario is almost that of Sodom and Gomorrah, though the moral decline in Ayla is not justified from present evidence. Recent studies of earthquakes in this region by Ghawanmah and Daradkheh indicate that two quakes, of 1068 and 1070 A.D., were accompanied by "sinking and deformation of the crust of the earth," or, according to a contemporary account, the city was "swallowed by the earth." These same earthquakes destroyed Ramla, damaged the Dome of the Rock in Jerusalem, and produced a tidal wave in the Mediterranean so that the seas receded for the distance "of a day's walk." Archaeological evidence of this cataclysm will be useful for reconstruction of pre-earthquake landscape, potentially explaining the relationship of Ayla with the older Roman-Byzantine site and with the later castle of Aqaba to the south. Finally, such a study might be of some interest to modern urban planners in the region.