The transformation of Drumlanrig Castle at the end of seventeenth-century

Cristina González-Longo, Department of Architecture, University of Strathclyde

Abstract

The transformation of Drumlanrig Castle between 1679-98 makes it one of the most original and interesting buildings of its time in Britain. It was carried out at almost the same time as the Royal Palace of Holyrood, whose design, construction and procurement influenced the making of Drumlanrig. James Smith, one of the mason-contractors at Holyrood, went to work at Drumlanrig as an independent architect for the first time, providing a unique design that was in continuity with local practices but also aware of contemporary Continental architectural developments. The careful selection of craftsmen, techniques and materials make this building one of the finest in Scotland. Although the original drawings and accounts of the project have now disappeared, it is possible to trace the history of its design and construction through a series of documents and drawings at Drumlanrig Castle and by looking at the building itself. This paper will unravel the transformation of the building at the end of seventeenth-century, identifying the people, skills, materials, technologies and practices involved and discussing how the design ideas were implemented during the construction.

Figure 1: North elevation of Drumlanrig Castle

Introduction

John Summerson considered Drumlanrig Castle the most remarkable building emerging from the tradition initiated by the King Mastermason William Wallace (d.1631), '*the last great gesture of the Scottish castle style'* and *'obstinately Scottish'*.[1] He did not make any reference to the fact that the building incorporates an earlier building, which makes it even

more remarkable. The design of Drumlanrig innovates but at the same time respects tradition and local identity, including the romantic idea of the Scottish castle (Fig. 1).

Perhaps for all these attributes, despite its apparent non-classical design, Colen Campbell featured it in his *Vitruvius Britannicus.* [2] He does not name the designer, maybe due to the fact the building is the result of various phases and design collaborations. There was also a great deal of the client's input, including a drawing of the front of the house done by the 2nd Duke.[3] However, archive documents clearly show a structure of designers and contractors, '*Mr James Smith'* performing the role of architect and the gardener '*Cornelius*' as landscape architect.

The transformation of Drumlanrig Castle occurred between 1679-98, almost at the same time as Holyrood Palace, which design, construction, procurement systems and professionals involved influenced it. C. T. Ramage talks about a "*plan made of wood, with proper elevations, which it is evident the master of works… had closely followed*"; which unfortunately has disappeared. [4] The original drawings and accounts of the project have also disappeared, but it is possible to trace the history of its design and construction through documents and drawings at Drumlanrig Castle archives and by looking at the building itself.

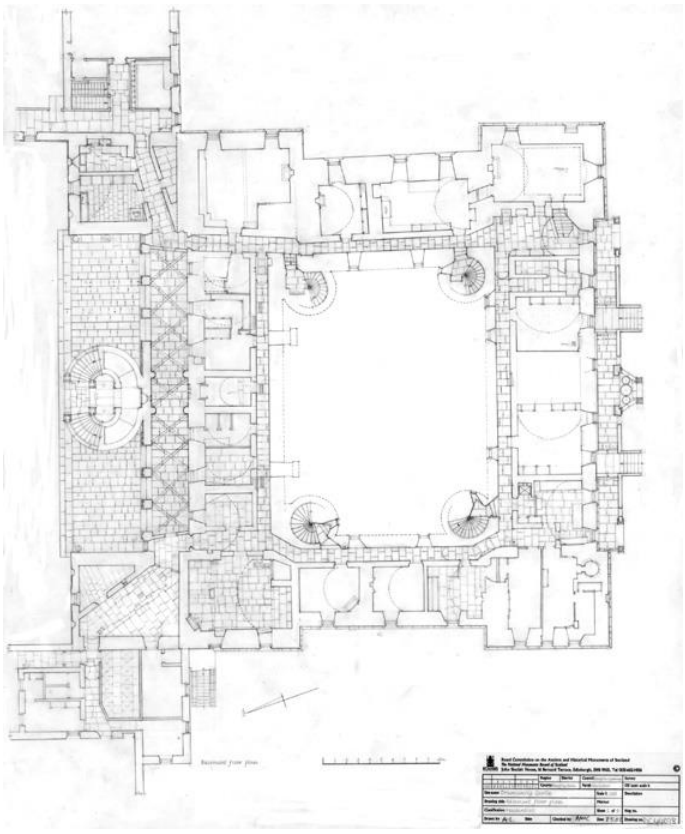

Figure 2: Plan of the basement showing the location of the vaults (RCAHMS)

The first Castle

The seventeenth-century iron yett behind the oak front door and the North ends of the corridors along the East and West ranges are some of the few indications of the castellated nature of the building. The Douglas family owned land in this area from at least 1388. There is mention of a castle on the site in an indenture dated 29 May 1429. [5] From the remains still visible and a plan dated 1608, we can assume that this first castle was similar to others: a rectangular barmkin enclosure accommodating four ranges of courtyard buildings, with the north-west tower as keep.

An inventory made at the death of James Douglas, 7th Lord of Drumlanrig (1498-1578) mentions that he '*beildit the haill house and pallice of Drumlanrig'* [6]. The main building would have taken by that time the appearance of a tower-house (N and W ranges) with a turnpike stair in the corner and James would have built additional ranges around the same quadrangular courtyard we see today.

Visible remains from this period would be the North wall of the basement (under the terrace), the barrel vaults in the basement (fig. 2), the ribbed cross vault at the Chapter Room, to the North of the West quarter and the vault at the Duke's Study below. Other remains are visible all around the bottom of the building, where the new windows seem to be located at the top of the old enclosure wall. Remains are also visible at the lower part of the East external walls, including gun-holes and blocked windows, and at the courtyard, where the windows' surroundings are not built as a basement window (like the new window to the stair tower) but appear as partially buried (Fig. 3).There is an obvious difference in the colour, tooling and dimensions of the older stone, as well as in the window surroundings and wall thickness, being around 2.5m at the bottom of the East external wall.

Figure 3: Remains of the older castle

William Douglas, 1st Earl of Queensberry and grandfather of the 1st Duke, wanted to transform the castle. Two plans dated 1608 and 1615 (Fig. 4) show the building around a square courtyard plan and two plans dated 1618 (Fig. 5) illustrate the proposal for the rebuilding of the South quarter and the retention of the existing north-west tower. There is also a document dated 1618 describing the works. The Earl asked for estimates '*for the reedifreing and building up of the South quarter'* and there is a 1622 letter about wood required from David Anderson, burgess of Aberdeen to his '*guid frend Thomas Ballantyne, wright',* then at Drumlanrig. [7]

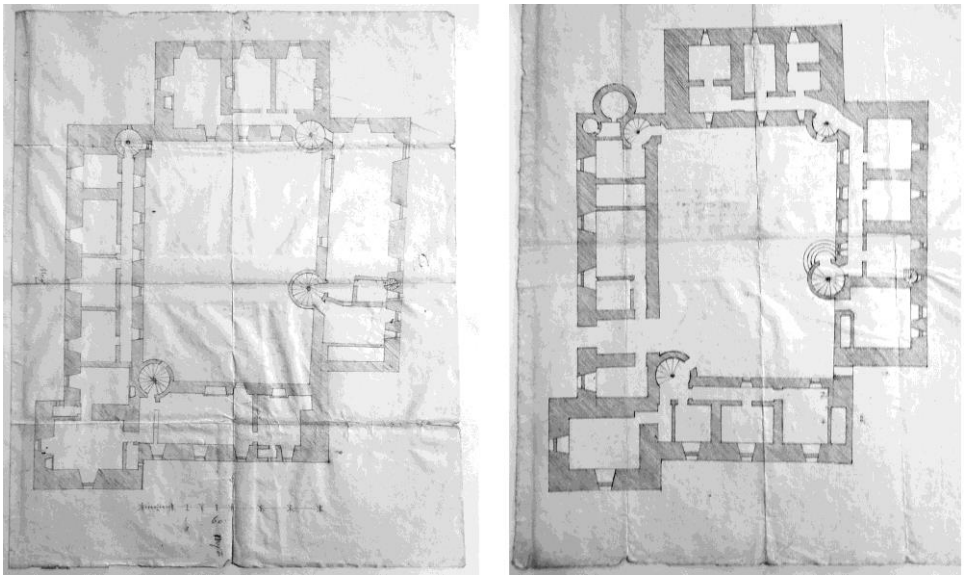

Figure 4:Plans of Drumlanrig Castle '*unreformed*' dated 1608 (left) and 1615 (right). North on the left. (Drumlanrig Castle Archive)

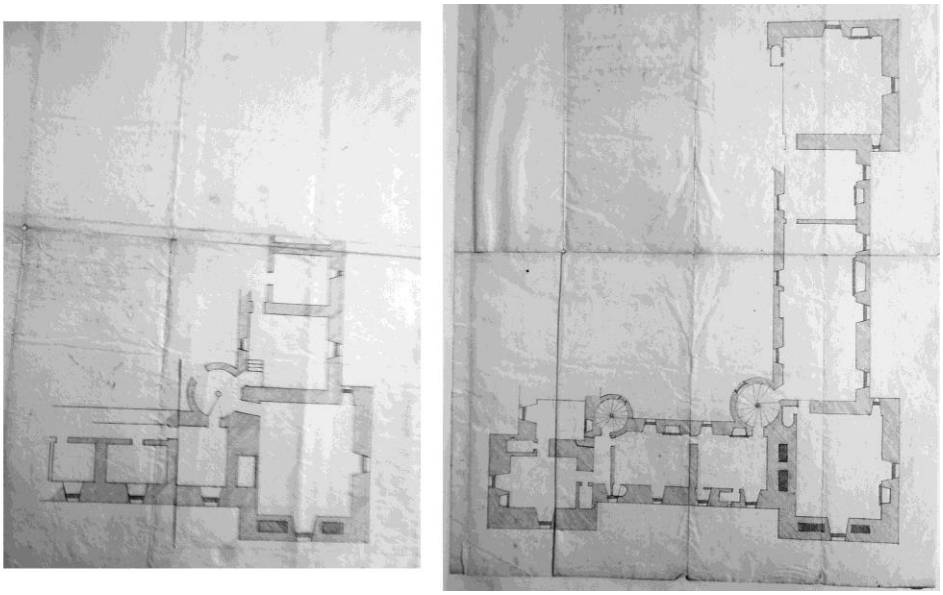

Figure 5: Ground and Third floor Plan '*as reformed'* dated 1618, showing the existing NW and the new SW and SE towers (Drumlanrig Castle Archive)

The 1st Duke of Queensberry's transformation (1679-95)

Sir William Douglas (1637-1695), 3rd Earl of Drumlanrig wanted to transform the Castle into one of the most impressive houses of Britain, probably in view of his rising political career. He became the 1st Duke of Queensberry in 1684 and King James VII's Lord High Commissioner to the Parliament in 1685. The starting point for the transformation of Drumlanrig Castle seems to have been the design produced for his grandfather (Fig. 5) as the Earl marked on the back of the 1618 plan: '*A memorandum of my grandfather anent repairing ye House of Drum to be looked over and advised be Sr Wm Bruise* [Sir William Bruce]'. An additional note, with different handwriting refers to '*Mr. Mills* [Robert Mylne's] *draughts both for the house and bridge and estimett for the bridge'*. Both Bruce, Royal Surveyor, and Mylne, Royal Master Mason, were working at the time at Holyrood Palace.

There is a contract dated 1686 which confirms Smith's role in the project, as the plumber William Waldhave had to carry out the works '*conforme to the synd draughts, and that at the sight of Mr James Smith or ony his Grace is pleased to apoynt for surveying the said work*'. [8] Most probably the imprisonment of William Bruce in 1678 facilitated the appointment of Smith as architect for the project, becoming his first important documented commission as independent architect. Smith had married Janet, the eldest daughter of Mylne in 1679, when he was working in Holyrood Palace. Smith's life and work have been discussed before, including his way up the profession, from *measson*, like his father, to become the leading architect in Scotland at the end of seventeenth-century. [9]

The basic configuration of the building – a square with one turreted tower in each angle, built around a courtyard with one turret staircase in each angle –is usually associated with George Heriot's Hospital in Edinburgh, founded in 1628 and completed over the next sixty years. Although it is not clear who was Heriot's designer, the building is the result of the directions of Dr Blacanquall, executor of Heriot's will, and the work of the leading master masons of the time: William Wallace, William Aytoun, James Murray, John and Robert Mylne. The latter is probably the most clear connection between the two buildings.

But Drumlanrig is different, as it included extensive reuse of the existing castle, extending the building in elevation and regularising its exterior. Only few of the great Scottish houses at the end of seventeenth-century were completely new constructions. At Drumlanrig, the traditional method of extending a tower-house horizontally, the tower-and-jamb with the staircase in the re-entrant angle, was employed. There is a tower staircase in each of the corners of the

internal courtyard, which was quite out of fashion at the time, but appropriate for an ancient paternal seat, the house of the *noblesse d'épée*. We find however some innovations, like the vertical extension, the 'wrapping up' of the existing buildings, the creation of a new main entrance at first floor level and the location of the public spaces in the central sections and private ones to the sides.[10]

Figure 6: Front terrace and stonework at the main entrance

Figure 7: Vault above main entrance and balusters of stair

With the 1st Duke's intervention, Drumlanrig was converted in a regularised courtyard palace with tall square towers in each corner, a theatrical façade of magnificent polished pink stone and a magical skyline of ogee roofs. Large terraces with a bold balustrade, all around the front and the top of building, unified the design. By1691 there were 64 hearths at the Castle.[11]

The terrace and main entrance is reached from the forecourt by a divided horseshoe stair with a striking balustrade.[12] The mouldings of the balusters follow in parallel the curve of the flight of the stairs, resulting in a very complex geometry (Fig. 7), which together with the

Dorico Barbáro at the portico of the lower level, show a clear reference to Juan Caramuel de Lobkowitz's treatise *Architectura Obliqua*.[13] The horseshoe stair led into an open loggia through the entrance porch. The porch is the base of a tower surmounted by a semicircular pediment and a clock within a *tempietto*-like element with Ducal coronet above. This tower marks the main entrance (Fig. 6), configuring the façade as a civic building – like the *Palazzo Senatorio* at the Capitoline Hill in Rome - rather than as a private residence.

In overall composition, the building refers again to the *Palazzo Senatorio*, with a giant order of fluted composite pilasters in the North elevation, used for the first time in Scotland, [14] a balustrade topping the building and a tower in the middle. These pilasters, an element which appears in other of Smith's works, helped to unify and monumentalise existing fabrics, but was also a technique to better join the masonry with the existing one. By rotating the balusters 45 degrees it improves sunlight penetration in the North facade. There is an identical rotated balustrade above the main entrance in Holyrood, probably also Smith's design. The need to adjust the composition to the location of the existing windows in the North elevation caused an unorthodox overlapping of the order with the windows' pediments, giving the elevation more movement.

The portico at the lower level of the North elevation is roofed with ribbed cross vaults springing from corbels in the manner of c.1500 (Fig. 3),[15] but they could be late seventeenth-century, like the cross vault covering the main entrance (Fig. 7).

The 2nd Duke of Queensberry's improvements (1695-98)

Although William was not able to travel to complete his education due to debts incurred during Cromwell's rule, his sons, James (1662 – 1711) - who became the 2nd Duke after his father's death in 1695 - and Henry went on a Grand Tour of two and a half years, visiting France and Italy and spending a considerable time in Rome. Smith designed William's magnificent mausoleum at the nearby church of Durisdeer and remained engaged in the Castle, as the 2nd Duke says in a letter dated 22 April 1696 that he '*is to go to Drumlanrig with Mr Smith*'.[16]

James Nasmith was responsible for providing materials, tools and resources, for the payments and keeping the books as well as making sure Lukup completed previously instructed works. The instructions refer to James Smith and the Duke's gardener, Cornelius, as those who would give the specific design and construction instructions to the workmen ('*advise and direct'*) in both Drumlanrig and Queensberry House, in a collaborative way, with a great input

from the Duke. He went into a great deal of detail, specifying design, materials and procedures, with a clear interest in finding the cheapest way to purchase the specified materials and in the '*handsomest and newest fashion'*. As well as providing drawings for the building and garden features, including a 'well of Love' in the park and pedestals for lead statues, Smith also produced architectural elements such as marble fireplaces.

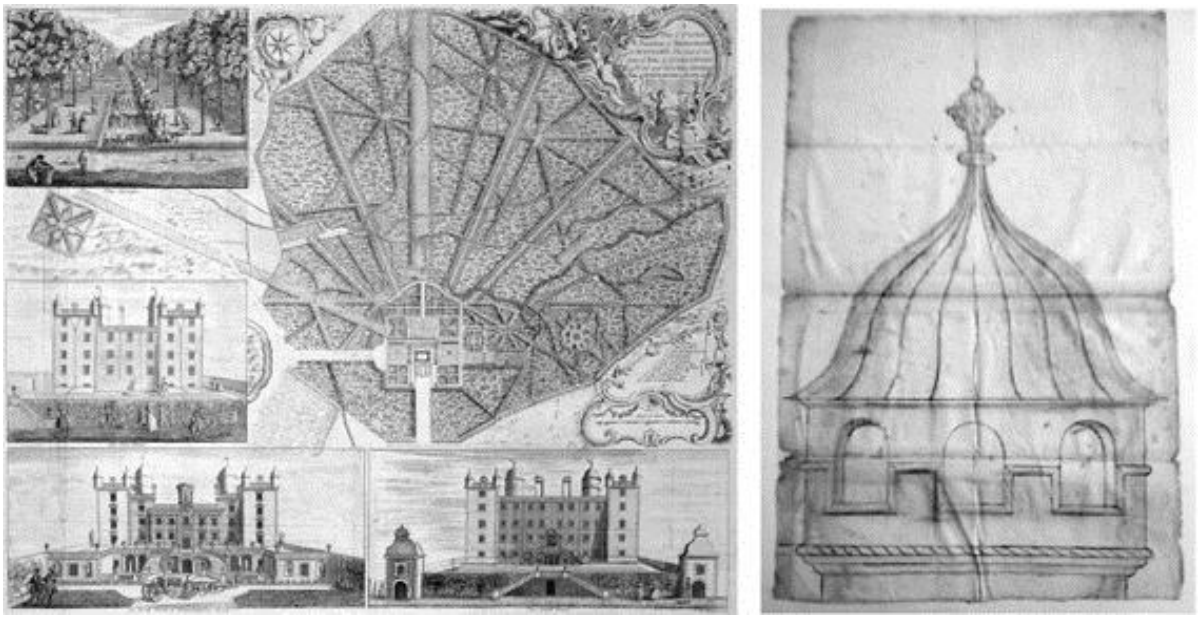

Figure 8: John Rocque plan and Roof of stair turret (Drumlanrig Archive)

The 1739 engraving *Plan of ye Garden and Plantation of Drumlanrig* by John Rocque is the most important evidence of the appearance of the Castle and garden in the early 18th century (Fig. 8). The North front is shown without its later service wings, added in the early nineteenth-century. The plan also shows the gardens created by the first three Dukes, including the cascade on the hill to the South, served by an aqueduct two miles long (Fig. 8 top left), and later abandoned by the 4th Duke, 'Old Q'. The gardens were originally organised in terraces, but later converted into slopes, apart from the upper one, which is around 10m high. This was probably related to structural problems of the dykes due to water ingress, as they had already been collapsing in 1697.[17]

The procurement of the works

There is a series of letters dated 1687-90 from the 1st Duke of Queensberry to his cousin, the Laird of Dornock, who was his caretaker in the area. They make clear that Smith was the architect of the project, overseeing William Lukup.[18] Lukup is named as Master of Works

of Drumlanrig on his tomb, employed between 1679-90.[19] He subcontracted work, as revealed in a contract of 1686 with the plumber Waldhave, who provided the water piping to the building, the drainage and leadwork to the roof. [20] The works were finished in 1697 by another plumber ,John Carnabie, with whom a maintenance contract to keep the lead roofs and water works in good order, with a yearly salary, was also agreed.[21] The ogee roofs of the two pavilions to the South were commissioned by James Smith to the wright, Alexander Acock.[22]

While Lukup seemed to have executed builders' work, instructions given by the 2nd Duke to James Nasmith, gardener, in September 1697, made clear that Nasmith had strictly the role of Master of Works. He was the administrative and financial officer, responsible for the organisation of the building operations, the engagement of craftsmen, purchase of materials and keeping and controlling the accounts. The project at Drumlanrig followed the direct labour system, in a similar way the Royal Works, local authorities, the Church and some noblemen did, with staged contracts that permitted adjustments as works progressed. [23]

The clock in the tower of the main entrance shows the date 1686, the same appearing in documents concerning a visit of two Dutch stone-carvers, Peter Paul Boyse and Cornelius van Nerven. They had worked before for three months at Kinross, Bruce's own house,[24] where Smith and his servitor John Hamilton were also working at the time.[25] They seem to have done most of the fine carving at the North elevation, [26] including the large swags of fruit in the front entrance and a great Queensberry coat of arms under the clock tower.

The Duke had to endure the rising cost of the building, probably affected also by the turbulent times in the country, in particular when James VII left for France in 1688. Works were however progressing and marble was sent from Edinburgh just when the first rumours began that the Prince of Orange was going to invade England.

The construction sequence

Dates carved on the window lintels of the stair-turrets to each of the four corners of the courtyard provide the sequence of the construction: the building started in 1679 at the Northeast corner and developed clockwise, about every two years, around the courtyard until 1689, finishing with the top of stair-towers and the north-east tower.

In July 1684 there were 66 men, including 31 masons and 8 wrights, employed in the works. [27] In 1686 Peter Paul Boyse and Cornelius van Nerven were working in the North

elevation, and perhaps before, as one of the swagged curtains and seaweed scrolls, carved around the West entrance of the porch, bears a marquess's coronet, so is datable to 1682-4 while the other, at the East entrance, with a duke's coronet, should be after 1684.

From the contract with Waldhave, we know that by 1686 works in the North quarter (apart from the wrightwork to the Gallery), NW tower, including the three turrets above it, and the clock house were completed and ready to receive the leadwork. The other stair-turrets were already finished. A drawing of one of the ogee roofs of the four stair turrets existing in the building is still in the archive at Drumlanrig, showing a more elaborated design than the existing ones (Fig. 8). Waldhave also covered the garden pavilions with ogee roofs "*conform to ther proporsions"* and provided other leadwork to the house, including sash and case window weights. As mentioned before, the leadworks would be finished in 1697 by John Carnabie.

The fine decorative ironwork of the balustrade of the South balcony and stair was made by James Horn of Kirkaldy, who worked with Smith on other buildings in the 1680s. The lead sundial, dated 1692, is by Thomas Wynne of London. The Great Oak Staircase was added in 1697.

Materials and techniques

The characteristic pink sandstone of Drumlanrig, which becomes purple when wet, is an impure arkosic arenite sandstone.[28] It comes from the nearby King's Quarry, within the Buccleuch Estates, which at the time of the transformation of the Castle was largely available. There is also evidence of quarrying stone in 1698 to the westward of the house, in order to reduce transportation costs.[29] It has a bedded character and it is typically a fine to coarse grained, pink to lilac banded sandstone, with relatively abundant clay minerals. It has thin bands and localised patches of grey in areas where the iron oxides minerals are less oxidised. This crystaline local stone reflects light and it has a relatively high quality as building stone, with good cohesion, strength and durability. Although the bedding and texture of the stone make it in theory unsuitable for high quality ashlar and detailed carving work, its use in Drumlanrig Castle has demonstrated its durability and 'lively' quality, despite its vulnerability to damage from continued water penetration due to the presence of clay minerals.[30]

The North façade has finely carved ashlar stone with fine joints and rusticated quoin dressed stones (Fig. 6), with both good geometry and craftsmanship; this can also be seen in the

internal walls of the South West stair tower. The chimneys and turrets are also in ashlar. The rest of the elevations are rough-hewn rubble, which were harled with pink lime-based mortar, with exposed quoin dressed stones. Most probably, as at Melville House and his own house, Newhailes, Smith covered these walls with pressed-back harl and regular ruling-out to imitate coursed ashlar.

Great care was taken in the selection of stone blocks for particular locations, as can be seen in the vault above the main entrance (Fig. 7). At this time, the quarriers were part of the building workforce. The consistent colour and careful selection of the stone at Drumlanrig were certainly the result of a painstaking process, perhaps trying to evocate the red marble (*diaspro*) which Smith could have seen in Rome.[31]

The display of flat lead roofs, with a total absence of the traditional slate roofs, is a clear 'showing-off' of the local Queensberry lead mines. As well as the main block, Smith added his characteristic ogee roofed pavilions to the front of the house and flanking the South front (Fig. 8). Nasmith was instructed in 1697 to search for the cheapest timber, at Whytheaven or Leith and in 1698 he met merchants at Dumfries to see if rates for timber from Norway would be cheaper than at Leith. In October 1698 white lead and oil to paint the windows was brought from Holland .[32] Smith also added the Great Oak Staircase giving access to the formal rooms at the first floor, a freestanding stair displaying virtuoso turning of spirals.

The building shows details which would become some of Smith's characteristics: ogee roofs, regularly disposed fenestration, moulded lugged architraves, fluted giant Corinthian pilasters and modest marble or stone mouldings in fireplace surrounds between the fire and the timber panelling. He incorporates vernacular, gothic and 'oblique' elements at the same time. As Charles McKean put it: '*even when they* [Bruce and Smith] *were designing in the grand manner, their Scottish accent made itself heard'*; he considered that '*Smith created a contemporary palace that visitors allowed to be noble*'. For McKean, the influence of Drumlanrig is clear in William Adam's Duff House, and beyond [33] and it will certainly influence Smith's later work.[34]

Conclusions

Although the original drawings and accounts of the transformation of Drumlanrig Castle between 1679-98 have now disappeared, it has been possible to trace the history of its design and construction through the building itself and a series of documents and drawings at Drumlanrig Castle. This has allowed the identification of the people, skills, materials,

technologies and practices involved in the project. The careful selection of craftsmen, techniques and materials make this building one of the finest in Scotland.

The retention of the older fabric and the reference to the older dynasty of the Douglas clan are two important reasons why the building is still called Castle and not Palace, as its appearance could suggest. It is one of the most original and interesting buildings of its time in Britain, where theory and practice, local and international, come together.

The existence at the end of seventeenth-century of larger projects with educated clients such as the Dukes of Queensberry, closely involved in the process, changed the nature of the projects, becoming more complex and collaborative. This allowed for the emergence of architects such as James Smith, who like his clients, with university education and European travel experience, was able to understand their design intentions and cultural aspirations.

There is a clear shift in the procurement of the works carried out by the 1st and the 2nd Dukes, most probably influenced by the works at Holyrood Palace. The first phase works at Drumlanrig were designed and controlled by Smith and executed by Lukup (subcontracting parts of the work such as the lead to the roofs) and in the second phase Nasmith is brought in to administer the works, and the roles of each individual become more specialised.

The integration of the house and landscape works is clear, with a continuous design process which allowed for changes as the project proceeded. The main works were however planned and contracted beforehand although some serious delays occurred. The 2nd Duke was also able to carry out the works in Drumlanrig at the same time as those at Queensberry House, the Duke's new residence in Edinburgh, and with the same designers.

The 1st and 2nd Dukes of Queensberry were Smith's greatest patrons and Drumlanrig is an exemplar of good patronage which nourished artistic freedom and an effective collaboration and exchange of ideas. It responded to the aspirations and limited resources of an emerging country and nobility. Drumlanrig has a world-class quality, with continental references but solidly rooted in local traditions. Its architecture and construction resulted from a mixture of traditional Scottish construction methods and architectural references from abroad. Despite the extensive inclusion of fragments of the earlier Castle, thanks to the skills and ability of the client and professionals involved, Drumlanrig achieved harmony, or, as Alberti would put it, *concinnitas*.

Acknowledgements

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Notes

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