An American Expedition to Petra has completed excavation at the Main Theater at Petra after two seasons of work in 1961 and 1962. The Expedition worked in cooperation with the Department of Antiquities of Jordan and was directed by Dr. Philip C. Hammond of Princeton Theological Seminary.

Noted by Johann Ludwig Burckhardt in his first report of the identification of Wadi Musa with the ancient Sela'-Petra in the year 1812, the Theater has attracted the attention of travellers and visitors to Petra since that time. The installation is carved into the side of a mountain, just inside the Siq. Covered by the debris of almost twenty centruries, only the upper rows of seats were visible prior to the present excavations. Since the days of the traveller Irby, some 33 rows of seats, with an estimated seating capacity of about 3500 persons, have been reported in the literature. The scaena was built of masonry and was hitherto not able to be described properly because of its ruined condition and the depth of the deposit over most of it. The vomitoria were almost completely sub-surface and are not noted in earlier descriptions. Ruins of the tribunalia (e) and related passages and features have also been overlooked in the past, along with the remains of rooms and blocking walls high on the cliffs at each side of the auditorium. The drainage system of the installation also had escaped notice in previous accounts, in spite of its obvious presence along the practinctio of the media cavea, along the upper gallery of the summa cavea, and, less obviously, along the top-most gallery above the latter. Prior to the work of the American group, the Department of Antiquities undertook a preliminary clearing of surface debris in the orchestra area and a complete clearing of the vomitorium dextrum. In the two seasons of cooperative work on the site, the American expedition had, as its primary purpose, the determination of the stratigraphic history of the site, as well as the recovery of architectural, ceramic, numismatic, and epigraphic details which might serve to establish the chronological history of the Theater, itself.

In 1961, therefore, three main trenches were opened in the orchestra-stage area designed to connect and interrelate the stratigraphic evidence from the various parts of the structure as a whole. The lines of these trenches were laid out perpendicular to the diameter line from the center itinera of the cavea, to the intersection with the probable diameter of the face of the finitio proscenii, eastward in the same line to the face of the scaena frons, and northward along the probable line of the orchestra diameter previously determined. Each trench was excavated in order to investigate the stratigraphy of a definite part of the structure, and to relate that part to the rest of the excavation. In order to correlate all strata with the modern surface level, a fourth trench was laid out across the stage area from the face of the vomitorium sinistrum to the scaena frons. Following the ecxavation of these trenches, the stage area was then cleared stratigraphically in order to secure a complete picture of the details of its paving, sub-paving, and of the hyposcenium. In 1962, more emphasis was placed on planning and surveying of the Theater and its related features, but excavation was again carried out to secure further stratigraphic information. A trench was opened from the Northeast exit of the vomitorium sinistrum and carried across the stage, scaena and postscenium walls to the wadi bed, in order

to further correlate the upper stratigraphic levels with the untouched modern surface in that area and to investigate the complexion of the scaena-postscenium build in an area which had remained sub-surface because of heavier fall from above. In addition, the auleum slot, the central niche of the stage, and the stage face were excavated at strategic locations in order to clarify plan and to isolate and relate building phases. The excavations in those areas had been further facilitated by the general clearances conducted by the Department of Antiquities in the intervening period following the completion of the 1961 season. All areas of the Theater complex were planned in detail and the architectural features analyzed mathematically, stylistically, and architecturally. The complete results of these analyses will be presented in the final report of the excavations.

Stratigraphy. As a result of the stratigraphic excavations of the two seasons, the stratigraphic history of the Theater at Petra has been resolved into over 200 levels, or strata, which, in turn, have been phased into eight clearly defined periods. In summary form, these phases are as follows, from most ancient to most recent:

- I. **Period of Main Use:** the period in which the Theater was put to its designated use as a center of community activity and entertainment. This period may now be subdivided into three building phases (a) primary, (b) a refurbishing stage, with little change in plan, and (c) a later rebuilding in which plan changes and additions were made on a large scale.
- II. **Period of Early Re-use:** This period may be divided into two subdivisions and is represented by over 25 separate levels throughout the total excavations. The period is characterized by a triple-faced battered filled wall erected on and over the lower part of the **ima cavea**, built of robbed architectural debris. Robbing of pavement slabs and the construction of an intrusive drain in the area of the main door of the scaena **frons** is also to be attributed to this period. Stratigraphy indicates that this period post-dated the actual use of the Theater, as such but clearly predated its main destruction (Period IV, below).
- III. **Period of Dis-use, Pre-Fall:** this period may also be subdivided, on the basis of over ten levels of ceramically sterile soil at the bottom of the phase, followed by an upper deposit with heavy, non-occupational ceramic concentration.
- IV. Main Destruction Period: the fall level of the Theater was carefully isolated, particularly in the stage area, in order to analyze debris in terms of the build and general architecture of the scaena frons, especially in regard to its upper stories (episcenium). As a result, the lines of fall, their extent, their composition, and some of their most important implications for provincial architecture were able to be recovered and noted. The nature of this level makes it obvious that the destruction of the Theater at Petra was cataclysmic and general, both in time and in extent. Hence, the date of this general destruction must be sought in one of the major earthquakes which periodically rocked the ancient Near East. The superimposed levels above this destruction phase would seem to preclude a date as late as the quake of A. D. 746/748 (intensity index 18. 1), which destroyed Jerash and other sites in the area of Syro-Palestine, and which is sometimes referred to in terms of the destruction of other monuments at Petra, as well. Rather, a date much earlier in the known earthquake series range

(which, here, would extend form A. D. 19 onwards) would seem to be indicated. Should this be true, the date of other destruction attributable of earthquake at Petra will necessarily also have to be reconsidered.

- V. First Period of Dis-Use, Post-fall: this period is that in which the destruction debris of the preceding period was covered by obvious and characteristic alternating levels of water-laid and wind-drifted soil. Over 60 levels belonging to this phase were isolated over the excavations. The ceramic concentration and complexion of this was noteworthy, both in quantity and in chronological implications, since not all the ceramic materials found within the levels can be presumed to be simply earlier materials carried there by water and wind. That this post-destruction phase was apparently not detected in other areas at Petra is probably to be attributed to the basin-like nature of the Theater complex, which tended to retain water and wind borne levels more discernibly than did more open areas elsewhere on the site. The levels of this phase were capped by the hard-packed floor level of the next phase above.
- First Period of Re-use, Post-fall: during this period the Theater area was again VI. put to use for some temporary, and obscure, occupation. Two separate building phases are evident in a series of three robbery walls. The earlier part of the period is characterized by a wall about one meter wide, extending along the line of the finitio proscenii, and sealing off the stage area from the auditorium. Large building blocks, column drums (used as foundation courses), and other fall debris were incorporated into the make-up of this imposing wall. Somewhat later in the same period, two other subsidiary walls were built in relation to this main robbery wall, but were not bonded into it. Blocking of the main door (the "Royal Door" of Roman dramatic convention) of the scaena froms took place during this period, as well as the blocking of the outer door of the posts-seenium at the northern end of the installation. Lack of specific evidence precluded determination as to the extent of other exit blockings, however. The precise use of this artificial enclosure, with its extensions, cannot be determined, since no distinctive occupational debris was associated with the phase to narrow down function. Housing, industry, or herding facilities of a temporary nature could all be possible uses.
- VII. Second Period of Re-use, Post-Fall: this period, again with two subdivisions, represents only casual re-use of the Theater area, perhaps for camping purposes, and is only of stratigraphic interest.
- VIII. Final Phase, Post-fall, to Modern Surface: the phase, which represents the accumulated debris, and some casual use, of the Theater area, presents little of interest, either stratigraphically or chronologically. Prior to the present excavations, the modern surface level had covered the Theater complex up to the practication of the ima-media caveae, almost completely obscuring plan and specific features.

The specifics of the period of main use (Period I) and the data supplied by the related main destruction period (period IV) will be considered in the forthcoming final report of the excavations. It may be said, here, however, that the excavations have produced considerable material of basic architectural interest, in terms of the Theater at Petra, per se, and, in a

broader sense, relating to the development of provincial Roman period theatrical structures in the Near East, as a whole. In addition, the plans and architectural details which the Theater at Petra has supplied will furnish one of the most complete pictures of such a structure hitherto possible, because of the relative isolation of the ruins and the relative lack of post-fall occupation of the site. The details of plan, order, and related architectural aspects will also furnish chronological material, which, when coupled with the ceramic, nimismatic, and epigraphic data, will add to a further understanding of Petra's role in Near Eastern history and will furnish a good deal of valuable comparative material for the field at large.

Among the individual finds which should be noted at this point, are the quantities of architectural pieces which were preserved by the enveloping debris of the first post-fall period. Mouldings, facings, decorative carvings, plastered and cemented pieces, iron and bronze fixtures, and similar details will permit an extensive analysis of the order involved, the techniques employed in the building, and the historic relationships of the structure. Epigraphic data, especially that found as part of the columnar place markings, will provide a good deal of specific information concerning the stage of Nabataean script development reached, and in use, by the period involved. Unfortunately, the breakage and virtual pulverization of the frieze blocks of the episcenium precluded securing any connected inscriptional information from that source. Numismatic materials, although not extensive, will also provide some supporting chronological data, to be related to the ceramic and stratigraphic remains secured. The damaged statue of Hercules, found during the 1961 campaign, is also of some interest, from the standpoint of its place in Neo-Attic sculpture and on account of its own intrinsic excellence, even if it provides little in the way of definitive chronological significance.

Conclusions: No final chronological conclusions will be drawn until the final report of the excavations has been completed, but certain tentative indications may be noted, however:

- (1) The Nabataean order of the construction, in its two earliest phases of Period I.
- (2) The (slavish) adherence to the Vitruvian plan and modular canons.
- (3) The plan and its relation to other kanown parallels in its various aspects.
- (4) The chronological possibilities indicated by certain specific building techniques e.g. the stage of concrete technique reached, the vaulting arrangements, the module used, painting technique, plan arrangement, dressing, and similar aspects.
- (5) The ceramic data furnished by the stratigraphy and by the concrete fill found in the fall debris.
- (6) The cultural prominence of the site at an early date, and its degree of eclectic Hellenization, as an indication of the local susceptibility to foreign culture prior to the onset of the Roman period and to actual Roman occupation.

Summary of Results: The major archaeological results of the two seasons may be summarized as follows:

(1) Stratigraphy: the stratigraphy of the site, as an indication of the course of its later history, from the modern surface to the bed-rock floor of the installation, has been analyzed, drawn in section, phased and interrelated for the first time since the rediscovery of the site in 1812.

- (2) Plan: the plan of the stage and scaena frons, as well as the general plan of the complex as a whole, has been established for the first time since the destruction of the Theater in antiquity. In addition, mathematical and physical data have been secured which will permit complete analyses of the separate parts of the complex.
- (3) Architectural Detail: the amassing of the architectural detail and data (column types, fixtures, building techniques, decorative and functional devices and other features), the classification of architectural members (cornices, orders, columnar size and denomination, and general plan), the purely epigraphic and artistic architectural informarion secured (inscriptions, statuary, painting), along with over all interpretations of it (comparisons and relationships to parallels), all represent a major contribution to the scientific study of the provincial Roman theater type in the Near East. The specific data from the present excavations and clearances will finally permit a definitive analysis of the place of the Theater at Petra within the greater architectural context, and for a more precise discussion of the chronology involved in the history of the site of Petra, itself.

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