RECONSTRUCTION OF THE WEST WALL OF THE QASR -IL-'ABD AT IRAQ-EL-EMIR

by
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In May of 1976 few of the blocks of the west wall of this building were visible except at its two ends. Excavation in the intervening area revealed the blocks of the first main course of the wall lying face-down where they had collapsed outward onto the surrounding platform. (Pl. LXXXIX, 1-2). The foundations for the outer slabs and for the smaller blocks of the inner face of this course were exposed in situ. As clearance proceeded westward, successive courses of blocks of this wall came to light, all lying face-down. Beyond the long slabs of the first main course (3mx2m) lay nine blocks which were originally set vertically upon them (1.8x2.7m) with spaces left for seven windows. The smaller blocks which served as windowsills lay between these (1.0x1.0x0.6m. high). Further west we found the series of lintel blocks (3.0x 1.2m) and those of the Ionic cornice with dentils. It thus became clear to us that the entire west wall had collapsed outward and that the positions of the blocks lying on the platform corresponded to their original positions in the wall.

The next step was to draw and number all these blocks. (Fig. 1). The numbers designate the wall, course, and position in the series for each block. An initial "2" indicates the west wall. Thus, block 2.1.10 is the tenth block in the first course of this wall. The five visible faces of each block were then drawn at a scale of 1:50. At this point it was noted that these blocks have mortise and tenons of varying sizes and positions such that each tenon fits only one particular mortise. With this information it became possible to draw this gigantic jigsaw puzzle with great precision. In fact the entire wall was then definitively reconstructed on paper from end to end (37.50m) and to a height of 6.25 metres.

At the request of the Department of Antiquities, Dr.E.Will, Director of the French Institute of Archaeology for the Near East, put me in charge to rebuild the central portion of this wall over a length of 23 metres . Aside from its aesthetic objective this decision enabled us to free the small blocks of the upper part of the building crushed by the enormous blocks of the first story.

We started the reconstruction in April of 1980 using the crane of the Department of Antiquities, operated by the driver and assisted by four workmen. The first problem was to bring the crane into position next to the wall. The blocks we wanted to lift verged on the maximum load for this crane. The horizontal distance between the crane and the load therefore had to be minimized. The fallen blocks themselves filled every possible work space. Even beyond this area we had to fill in to produce a level area where the crane could be positioned. From this point the blocks had to be removed, beginning from the westernmost series, working

on phases until the crane could be positioned next to the foundation.

In the course of this procedure, series of blocks from the upper structure of the wall were indeed found. Under the lintel blocks came first a series of ashlars blocks of a doric cornice, and frieze, and architraves with unfinished guttae, then another course of ashlars. These last, when cleaned, displayed mortise and tenons joints. Two more courses of these appeared under the huge blocks which had flanked the windows. All these blocks, too, had to be removed beyond the work area. The cleared ground having been levelled, the crane was moved into position next to the huge blocks of the second course. These were stood on end in place, while the sill-blocks were removed, together with the ashlars discovered under these.

When the ground thus cleared had been levelled, the crane was brought up to the first course of fallen blocks, these in turn were stood on end, and the second series moved up against them.

It was May before we could finally move the crane up next to the foundation to begin the actual work of rebuilding the wall. The stone slabs of the foundation had split and slumped, so these had to be removed, cleaned and repositioned. In addition, one-third of the length of these foundation had been dismantled to a depth of two metres during the excavations of 1961 and 1962. This space was filled with large blocks at the bottom and reinforced concrete at the top. It was difficult to bring the concrete up precisely to the level of the ancient foundations at either end of the wall.

Once the foundation had been levelled, we could begin to replace the blocks of the first course. There always were a few centimeters in between these blocks and this gap was sufficient to permit the removal of the iron cable after each stone had been positioned. The most critical and difficult task here was to align these blocks with those which had remained in situ, at either end of the wall (2.1.1,2.1.11,2.1.12). Before this, however, we had to remove a portion of the interior face of this course which had remained standing. After the exterior slabs had been reset, we had to reconstruct the missing parts of the backing to get a wide enough upper bed to support the blocks of the second course. Most of the backing stones had been found and stored during the 1976 excavations. By analogy with the better preserved east wall and from the find-spots of these stones we could see that hard limestone had been used for the backing of the upper part of the first course, while soft limestone had been placed beneath these on the foundations. The missing backers were replaced by reinforced concrete. Since the exterior slabs of this course were not joined, we had to pour in concrete to strengthen the whole. The shattered block with a feline in relief (Pl. XC,2), also from this course 2. 1. 3. was reconstructed and replaced, its backing reinforced by concrete.

This feline is one of a symmetrical pair, its counterpart in the east wall having been discovered during Paul Lapp's excavations in 1962. The mouth of each feline was to act as a spout, and the basin behind it as a reservoir.

Not until the beginning of June could we begin to rebuild the second course. Here began the challenging work. For the first time we had to lift blocks weighing up to fifteen tons to considerable heights, testing the crane to the limits of its capacity. With great difficulty

the nine blocks were reset (2.2.9-2.2.3) (Pl. XC, 2 and Fig. 1). With each one, the adjacent window sill block was inserted. These blocks could not be alignel with the first course as precisely as one might wish, for only the margins were finished, and the prominent bosses hindered our view. Then we shifted the lintel blocks into position next to the wall (2.3.4-2.3.9). Although these blocks were lighter than the previous series, a new difficulty arose, for they had to be lifted to an even greater height.

We then gathered the cornice blocks from the block field (2.4.6-2.4.10). We started with block 2.4.6, the only one which was linked to the lintel course by a tenon, which fit the mortise of lintel block 2.3.4. The other cornice blocks followed with dry joints. A crowbar was used to adjust their positions.

During the reconstruction we observed that all the original cuttings and pry-holes were still useful, their positions perfectly suited to the task of reconstruction.

This work would not have been possible without the crane from the Department of Antiquities and above all the skill of its driver, Ahmad Kechwani.

All the blocks of the outside walls are listed, drawn, and more or less intact to a height of at least six metres. It would be possible to rebuild the two corners of the west wall and the north façade to that height, but most of the blocks exceed fifteen tons. A larger and more powerful crane will therefore be needed.

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