

INVESTIGATIONS AT
THE GATETOWER AND WEST RANGE
OF JESUS COLLEGE,
CAMBRIDGE

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Recording work was carried out inside the Gatetower and West Range of Jesus College, by the Cambridge Archaeological Unit, during extensive repair and refurbishment in November 1997. As much of the evidence in the report is concerned with the earliest use of the building to the west of the Gatetower the older name "Grammar School Range" is used throughout.

Previous work in the Hall and kitchens of the College (Dickens 1995, Evans 1995, Dickens & Evans 1995) has established a fabric and build type that is associated with the early College as opposed to the Nunnery. These can be typified as follows:

- *Nunnery*: Small irregular rubble build, mostly clunch and barnack, as seen in the exposed Chapter House arcade.
- *Primary College*: Large (sometimes very large) clunch blocks, squared off and crudely coursed, but not set as regular ashlar, occasional bricks and brick fragments incorporated into the build. This often encased in brick resembling a modern breeze block type construction.

Based on this observations in the Grammar School Range and Gatetower confirm the impression given within both Willis & Clark (1886) and the

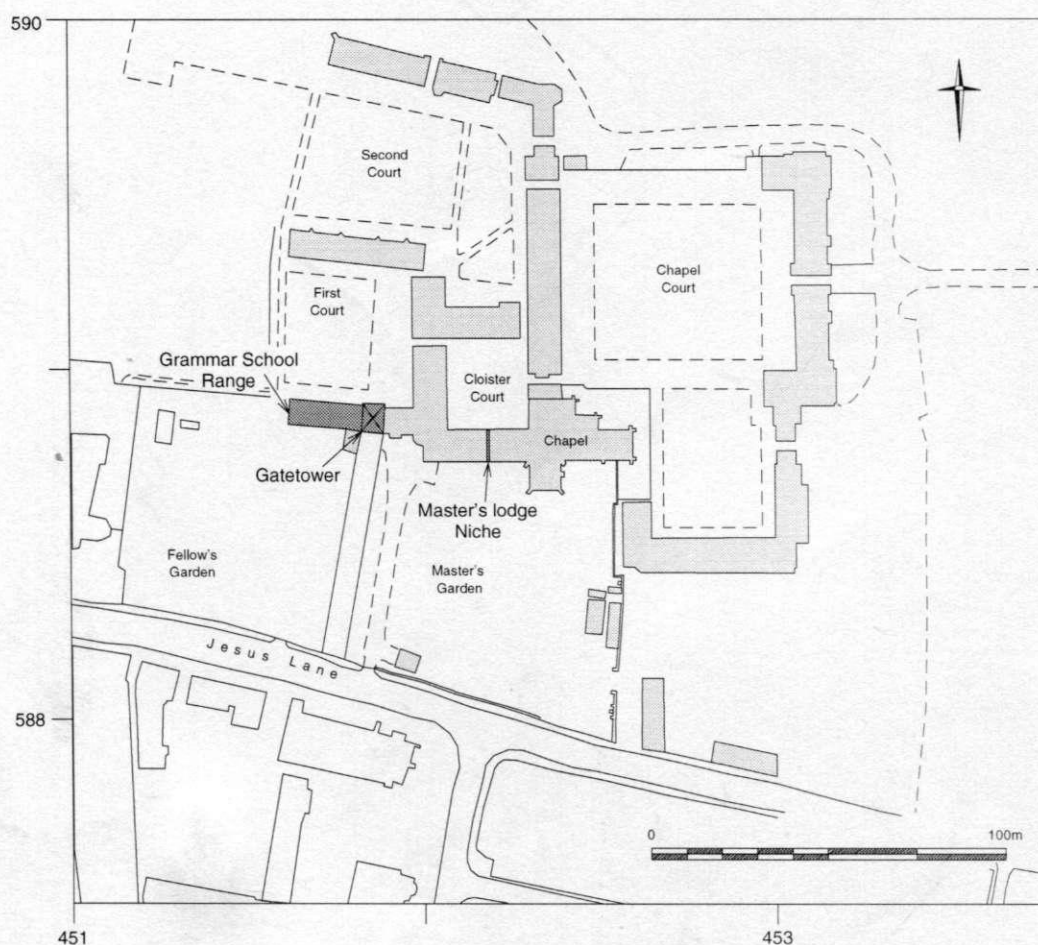


Figure 1 Jesus College, Area of Investigation

RCHM (1988) that there is no Nunnery period fabric surviving, certainly above ground level, in either building. Foundation exposures were limited, one in the Grammar School Range, none in the Gatetower. The one exposure observed revealed no evidence of earlier construction or a build up of deposits on the natural sub soil.

Results

The Grammar School Range will be considered first. In this building evidence relating to the earliest arrangements are important. Later alterations will be considered briefly.

Grammar School Range

Exposures were observed on the ground and first floors only, the second floor having been added in 1718. A band, varying between 0.60m and 1.00m high had been stripped along the wall bases on both floors, with occasional cable chases and pipe conduits extending up the wall height. Several of the windows also had their upper features exposed. The elements observed are described in this section and will be discussed in relation to the chronological sequence and development of the building subsequently.

To distinguish between elements of the structure (i.e. windows etc.) these have been numbered as shown on figure 2. In summary these are:

Windows:	S.1 - S.12	South wall windows ground and first floor
	N.1 - N.2	North wall windows ground and first floor

Fireplaces: FP.1 - FP.5

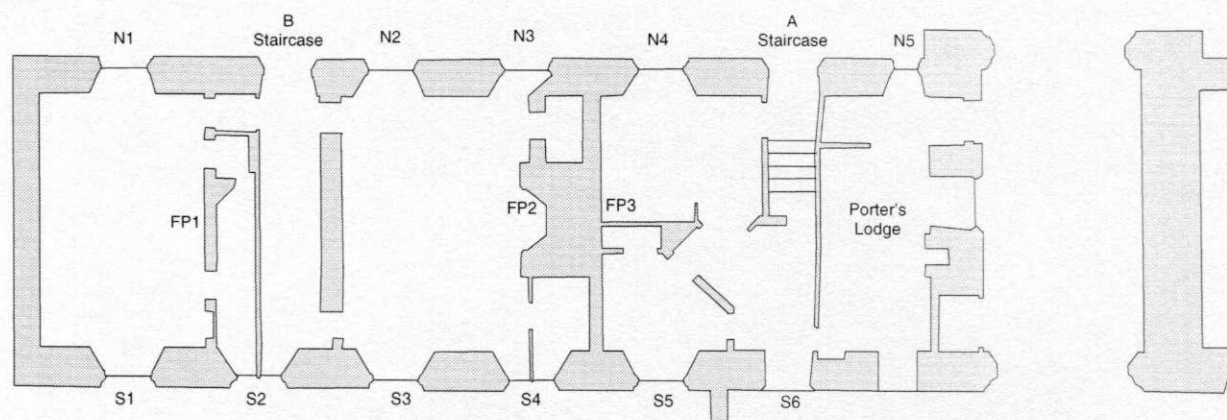
Gatehouse End I - V
doorways

External Walls

Wall construction was predominantly of large squared clunch blocks, laid in fairly crude courses with occasional brick inserts to level the courses up. The blocks were roughly squared, but not formal ashlar, and it seems unlikely that they were intended to be seen. A deeper exposure beneath window S.3 (extending 0.78m below present floor level) showed the lower footing to be of more irregular smaller clunch, with small brick/tile inclusions. A shallower exposure below floor level, immediately east of window S.1 showed this to be integral with the larger block build. The rubble footing bedded directly on to natural, a firm orange sand, upon which there was no indication of earlier footings or a build up of deposits. The western wall of the Range is built entirely of brick, described by the RCHM as laid in Flemish bond, it is actually an irregular English bond with odd patches laid on edge within it. This is a replacement wall constructed in 1718 (RCHM 1988: 85). The clunch build

continues upwards almost to the first floor ceiling. At this level it is abruptly replaced by the much later brick construction of the second floor, also dated to 1718. As the walls rise the size of clunch blocks used decreases, a pattern even more marked in the Gatetower.

Ground Floor



First Floor

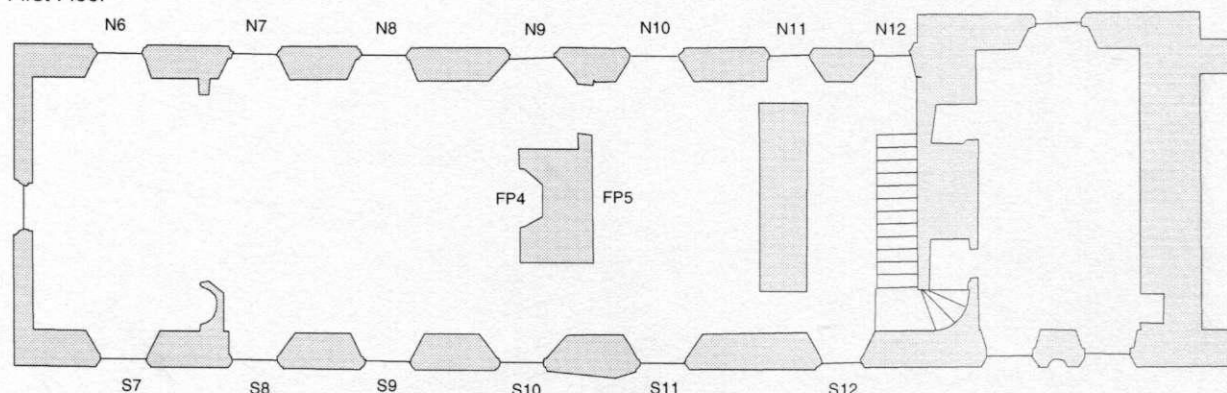


Figure 2 Ground and First Floor Plans Showing Window Numbering Scheme

In two places there is an exception to the dominant clunch build, both in the south east corner of the Range. On the ground floor, inside what is now the Porter's Lodge, the wall immediately west of the east end wall (which is clunch, see below) is not clunch into the corner. Part of the wall is now occupied by a hatch way which probably partly takes up the location of a small window, visible on Loggan's print, but no evidence of which was exposed. East of this is fairly late brick infill, but to the west is a much earlier brick construction, which appears to be faced with mortar on its western edge. This butts directly against the start of the large clunch block build which then continues to the west as previously described. At the eastern end of the clunch build the blocks are neatly squared off, and there is no indication that this is due to a later cutting through. What the significance of this is not clearly understood at this stage but it could be interpreted to

indicate a southern entrance (I) at this point (see below *staircases*). On the first floor, between window S.12 and the line of the eastern wall, two cable chases revealed that the south wall was constructed from clunch blocks immediately above the corner discussed above. However from a height of c.0.80m above main floor level this was replaced by brick at least to the ceiling. Loggan shows a small window here in 1688, directly above and the same size as that on the ground floor. Given that the present window is offset from the others in the sequence, it seems likely that the brickwork represents the removal of the small window serving, with its partner as stairlights, and insertion of a larger at the top of the east 'A' staircase, tentatively dated to the seventeenth century (see below).

Windows

At present there are ten windows in the south wall (S.1-5 on the ground floor, S.7-12 on the first). In addition there is S.6 on the ground floor, now an internal doorway, and the opening in the southwest corner, un-numbered, which is in more or less the same place as a small window on Loggan's 1688 print, and a similar window above it on the first floor. The north wall has five windows (N.1-5) and two doors on the ground floor, seven windows on the first floor (N.6-12). Observation suggests that all the windows have been much altered.

The ground floor windows were formed by a technique recorded elsewhere in primary College constructions, used for both windows and fireplaces (see below in the Gatetower and in the Hall). A massive lintel, average 0.20m high x 0.60m deep x 2.20m long, (wooden in the case of the windows, clunch in the fireplaces), in some case with a secondary smaller beam on the window side, forms the top of the window opening. Above this is a relief arch in brick, the ends of which rest upon the lintel. The arch is infilled with large squared blocks of clunch. As far as could be observed this was the method of construction used in all the ground floor windows. At present the ground floor windows are a mixture of half and full bay in length. The exposed fabric shows that originally all were half bay. Where they are now full the surfaces under the window frames are either very rough, cut through the clunch wall, or faced in later brick.

The original form of the first floor windows is more difficult to determine. All the south wall windows had flat lintels but these were formed from much slighter reused wooden beams in sets of three, some of which had been replaced with modern concrete. The only case where wall fabric was exposed, above S.7, showed a single course of bricks laid on bed, and which may well relate to the second floor extension rather than the window construction. It is apparent that the first floor windows were also originally half bay. Some are now lengthened to full and these extensions have cut through the relief arches of the ground floor windows below (S.7 through S.1, S.9 through S.3, S.10 through S.4, S.11 through S.5 and N.9 through N.3). Four of the first floor windows in the north wall have a different construction (N.6, N.8 N.9 and N.10). The tops of these are arches built entirely in brick, sloping

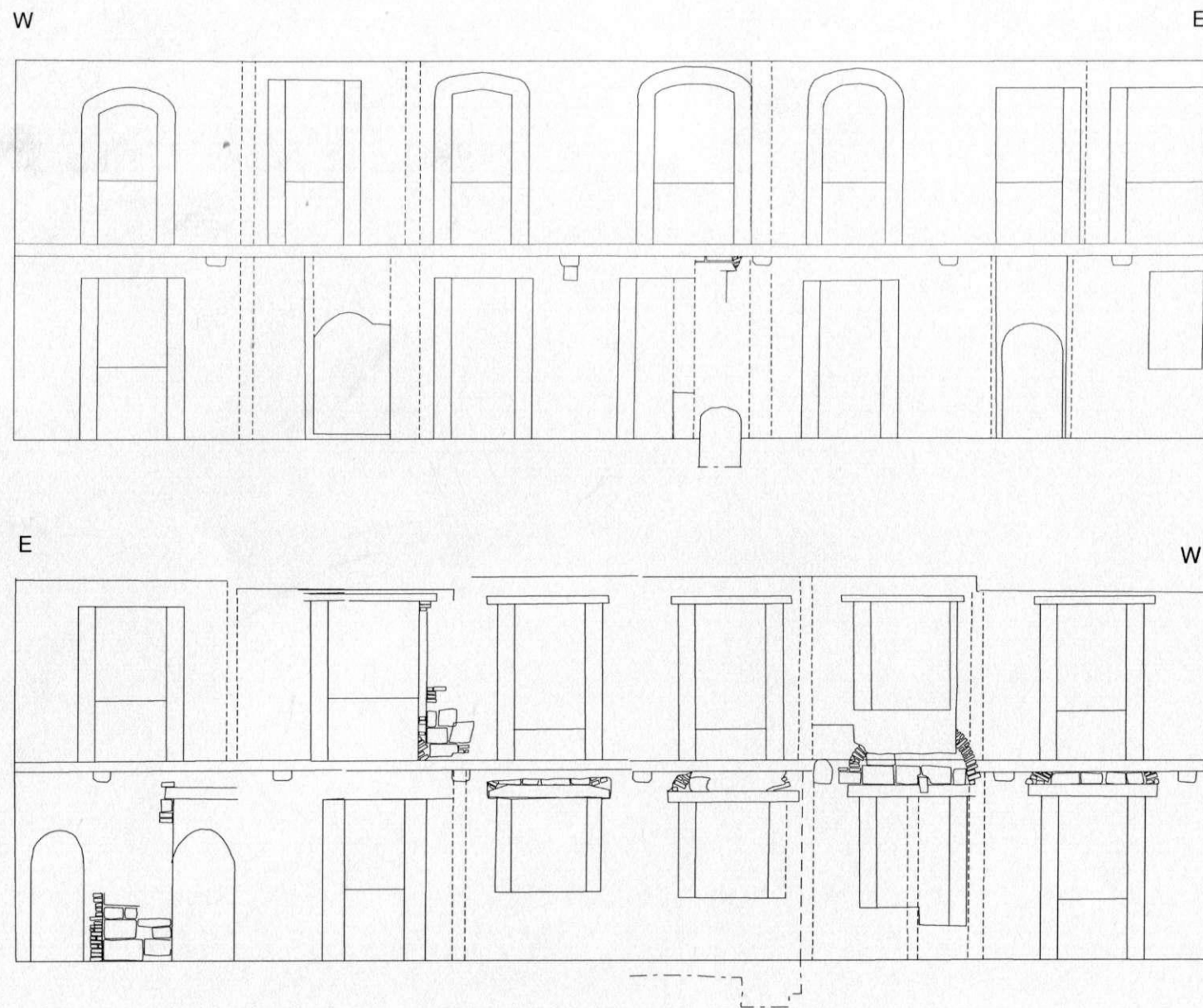


Figure 3 North and South Internal Elevations of the Grammar School Range

back towards the glass. Above N.6, however, a reused timber lintel has been exposed in the wall where it has been superseded by the later design. This suggests that all the curved window tops are secondary and that originally all the first floor windows were flat topped half bay like the ground floor. There was not enough evidence to say whether the three part lintels are original or relate to the other known window alterations listed by the RCHM (1988: 85).

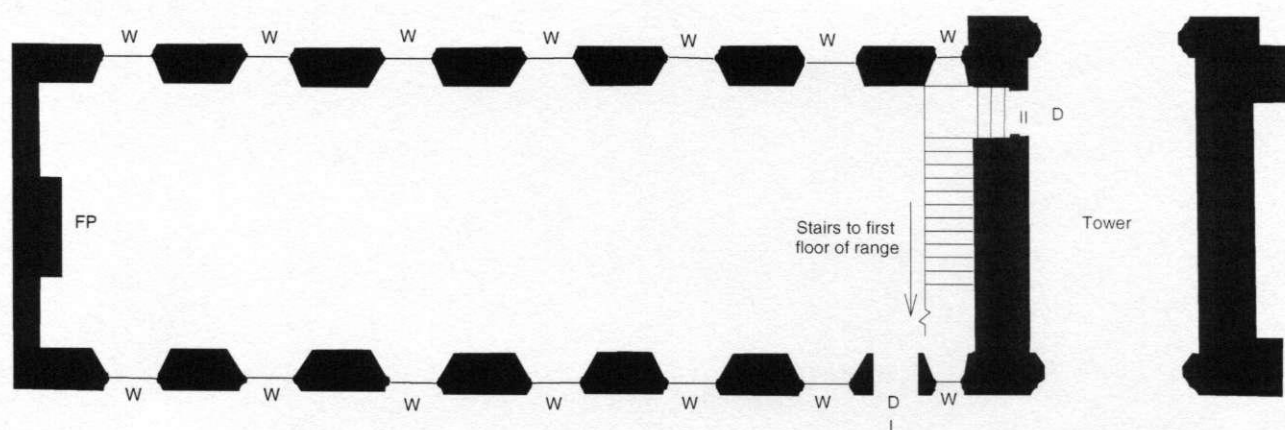
Partition Walls

The ground floor of the Grammar School Range is divided into seven bays by ceiling beams, however there is no evidence that there were any cross walls in the earliest layout. The earliest evident are two partially surviving wooden-framed partitions which form a passage south from the western doorway (staircase B). The westernmost of these has been cut through, presumably to allow insertion of or alteration to the staircase to the first floor (see below) which was removed in 1951 following the 1950 fire. Part of the eastern partition, however, does continue to the south wall, meeting it beside window S.2. The wooden structure is not bonded into the clunch wall, indeed there is a remnant plaster/render surface between the frame and the clunch. This suggests that these walls are secondary to the original arrangement. On the western side of the western wall, inside the space of a modern cupboard, are traces of a simple painted decorative scheme.

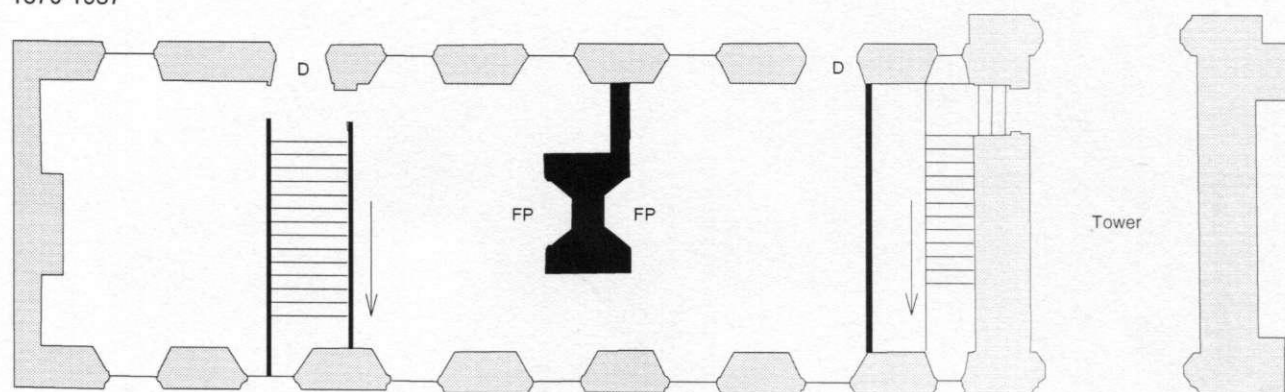
Fireplaces

Within both the ground and first floors of the Grammar School Range were a series of fireplaces, of which traces of five survive. The RCHM suggests that the original layout of the School had a fireplace at each end, the westernmost of which (FP.1) was moved from its original position in the west wall to its present position, against the western wooden-framed partition when the west end wall was rebuilt in 1718 (1988: 85). This tallies with the evidence observed. Very little of FP.1 now survives having been demolished to below first floor level in 1951. However it is not clear where the RCHM would put the eastern end wall fireplace. There is no trace of a fireplace in the far eastern wall and the nineteenth century inserted window (see below) is not large enough to account for it being removed. An early College fireplace was a significant structure and there is no obvious sign of one having been removed from that wall. Also, in the light of the discussion below, (see *staircases*) it is possible that a stair crossed this wall rising to the first floor. An alternative is that the end of the School was marked by a secondary wall further west. Traces of a brick wall were uncovered immediately on the tower side of staircase A during this renovation. This was constructed from soft red bricks (230 x 100 x 60mm) laid on bed in English bond. Projecting the line southwards suggested that the wall could join up with the bricks down the eastern side of window S.6. This may provide a context for the faced bricks discussed above. the gap between the face and the possible wall would be about 1m and perhaps suggest a point of access. It is by no means clear, however, that the brick wall is an original feature, indeed comparison of the brick size with those in the certainly original window relief arches shows that

1507-1570



1570-1637



1637-1718

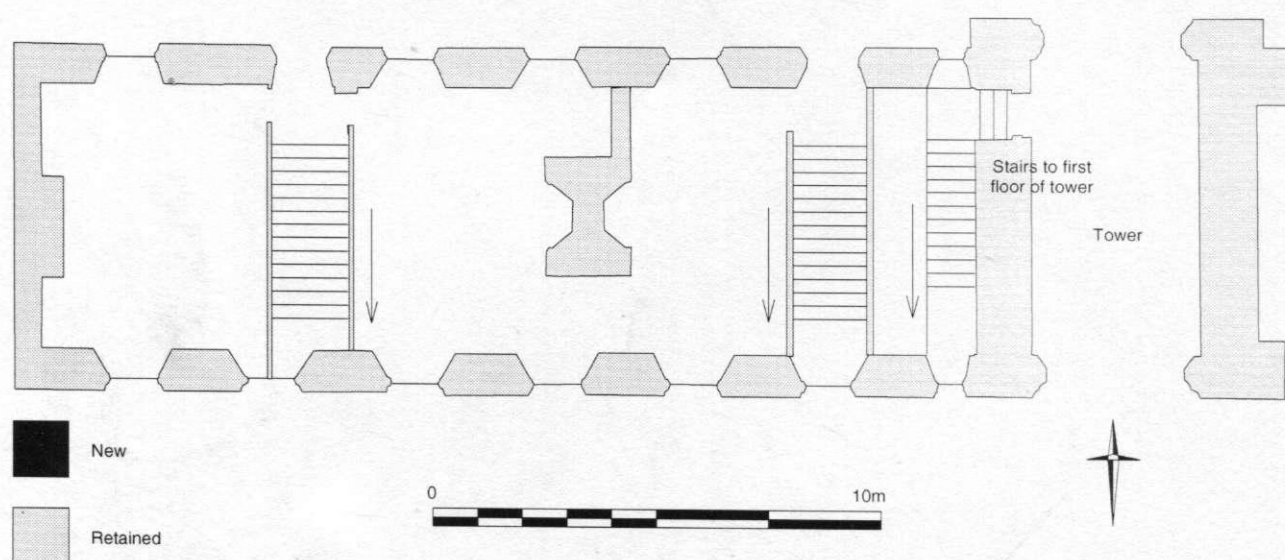


Figure 4 Proposed Ground Floor Layouts Within the Grammar School Range

they are larger (230mm long compared to 200mm), suggesting that this cross wall too, is secondary. This leaves the puzzle remaining as to where the RCHM thought the eastern fireplace would have been situated.

The rest of the fireplaces are all contained within the large central brick built block. The RCHM presumes that this is associated with the period immediately after the suppression of the School in 1570. The evidence from these observations certainly indicates that it is a secondary feature. Only one of the fireplaces (FP.2) was fully exposed at the time of recording. The main structure is in brick with a substantial clunch frame and mantel, with extensive graffiti. Amongst the carving is the date "1600", but the form of the figures makes it rather suspect without further investigation. There are no indications of walls to the south of the structure, but to the north the picture is more complicated. The RCHM record that a garderobe was constructed on the north side as part of the fireplace structure on the first floor (1988: 85). From the eastern end of the fireplace structure a contemporary brick wall runs to the north wall, meeting it about halfway between windows N.3 and N.4. This is bonded to the fireplace build, but is clearly not bonded into the northern clunch wall. Indeed, as above in the case of the wooden-framed partition, an earlier plaster/render face is visible behind the bricks, confirming that it is secondary. A second, later, brick wall closes off the space north of the fireplace and partially blocks window N.3. At the base of the clunch wall, between the two brick ones, is a well built brick arch/tunnel, cut through the thickness of the wall standing 0.72m wide and at least 0.86m high. This is presumably the outlet of the first floor garderobe, indeed it still carries modern waste pipes to the outside.

FP.3 was partially exposed by removal of plaster on the west wall of the ground floor porter's office. The body was in the same brick as before, the frame in large squared clunch (c.250mm deep). One graffiti, the initials, WN, were observed on the small portion exposed.

On the first floor FP.4 was not exposed at the time of recording. FP.5, however, allowed a closer examination of the construction of the system. Most of the clunch frame had been removed in the past, although some survived on the north side behind the wooden panelling. Over the clunch mantel, which has partially survived, was a brick relief arch, infilled with brick, again serving to distinguish this as a later rather than primary College construction, these being infilled with clunch (see above and elsewhere). FP.5 had been much altered in the past to allow the insertion of a smaller grate and hearth, however, when this was removed it exposed the original flue arrangement which conducted the smoke from FP.3 into the chimney. This was brick built in the southwest corner of the fireplace and measured (internally) 460mm front to back, 480mm side to side.

Staircases

There is no primary archaeological evidence surviving to indicate the exact location of a staircase from the ground to the first floor of the Grammar

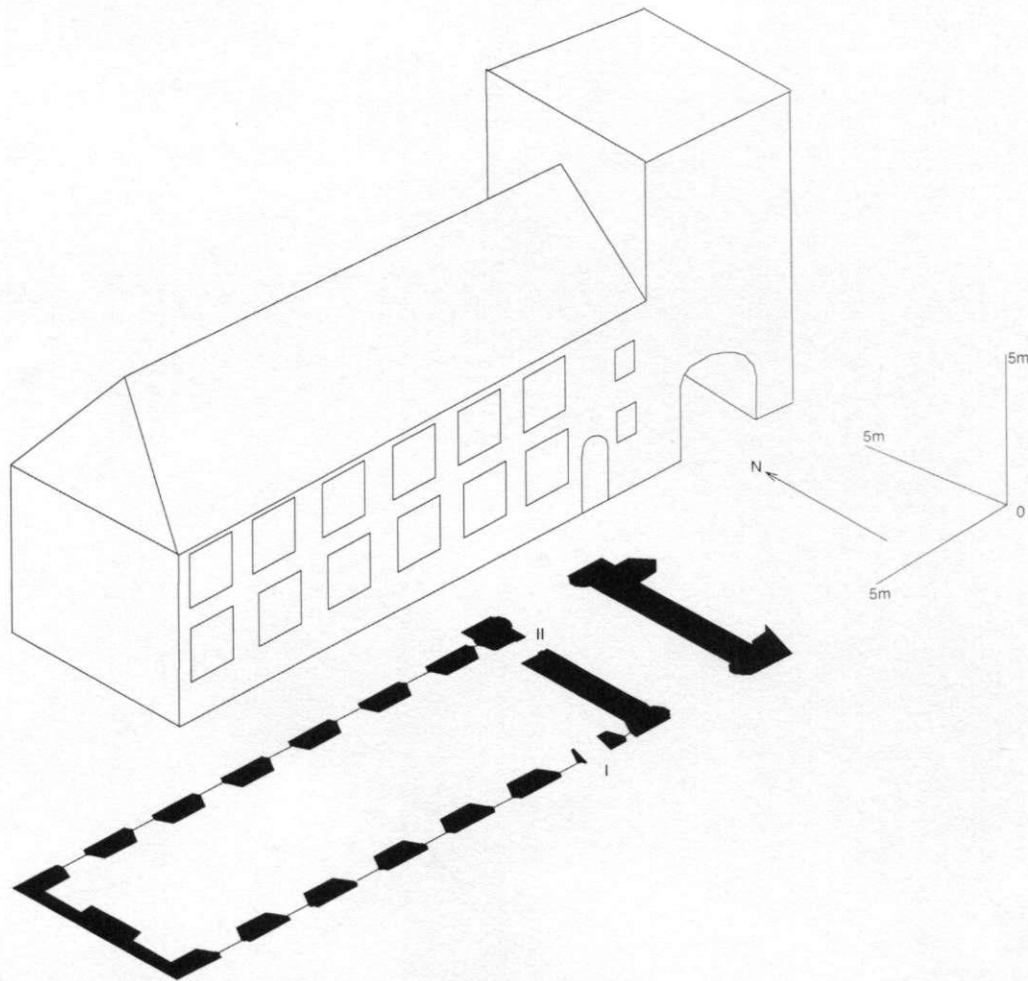


Figure 5 Isometric Reconstruction of Exterior of Grammar School Range

School Range in its earliest form, although one must have existed. Inference, however, can be made from the floor plan. The proposed ground floor layout at this period (see figures 2 and 3) is for seven opposed pairs of windows on the north and south sides. The two easternmost windows, however, are significantly smaller than the rest there is also the suggestion, described above (see *external walls*), of the possibility of a doorway between window S.6 and the southeast window. These features suggest that the east end of the Range was different to the pattern of the rest. Combined with the form of the doorway in the east wall (the Porter's Lodge door, see below) it is possible to suggest a primary wooden staircase rising directly from the east door to the first floor of the range, entrance to the school itself being through the proposed southern doorway, thus separating the function of the School from the function of the College proper.

The Gatetower

As the link between the Grammar School Range and the Gatetower proper the three story elevation (external to the Gatetower, internal to the Grammar School Range) will be considered in its entirety before looking at the findings from the rooms of the Gatetower itself.

Elevation

Starting on the ground floor and moving upwards. Examination of the construction, fabric and bonds, between the east elevation and the north wall of the Grammar School Range shows that they form part of a coherent build. Immediately inside the Porter's Lodge doorway (II) the North wall of the Grammar School Range is constructed from very large squared clunch blocks, up to 820mm x 450mm. These continue through the build exposed in the doorway, the external face, under the tower, having been clad in 80mm of limestone at a later date. Immediately inside the doorway the clunch blocks have been cut back 40mm leaving the bulk of the blocks protruding to form the sides of the doorway itself. The stone cutting to produce this is of a high quality, all the angles sharp. This formation of the corner angle within single blocks strongly suggests that this doorway is contemporary with the original building plan and not, as proposed by the RCHM (1988: 85) a nineteenth century insertion. That the doorway is not later is further supported by comparison with the Porters Lodge window 0.70m south of the doorway, also supposed to be nineteenth century. This clearly has been cut through the existing wall fabric. Where exposed the clunch sides are rough and at some stage have been crudely faced with large ceramic tiles of various dimensions (7" square, 9.5" x 6", 10.5" x 6"). The tiles look reused and their purpose in this position is not clear other than to make a smoother face. Between the door and the window the clunch wall has been undercut and subsequently pinned with white stock bricks. 0.41m south of the window a modern cupboard is inserted into a hole cut into the clunch fabric. The hole is rather wider than the cupboard itself and has been made good with roughly built courses of brick. The hole, however, only extends 0.55m back into the wall, again crudely cut, indicating that it is not primary. The clunch block build continues south into the corner.

Returning to the Porter's Lodge doorway (II). If this were late, and simply to provide access to the Lodge, then its form is curious. Externally the height is 2.00m, internally, through the thickness of the wall however, it is 2.86m. If a simple ground floor entrance there is no reason for this exaggerated slope to the roof and it implies a significant effort to no apparent purpose. One explanation would be that the doorway was designed to contain a rising staircase (see above in the Grammar School section). The style or pattern of this doorway is also observed in two other openings in this elevation. The blocked opening III, almost above the lodge doorway, is 2.40m high on the room side, 3.13m externally. The entrance to the upper tower room, IV, has the opposite pattern, the roof sloping down from the room through the wall. Taken together, and ignoring the present entrance to the first floor tower

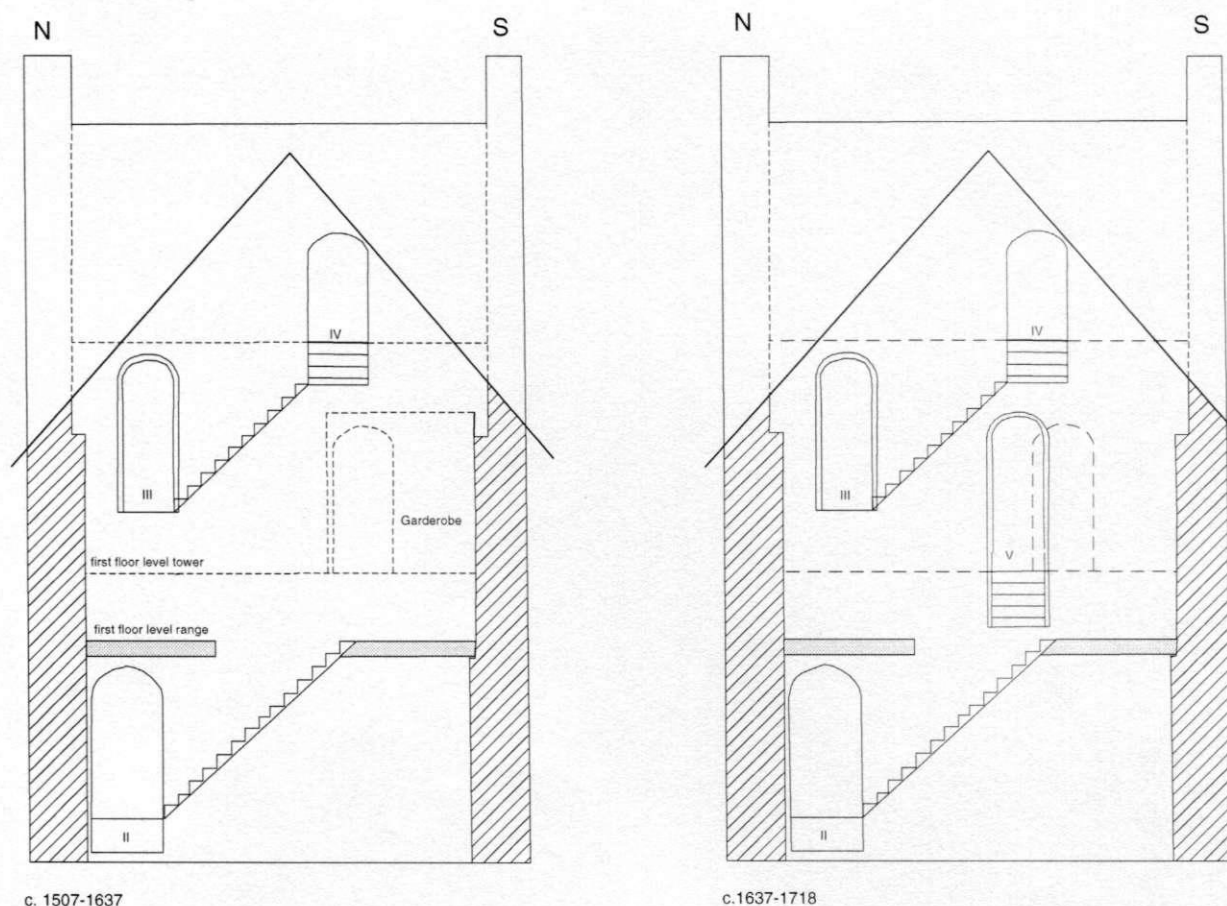


Figure 6 Door and Stair Arrangements in the Gatetower and Grammar School Range in the Sixteenth to Eighteenth Centuries

room for the moment, this pattern suggests an earlier system of access arranged across the face of the elevation. The stairs are gone from the ground and first floor openings, which now have different uses, but survive in the entrance to the upper tower room where removal of the existing wooden stairs revealed a much earlier, probably original, flight of stone steps leading up to the room. These were much worn, consisting of three risers 0.18m high, with treads 0.28-0.30m deep. Most of the next step down had been removed, but enough survived on the southern side to indicate that the stairway was beginning to turn to descend across the face of the elevation down to the first floor northernmost doorway from where steps would have led down into the first floor room of the tower.

The southern entrance to the first floor tower room is more complicated, the evidence suggesting perhaps three different phases of use. At present there is a large opening, 3.02m high, from which stone steps rise up to a small landing outside the door to the room (not illustrated). Both the opening and the steps appear late. The roof of this space, within the thickness of the wall, is a simple

brick built barrel vault. Immediately outside the room door part of a second, bricked up, opening was exposed traces of which could be also seen on the external face as cracks in the render (V). To the right of this a 'passageway' within the body of the wall had been filled in with a rough brick blocking. The sides of the passage were faced with hair plaster painted pale blue. The vaulting of this roof was slightly offset to and cut through the barrel vault of the existing space. The two, then, are not contemporary. It seems likely that the earlier space was not related to access, but had a different function, most probably a garderobe serving the lower tower room. The dimensions, 2.50m high x 0.74m wide, are almost identical to those of the garderobe identified in the upper tower room on the opposite wall (see below). The insertion of the doorway and 'passageway' through the wall presumably gave access onto a staircase down to the ground floor door. The implication of this is that in its earliest version there was no direct access to the rooms of the Gatetower from the Grammar School Range. Entrance was made to the first floor room from the stairway from the main part of the Master's Lodge to the east. From here egress was through the northern door of that room (III) up the staircase and in through the second floor doorway (IV). Each of these rooms was served by its own garderobe. Subsequently, perhaps following the suppression of the School in 1570, or later, when the tower rooms ceased to be part of the Master's suite around 1636-7, the means of access to the lower tower room had to be altered. A new opening (V), across the end of the existing garderobe, was made to allow stairs to descend through the wall down, perhaps utilising the existing stairway to the door on the ground floor (see above). This implies that access to the tower rooms was still to be made without entering into the body of the former School building, subsequently given over to College accommodation, perhaps dating the changes to the earlier of the two suggested events, although the removal of control to access away from the Master's Lodge implies the later date may be more likely.

Gatetower Rooms

First Floor

The first floor tower room was evidently of some status and has retained evidence of several phases of its use and decorative schemes. Beneath the later panelling, which also served to divide the room into two unequal parts, survived an extensive painted decoration. This consisted of broad green bars (180mm wide) with black borders dividing the walls into panels (approx. 2.20m x 0.64m). The background and infill of the panels are painted white. Traces of either an earlier paint scheme or undercoat for the green and white scheme is visible as traces of black and salmon pink. The green paint scheme respected all the doorways, which may suggest that all were still in use. This would give a date of pre-1637, which is not inconsistent with the copper based paint used. The conservation report on the paintwork, however, suggests that the scheme is more likely to be a little later, perhaps late 16th, early 17th century (Appendix 2). Archaeological evidence does not serve to elucidate the question further. On top of the paint work there are trace of wall

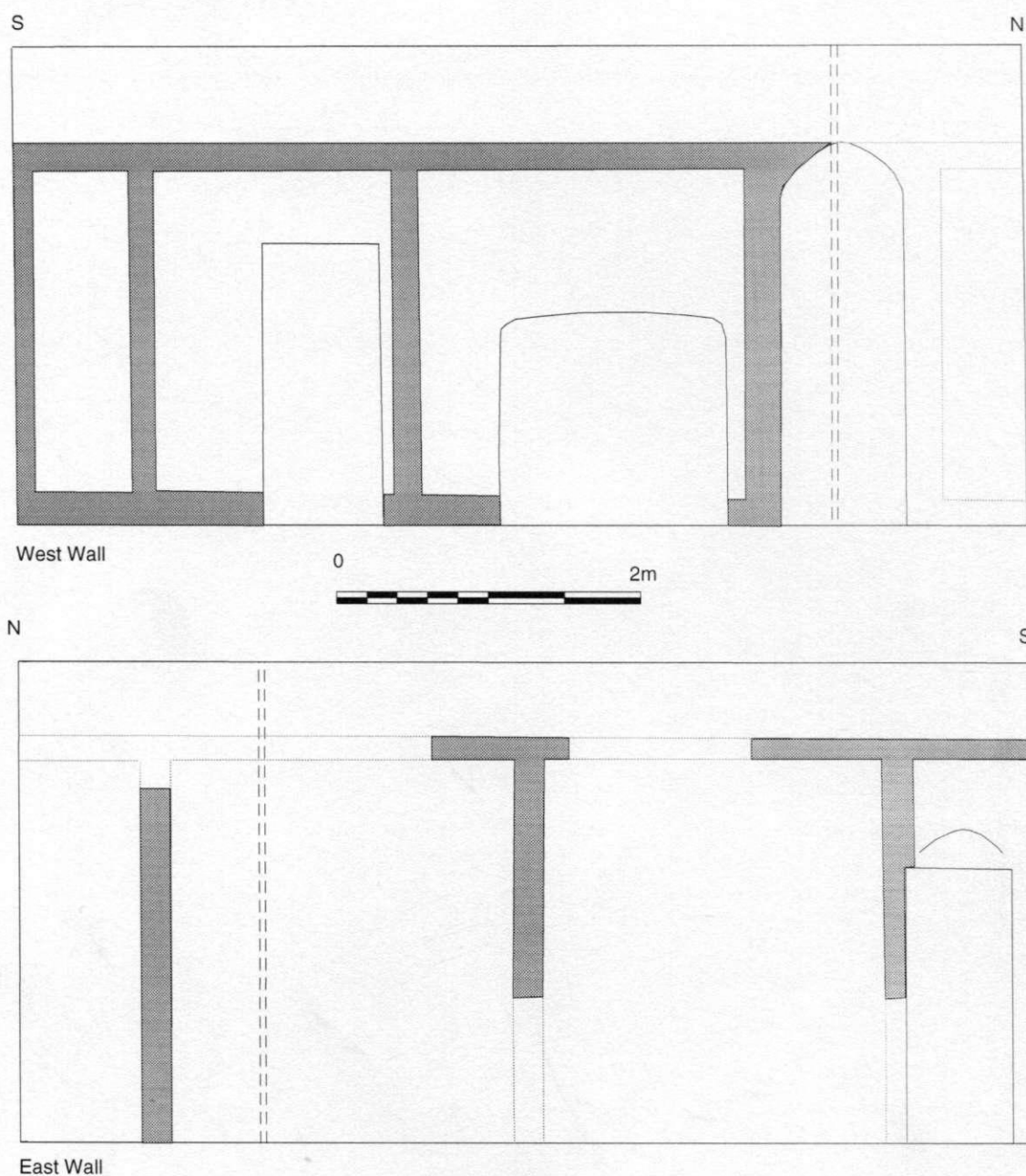


Figure 7 First Floor Room, Gatetower (Schematic)

hangings, wallpaper and finally the substantial wooden panelling which is still in place. This is eighteenth century in date, but there must be some doubt as to whether its placement in this room was primary, as this would give a time span of only about twenty years to fit in three entirely different decorative schemes. This room was recorded in detailed photographs by the RCHM.

Second Floor

The second floor room of the Gatetower was largely stripped of any wall covering allowing detailed observations to be made of its construction. The build was mainly of large clunch blocks (average 440 x 220mm) laid in rough courses. In places brick/tile had been used to level the courses up. All three doorways, two in the west wall, one in the east, were topped with four centred arches and appeared to be original and *in situ*. The door on the east wall now opens into a small cupboard. The RCHM suggest that originally it led onto a staircase to the room that is now the Drawing Room of the Master's Lodge (1988: 85). In fact the RCHM seems to have transposed details between the two tower rooms. It is a similarly positioned doorway in the first floor room which would have led onto the stairway, lit by a small window visible on Loggan's print. At the time of the tower's earliest use the building to the east of it (the Master's Lodge) was one storey lower than it is now, a doorway at this point could only have led out onto the roof. It seems more likely that this small barrel vaulted space served another function, quite possibly as a garderobe. Traces are visible in the cupboard's north wall of a small blocked window 1.47m high x 0.60m wide. This has a similar four centred arch to the doors. There is no indication of this on Loggan's 1688 print. The door in the southeast corner gives access to the spiral staircase leading to the tower roof. The doorway slightly north of that gives access to the room itself. The other main feature within the room is a fireplace. This has a substantial clunch frame and mantel. A brick relief arch above the mantel was infilled with clunch blocks, mirroring the technique used in the windows of the Grammar School Range and elsewhere in the earliest College. At a height of 2.70m above the floor was a row of wooden inserts, c. 80mm x 100mm. It seems probable that they held a rail or other means by which wall hangings could be supported.

Discussion

The Grammar School Range

The observations made confirm what has been suggested by the historical records, that this building dates to the earliest years of the College, immediately following Alcock's death, and that it has no predecessor in the Nunnery layout. It also confirms the several phases of alteration to both fabric and function. More importantly, perhaps, this work gives a much clearer impression of the earliest version of the building, the Grammar school itself.

There are no conclusive traces of primary internal divisions within the ground floor indicating an open hall layout, which would be typical of school structures of the two centuries preceding its construction, these structures being based on the medieval hall. One comparison would be the School of Divinity (now part of the University's Old Schools), completed by 1400. Access to the School would have been through the postulated southern

entrance, to the floor above through what is now the Porter's Lodge door from where a stair rose directly to the first floor. This separated the function of the School, whose pupils were presumably drawn from the town, from that of the cloistered world of the College.

Following the School's suppression in 1570 partition walls and the central fireplace served to subdivide the building into the smaller units for College accommodation, whilst doorways were inserted in the north wall. Presumably it was at this stage that the postulated southern door was blocked. It also seems probable that the brick division wall noted towards the eastern end belongs to this period as well. The timber-framed partition walls and western staircase probably belong to this immediately post-school period, the RCHM suggests that the eastern stairs are later (1988: 85), indeed it could be postulated that the eastern stairway dates to the 1637 alterations associated with the removal of the tower from the Master's control (see below). From 1570, if not earlier, the eastern end of the building was separate in function and access from the main part at both ground and first floor level. Post 1718 it seems probable that only on the ground floor, now the Porter's Lodge, was this separation maintained.

Gatetower

The construction of the Gatetower may have been begun during the lifetime of Alcock himself, as suggested by the RCHM (1988: 84) but its build has been demonstrated to be as one with the Grammar School which was not begun until at least 1503, three years after Alcock's death. The date by which the tower rooms became part of the Master's Lodge range is not known, although the RCHM record that they had been his since at least 1573-74 (1988: 96). The findings related to the altered access routes suggest that in fact these chambers belonged to the Master's rooms from earliest times. The proposed pattern of stairways and arrangement of door suggests that access to the tower rooms was controlled from the Master's Lodge side. Access to the lower chamber was from the staircase from of what is now the Master's drawing room. Entrance to the upper tower chamber was possible only from the first floor of the tower itself. The two tower chambers were well appointed, each with a garderobe and a fireplace. When the link between the Master and the tower chambers was severed (the rooms were exchanged for the 'Old Hall', now renamed the 'Prioress' Room in 1636-37), a new access had to be made to the first floor of the tower that did not require passage through the Master's rooms. This was probably achieved by using the existing staircase from the eastern doorway (the Porter's Lodge door) to reach a new opening and descending stair inserted through the wall across the northern end of the first floor garderobe. Access to the second floor remained as before. These access routes were still independent to the former Grammar School Range.

In 1718 - 20 major reconstruction and alteration work was carried out on the Grammar School Range which affected the tower. Both ranges, west and east of the Gatetower, were raised to three storeys. No evidence was observed to

indicate what the stairway arrangements were at this time but, given the scale of the reconstruction, it seems likely that at this stage access to the tower rooms was moved inside the west range, the two former staircases being removed.

Acknowledgements

Many thanks to the College for making funds available for this work, to Matthew Seaborne of Donald Insall and Associates, the Architects, and to the building contractors, Rattee and Kett, for permitting us to get in their way. Principal photographic recording was by Pat Payne of RCHM, additional photographs by the author. Recording was carried out by the author and Crane Begg, the tower ceiling was recorded by Tony Baggs. Tobbit Curteis Associates provided useful information about the tower room paintwork. Responsibility for the ideas presented here rest with the author, but have benefited immensely from discussion with colleagues, particularly Christopher Evans and Tony Baggs.

Figures within the main text are by the author, those within Appendix 1 and 3 are by Tony Baggs and Crane Begg respectively. Photographs by Pat Payne of the RCHM.

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Appendix 1

The Gatehouse Tower Roof

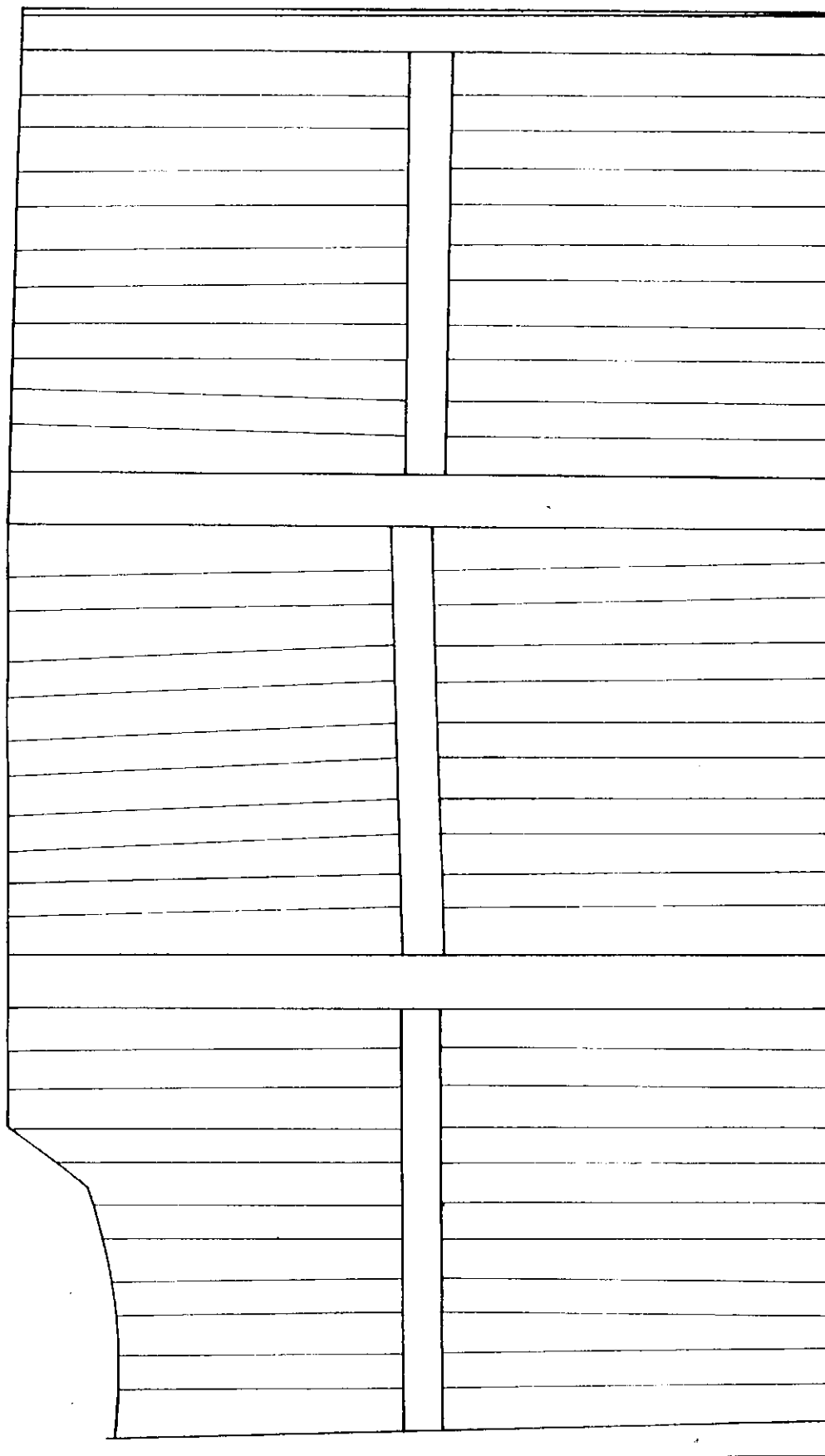
A. Baggs

In January 1998 the temporary removal of a later, probably 19th-century, inserted ceiling exposed the underside of the original roof which formed part of the west range which was probably added to the college buildings shortly after of Bishop Alcock's death in 1500.

The roof is of oak and its length is divided into three structural bays by two cambered tie beams which are matched by similar beams against the end walls. Along the central axis there are secondary beams which divide the roof into six compartments and in each of those there are five rafters. The only irregularity is at the south end of the west side where the newel stair leading up to the parapets intrudes into the room.

The tie and axial beams have plain chamfers with hollow stops and it is clear that the underside of the roof was intended to be seen from the tower room. The timber was probably left in its natural state but it was later covered with a thin layer of limewash some of which survives although now grey in colour and flaky.

Drainage from the roof, which was presumably always lead covered, was by valley gutters behind the parapets and they would appear to have been the source of leaks which have damaged the timbers and necessitated repairs. The only original section of wall plate is a short curving length where the rafters meeting the stair turret. The remainder of the plat along the west side is in four short lengths - all probably bits of re-used timber. There is now no plate at all on the east side where the beam and rafter ends are packed with bricks. One tie beam and at least three rafters are renewals. They carry no traces of limewash and the stops on the tie beam chamfers are ogee. The replacement of that tie beam must have been a major repair, which would have entailed the dismantling of two thirds of the roof, and when it was reassembled the axial beams were put back out of alignment and most of the rafters were reset slightly askew.



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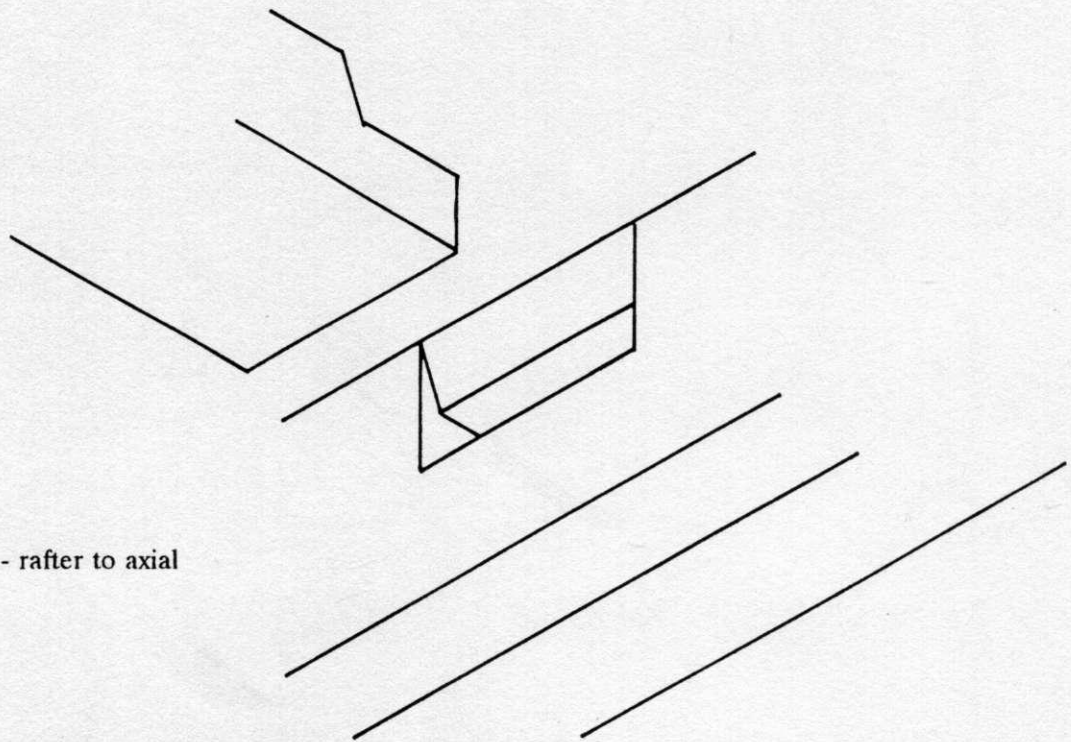
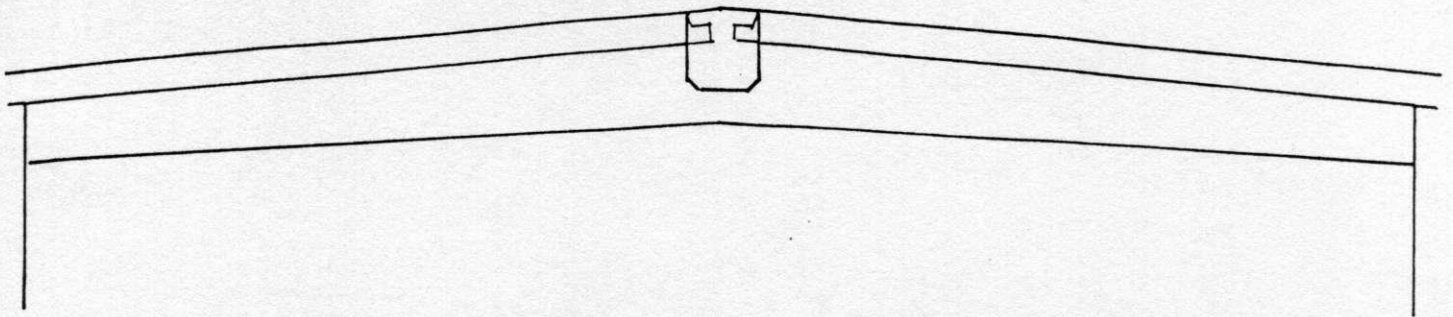
Plan
CHBG

Scale 1:20
1998

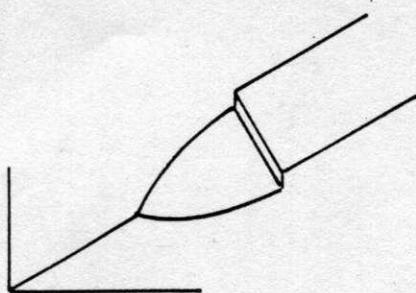
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Section
Details
CHBG

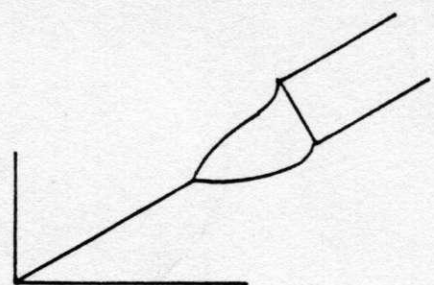
Scale 1:20
Scale 1:5
1998



Joint - rafter to axial



Stop on original tie beam



Stop on replacement tie beam

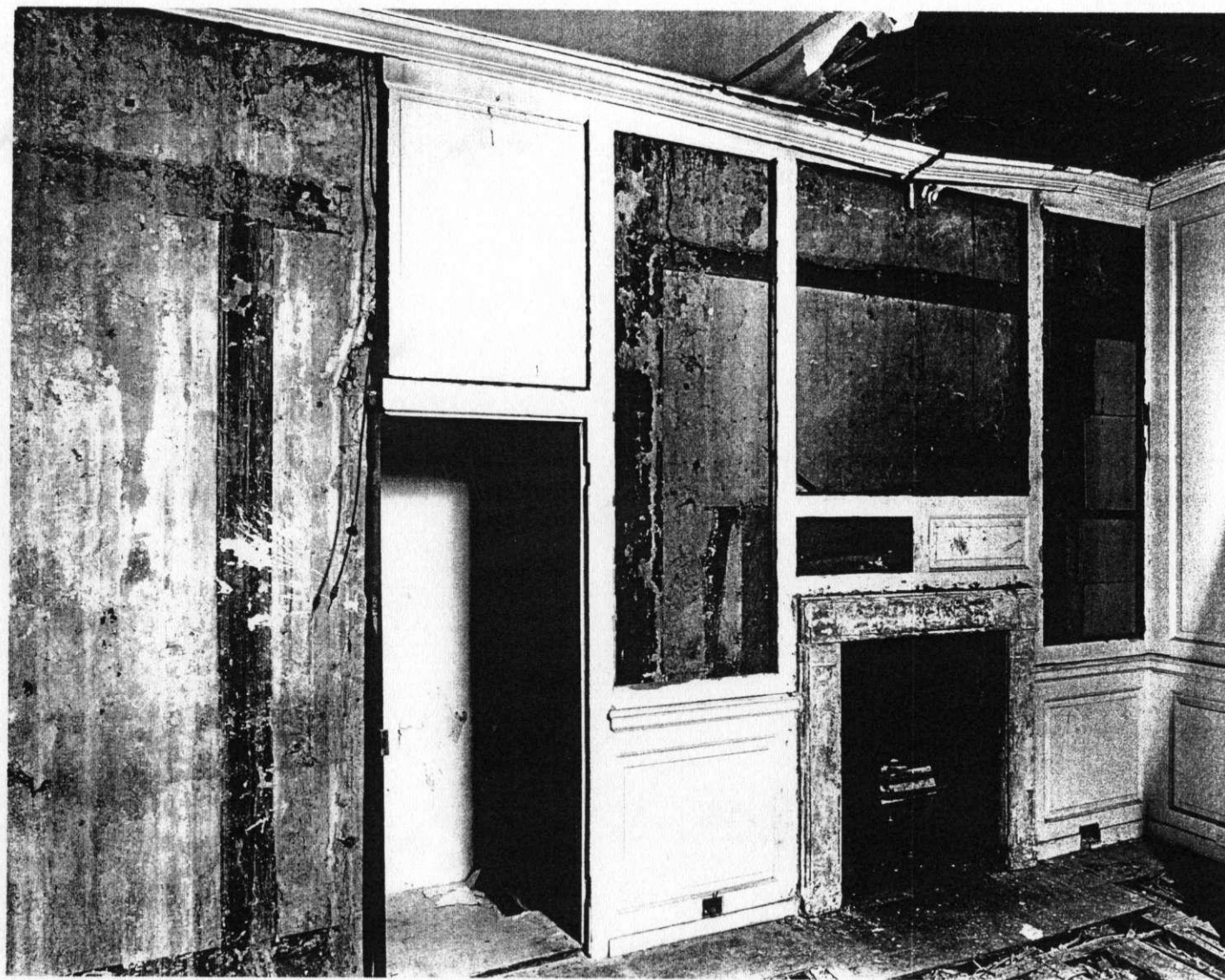


Plate 1 Gatetower Painted Room, West Wall
(Courtesy of RCHM)



Plate 2 Gatetower Painted Room, East Wall, Detail
(Courtesy of RCHM)

Appendix 2

Wall Painting in the Gatehouse First Floor Room

T. Curteis

Introduction

During refurbishment of the West Range, a scheme of painted decoration was discovered under the panelling in the first floor room of the Gatehouse. A preliminary examination was carried out along with emergency conservation on the most unstable areas of painting. Paint analysis was not carried out at this time.

The Paintings

The painted decoration consisted of a series of thick green lines (approx. 180mm) with black borders (approx. 8mm) separating the wall into panels (approx. 220mm x 640mm). The background and infill of the panels were painted white. Visual examination of the green paint suggested that it was copper resinate or a similar synthetic cuprous pigment.

The room is currently split into two sections, although it seems probable that at the time of the paintings it was a single unit. The painted decoration appears to cover all of the original walls and takes account of architectural features such as the doors and the fireplace. The decoration of the fireplace on the west wall was confusing due to areas of repair and repainting which had obscured the original sequence of decoration. The most obvious paint scheme is the fictive marbling with a yellow/brown background and black veining. This appeared to run over a black outline which was associated with the main green and white scheme. It is possible either that the marbling was contemporary with this scheme or that it was, in fact, a later alteration. However, as there is no evidence of the other, later, painted decoration, the latter explanation would be unusual.

On the east wall, areas of a very faint linear arabesque decoration was observed on the upper part of one of the white panels. No pigmented material was apparent and it appeared likely that this was part of a decorative scheme which was not associated with the main painting. The most probable explanation is that the decoration had been transferred from a later wallpaper, possibly as a result of the leaching of some of the organic dyestuffs used in the wallpaper. Fragments of a wallpaper with a similar design were found in the north west corner of the room.

In the areas of loss of the green and white scheme, a second, earlier, scheme of decoration could be seen. The predominant colour of this second scheme was the red background onto which simple linear black decoration was painted. Initially it was considered possible that this was a preparatory layer for the later scheme. However close examination showed that there was no discernible correlation between the black lines on the red scheme and the more regular green lines of the later painting. On the north wall, in an area above the window, there were a series of fragments of painted plaster which

it was thought might include some finer figurative or heraldic decoration. In fact the appearance of figurative decoration was a result of the uneven nature of the deterioration, causing layers of limewash and overpaint to remain only in some areas.

Small fragments of a green paint, similar to that on the walls, were found on the main exposed beam on the north part of the room (adjacent to the partition wall) indicating that the decorative scheme continued on to the ceiling. The paintings were carried out on a single layer of lime plaster which was applied directly onto the heavily keyed stone substrate. No preparatory features such as underdrawing or incision lines were observed.

Discussion

The use of simple green linear decoration is not uncommon in domestic wall painting of this type. A relatively common decorative technique in the 16th and 17th centuries was to paint exposed structural timbers with copper resinate and to paint fictive green timbers on the corresponding walls so as to make the entire scheme regular and decorative. An example of this is seen in St. John's College in the south range of Second Court (Curteis Paine Associates 1993). However, the regularity of the decoration at Jesus suggests that it is later than this and more likely to be a form of fictive panelling of the type seen in 121 High Street Marlborough. In this example, which on archaeological grounds is dated to the last quarter of the 17th century, the main bars are red and the panels are painted with fine grey marble graining. Although the colour scheme is different, the dimensions and general layout are not dissimilar to the example here.

The dating of the painting relies on a combination of stylistic and archaeological factors. Although part of the range to the east of the gatehouse is believed to incorporate earlier elements, the original two storey building to the west is understood to have been built between 1503 and 1507 as a grammar school (Willis & Clark 1886: 122). In 1570 the school was suppressed and the buildings passed to the College (RCHM 1988: 83). Between 1718 and 1720 a third story was added and certain features, including the windows, were remoulded. It is though probable that the current layout of the room and the panelling are part of this remodelling, apparently giving a *terminus anti quem* for the wall paintings. However fragments of wall paper which were found on the surface of the painting appeared to be at least 18th century in style indicating that the panelling may have been inserted at a later date, possibly from elsewhere in the College.

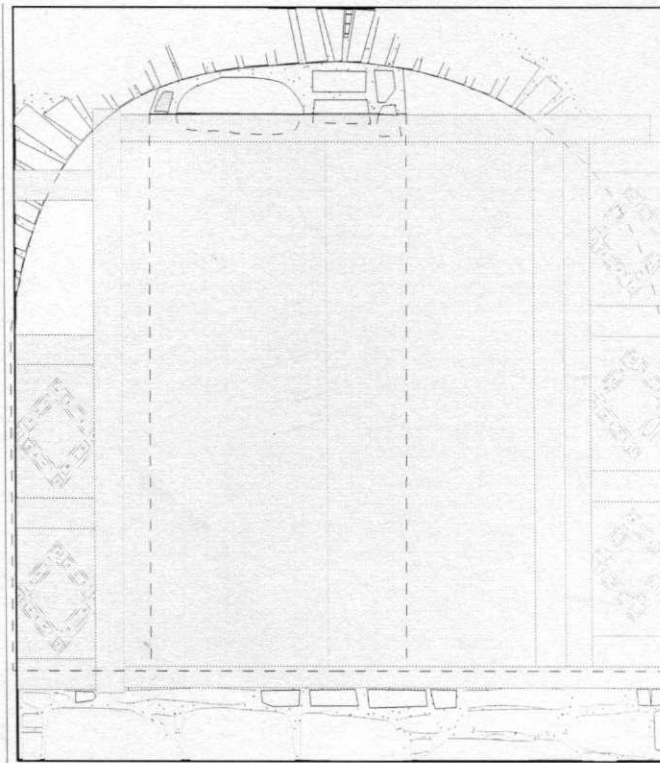
Due to its relatively simplistic scheme, it would be difficult to apply a precise date on stylistic grounds alone. However the regularity of the scheme and the suggestion of large scale panelling would indicate a later rather than an earlier date. The fact that at least one earlier scheme of wall painting survives would also indicate a relatively late dating. Therefore the most probable date for the green painting would be the late 17th century or early 18th century.

Appendix 3

The Master's Lodge Viewing Niche

C. Begg

In 1997 the panelling was replaced within the easternmost first storey room of the Master Lodge. This exposed the finely panelled 'early' north wall and the clunch-built west wall of the chapel, the latter clearly dating to Alcock's reduction of the nave. Within it was exposed a vaulted recess 1.55m across, 1.60m wide and 0.75m deep, the base being 1.05m above floor level. Spanned by an elliptical red brick arch, it is integral with the fabric of the wall. A cupboard, probably of 18th century date, has been inserted into its interior, which made recording very difficult.



Detail of niche with later cupboard

The west wall still carries large patches of early plaster rendering which continue across the frame of the recess and into its interior. Faint traces of paint survive locally both within the recess and on the wall itself. In the back of the recess the top of a rectangular opening could be made out in the gap between the arch and the cupboard. Measuring 0.70m wide, this is off-centre within the recess and has been infilled with clunch rubble and yellow brick. The blocking post-dates the plaster as this also faced the southern side of the rectangular aperture. The render pre-dates the cupboard.

It is difficult to account for this intriguing feature. The back of the recess corresponds with the position of the Rustat Memorial in the west wall of the chapel. Whilst the infilling of the rectangular opening probably relates to the setting of the plaque, given that its sides are faced, this cannot account for the opening's existence. In other words it seems to be a primary college feature whilst the memorial is of late seventeenth century date, probably by Grinling Gibbons (Renfrew & Robbins 1990). The only plausible explanation is that this represents some manner of viewing niche or hagioscope onto the chapel. It is possible that it originally carried an oriel window which spanned the recess, only later being reduced to the smaller rectangular opening (and then plastered over). Alternatively, from the outset it might only have consisted of the smaller aperture. Whatever its scale and sequence it is tempting to attribute this through-nave observation to the Master. However, given that the first and second floor rooms in this range were apparently only annexed by the Master in the 19th century, previously being college chambers, this seems unlikely (Willis & Clark 1886: 170-1).



Plate 3 Master's Lodge Niche and Later Cupboard
(Courtesy of RCHM)