THE HELLENISTIC SCENE BUILDING OF THE THEATRE AT MESSENE

Consideration of its original form and Roman reused blocks

This paper reports on the analysis of the original form of the Hellenistic scene building of the Messene Theatre, which is believed to have consisted of two parts: a *proskenion* consisting of a 26.5-m-long Ionic colonnade with wooden *pinakes*, and a *skene* with three *thyromata* to provide costume-changing space for actors. Through the analysis, it was also determined that the Roman scene building was constructed by systematically reusing the architectural blocks of the Hellenistic scene building. The normal Ionic column drums of the *pulpitum* appear to have been transported from another building, most certainly the Arsinoe Fountain.

Keywords: Hellenistic architecture, Theatre, Scene building, Restoration, Reused block

1. Introduction

Much has been written about Greek Hellenistic theatres, and previous investigations of the most well-preserved Hellenistic theatres, such as those found in Priene\(^1\) and Epidaurus\(^2\), have provided us with basic knowledge on Hellenistic theatre construction, especially on their stone scene buildings, which normally consisted of a high raised stage (*proskenion*/*logeion*) and a two-storied scene buildings (*skene*)\(^3\). In contrast, there is limited information on other Greek theatre forms in the east because of later period rebuilding, primarily dismantling and reforming during the time of the Roman imperial period. At that time, most Hellenistic scene building had been transformed from their original Greek traditional style to reflect the Roman contemporary style. However, thanks to the recent excavations, new information on Hellenistic scene buildings regarding the theatres at Aigeira\(^4\), Eretria\(^5\), Delos\(^6\), and Apollonia\(^7\) has become available to scholars. As a result, attention is now being focused on the architectural context of the Hellenistic scene buildings\(^8\), with scholars paying particular attention to the dismantling and the rebuilding of the scene building\(^9\).

In the case of the Hellenistic scene building at the Messene Theatre, it is particularly noteworthy that the majority of the foundation of the Roman scene building was constructed by reusing blocks from the previous building\(^10\). Based on our recent survey of 2016, these reused blocks appear to have been extracted, modified, and incorporated into the new structure in a systematic manner. In this context, the present paper aims to report our recent observations of the original Hellenistic scene building, and to estimate its original form by considering the reused material with related Hellenistic scene buildings\(^11\). It should be noted that the present article has been partly appeared in the previous report\(^*1\).

2. Remains of the Hellenistic scene building

Most of the preserved scene building remains trace back to the Roman period rather than the earlier Hellenistic period, which is normally placed in the second half of the second century B.C.\(^12\). The Roman scene building plan consisted primarily of three parts, stage front (*proscaenium or frons pulpiti*), stage (*pulpitum*), and *scaenae frons wall* (Fig. 1). Although no portion of the wooden stage floor has survived to the current position, a northeast view of the open-air pulpitum can be seen in Fig. 2. This photograph also shows the long narrow foundation of the Hellenistic *proskenion*. This foundation, which is located between the stage pillars and the foundation of the *scaenae frons*, was approx. 26.55 m long and 0.90 to 1.10 m wide, and was made of two parallel lines of

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poros stone, which was a common building material not only in the high Hellenistic time of Messene’s history, as evidenced by the Stoas of the Asklepieion and the Arsinoe Fountain, but also in Hellenistic architecture elsewhere on the Greek east.

The upper face of the poros stone foundation is approx. 1.15 m lower than the floor of the three niches of the two hospitalia and central valvae regia, and is separated by 0.65 m from the Roman scaenae frons foundation at the west end, and about 0.85 m from east end. Thus, rather than running parallel to the Roman scene building, the axial line of the poros stone foundation is offset counterclockwise by about 1 degree, probably because of a construction error. Both ends of the poros foundation are 1.20 m separate from the paraskenia. The L-shaped corner of the west end of the poros foundation indicates the end of the proskenion. Although no similar traces can be seen on the east end, when viewing from the interior, a poros stone can be seen under the proscaenium wall, so it is likely that there was a L-shaped corner at both ends of the Hellenistic proskenion, probably accompanied by the Hellenistic paraskenia. The proskenion foundation is the only surviving portion of the Hellenistic scene building that remains in situ.

3. Hellenistic scene building and Roman reused block

The author’s investigation and new observations of the Roman scene building reveal that Hellenistic architectural materials had been reused in parts of the Roman scene building. It is conjectured that when the Roman scene building was constructed in the second half of the second century B.C., most parts of the architectural members of the former Hellenistic scene building were carefully dismantled and incorporated into the design of the Roman scene building. Those reused architectural members include not only the proskenion foundation and Ionic attached half-column drums, but also blocks of the skene wall, the architrave-cornice, and the backer of the skene building, etc.

3-1. Proskenion foundation

It is suspected that all of the floor slabs of the two hospitalia and the central valvae regia niches were originally reuse from the foundation of the Hellenistic proskenion. Fig. 3 shows another northeast view of the Messene Roman scene building, while Fig. 4 shows the plan of the east hospitalia. The floor slabs of these niches is approx. 0.233 to 0.30 m high (8 measurements) and believed to be the stylobate of the proskenion. The proskenion foundation was constructed very simply and the height of the stylobate block was varied. It is not possible to identify the original thicknesses of these slabs because they were modified to fit into each of the niche floors, but the thinnest slab was measured as 53 cm on the east hospitalia, which is slightly bigger than the depth of the candidate attached Ionic half-column drum of approx. 50 cm, as discussed below. In any event, the thicknesses of the stylobate blocks varied as well, probably because
there was no need to keep the back side of the stylobate straight17).

3-2. Ionic columns of the *proskenion*

The wooden stage floor was supported by 18 stone pillars that were originally produced in the Hellenistic period (see Figs. 1–3, Table 1). There are two pillar types: Ionic attached half-columns and Ionic normal columns. Both column types were cut at heights of appropriately 1.2 to 1.3 m to support the Roman wooden stage. The Ionic attached half-column drums consisted of six blocks 0.37 to 0.43 m in diameter and 0.48 to 0.49 m in depth. Fig. 5 shows a photo of an Ionic attached half-column drum (T64), while Fig. 6 shows a drawing of the same column. These blocks were equipped with slots (approx. 12 to 16 cm wide and 3 cm deep) on both sides, thereby suggesting that they were originally fabricated to hold prepared wooden painted panels (*pinakes*) for use in the *proskenion*. The front sides of the Ionic attached half-column have 10 flutes.

A normal Ionic column consists of 12 blocks and has a lower diameter of 0.45 to 0.48 m (4 measurements). Fig. 7 shows a normal Iomic column drum (T57), while Fig. 8 shows a drawing of the same column drum. Four of those blocks are the bearing base, but because of the modern reconstruction work, it was possible to identify the attic-type moulding of Block No. T57 only18). Normal Ionic columns also have 20 flutes, as double number of 10.

Both column types were made of local *poros* stone. The columns were finished with stucco, as seen in the case of the other two Messene public buildings mentioned previously. In particular, it was noted that flute sections of both columns type are quite similar to each other, as well as to the Corinthian columns of the Stoa of the Asklepieion19) and Ionic columns of the Arsinoe Fountain20). Taken together, the characteristics of both column types are indications
that they were originally from former public buildings of the Hellenistic period that had been produced.

3-3. Ionic attached half-capital of the *proskenion*

In the survey discussed below, which was conducted in 2012, some pieces of an Ionic column drum were discovered near the northeast corner of the Agora, as shown in Fig. 9. These architectural blocks include some Ionic attached half-capitals with necking. The upper diameter of the column was approx. 34 cm, and the depth of the block was approx. 50 cm. The attached half-columns are dressed by 10 flutes on each front side, and both sides of the necking have slots that are approx. 15 cm wide. The given dimensions and stylistic characteristics clearly indicate that these architectural blocks were originally part of the Hellenistic scene building. While their archaeological context is not yet clear, it seems certain that these Ionic attached half-capital blocks were reused in public buildings of the agora, during the time of Roman imperial period.

3-4. Wall blocks of the *skene*

The platform and *podium* of the Roman scene building was almost completely founded in reused cut-stone from the Hellenistic period. Fig. 10 shows detail of the Roman scene building platform. The *scaenae frons* platform was made of white limestone from the bottom up to the floor level, but the wall of the *scaenae frons* consisted of brown *poros* stone, as can be seen in Fig. 12. Here, we can see how the limestone and *poros* stone blocks were converted into the north elevation of the *scaenae frons* foundation, which faces the *pulpitum* (Fig. 10). On the lower part of the foundation, there are two courses of ashlar limestone arranged in isodomic masonry technique. The lower course is approx. 0.41–0.43 m in height, while the upper course is approx. 0.48 m in height. The third row forms a step to support a wooden floor.

What is remarkable about this feature is that there are dowel-tailed clamp traces on the vertical face (observing surface) of the lower course (rather than on the top face), but not that of the upper course. Details of the Roman scene building can be seen in Fig. 10. These clamp traces are, of course, not intended to connect with each other, but they do prove that the blocks were reused. After all, the height difference of these two foundation courses indicates that the upper course blocks were reused in the original direction. In contrast, the lower blocks were rotated so that what was originally the top or bottom faced outside. The standardized dimensions of the limestone used in both courses also support this interpretation. Thus, it can be said that these two sets of blocks were set facing each other to form the wall of the *skene*, and were bound together with clamps.

From an examination of the mason marks observed on the limestone foundation surfaces, it can be conjectured that this conversion was undertaken by local stonemasons in a systematic way. Fig. 11 shows mason’s marks on the Roman scene building23). The first course has numeric alphabet marks in sequence from east to west — A, A-B, B-Γ, ..., Ψ-ω — which were obviously used as references. The second course was originally marked with B, meaning ‘second’ course, by adding marks before or after: AA-B, BB-Γ, ΓΒ-Α, ΔΒ-Α, etc. This supports our interpretation of the systematic incorporation of architectural blocks from the rear wall of the Hellenistic scene building into the Roman scene building24).

3-5. *Architrave-cornice* and backer of the *skene*

The third course of the Roman scene building platform, which can also be referred to as the stylobate and toichobate of the *scaenae frons* wall, is set slightly

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Table 1 Messene. List of Ionic attached half-column and normal Ionic column drums of the *pulpitum*

<table>
<thead>
<tr>
<th>Number (from E to W)</th>
<th>Block height (m)</th>
<th>Upper diameter (m)</th>
<th>Lower diameter (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>0.422</td>
<td>0.435</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>0.426</td>
<td>0.464</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>0.432</td>
<td>0.445</td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>0.414</td>
<td>0.435</td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>0.460</td>
<td>0.474</td>
<td></td>
</tr>
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<td>09</td>
<td>0.436</td>
<td>0.463</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0.470</td>
<td>0.475</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0.470</td>
<td>0.475</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0.463</td>
<td>0.476</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>0.427</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>1.263</td>
<td>0.442</td>
<td>0.463</td>
</tr>
</tbody>
</table>

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Table 1 Messene. List of Ionic attached half-column and normal Ionic column drums of the *pulpitum*
lower than the two abovementioned foundation courses. The blocks of this course are carefully placed approx. 25 cm back from the second course in order to provide a space to hang beams for the wooden stage floor (Fig. 3). These limestone blocks are approx. 0.36 m in height, which is somewhat lower than the former lower two courses, and were prepared not only for use along the Roman stage but also in the margins of the three niches, probably so that they could be visible from the audience. The back sides were made of reused poros stone, just like the upper courses. Some of the front blocks bear a narrow course of moulding on the bottom of the face, while other blocks bear a narrow taenia on the top instead of moulding (see Figs. 4 and 12 for details).

The original measurements are as follows. The average architrave-cornice block is 0.36 m in height (7 measurements) and 0.35 m in bottom width (6 measurements), whereas the backer is approx. 0.35 to 0.36 m in height (2 measurements) and approx. 0.34 m in bottom width (1 measurement). Based on our knowledge on Hellenistic period stone scene building, we can conjecture that the skene was built in rough finished stone masonry, and no ornamentation (such as the order of the proskennion) was ever applied25. If we keep in mind the careful treatment of elevation in reference to Hellenistic public buildings, it might be not curious if the grave monuments of the Messene gymnasion-complex are taken up as candidates for comparison. Indeed, the profile of the crowning moulding of the architrave-cornice block is quite similar to those seen on two of the grave monuments26.

The architrave-cornice block consisted of two parts: the architrave and the crowning moulding, either with or without dentil moulding. Owing to its service as the doorway lintel, one block (K3.46) received special treatment: Its central part bears three faciae instead of two, so it can be used to estimate the total height of the ‘original designed’ blocks. Its height, 0.365 m27, is as same as the architrave-cornice blocks (0.35 to 0.36 m, as mentioned above). It is said these grave monuments were built between the end of the third and the middle of the second century B.C.28, which is close to the period when the Hellenistic scene building was erected29. Taking into consideration this parallel example, it can be said that these architrave-cornice blocks originally belonged to the Hellenistic scene building, most likely the skene wall.

The lengths of the architrave-cornice blocks vary from 1.647 to 2.23 m (7 measurements) and the backer blocks are from 1.907 to 1.950 m (2 measurements), neither of which include their original lengths. Here again, the reason for the irregularities might be because blocks from the Hellenistic scene building were reused. The cornice was reused upside down from the original form to prevent it from obstructing the space that it was prepared for, but this was probably not necessary for the backer blocks, which could be used as facing with the original outer face and taenia on the top.

Fig. 11 Messene. Mason’s mark on the Roman scene building (after Themelis 2015, fig. 15)

Fig. 12 Messene. Detail photo of east wing of the Roman scene building (photo by Yoshitake, R.)
3-6. Skene wall blocks?
The fourth to sixth courses of the *scaenae frons* foundation (Fig. 10) are roughly the same height (43 to 47 cm). They are made of *poros* stone, instead of limestone, and bear double-tailed clamp traces on the top of both the ends of the longer side. These clamps are inconsistent with the neighbouring blocks but are only found on the front row of the *scaenae frons* wall. Here again, mason’s marks can be observed. The symbols become more complex, with addition of either a “Δ,” (‘fourth’ course) or a combination where the “letter C” is inscribed facing either right or left of the identifying letter30). It is still unclear which part of the Hellenistic *skene* building they had originated from, and it is possible that these blocks came from the Hellenistic *parodoi*, which bear similar dowel-tailed clamp traces. In fact, it is probable that both of the limestone *parodoi* walls were rebuilt in the late third century B.C. when the *skenotheke* and mobile wooden stage were introduced31).

3-7. Skene threshold
Each of the three doorways of the niches, two *hospitalia* and the central *valvae regia*, has a threshold. Fig. 13 shows details of the west *hospitalia* niche stairway, the steps of which are made of limestone, not marble as seen in the Roman scene building. It is reasonably clear that the thresholds were also reused from the previous building because the steps behind the doorway also contained reused blocks from several parts of the Hellenistic theatre, including the cornice block of a statue base, which can now be observed in a step of the west *hospitalia* (Fig. 13). These thresholds were probably crafted from three rooms of the ground floor of the skene corresponding to the three doorways of the *proskenion*. Similar examples can be observed of the *skenes* of the theatres at Priene32) and Delos33), among others.

3-8. Window frame of the *thyroma*
More obviously reused blocks from the Hellenistic scene building can be seen in the case of the *aulaeum* (or drop curtain) of the Roman stage (Fig. 14).34) Behind of the *proscenium* wall and floor of the *pulpitum*, there is a row of eight limestone slabs cut into rectangular shapes approx. 0.7 m in length and 0.5 m in width, with depths between 0.15 and 0.20 m. The slabs bear a square hole in the middle (approx. 18 X 18 cm per side) in each to support a post for the drop curtain35). The original total height of the window frame is unknown, but the width is approx. 0.27 m. Some of these slabs have crowning moulding that matches the window frames of the north propylon of the Asklepieion at Messene36). There are numerous examples of the Hellenistic scene building doorframe, such as the *skene* ground floor doorframe at Priene37) and Delos38), among others.

4. Estimation of the Hellenistic scene building
Taken together, all the above-mentioned architectural findings and identifications can assist us in creating an estimation of the theatre’s original form. In this section, our hypothetical estimation of the Hellenistic scene building will be discussed. Fig. 15 shows the restored Hellenistic scene building of the theatre at Priene, while Fig. 16 shows a hypothetical restoration of the *proskenion* foundation of the Hellenistic Messene Theatre.

4-1. Estimation of the general form of the Hellenistic scene building
The *proskenion*, the foundation of which is fortunately still surviving *in situ*, measures approx. 26.5 m in length. Since the stylobate length of the Hellenistic *proskenion* varies from 15.4 to 31.2 m, there was no standard *proskenion* size during the Hellenistic period39). From the origin of the stone scene buildings, like the Dionysus theatre at Athens40), the *paraskenion* was a common, but not exclusive, motif among Hellenistic theatres41). Ramps or staircases were vital to provide access for actors, although ramps were only seen in the early phase of Hellenistic scene building development, and were abandoned after the second century B.C.42). Concerning the architectural character of the Ionic attached half-column, comparisons were made with the Corinthian column of the stoa of
the Asklepieion and the Ionic column of the Arsinoe Fountain, both of which have been dated to the beginning of the second century B.C. It is believed that the stone Hellenistic scene building might be from the same period as that of those two buildings\(^{43}\). Thus, it is likely that no ramps were used, so staircases must have existed somewhere in the scene building.

Next, the lower diameter of the Ionic attached half-column can be estimated as 0.43 m from the above measurements. Since there are no stylobate blocks remaining in situ, the numbers of columns and intercolumniations are hypothetical. Since a proskenion usually has three doorways, with the central doorway located on the central axis of the scene building\(^{44}\), the number of intercolumniations is usually an odd number. Thus, we estimated intercolumniations as follows: (stylobate length – radius of the column X 2 at both ends)/(estimated number of intercolumniation). Then,

\[
\begin{align*}
(26.50 - 0.43)/11 & = 2.37 m \\
(26.50 - 0.43)/15 & = 1.74 m \\
(26.50 - 0.43)/19 & = 1.37 m
\end{align*}
\]

Since the intercolumniation of Ionic proskenion varies between 1.5 and 1.9 m in other Hellenistic theatres\(^{45}\), we considered 1.74 m to be a reasonable value for that feature.

As for the proskenion height, Vitruvius says “The height of this 'logeum' ought to be not less than ten feet nor more than twelve (Vitruv. 5.7.2.)\(^{46}\).” In most ways, the ideal theatre described by Vitruvius does not correspond exactly with any actual known theatre building, but since the highest stage of the Dionysus theatre proskenion in Athens is 3.59 m, the Messene theatre stage height might be approximated at no higher than 3.6 m. Accordingly, the standard ratio of the major elements of a Hellenistic scene building are:

- Column height: Axial intercolumniation = 1:1.63\(^{47}\)
- Entablature height: Axial intercolumniation = 1:0.389\(^{48}\)
- Thus, the stage height, i.e., the height of order, can be estimated as

\[
(1.738 \times 1.63) + (1.738 \times 0.389) = 2.83 + 0.7 = 3.5 \text{ m}
\]

In this case, the ratio of the lower diameter (0.43 m) to the column height (2.83 m) is 1:6.58\(^{49}\).

Similarly, the standard ratio between the height of proskenion and skene is

\[
\text{Proskenion height:skene height = 2:3}\]

Thus, the height of skene can be estimated as 3.49 X 1.5 = 5.235 m.

4-2. Discussion on normal Ionic column

The critical argument of the present restoration might be the normal Ionic column drums, which were reused in the pillars of the pulpiti. Our recent fieldwork examinations have concluded that the flute sections of both the normal and half Ionic columns are exactly the same, so it is reasonable to assume that they belong to the same period. If we trust that these Ionic column drums are from the Hellenistic scene building, then, in which part these blocks were applied? There are three exceptional examples of the Hellenistic skene form: The Theatre at Apollonia in Albania possessed a Doric façade on the upper story of the skene, of which only one case can be found in mainland Greece\(^{50}\). While its hypothetical restoration is supported by several pieces of evidence\(^{51}\), it seems possible that the Doric colonnade could have been used in the stoa behind the scene building. The remaining two examples are two Sicilian scene buildings at Segesta and Tyrndaris. According to the architectural survey by Bulle, the Segesta Theatre scene building was restored as a two-story structure (Doric lower and Ionic upper)\(^{52}\), but in her study, Buckler conjectured that the theatre was later restored to a single-floor form with an Ionic proskenion and Doric skene\(^{53}\). The scene building at Tyrndaris also has two stories, Doric below and pilasters above\(^{54}\), but Buckler again posits the restoration to a single floor structure with pilasters used for the proskenion and Doric used for the skene\(^{55}\). However, it should be noted that both of the abovementioned forms are based on Bulle’s 1920s architectural survey, and since the number of discovered architectural blocks remains limited, Buckler’s restoration theories remain hypothetical and uncertain. Moreover, the researchers who support the colonnaded façade skene have do not explain exactly how the stage actors were able to hide costumes and tools without thyromata. In this way, the idea of a

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Fig. 17 Messene. Estimated restoration of the Arsinoe Fountain, phase 2 (after Reinholdt 2009, folded plate 9), scale 1:500

Fig. 18 (left above) Messene. Ionic column drum with base block of the Arsinoe Fountain, reconstructed, 2016 (photo by Yoshitake R.)

Fig. 19 (right above) Messene. Ionic column drum (above, No. 72) with base block (below, No. 67) of the Arsinoe Fountain (modified by Yoshitake R., after Reinholdt 2009, pls. 16-17) scale 1:30
colonnaded façade of skene is still highly unlikely.

If we trust that the Ionic column drums are from an another public building, then, the Arsinoe Fountain, which is located in the northeast of the theatre across a paved street, must be listed as the most possible candidate. This fountain was constructed between the end of third and the first half of the second century B.C., and was rebuilt in the second half of the first century A.D.56 At the time of Roman construction, the front Doric colonnade was demolished and turned into a pair of huge basins that were divided by the middle paved passage leading to the new shrine-like three-arched façade. Fig. 17 shows the restored elevation of the Arsinoe Fountain of the second phase, when six Ionic columns from the middle colonnade were dismantled57.

It might not be coincidental that the discovered normal Ionic column of the Roman stage (Figs. 7–8) has lower diameters of 0.45 to 0.48 m (4 measurements), which precisely matches the diameter of 0.44 to 0.46 m (5 measurements) of the normal Ionic columns of the Arsinoe Fountain (Figs. 18–19)58. Comparing to twelve survived column drums from the Roman stage, it is obviously strange that only three blocks and five scattered fragments of the normal Ionic column drums of the middle colonnade of the same building. These circumstances might lead us to assume that both of the public buildings located northwest of the agora were rebuilt during the same period, and that the dismantled column drums and base were reused as pillars into the new stage of the theatre, and the capitals into somewhere of the agora. Moreover, this transportation and reuse of material could be dated to the third quarter of the first century A.D., bringing it into agreement with the dating of both Phase II of the Arsinoe Fountain (the second half of the first century A.D.)59 and the construction phase of the Roman theatre scene building (from Claudius to Vespasian: A.D. 41–79)60. Thus, in the case of Messene, it might be reasonable to conclude that the traditional thymomata-type skene was constructed and the normal Ionic column drums of the stage most likely involved the transportation and reuse of blocks from the Arsinoe Fountain.

5. Summary

The results of our recent observations and architectural analyses have enabled us to provide a more comprehensive estimation of the Messene Theatre Hellenistic scene building. The Hellenistic scene building, following the traditional form, was found to have consisted of two parts: the proskenion and the skene. The proskenion, which had an approx. 26.5-m-long colonnade of Ionic attached half-columns made of poros stone, bears traces of the wooden pinakes used in their intercolumniation and the three doorways between them61. It is possibly that there were paraskenion on both side of the stage, but the staircase leading to the stage is still uncertain. Three doorways were installed behind the proskenion, each with a limestone threshold. There were possibly also three thymomata on the upper floor of the skene, which was built to provide costume changing space for the actors. The origin of the normal Ionic column drums of the pulpitum is estimated not to the concerning scene building but to another public building, most probably to the Hellenistic Arsinoe Fountain.

Acknowledgment

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REFERENCES


NOTES


10) Note for the reused material of the Messene theatre; Yamazato and Yoshitake 2017, op. cit.

11) Spolia may not be used in this article, rather reuse. Since the terminology of architectural spolia has been used the reusing material from the late antiquity to the early medieval age, the meaning of it is not limited only to reusing construction activity but also symbolic way to show classical material in new building. Nevertheless, architectural spolia was not aim to ideological way of presentation, but to pragmatic reason (Ward-Perkins, B., ‘Spolia and Reuse of Unwanted Buildings, in From Classical Antiquity to the Middle Ages. Urban Public Building in Northern and Central Italy AD 300-850, Oxford University Press, pp. 203–229, 1984, 213–214; Deichmann, F.E.: Die Spolien in der spätmittelalterlichen Architektur : vorgetragen am 5.7.1974, Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Philosophisch-Historische Klasse; Jahrg. 1975, Heft 6, Beck, 1975; Deichmann, F.E.: Säule und Ordnung in der frühchristlichen Architektur, Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung, Vol. 55, pp. 114–130, 1948). Spoliation, as opposed to spolia, is recent terminology, meaning the termination of a building’s original form and purpose (Kinney, D.: Spoliation in Medieval Rome, in Alkamp, S., Carmen, M.-J. and Seiler, P. (eds.): Perspektiven der Spolenforschung. 1. Spolierung und Disposition, Walter de Gruyter, pp. 261-286, 2013).


13) cf. the stylobate height of the theatre at Aigaea is varying from 13.5 to 32.5 cm. Gogos 1992, op. cit., p. 60, table 13.

14) cf. the stylobate depth of the theatre at Aigaea is varying from 46 to 67 cm. Gogos 1992, op. cit., p. 60, table 13.

15) For the moulding of attic-type base at Messene, see: Hayashida et al. 2013, op. cit., p. 85, esp. fn. 76.


17) Reinholtz 2009, op. cit., p. 73, figs. 104-105.

18) As the present paper discuss, reusing of the Hellenistic building material in Roman imperial period was common phenomenon in Messene. See the case of the Arsinos Fountain. Reinholtz 2009, op. cit., pp. 130–140.


21) The character of mason’s marks support the dating of the reusing and rebuilding at Roman imperial period; like as sigma (σ) instead of standard (Σ), small omega (ω) instead of big omega (Ω), etc. Sidiroponoul 2015, op. cit., p. 222.

22) Some exceptional case will be discussed in the following.


24) Ito 2002, op. cit., 39, fig. 32. It is also some architrave-frieze blocks of the fountain of Arsinos can be observed, but not clear. Reinholtz 2009, op. cit., pp. 80–81.


27) Sidiroponoul 2015, op. cit., p. 222, fig. 15.


29) von Gerkan 1921, op. cit., pp. 51–59, pl. 27.


34) The Hellenistic scene building with paraskenion can be seen on the following theatres at Epidaurus, Oinadian, Demetrias, at Dodona; in contrast, no paraskenion on the following theatres; at Priene, at Oropos, at Corinth, at Isthmia, Ilyos and Theopseia (Gogos 1992, op. cit., p. 75, fn. 185).


36) See note 29.

45) If we determine the column height from the amount of tapering to the cylinder height, the column height \((\text{lower diameter}) - \text{(upper diameter)}\) \((\text{av. Column drum height}) - (\text{height})\), at Dionysus theatre of Athens, I:2:0:1 (Fiechter, E. R.: Antike griechische Theaterbauten, 6: Das Dionysos-Theater in Athens, II: Die Sculpturen vom Bühnenhaus, W. Kohlhammer, 1936, plate 4; column height \(= \text{ca. 1.7 m, axial intercolocation} = \text{1.34 m} \), at Oropos, 1:3:391 (Dörpfeld, W. and Reisch, E.: Das griechische Theater: Beiträge zur Geschichte des Dionysos-Theaters in Athen und anderer griechischer Theater. Barth & von Hirst, 1896, p. 104; Fiechter 1936, op. cit., p. 17, plate 3; column height 1.887 m, axial intercolocation = 1.356 m); thus, the average is 1:1.63.

46) The axial intercolocation of the Ionic colonnade of the Arsinoe Fountain, which is 0.46 m:3.575 m = 1:7.77 (Reinholdt 2009, op. cit., p. 82–83, table 3) In the case of Epidaurus, the theatre of which has Ionic attached half-column as like as Messene, it is 1:7.691 (von Gerkan – Müller-Wiener 1961, op. cit., p. 19, fig. 13, pl. 21). More useful comparison is the ratio both of the middle Ionic colonnade of the Arsinoe Fountain, which is 0.46 m:3.575 m = 1:7.77 (Reinholdt 2009, op. cit., pp. 71–75).

51) Ratio of the height of skene to the height of proskenion is as follows; at Sicyon, 1:0.379 (Fiechter 1931, pp. 15, 28; entablature height = ca. 0.55 m, axial intercolocation = 1:4.5 m), at Corinth, 1:0.359 (Stillwell 1952 pp. 40, 106–110; entablature height = ca. 0.6 m, axial intercolocation = 1:6.7 m), at Epidauros, 1:0.446 (von Gerkan – Müller-Wiener 1961, plate 21; entablature height = 0.773 m, axial intercolocation = 1:7.33 m), at Oiniadai, 1:0.373 (Gogos 2009, pp. 190–191, plans 18, 19; entablature height = 0.36 m, axial intercolocation = 1:5 m); thus, the average is 1:0.389.

52) If we determine the column height from the amount of tapering to the cylinder height, the column height = ((lower diameter) - (upper diameter)) \(X\) ((av. Column drum height) - (av. Amount of column drum tapering)); \((0.414 - 0.34) X (1.269/0.39) = 2.408\) m.

53) The dating is supported by based on the several evidences of architectural character, inscriptions, introduction of the arch technique in roman time, etc.


57) Reinholdt 2009, op. cit., pp. 130, 135. The dating is supported by based on the several evidences of architectural character, inscriptions, introduction of the arch technique in roman time, etc.


59) Reinholdt 2009, op. cit., pp. 77, 219–220, figs. 106–109, pls. 17–18. Another candidate of reuseing source can be the North Stoa of the Agora, the diameter of which is unknown; but clearly bigger than the one of the Stoa of the skene (0.626m of outer order; 0.710 m of inner order) (Hayashida et al. 2013, op. cit., p. 161, table 25).


61) Yoshitake 2013, op. cit., p. 491.

63) According to Moretti, painted wooden panel was so expensive (130 drachmas per a panel without the fir-wood!), that panels were possibly put into the stage when it was not use. Moretti, J-C.: The Evolution of Theatre Architecture Outside Athens in the Fourth Century, in Csapo, E., Goette, H.R., Green, J.R. and Wilson, P. (eds.), Greek theatre in the fourth century B.C., Walter de Gruyter, pp. 107–137, 2014, esp. p. 129; Fraisse and Moretti 2007, op. cit., p. 240.
和文要約

古代ギリシア劇場の舞台建物に関しては、プレネスやエピダウロスなど舞台遺構の調査研究によって、高いステージ（プロスケニオン/ロゲイオン）と2階建てのスケーネで構成されることが知られている。ギリシアや小アジアに残る他の舞台建物については、後の改築を受けた影響で、長年にわたる研究が行われている。東地中海のヘレニズム期の舞台建物の多くが、ローマ時代には改築されたことである。近年の発掘調査の進展により、多くのギリシア建築の研究成績が発表され、ヘレニズム期の舞台建物が再び活発に研究されている。とりわけヘレニズム期の舞台建物の解体とローマ時代における舞台建物への建て替えの手法は、建築史研究者の間で盛んに調査研究されている。ヘレニズム期のヘレニズム期の舞台建物の事例は、現在、ローマ時代の舞台建物の大半がヘレニズム期の建築遺構を転用していることがよりよく観察できる重要な遺構である。以上の破壊から、本稿ではスケーネ劇場の舞台建物とその転用材の現地調査結果を報告するとともに、類例と比較しつつヘレニズム期の舞台建物を推定した。

筆者らが2015年に現地調査を行った結果、メソネ（ローマ時代の舞台建物）とヘレニズム期の舞台建物からの転用材であり、計画的に転用されたことが確認できた（Figs. 1-2）。まず、ローマ時代の舞台下に残る長さ約26.5 mの二列のポロス石の石列は、ヘレニズム期のプロスケニオンの基礎である（Fig. 3）。ローマ時代のプロスケニオンとスケーネの内部には、ポロス石の基礎が一階御観察できることから、両翼にフスタレオンがあった可能性がある。次に、スカナエ・フォンスの三つの壁（ニッチ）には、半分の石が散乱しており、随所にダボや鎌の痕跡が観察できる（Fig. 4）。正面から見ると太石の厚みは0.23 mから0.30 mであり、これはプロスケニオンの基礎に直接接していたスタイロベイト部材の転用と考えられる。床に敷き詰められたように転用前の部材の形状は不明だが、最大幅で0.55 mあり、後述のイオニア式半円柱部材の転用を約0.50 mとほぼ一致する。

ローマ時代の木組ステージを支える18本の柱床は、すべてヘレニズム時代のイオニア式半円柱部材（Figs. 5-6）とイオニア式円柱部材を高さ1.2～1.3 mに切削して転用したものである（Figs. 7-8）。イオニア式半円柱の上部に幅約15 cmの溝があまり、柱間に差し込んだ木製の補強材を固定したと考えられる。円柱のフルートは周囲20本で、柱床にはアッティカ式織形がある。フルートの断面形状やポロス石の材質、スタッコ仕上げなどの特徴は、同じメソネのアイスクリオス神殿のコリント式ストアやアルシノイ泉場のアイオニア柱列に似ている。さらに2012年の調査では、メソネのアゴラ北東部からイオニア式半円柱の柱床が確認された（Fig. 9）。その直径や両側面の溝の特徴がスタイロベイトの床柱に転用されたイオニア式半円柱の部材に合致することから、元々はプロスケニオンの列柱の柱頭で後にアゴラに移植されたものと考えられる。

ローマ時代のスカナエ・フォンスの基壇は、ステージ床下から直接観察することが出来る（Fig. 10）。基壇は2層の切石の石灰岩で構成されており、1層目と2層目で高さが異なる。さらに石材には縦や横の穴が観察できるが、互いに一致していないことから転用材であったことが明かである。この2層の基壇は、もともと二枚一

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