THE RESTORATION OF SIXTEEN ORIGINAL BLOCKS IN THE UPPERMOST COURSES OF THE SOUTH WALL OF THE CENTRAL BUILDING OF THE PROPYLEA

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ABSTRACT

The study resulted with the attribution of sixteen of above blocks to the superstructure of the western hall south wall, at the same time identifying the exact positions of each block in the wall. Three inner cornice blocks (thranos) are identified as to have originally been placed immediately to the west of the block now exhibited in the British Museum. Six blocks of the nineteenth course are identified to have originally been placed next to the first from the east block which has not been identified. Six blocks of the twentieth course have been identified as to have originally been placed next to the first from the east block. The cornice block which had been restored by Pittakis is identified as the first from the east block of the south wall cornice. The identification of these blocks allows their restoration to their original positions in the superstructure of the south wall. This restoration demands the reconstruction of three missing blocks in new marble. This proposal has been submitted and approved by the Central Archaeological Council of the Ministry of Culture on the 8th of July 2008 and will be executed in the following year 2010. Along with the greater restoration of the superstructure in the eastern portico and in the northeast corner of the western hall, the restoration of the superstructure of the upper courses of the south wall will contribute to the better definition of space inside the western hall of the Propylea.

INTRODUCTION, EXPERIMENTAL, RESULTS & DISCUSSION

The completion of the restoration of the Propylea of the Athenian Acropolis, is a very important event in the field of archaeological restorations, not only for the Greek area. The removal of iron elements that were incorporated in most architectural members in the past, the definition of the original position of ancient blocks were then used, and the integration of others who were on the ground, allowed to improve the readability of the monument, without disturbing the image of the building, as it had been consolidated in recent years in our perceptions.

The harmonious integration of the necessary marble additions as well as the appropriate architectural members entirely by a new marble also contributed substantially to the development of the architecture of the building. In Figure 1: The southeast corner of the Central Building
particular, the addition of two more blocks of architrave with a new marble in the south façade of the Central Building, was to morphological integrity of the southwest corner of the entablature of the East Portico (Fig.1). This intervention in the southern façade of the monument, although intercalary in the general program of restoration of the ceilings of the Propylaia [1], may well be seen as the missing link between the completed project and that following, the implementation of which has already begun. This is because the next program intervention in the Propylaia regards the placing blocks adjacent these architraves, extending westward the restoration of the monument.

This is a small-scale program aiming to restore the superstructure of the south wall of the Central Building, whose implementation was approved in July 2008 by the Central Archaeological Council of the Ministry of Culture and Tourism. The study, concerning the restoration of sixteen original blocks in the south wall of Western Hall, was carried out by the writer between the years 2001-2007.

In October 2002 on the occasion of the 5th International Meeting for the restoration of the Acropolis Monuments they have been presented the results of this survey which over the years enriched with new elements so as to arrive at safer conclusions [2].

The south wall of the Central Building which corresponds to the West Hall is maintained generally in very good condition (Fig.2). In particular the two surfaces, both internal and external, in addition to traces of later classical times [3], does not show signs of mechanical deformation. Note that the corresponding part of the opposite, north wall of the Propylaia, shows more lesions such as the characteristic triangular shape fractures of many blocks, and the apparent erosion of these, especially the east upper half of the internal surface of the wall.

The structural fabric of the Central Building of the Propylaia was little disturbed in the Middle Ages. Much of the superstructure of the Western Hall and the East Portico was destroyed in 1640, when a lightning caused the explosion of gunpowder that had been stored by the Turks under the coffered slabs ceiling, in this area of the monument. The first drawings depicting the interior of the Central Building, in the beginning of the nineteenth century, shows the south wall of the Western Hall reaching to a level of blocks which have the inner cornice profile (thranos), therefore to the 18th course. In this course, there are depicted the first four from the east, apparently in their original positions (Fig.3)[4].
During the years 1835-36, among the first interventions in the Acropolis monuments along with the removal of medieval additions the south wall is restored by Kiriakos Pittakis, curator of the Central Public Museum. In this intervention seven blocks of 19th and 20th courses and one cornice block, were reset not in the original but in homologous positions without clamps and dowels (horizontal and vertical metal joints) and without mortar. In particular during this intervention these eight blocks were reassigned as follows: in the nineteenth course four blocks were placed in positions of first, second, third and fourth from the east. The last one was placed upside-down so that it rests on the upper seat. In the 20th course, blocks were placed in positions of second, third and fourth from the east. Finally the cornice block was placed in third position from the east [5].

During the Nikolaos Balanos’ restoration of the Propylaia (1909-1917) this area of the monument was left untouched, so the south wall of the Western Hall remained unmodified until recently, when interventions under the Committee for Conservation of the Acropolis Monuments (ESMA). The eight blocks were dismantled in November 1997 during the intervention of the structural restoration of the south wall of East Portico (1997-2001) (Fig.4). The dismantling of these blocks allowed to

Figure 3: The interior of the West Hall of the Central Building from N. Drawing by William Gell 1801-1804

Figure 4: The south wall of the Central Building (external side). Colour indicates the parts of the building dismantled in the years 1997-98. In dark colour, the eight blocks of K. Pittakis’ restoration (based on drawing by T. Tanoulas).
carry out measured drawings and carefully study, in connection with decumbent blocks near the Propylaia which showed common morphological and technical features, first by the head of the Prolylaia restoration project Tasos Tanoulas and the experienced designer P. Moutopoulos and then from 2001 onwards, by the writer. It is worth noting that valuable information was obtained from the parallel study of blocks and cornice blocks of the same courses at the north wall of Western Hall, that had been dismantled in September 2002, during the project of restoration of the superstructure of the Central Building. Overall the study examined 20 blocks, of which 11 come from the collections of the scattered architectural members of the Acropolis and compile characteristics blocks belonging to eighteen, nineteen and twenty courses, and after the dismantling of the north wall added a block of 20th course with the characteristics of the south wall found that Balanos had erroneously restored at that place of the building.

The two side walls, north and south of the Central Building of the Propylaia have twenty courses of blocks above the orthostates made of Eleusinian stone. Each course in the section of the Western Hall, including nine or ten blocks. All blocks are stretchers but until the eighteenth course occupy the entire width of the wall which is 0.88 m. The length and height of blocks ranging around 1,18 m. and 0.49 m. respectively. Over the blocks of the eighteenth course (thranos) underlying the wall ionic architraves of the Western Hall. The width of each thranos at the upper seat is equal to 1,035 m.. Behind the ionic architraves the wall was filled with blocks of nineteenth and twentieth courses which are narrower than the other, having a width of 0.69 m. and smaller with a height of 0.42 m. Then on the architraves are based the beams of the roof and the inter-beam slabs, while on the outer side, above the blocks underlying the cornice blocks. The two lateral walls of the Central Building present an inclination towards the inside but without miosis so the outer and inner surfaces are parallel.

During the study the key features of the blocks were identified and designed. These features set the criteria according to which the original position of every block was identified. During this process, there were taken into account various features such as the position and depth of the double T clamps and dowel holes, and the position of pry-holes, which indicates the setting direction of the superimposed block, as well as some specific characteristics of each block individually. As already mentioned the blocks of 19th and 20th course are narrower than others. Especially the blocks of 20th course have another distinctive characteristic as the periteneia (that indicates the final surface) width 0.065 m. along the upper part of the outer surface. Some of them also have horizontal joints to the wall ionic architraves. The rear surface of both 19 and 20 courses' blocks is worked with the point without any other features because it remained unseen behind the wall ionic architraves. The examination of the preserved blocks has shown that the setting direction on the wall of both 19 and 20 courses was from the west edge towards the eastern part, since the dowel holes are located on the east lateral surface of joints, namely to the right of the front part of each block. This was the most important criterion of distinction from the blocks of the north wall, which were set working towards the east, they have the dowel holes on the east lateral surface too, but to the left of the front part. The extent of physical damage (erosion) to the front part of the blocks was not the main criterion for their distinction, since it’s not clear the difference in damage between the blocks of the north wall and these of south wall, of these courses. On the 18th course, (thranos), the four in situ blocks were set working from the eastern part towards the west and the fifth from the east was the last-laid intermediate block. Among other things, on the upper surface found that between the two dowel holes, that join vertically thranos with the superimposed blocks of 19th course, only the southern of them was used, while also in the course below was observed the presence of dowel holes that ultimately never used. The outer face of all blocks present an inclination, so that the two corner angles formed by the coincidence of the face of the wall block with its upper and lower horizontal surface are the upper obtuse corner angle and
the lower acute corner angle. The maximum deviation from the vertical of the surface that corresponds to the height of each block is about four millimetres (Fig. 5).

Figure 5: Drawings of the south wall of the Central Building after the study of the identification of the examined blocks

The blocks of thranos that have been examined are all four. Three of them are from the collection of scattered members of the Acropolis and were found in the area south of the Propylaia. The fourth one is in the British Museum and it has been carefully drawn by the architect T. Tanoulas (2000). Recall that this block has been posted along with other architectural members of the Acropolis monuments by Lord Elgin between 1800 and 1803. The thranos of the British Museum shows on the upper surface two cuttings used for lowering the stone into place by means of lifting “tongs”, and also displays only auxiliary dowel cuttings to the west lateral surface of joint for the support of adjacent blocks. This block was therefore set last in its course after the wedging of the adjacent stones from the eastern and western part of the wall, and occupied the fifth position from the east.

Figure 6: The drawing of the block of thranos that is in the British Museum (T. Tanoulas, 2000)
In regard to the resetting of blocks of 19th course, in total they have been examined seven stones. Among those not found one who set first from the east, which by analogy with the corresponding block of the north wall, there is no doubt that it was L-block (maschaliaia), since a part of the east lateral surface of joint was entering between the wall architrave of the south wall of East Portico, and was set last in its course. In this position will be placed the same block but made by new marble. Finally the examination of the rest of the blocks showed that only one did not respect the criteria for this restoration proposal, while among those which are restored occupying up the seventh position from the east, only one remains in the same position, the third from the east, that had also in the last restoration (1836).

About the resetting of stones of 20th course, a total of eight blocks were examined. Of these there was no one belonging to the first east position, as confirmed by the corresponding block of the north wall, this block was L-block (maschaliaia), as well as the block of below course and smaller than the adjacent. In this case too this restoration proposal places an identical block made by new marble. The research also found that two blocks did not respect the criteria for the resetting in the south wall. Note that one of those (NSC number of scattered collection 5219) has been restored at the north wall, at the position of the block that Balanos had erroneously placed, which finally this proposal restoration places in the seventh from the east position of the south wall. Of the three that were restored in 1836 no one took the same position again.

Finally, the position of the only surviving cornice block (Fig.6) on the south wall is in the eastern edge, as evidenced by the comparison with the cornice blocks of the north wall. It was found that it has the same technical characteristics as the first from the east of this wall with the only difference that is larger in length and width. These features are the L-shape notch in the contact with the wall architraves of the south side of East Portico, showing to the right of the front part, to east lateral surface of joint, and also the slight swelling on the upper surface (east side), measuring 0.355 m. per 0.75 m., where rests block of the western pediment of East Portico.

CONCLUSIONS

Of the twenty blocks that were comprised this survey, including one block erroneously restored by Balanos on the north wall, sixteen were identified as belonging to the south wall. Of these sixteen blocks, eight were not previously restored.

Figure 7 : Photos of the upper and front surfaces of the only surviving cornice block of the south wall
The general conditions of these blocks is estimated good enough to not require neither join of ancient fragments by means of titanium reinforcements nor big additions of new marble. However, four new marble supplements were found necessary for the safe placement of horizontal and vertical join titanium elements into the ancient cuttings. All these four supplements have already been finished. Finally, the study provides for the resetting of another three blocks, (rising up the total number to nineteen), which as already mentioned, will be made entirely of new marble: this is the thranos that will replace the original block kept in the British Museum, as well as the first from the east block of 19th and 20th course, respectively, which have been judged necessary for the setting of the superimposed cornice block.

The restoration of sixteen original blocks in the uppermost courses of the south wall of the Central Building of the Propylaia (Fig. 7) although it is a separate program, it can be considered as the continuation of the proposal for the restoration of the ceilings, since it restores in an intelligible way the disturbed - following the 1640 explosion - structural fabric of the building. The study by making the most of the preserved original material of this part of the building and by resetting it to its original position, helps not only to increase the legibility and improve the aesthetic image of the monument.

Figure 8: The south wall of the Central Building (external side) after the restoration of the sixteen original blocks in the uppermost courses (based on drawing of T. Tanoulas)

REFERENCES


[3] Instead we remark the conservation of traces of the painted ornament, without however any actual remains of color, on the surface of the cyma reversa of the profile of the in situ blocks of thranos (18th course) at the inner surface of the south wall. About the postclassical alterations in the West Hall of the Central Building see Tanoulas T., (1997), Τα Προύλαια της Αθηναϊκής Ακρόπολης κατά τον Μεσαίωνα, Vol. 1, pp. 165-174.
