

SOME NOTES ON THE ROMAN THEATRE OF BETH-SHEAN (SCYTHOPOLIS)*

Following the publication of the preliminary report of the archaeological excavations in the Roman theatre in Beth-Shean,¹ a number of relevant notes are in order concerning the oval cells or so-called *tholoi* connected with the *vomitoria*, the course of the excavations on the site, and the epigraphical material.

1) *The oval cells (the so-called tholoi)*

The nine oval or "heart-shaped" cells² which were discovered in the theatre doubtless arouse great interest and we would like to present a suggestion which is both old and new regarding their purpose and use. As was noted in the report, the cells are located in front of the *praecinctio* and under the first seats of the *summa cavea*. Although the ceiling has not been preserved in its entirety on any of them, signs of a ceiling remain on several of them, especially on the second cell on the east, on which we can plainly distinguish the lower portion of its domed roof. This fact constitutes unequivocal archaeological evidence of the nature of the ceilings of the cells in question, and on this basis it is possible to reconstruct a *tholos*-like domed ceiling. It is, therefore, difficult to accept G. C. Izenour's reconstruction of the cell and its

* Our gratitude is due to Mr. D. Levinson, National Parks Authority, Tel-Aviv, who has kindly agreed to give us the plan and has permitted us to publish it. We wish to thank Prof. D. Ussishkin, Head of the Institute of Archaeology, Tel-Aviv University, for his assistance, and Miss Yehudith Dekel of the same Institute, who copied the plan. The plan of the theatre was originally surveyed and drafted by Mr. S. Slomanitzky of Kibbutz Beth Alpha.

¹ S. Applebaum, "The Roman Theatre of Scythopolis", *Scripta Classica Israelica* 4 (1978) 77-105. From January to April 1963, I (A.O.) conducted renewed excavations in the theatre on behalf of the Department of Antiquities and Museums and the Department of Landscaping; see *Hadashot Archaeologiot* 6 (April 1963) 16 (Hebrew).

² They are similar in shape but their size and plan are not uniform.

barrel-vault ceiling.³ There is a narrow passage, less than 1 m. wide, leading from each cell to the two wider parallel passages of the *vomitoria* which lead on to the exit. We have no doubt as to their uniqueness, not only among the Roman theatres in Palestine, but also in the entire Roman world. It turns out that at present they are an exceptional architectural element, despite the fact that there is literary evidence regarding their purpose.

In the course of the excavations and the work of uncovering in 1963, one of the cells, the fourth on the west, randomly chosen, was examined in an attempt to determine its nature. We should note that all nine cells were floored with small unworked basalt stones. In the course of the excavation of the cell, we reached a depth of *ca.* 70cm. below the floor. It became clear that the area below the basalt stone floor was filled with stones and dirt which served as the foundation level of the floor. Therefore, the excavation of the cell did not enlighten us further or provide us with new finds which could aid us in understanding the purpose of these structures. The original hypothesis, namely that these cells served as absorption pits, toilets, and the like was abandoned.

C. R. Conder and H. H. Kitchener, who carried out the survey of Western Palestine on behalf of the PEF, published in 1882 what they had seen in the area concerning the oval cells:

“From each vomitory a passage $2\frac{1}{2}$ feet wide leads at an angle to a cage with a domed roof like part of a hollow sphere. The greatest height of the cage is 6 feet. On the plan the cage is about $\frac{3}{4}$ of a circle of 8 feet diameter. The marks of sockets for bars are observable in the cages where the wild beasts were no doubt placed”.⁴

In their work they also cite other investigators such as E. Robinson and V. Guérin who visited Beth-Shean and the Roman theatre before them and offered opinions on the significance and purpose of the oval cells. It is interesting that both Robinson and Guérin regard the

³ Compare G.C. Izenour, *Theatre Design* (New York 1977) 40, fig. 2.15.

⁴ C.R. Conder and H.H. Kitchener, *The Survey of Western Palestine*, II (London 1882) 107.

structures as resonating chambers, while Conder and Kitchener who quote their predecessors' opinions in their book, express an entirely different and far-reaching opinion which is insufficiently founded, namely, that the cells served as cages for wild beasts. Robinson writes:

"All the interior passages and vomitories are in almost perfect preservation. According to the travellers just named, it has one peculiarity, which Vitruvius says was found in few of the ancient theatres, viz. oval recesses half way up, intended to contain brass sounding-tubes."⁵

Guérin's treatment of the meaning and purpose of the oval cells is similar:

"De distance en distance, on remarque des passages bas et étroits, où un homme seul peut pénétrer en se courbant, particularité que l'on observe seulement dans un petit nombre de théâtres anciens, et qui avait pour but très-probablement de répercuter la voix des acteurs."⁶

Since the publication of these opinions, the discussion of the significance and purpose of the cells in question has been renewed, especially since the uncovering of the theatre. Although assumptions, suppositions and proposals by various investigators have multiplied,⁷ amazingly enough, none of these has dealt with the suggestions of Robinson and Guérin, and little attention has been paid to the work of Vitruvius which contains a solution to the problems of the resonance and acoustics of the ancient theatre. In his book on the excavations at Caesarea, A. Frova⁸ mentions the oval cells which open on to the *praecinctio*, but he fails to deal with their significance and purpose. Izenour, in his work on the *Theatre Design*,⁹ has doubts about the

⁵ E. Robinson, *Later Biblical Researches in Palestine — 1852* (Boston 1857) 328; cf. also: Conder and Kitchener (supra n. 4) 102–103.

⁶ V. Guérin, *Description géographique, historique et archéologique de la Palestine, 'Samarie'*, I (Paris 1874) 286; cf. also: Conder and Kitchener (supra n. 4) 107.

⁷ See Applebaum (supra n. 1) 86, n. 13; see also: Y. Aharoni, *miDan ve'ad Eilat*, III, 5 (1959) 36 (Hebrew); I. Ben-Dor, *Guide to Beisan* (Jerusalem 1943) 18–19.

⁸ A. Frova, *Scavi di Caesarea Maritima* (Milano 1965) 185, n. 3.

⁹ Compare Izenour (supra n. 3) 39–40, figs. 2.13–2.16, 154–155, n. 17.

acoustical effectiveness of the oval cells in the Roman theatre of Beth-Shean. He does not accept Vitruvius' theory and calls it "Romantic nonsense?",¹⁰ or "... the legendary Vitruvian sounding vessels".¹¹ In Izenour's opinion the answer to the question of the meaning and function of the oval cells is still insufficient. He writes:

"... we can never be sure of their function and meaning, but since the notion of sound reinforcement as reported by Vitruvius is pure fantasy anyway, there is little point in trying to either prove or disprove an idea which at best is only an interesting *divertissement*".¹²

However, Izenour does not suggest any other possible function or significance for the cells.¹³

It is difficult to accept Applebaum's¹⁴ unequivocal determination that the *tholoi* were "without access to the *praecinctio*." It is true that on the basis of the state of preservation of the cells it is not easy to determine whether they actually had openings onto the *praecinctio*. Yet in the second cell on the east there is a tendency to narrow the shape of the cell, so that it resembles a ship's prow, pointing towards the *scena* (north-west). We must remember that only two courses remain. This shape indicates the existence of an opening to the *praecinctio* and *scena*. This distinction and the orientation of the other cells towards the *scena* indicate that openings to the *praecinctio* were cut into them. It is interesting that it is also Lauer-Belart's opinion, which was quoted by Applebaum,¹⁵ that "each *tholos* gave access northward to a stair on the

¹⁰ Izenour (supra n. 3) 155, n. 17.

¹¹ Izenour (supra n. 3) 154, n. 17.

¹² Izenour (supra n. 3) 155, n. 17.

¹³ We are grateful to Mr. A. Kahanoff of Bat-Yam, Israel, for his kind assistance and useful advice on aspects of acoustical engineering. Mr. Kahanoff has drawn our attention to the book by Izenour and to some problems raised by the oval cells in the theatre of Beth-Shean. In his opinion no acoustical purpose was served by the stairs (*balei*) built at the axis of each oval cell. It seems to him that Vitruvius' theory was correct, i.e. that the oval cells were built for acoustical purposes, but apparently were never used, because they were not acoustically effective.

¹⁴ Applebaum (supra n. 1) 86.

¹⁵ Applebaum (supra n. 1) 86.

praecinctio which led to the upper *cavea*." On the other hand, Applebaum attempts to take a contrary stand and thus undermines his earlier opinion when he writes:

"Furthermore, if the *tholoi* once gave access to the *praecinctio*, all were later blocked off from it, presumably when ascent to the *summa cavea* was afforded by stairs from outside the theatre on the south."¹⁶

It would be interesting to know on what basis he determines that the *tholoi* "all were later blocked off from it."

In our opinion, the solution to the problem must be sought in Vitruvius' work, as was already proposed by Robinson. Vitruvius' remarks deal directly with the problem and lend reality to the picture.¹⁷ His description is very germane to our subject since the oval cells in the Roman theatre of Beth-Shean are located at the head of each staircase, under the lower spectators' seats of the *summa cavea* and face the *scena*. R. de Fusco in his book on Vitruvius¹⁸ includes a sketch from another book on the work of the Roman architect published in 1758.¹⁹ The opening of a resonating chamber for the absorption and amplification of sounds and voices facing the *scena* is also depicted in this sketch.

Between Vitruvius' description and the archaeological and architectural conditions in the Roman theatre in Beth-Shean there seems to exist harmony which can not be ignored. This correlation enables us to understand better what Vitruvius has written. The conclusion to be derived from it is that the oval cells or *tholoi* served as resonating chambers.

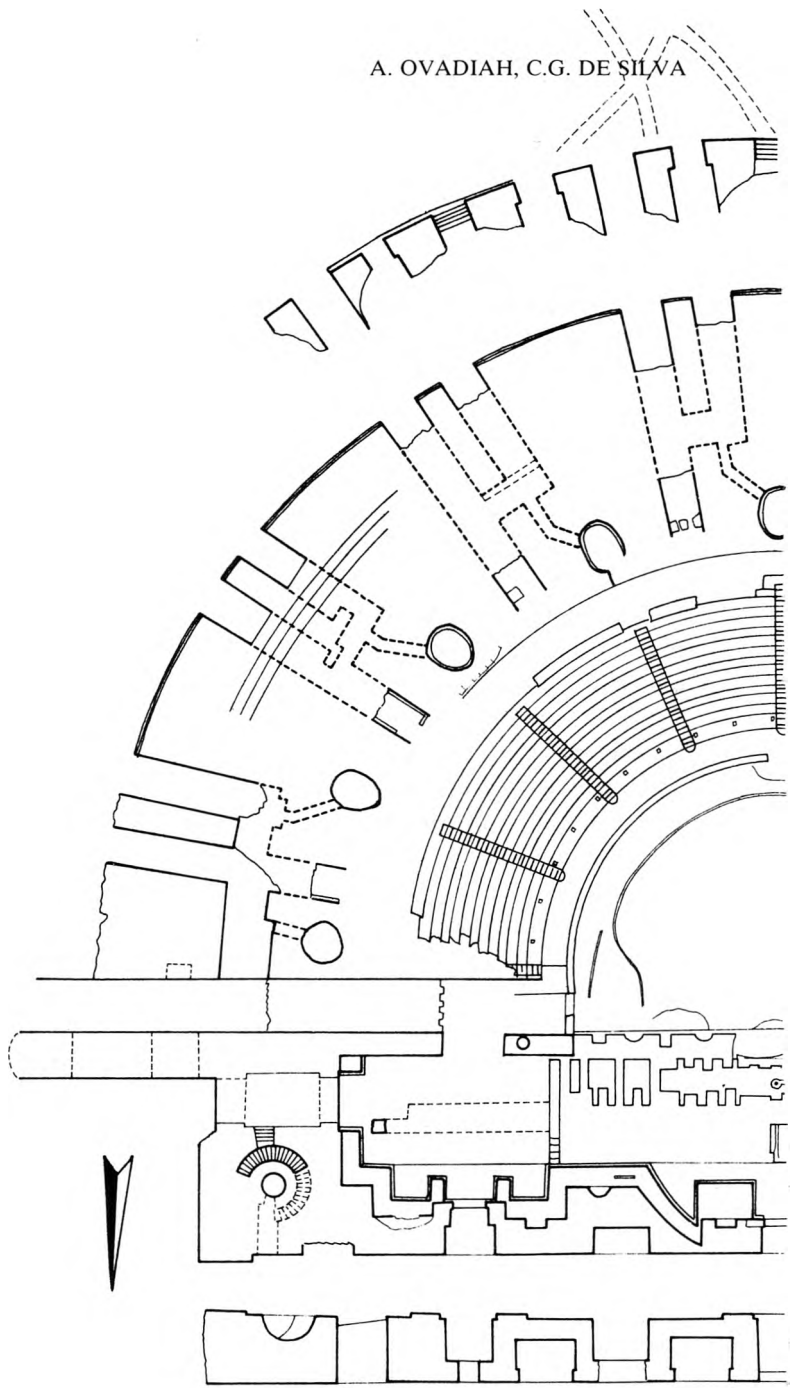
Applebaum and Lauer-Belart are of the opinion that the oval cells in Beth-Shean served as a foundation for the seats of distinguished spectators and that stairs led to them from the cells themselves. Applebaum's comparison to the *tholoi* of the theatre in Beth-Shean is

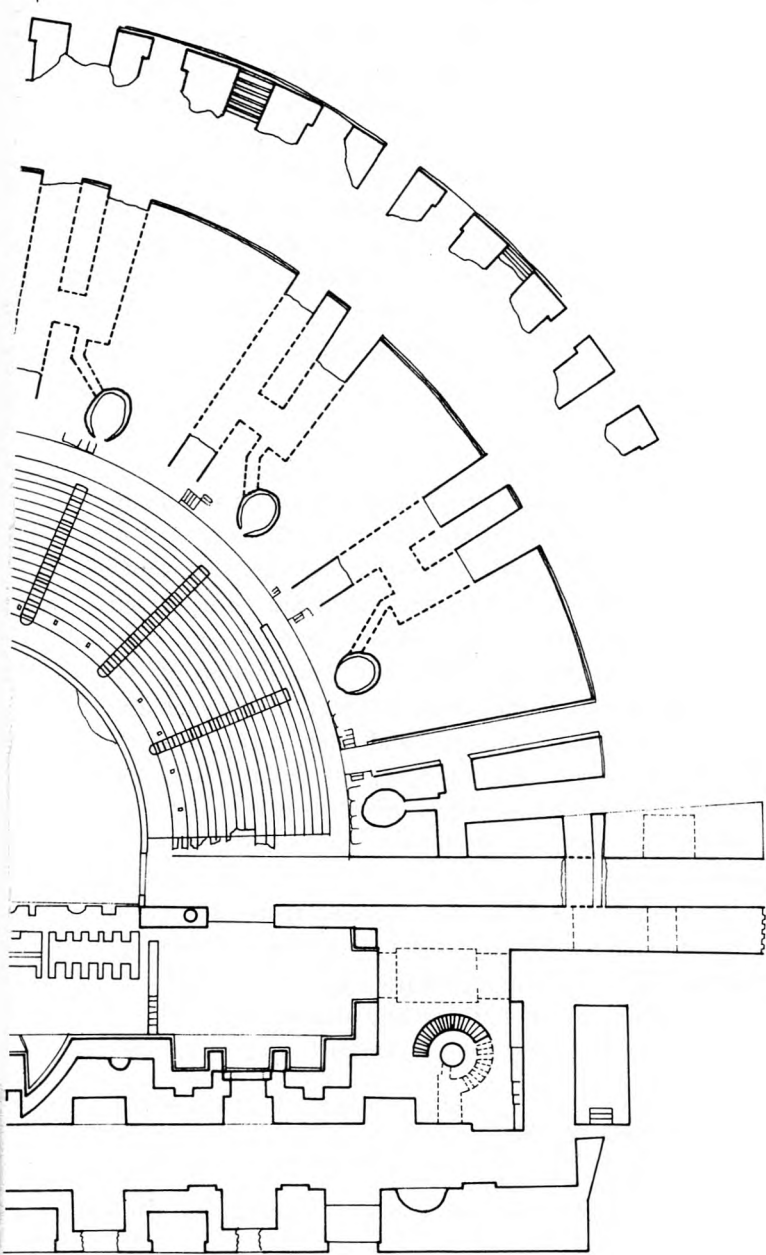
¹⁶ Applebaum (supra n. 1) 87, n. 14.

¹⁷ Vitruvius, *De Architectura* 5.5 (Loeb Classical Library, I [Cambridge, Mass. 1962]). For further discussion of the harmony and acoustics see also: 5.3-4.

¹⁸ Compare R. de Fusco, *Il Codice dell'Architettura, Antologia di Trattatisti* (Napoli 1968) 75ff., figs. 16-17, 22.

¹⁹ Compare B. Galiani, *L'Architettura di M. Vitruvio Pollione* (Napoli 1758).





not plausible.²⁰ Our reservations derive from the fact that in the theatre of Autun in France, no cells like the ones in Beth-Shean were found, but only a "loge" near one of the entrances to the theatre to which led external stairs, which served as seats. We may note, therefore, that the oval cells in the theatre in Beth-Shean are the only ones known to us at present in the architecture of the ancient theatres which served the purpose mentioned by Vitruvius. They thus make the theatre in Beth-Shean unique in the Roman world. Vitruvius mentions resonating chambers containing bronze vases in theatres in various districts in Italy, but not in Rome proper, and in several cities in Greece. He writes in general, not specifying names of settlements except for one place in Greece.

2) *The external peripheral wall*

We should discuss this wall, which bounds the theatre on the south side, in greater detail. Most of it was uncovered by one of us (A.O.) in 1963.²¹ In the course of the excavations, four staircases were uncovered which had been built on a fill of earth and stones. They are incorporated into the wall and formed an integral part of it. That is, they were planned together and built at the same time. An examination of the elements in the area shows clearly the close connection between the external peripheral wall and the staircases and does away with all assumptions as to their structural and chronological separateness, i.e. that they should be considered as two stages of construction. Between every two staircases in the external peripheral wall there are three openings, two located opposite a pair of *vomitoria*, and one to the right of them opposite the southern wall of the theatre. It is difficult to explain the nature and purpose of several caves quarried in the hill opposite the peripheral wall; they were partially excavated but proved archaeologically sterile, being full of nothing but alluvial soil.

As one of us (A.O.) has mentioned on various occasions,²² the

²⁰ See Applebaum (supra n. 1) 87, n. 15; see also: A. Grenier, *Manuel d'archéologie gallo-romaine*, 3 (Paris 1958) 800-801, fig. 262.

²¹ *Hadashot Archaeologiot* 6 (April 1963) 16 (Hebrew). The sketch of the external peripheral wall in Applebaum's plan is incomplete.

²² Lecture at the Second Archaeological Conference in Israel, Jerusalem, 14-15 March 1973 (A.O.).

external peripheral wall testifies to the intensiveness of construction in the theatre. The four staircases were supposed to lead from outside (on the south) to the seats in the *summa cavea*, probably by means of radial bridges. This design was supposed to ease the pressure on the *vomitoria* during the entrance to and exit from the theatre. It seems that the three openings alternately set between the staircases were intended to enable traffic to flow via the *vomitoria*, as there is no other way in which to understand their location opposite the *vomitoria*. Hence it would seem that the *vomitoria* did not go out of use nor were they meant to be blocked up with the construction of the external peripheral wall. The most obvious and clean-cut evidence for the unfinished state of the external peripheral wall and the staircases incorporated into it is the slight distance between it and the slope of the hill which constitutes a "bottleneck" to the passage of the audience and its entrance into the theatre. The width of the passage, as measured after the excavation of the place, is 1-2m. Before the excavation and uncovering of the passage, the distance may have been less. It seems that the main reason for the survival of the narrow passage was inherent in the unfinished state of the work of quarrying or excavating the slope of the hill.

It is reasonable to assume that the work was not completed and the external peripheral wall and the staircases within it were never used while the theatre was in operation. If so, then the ascent to the *summa cavea*, contrary to Applebaum's view,²³ was not afforded by the stairs from outside the theatre on the south. The radial bridges which Applebaum mentions²⁴ and which were supposed to bridge the upper part of the external peripheral wall and the *summa cavea* are purely conjectural; no remains were discovered in the area which would justify the assumption that they existed.²⁵ Therefore, we may suppose that they were within the framework of the general design of this area of the theatre.

²³ Applebaum (supra n. 1) 87, n. 14; 94.

²⁴ Applebaum (supra n. 1) 87.

²⁵ On the external part of the southern wall of the theatre we can distinguish two corbelled recesses. They may be signs of the existence of the radial bridges or may have served as a support for the passages between the external peripheral wall and the *summa cavea*.

It is difficult to determine with certainty whether the external peripheral wall is an integral part of the preliminary design of the complex or its construction had been decided upon after the completion of the principal portion of the theatre while it was in active use.²⁶ We should also note that in the course of the excavation and cleaning of some of the seats of the *summa cavea*, their foundations were found to be preserved in their entirety although the seats themselves had been extracted in the course of time.²⁷

3) *The epigraphical material*

In addition to the epigraphical material mentioned in Applebaum's paper, we should mention here another Greek inscription incised on an altar which was discovered at the time of work by one of us (A.O.) on the theatre. The altar belongs to the period when the theatre was in use, and bears the dedication: "To the god Dionysus, Germanus (dedicated)." There is no need to deal at length again with the importance and implications of this epigraphical discovery because it was discussed a number of years ago in an article on the Greek cults in Beth-Shean.²⁸

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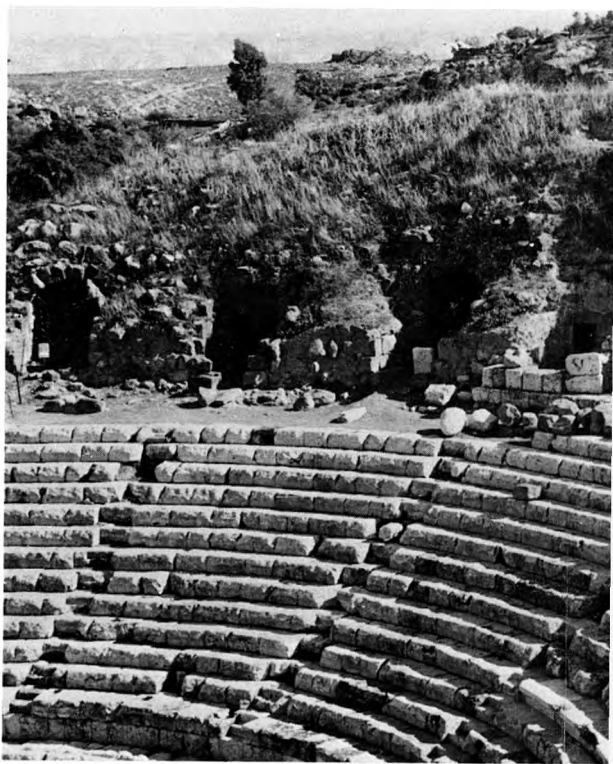
ASHER OVADIAH AND CARLA GOMEZ DE SILVA

²⁶ In Applebaum's opinion, based on the archaeological finds, the external peripheral wall and the theatre date from the same period; see Applebaum (supra n. 1) 88.

²⁷ *Hadashot Archaeologiot* 6 (April 1963) 16 (Hebrew).

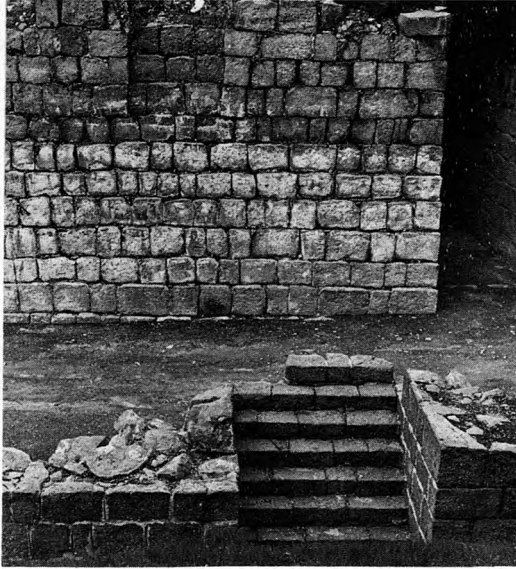
²⁸ A. Ovadiah, "Greek Cults in Beth-Shean/Scythopolis in the Hellenistic and Roman Periods", *Eretz-Israel* (Nelson Glueck Memorial Volume) 12 (1975) 122-123 (Hebrew; English summary in 127).

Roman theatre of Beth-Shean: General view -



– lower and upper *cavea*, *vomitoria* and oval cells.





Roman theatre of Beth-Shean: one of the staircases in the external peripheral wall and the niche opposite it (facing north).



Roman theatre of Beth-Shean: the external peripheral wall (facing east).



Roman theatre of Beth-Shean: floor of one of the oval cells.



Roman theatre of Beth-Shean: one of the oval cells.