The internal arrangement of the donjon at Colchester in Essex: a reconsideration

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Impressive in size, the great tower at Colchester represents one of the more enigmatic early donjons extant in the British Isles, for its early history, development and design are not entirely typical. While William the Conqueror instigated its building around 1074 to 1076, only the ground floor was completed, leaving the structure in an architectural state of limbo. A quarter of a century passed before Henry I granted the castle by charter to his steward Eudo, a man who had close personal connections with Colchester, and who may have overseen the earlier phase of building on behalf of the former king. It is likely that Eudo completed the Conqueror's unfinished work on his own account, and it was not until his death in 1120 that the castle returned to royal ownership.[1] For the purposes of this article and in the interests of simplicity I shall divide the construction regimes into just two phases, the first subdivided, described as Phases Ia, Ib and Phase II.[2]

The problems attendant on any interpretation of this building are well known and can be summarised as follows. In the first place, the donjon is much larger than any other,[3] which certainly accounts for some of the peculiarities in its plan. Its size, 46m by 33.5m can be attributed to a desire to re-use the podium of the Roman Temple of Claudius as a foundation for the donjon.[4] Without doubt this decision represents more than simply a labour-saving device, for the deliberate exploitation of Roman connotations in both architecture and place for propaganda purposes has been noted here, as elsewhere.[5] Indeed, this seems to have been a trend already prevalent in early eleventh-century France.[6] There are also indications that the temple site at Colchester had devolved into an Anglo-Saxon *villa regalis* by the tenth century,[7] which would only have acted as another propaganda spur to the Normans to build a castle there, underlining continuity of authority. Roman building material was liberally used in the construction of the donjon, though it has to be borne in mind that the dearth of good building stone in the region, combined with a copious source of recyclable Roman ruins, would naturally encourage such a course of action even without the added advantage of any symbolic connotations.

The second peculiarity of the donjon surrounds the lengthy building break, clearly evidenced by crenellations fossilised within the walls at the top of basement level (Phase Ia).[8] Arguments that this was envisaged as a temporary measure are certainly justified,[9] but resumption of the planned upper stories was delayed by about twenty years, which is an unusually long hiatus. Corner turrets were built, doubtless to give the half-finished structure a better look (Phase Ib) but the upper levels of the building were not added until *c*.1101 (Phase II).[10] This means that, although the tower and its plan were started under William I, it was not brought to fruition until the reign of Henry I, by which time some developments were emerging in donjon design.

The third problem is the absence of all but a trace of the fabric above the first floor, due to a determined attempt by one Mr. Wheeley, beginning in 1683, to raze the tower to the ground for its stone. However, he found that the effort required to take down any solid walls in the structure made the enterprise economically unviable and it was given up as hopeless within a few years, though not, unfortunately, before demolition of the upper storey had been achieved and other damage inflicted: "The tops of the towers and walls were forced down with screws or blown up with gunpowder …... but [since] the profit did not answer the charge of further demolition
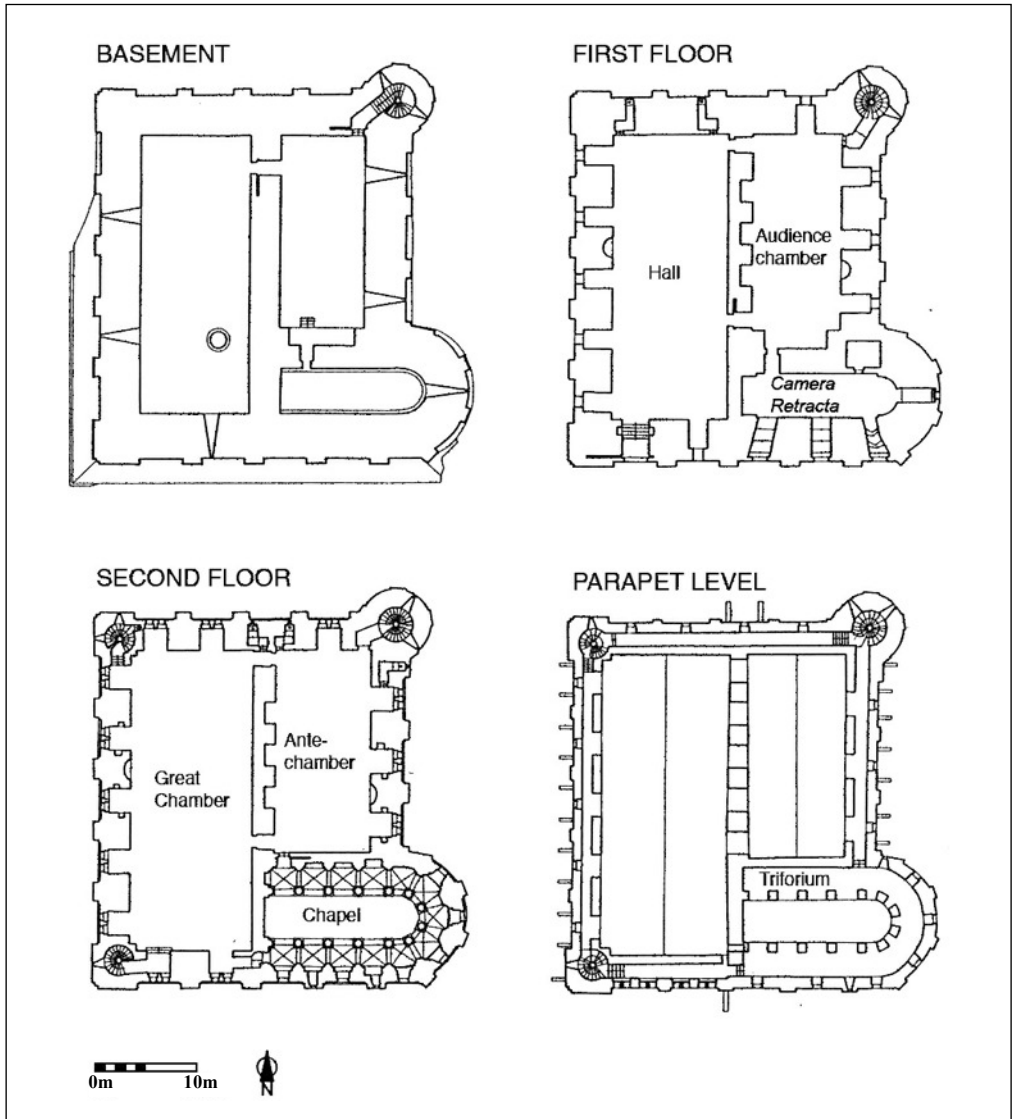
Figure 1: Floor plans of the White Tower, London

he [Wheeley] was forced to desist." [11] Subsequent alterations were made to the surviving two floors when the S part was used as a prison and later a museum, while the N part remains a ruinous shell.[12] Nevertheless, we have reasonably good evidence for the basement and first floor and the trace of the second floor has left enough to reconstruct certain key features, notably the location of a chapel in the SE corner, the presence of mural galleries on all sides and the continuation of the stairs in both of the W turrets. It is therefore possible to draw a likely reconstruction of the final form of the building from the surviving evidence, especially taking into account parallels with other plans.

It has been assumed that Colchester, built for the same patron and initially in progress at the same time, would basically have followed the plan at the White Tower, comprising two full floors above the basement.[13] It will be argued here that the polite accommodation as finally built comprised an aisled Hall approached through a waiting room and rising through two storeys; that there was an audience chamber and private bedchamber at the same level as the Hall; that at top floor level a gallery gave access to a chapel and to chambers placed over the smaller rooms below.

At Colchester the SE cell is, in plan, pretty much a replica of the White Tower design, with a protruding apse for the vaulted chapel envisaged on the top floor and two vaulted stories below this to support its structure (compare Figure 1 and Figure 2). The chapel was almost certainly designed to stand proud of the roofline, as in the original White Tower arrangement.[14] However, the scale of the enterprise made any further reproduction of the White Tower plan problematical and there were bound to be differences from the outset. In the first place, the basement floor was not set at ground level, as was normal, being already raised some 3m by the re-use of the temple podium. More importantly, the size of the building required two spine walls, structurally necessary because of a roof span that needed a triple pile rather than the more common dual pile plan (see Figure 2).

This left a long central cell that was difficult to light. In addition, the scale of the building did not lend itself to accommodating one hall through its immense length, as was normal. So the spine walls did not even run the full length of the
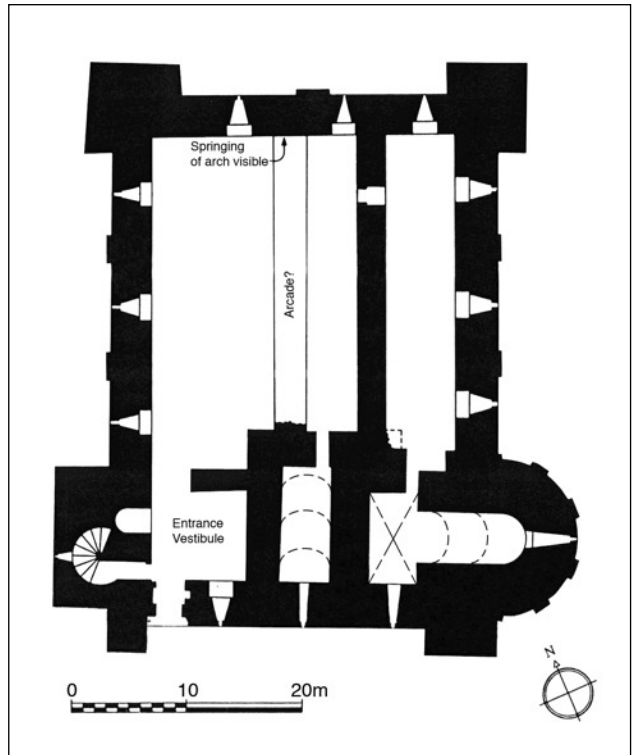

Figure 2 Colchester: Ground floor plan

building, with a lateral cross-wall and chambers across the whole width of the S section; at the White Tower this occurred only where the chapel cell was situated. Even the cross-wall was not straightforward, for the chambers differed in size, so their N walls dog-legged to accommodate the layout of the first floor. Despite the outline footprints of Colchester and the White Tower having been so celebrated for their similarity,[15] it must have been clear to its builders that Colchester could not simply reproduce the Conqueror's other great donjon on this particular site. The layout of the basement reflects this from the very start and even more essential differences emerged in the finished plan, delayed by two decades. By the time building resumed *c*.1101, work on Henry I's great tower at Norwich was advancing, marked by a determined change of plan over that envis-

aged by the architects of its instigator, William Rufus.[16] There are signs of cross-fertilization between Henry's modified plan for Norwich and a revised plan for Colchester, which probably veered closer to the contemporary royal model than that which the Conqueror's master masons had had in mind.

Analysis of the Plan: Ground Floor (See Plan: Figure 2)

Although circumstances led to its constituting the entire accommodation throughout Phase I (*c*. 1074-1101, the poor provision of lighting, no more than ventilation loops, shows that the vast majority of the ground floor space was envisaged, as was normal, as a basement designed mainly for storage. The survival of the ground floor plan fortunately provides us with the basis for supposition about the arrangement of the lost superstructure, where the polite accommodation was located.

There were a total of six cells at basement level: three long rectangles in the N section to support a triple-piled roof and three smaller ones in the S section. The roofing of the building must have been more complicated than at the White Tower, with a second set of pitched roofs across the S section. It is possible that the middle section on the S side was roofed in conjunction with the chapel while the westernmost one had its own small roof that could have been pitched, or perhaps more probably pyramidal. The roof as a whole would have required a complicated system of gutters, which could easily have accommodated a cistern for water collection.

The SE cell of the ground floor was determined by the shape of the chapel and, like its counterpart on the next floor, was vaulted in preparation for the ultimate thrust of the chapel vaults. A second barrel-vaulted cell, with equally thick walls, was placed immediately to the W, so that the ground floor potentially had two enclosed rooms that would have been particularly

secure, possibly envisaged as strong-rooms. The N wall of the central cell was deliberately set proud of the line of its SE counterpart, while the N wall of the next cell to the W was set back again. Thus a salient corner protruded into the westernmost of the long northern cells, made more pronounced by the position of the westernmost spine, which does not align with the W wall of the vaulted central cell on the S side. This arrangement of supporting walls is very significant in interpreting the first floor.

In the N section of building the E spine wall still stands but the W one was demolished by Wheeley. Where this joined the N wall of the donjon, however, there is no scarring on the lower 2m, suggesting that it was an arcade rather than a solid wall. This would also account for this being the only wall at basement level that Wheeler managed to demolish.[17] The interpretation of the first floor works best with the wall above also reconstructed as an open arcade. Superimposed arcades instead of a central spine were used at Beaugency (Loiret) as early as *c*.1015.[18] Other examples of the use of short arcades as supporting members in basements are known from Ivry-la-Bataille (Eure) *c*.1000[19] and Nogent-le-Rotrou (Eure-et-Loir) *c*.1005-1028).[20] At Norwich, *c*.1100, a revision of the original plan incorporated the use of an arcade in the basement[21] and this may have been directly influenced by Colchester.

An outstanding departure from the White Tower plan is that the entrance was located on the ground floor although, because of the height of the temple podium, this was well above natural ground level. The main door, at the W end of the S wall, was reworked in Phase II[22] and its elaborate decoration reflects architectural fashion at that time[23] (Figure 3).

Nevertheless, scholarly opinion agrees the doorway had been in this position from the start. It was widened to complement a new forebuilding belonging to

Figure 3 Colchester: Main doorway in the S wall.

Phase II, an improvement upon an eleventh-century timber original, both found by excavation.[24] The new doorway incorporated a portcullis, for which a recess was provided in the Phase II chamber above. This is another departure from the White Tower plan, where defences were inconspicuous. However, the Colchester doorway does resemble the entrance to the Tower in being very grand in its dimensions. It led into an entrance vestibule in the SE corner where there is a semi-circular niche in the wall, which may have been a place for a guard to stand; such niches are apparent in the great tower at Norwich.[25] No doubt anyone of status would have been ushered straight up to the first floor via a wide spiral stair in the SW turret off this vestibule.[26] The stair shows signs of reworking during resumption of the works in Phase II, at the same time that the doorway was widened.[27]

First Floor (See Plan: Figure 4)

As one would expect, all the windows on the first floor were larger than those in the basement, denoting more polite use. The arrangement of the S side of the first floor has been partly obscured by modern alteration and use of the building. Nevertheless, the surviving evidence permits some reconstruction. The SW stair would have deposited visitors into a room in the SW corner. While the equivalent space below is divided into two small cells, on the first floor it is more likely that these two spaces were combined into a single chamber, as at present. At basement level the immediate entrance vestibule had no need to be large, but the room above would have served as a checking-out area, waiting room and antechamber to the hall and was more likely to have been a reasonable size. The provision of two garderobes in the adjoining turret room[28] supports the interpretation of its use, for these facilities, often two, are commonly
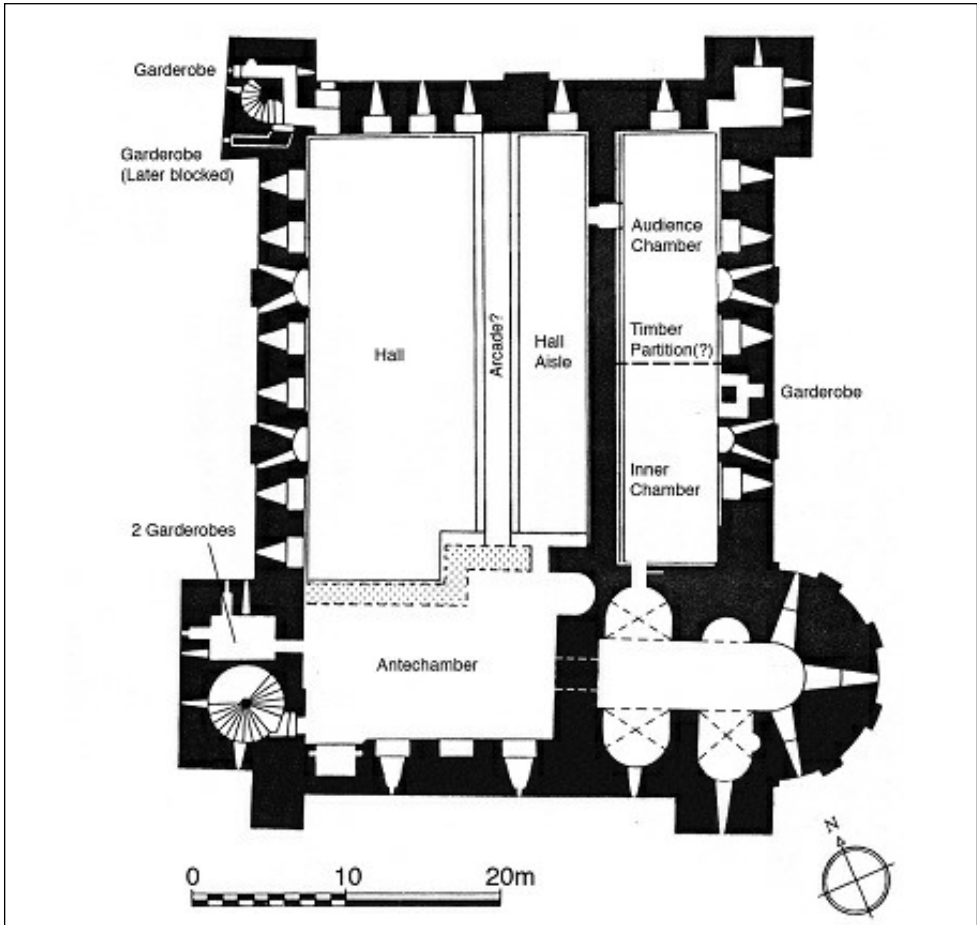
Figure 4 Colchester: First floor plan

found associated with waiting rooms. The winding gear for the portcullis would have been on show in a recess in the S wall next to the doorway and a much-altered recess in the S wall may represent the position of a fireplace, flanked by two windows,[29] a classic Romanesque room arrangement. From the waiting room one entered the hall. There is evidence for a doorway in the NE corner, conveniently adjacent to a semicircular wall niche of the sort that would accommodate a sentry, also found in the ground floor entrance vestibule.

Hall

On the N side of the donjon the arrangement of supporting walls in the basement W of the solid E spine was deliberately disposed to create a narrow central section, even though it would have been easy to align the W spine with the salient corner of the central vaulted cell in the basement, almost equalising the available space. This deliberate division into a wider and smaller space, added to the evidence for an arcaded spine at basement level, strongly argues for a hall with an aisle. This solution would also solve the otherwise insurmountable problem of lighting an enclosed central

space. The doorway from the antechamber shows that one entered through the aisle. As the S wall of the hall main section has gone we cannot be sure that there was not another doorway directly from the antechamber, but this is unlikely. As already noted, the supporting basement wall was deliberately set back towards the S compared with its neighbouring cell where, again, the easy solution would have been to build the N wall of the basement S cells in a continuous line. This very deliberate layout at basement level was clearly part of the Phase I plan of William the Conqueror, designed to create a recess at the S end of the hall nave that is reminiscent of the recess at the S end of the first floor chamber on the E side at the White Tower (see Figure 1, first floor). This looks like a place to set a throne. Although there was a doorway in the comparable recess at the White Tower, this connected with a private, enclosed room beneath the chapel, a vaulted space that may have provided a withdrawing room or dressing space for the king. The more public nature of the antechamber at Colchester, which formed part of the entry arrangement, is less likely to have been directly connected with the recess at the high end of the hall. The general arrangement of entering the hall via the aisle, with the king's throne set at the S end of an adjoining section of the hall beyond an arcade is a very close approximation to the surviving arrangement of the second floor at Rochester, built a generation later. One yearns for Mr. Wheeley to have left the arcade, if only so that we could see whether there was a wider arch at the throne end, as is the case at Rochester, where the architectural detail strongly suggests ceremonial use.[30] The hall was lit by a series of paired windows along the W wall and four more in the N wall. There was most likely another set of windows set at a higher level in wall galleries (discussed below), another parallel with the ceremonial space at Rochester. The hall and its accompanying aisle formed such a vast space (approximately

29m long by 18m wide maximum) that it required two fireplaces, both set into the W wall. The public nature of the room is underlined by the provision of two more garderobes in a turret at the NW angle.[31]

At the W end of the N wall was an external doorway to the hall; the marks of steps to reach it are visible on the exterior N wall[32] and it was overlooked by a protecting arrow-loop in the adjoining NW turret.[33] However, this was never apparently planned as a main entrance. It may have been envisaged as a private entrance for the use of the lord: a comparable arrangement is found in the donjons at Loches (Indre-et-Loire), built 1013-35 for the count of Anjou[34] and at Beaugency (Loiret c.1015).[35] The donjon at Falaise, built by Henry I c.1120 also had one of these 'back doors' and this is likely to have been the direct model for one at Norwich. Examples carry on into the second half of the twelfth century, for example Semblençay (Indre-et-Loire).[36] Frequently these doorways command a view of the castle courtyard (as was the case at Colchester)[37] or of the township (as at Norwich),[38] often both. They might have been used as 'appearance' doorways, where the lord could make an appearance to a wider assembly than could be admitted to the hall, either gathered in the courtyard or even to be seen by the wider populace beyond the castle walls. The presence of doorways or large window openings in numerous Romanesque donjons attests to such usage, possibly originally inspired by Carolingian palace architecture and the practice of kings at this period.[39]

Chambers

A doorway in the N section of the E wall of the hall led into a long narrow space in the easternmost cell (28m by 6m). It is possible that this was a complete withdrawing chamber but, despite this space being nowhere near as large as the adjoining hall, there were two fireplaces. This, combined with the proportions of the space, suggests that it
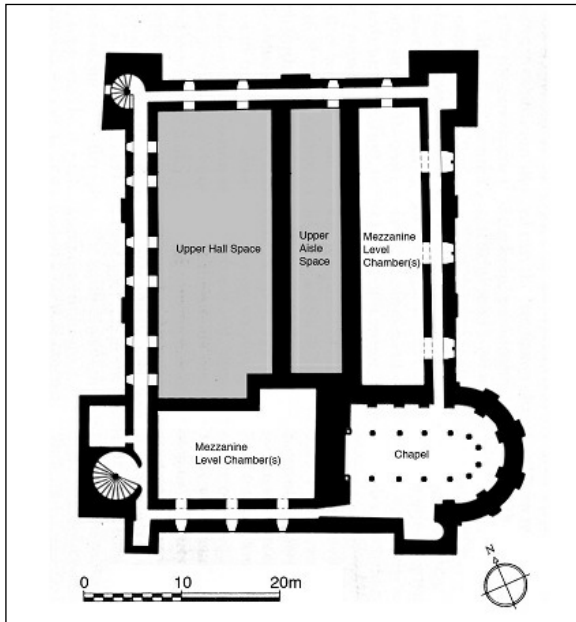
Figure 5 Colchester: Second Floor or Gallery Level plan

was divided into two rooms by a timber partition to form an outer and inner chamber, for there is no second doorway.[40] The first room, connected immediately with the hall, would be more likely used as a withdrawing room for private audiences and therefore is likely to be the larger. The arrangement of hall and adjacent chamber, used at the White Tower, is commonly found in earlier donjons in France[41] and it was also adopted in Henry I's donjons at Norwich and Falaise. Windows flanking a fireplace seems to have been the preferred arrangement in contemporary surviving chambers, which gives a clue as to the position of the partition (Figure 4). A division here would have given a room approximately 6m by 15m, with four windows in total. There was a vaulted mural chamber in the adjoining NE turret[42] but there were no garderobes attached to the outer chamber,[43] which may be another pointer to its use as a formal audience chamber.

The inner chamber thus reconstructed was smaller (approximately 6m by 13m). Its fireplace was flanked by only one

window and the doorway into a garderobe, which also had a vaulted closet;[44] all of which suggests more personal use, a private chamber that may have been used as a bedchamber as well. There is some dispute concerning access to the heavily vaulted sub-chapel to the S of this chamber. The 1922 Royal Commission report states very clearly that it was accessed from this chamber through the NW apsidal recess, the doorway having a drawbar. The commissioners asserted that another doorway in the W wall of the vaulted room (marked as a dotted line in Figure 4) was a later insertion.[45] Crummy, on the other hand, took this last to be original.[46] On the whole, the evidence of the Royal Commission is more convincing, especially the mention of the drawbar. Access to the vault from within the lord's chamber makes sense if it was used as a secure robing room or treasury, whereas there can be no very obvious reason why this secure space should have connected directly with the waiting room.

Second Floor (see plan, Figure 5)

While evidence for the missing upper floor at Colchester becomes more fragmentary, some elements can be reconstructed with certainty, including a chapel in the SE corner. Its walls stand to a maximum of 1.2m, enough to show that they were thin by comparison with the tower walls, maximising on the space available. Plain internal responds around the apse suggest a plan with aisles and an ambulatory, like St. John's chapel at the White Tower.[47] In addition, there was a side chapel in a projecting S turret. A gallery within the thickness of the remaining tower walls can also be safely reconstructed, along with its turret accesses in the NW and SW corners. The gallery windows on the reconstructed plan proposed here are, however, speculative, though based on parallels at Norwich and

Rochester. Similarly, the case for mezzanine-level chambers will be argued here, though it cannot be proven conclusively.

Access to the second floor was possible by either of the stairs in the turrets on the W side. During Phase I, while work was suspended on the upper floors and the building was temporarily single storey, the NW turret had been raised as far as first floor level, where it would have led only to the roof.[48] Despite this, the turret was equipped with two garderobes,[49] presumably in readiness to serve the projected hall. It may be that this corner of the building had advanced further than the rest, for evidence of the temporary crenellation is weakest in this corner, with no sign of it on the S wall of the turret itself. When work resumed in Phase II the decision was made to continue the stair upwards, an apparent change to the old plan that involved the blocking of one of the garderobes.[50]

The mural gallery at second floor level has been taken as evidence that there was another full storey,[51] but this is not necessarily so. The donjon was already massive in scale and the king's donjon at Norwich was setting a trend for a single, large storey above the basement with some additional accommodation at mezzanine level. There, the principal floor was encircled by a gallery that overlooked the public rooms and also gave access to the mezzanine-level chambers. This formula may well have been adopted at Colchester, where the gallery certainly led to the chapel and quite possibly to rooms over the antechamber on the S side and the chambers range on the E side (Figure 5). The proportions of the hall are consistent with its having risen through the full height of the top storey to the rafters, but the proportions of the waiting room and E side chambers would suggest that they were single storey rooms with extra chambers above. The E side mezzanine chambers could each have been accessed independently, like the W side chambers at Norwich;[52] these are en-

visaged as private spaces, probably bedchambers. On the S side, the space over the antechamber to the Hall would be large enough to be divided into two. The proximity of this space to the chapel might suggest use by the resident chaplain. Both Norwich and its derivative at Castle Rising had a mezzanine- level chamber close to the chapel, thought to accommodate the priest, and each also provided a room beside the chapel that was probably associated with it, perhaps a vestry.[53] Two such chambers could have been accommodated in the proposed mezzanine-level space at Colchester.

Drury attributed the Colchester gallery to the influence of the White Tower which, at the time he was writing, was thought to have an internal gallery overlooking the upper section of the second floor.[54] This is now known to have been an external feature, originally at the level of the gutters, which only opened on to the upper chambers after the roof was raised in *c*. 1490.[55] The White Tower gallery led only to the triforium of the chapel (see Figure 1 parapet level). The upper storey arrangement at Colchester, put on hold for a couple of decades, benefited from an improved design. This gallery was built as a proper, internal feature and was also set at the floor level of a second upper storey. Here it overlooked the extensive space of the dual-storeyed aisled hall as well as providing convenient access to the aisles of the chapel rather than its triforium. Thus it could work on a ceremonial level while also giving practical access to mezzanine-level chambers. Its inspiration is less likely to be found in the White Tower than in a more contemporary model. Only three English great towers have true internal galleries: Norwich, Hedingham and Rochester and the last two post-date Colchester.

Back in the 1070s the intention may have been to attempt a near twin to the White Tower but this was never going to be easy and circumstances, very possibly exacerbated by difficulties encountered in

achieving a workable plan, prevented the progress of the build. When it resumed it seems times were changing. Norwich provided the inspiration for a the revised design at Colchester: quite apart from the architectural parallels, the dating and close personal connections between Henry I and Count Eudo, and that Colchester was returned to royal ownership in 1120 add weight to this hypothesis. I would also contend that Colchester in its turn influenced the design at Rochester. Similarities between the Colchester hall arrangement and the layout of the ceremonial space on the second floor at Rochester have already been alluded to and Rochester, too, was given a gallery that overlooked the principal floor. It may be that Norwich and Colchester present us with a bridge between the great Norman donjon prototypes, such as Rouen and Ivry that inspired the White Tower, and the next generation of high status donjons.

Endnotes

1   HKW I, 31; Drury 1982, 399-400

2   Ia relates to Phase VIIA in Paul Drury's extensive report on the building and related excavations published in *Archaeological Journal* in 1982: his Phase VIIA2 will be called Phase Ib here and his Phase VIIB, Phase II. For detailed analysis of the dating evidence see Drury 1982, 398-399.

3   For comparative plans of Colchester and the White Tower, see HKW I, fig. 6; Drury 1982, Figure 40. For comparative plans of major rectangular donjons see Mesqui1992, Figure 124.

4   Hull 1982, 319; Drury 1982, 391

5   Wheatley, 2004, 123-128. In relation to Colchester in particular, see Wheatley 2004, 41. For a comparable interpretation of re-used Roman materials in William's donjon at Chepstow, see Turner 2004, 254-257; Creighton 2002, 67; Wheatley 2004, 128-129.

6   The symbolic connotation associated with the re-use of Roman building materials has been noted, for example, at Langeais (Indre-et-Loire) c.1000; Impey and Lorans, 1998, 25 and in the donjon at Mayenne (Mayenne) c. 900; Early 2002, 254.

7   Drury 1982, 390

8   Ibid. 393.

9   Ibid. 393

10   Ibid. 306

11   Morant, 1768, 7-8

12   RCHM Essex, vol. III, 1922, 50

13   Brown 1976, 66; Drury 1982, 393 and 400

14   Drury 1982, 395

15   HKW I, 31 and fig. 6; Brown 1976, 66; Mesqui 1992, 116, 126

16   For alternative interpretations of the development of the great tower at Norwich, see Drury 2002 and Dixon & Marshall 2002.

17   Crummy 1981, 80 and fig. 67; Drury 1982, 395

18   For plans of Beaugency see Valery-Radot, 1930 and Mataouchek 2004.

19   Impey 2002, 193

20   Chatelain 1973, 129 and Planche VII

21   Dixon and Marshall 2002, 236

22   M.R.Hull in Drury et al, 1982, 322

23   Zarnecki quoted by Crummy, 1981, 80

24   Drury 1982, 315 and Fig 2; 396

25   Dixon & Marshall 2002, 237-238.

26   A stairway situated immediately adjacent to an entrance and leading to a more important social space on an upper floor is a common feature of donjon design. More usually, however, the formal entrance is at first floor level and the adjacent stair is positioned to allow unimpeded access for favoured visitors to a superior set of rooms on the second floor. For an early example

and explanation of this point see Loches (Indre-et-Loire), built c.1013-35; Marshall 2002, 143-145. Later examples include Richmond (Yorkshire), Hedingham (Essex), Rochester (Kent), amongst others.

27   Hull, 1982, 322

28   Ibid. 320-321

29   Crummy 1981, 80 There was certainly a fireplace in this position by the late fifteenth or early sixteenth century; RCHM Essex, iii, 1922, 54

30   Marshall 2002i, 145-149; Goodall 2006.

31   Hull 321. One of these was subsequently blocked in association with carrying the staircase up to the second floor.

32   RCHM Essex, vol. iii, 1922, 51

33   Hull 1982, 321-322

34   Mesqui 1998, 95

35   Marshall (2006), unpublished PhD thesis, 295

36   Ibid, 93

37   Drury 1982, Figure 38

38   Marshall 2002, 150

39   For appearance doorways and their possible Carolingian origins see Marshall 2006.

40   A strikingly similar room arrangement is found in the great tower at Norham in its second phase (*c*.1160). Dixon and Marshall, 1993, 419-423.

41   Early examples can be cited at Mayenne (Mayenne), Loches (Indre-et-Loire), Beaugency (Loiret), amongst others.

42   RHCM Essex, vol. iii, 1922, 51

43   Hull 1982, 322

44   RHCM Essex, vol. iii, 1922, 51

45   Ibid., 51-54

46   Crummy 1981, 80, quoting H. Jenkins, *Colchester Castle: the templed citadel*, 1869, 59-61. Crummy reported being able to see evidence of the doorway behind a museum case, but this does not preclude its being a later alteration.

47   RCHM Essex vol. iii, 1922, 54.

48   Hull was fairly confident that first floor level in the turret belonged to Phase Ib. Hull, 1982, 321.

49   Ibid.

50   Hull 1982, 321. The building survey on the SW transept at Ely Cathedral, contemporary with the work at Colchester, showed a marked tendency to build up the corners first at each level. Fearn *et al* 1995

51   Drury 1982, 395. Drury notes that mural galleries are only found on the top floor, citing various examples, including Rochester, with Hedingham as an exception. In fact Rochester is the only exception.

52   Dixon & Marshall 2002, 237-238

53   Allen Brown, 1978, 54-55

54   Brown and Curnow 1984, 66 and Figure 3.

55   Impey *et al* 2009.

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