

The gardens of Glamis: an aerial view

Marilyn M Brown*

ABSTRACT

Traces of the gardens laid out around Glamis Castle in the late 17th century have been recorded during aerial survey. The paper discusses the form of the gardens, the indications of earlier features, their character and their destruction. Documentation relating to the estate, the architectural sketches on the Pont manuscript maps and the results from geophysical survey are considered in relation to the evidence from the cropmarks.

Aerial survey across Scotland has been carried out regularly since 1976 when climatic conditions have been appropriate, and the site of Glamis Castle and its surrounding policies (illus 1) have

been a frequent subject for aerial photography by members of the Royal Commission on the Ancient and Historical Monuments of Scotland (illus 2). The revelation of formal gardens from



ILLUS 1 Location map (Based on the Ordnance Survey map. © Crown copyright)

* Royal Commission on the Ancient and Historical Monuments of Scotland, John Sinclair House, 16 Bernard Terrace, Edinburgh EH8 9NX



ILLUS 2 Aerial photograph of Glamis showing the area immediately around the castle in the summer of 1981
(© Crown copyright: RCAHMS SC 944261)

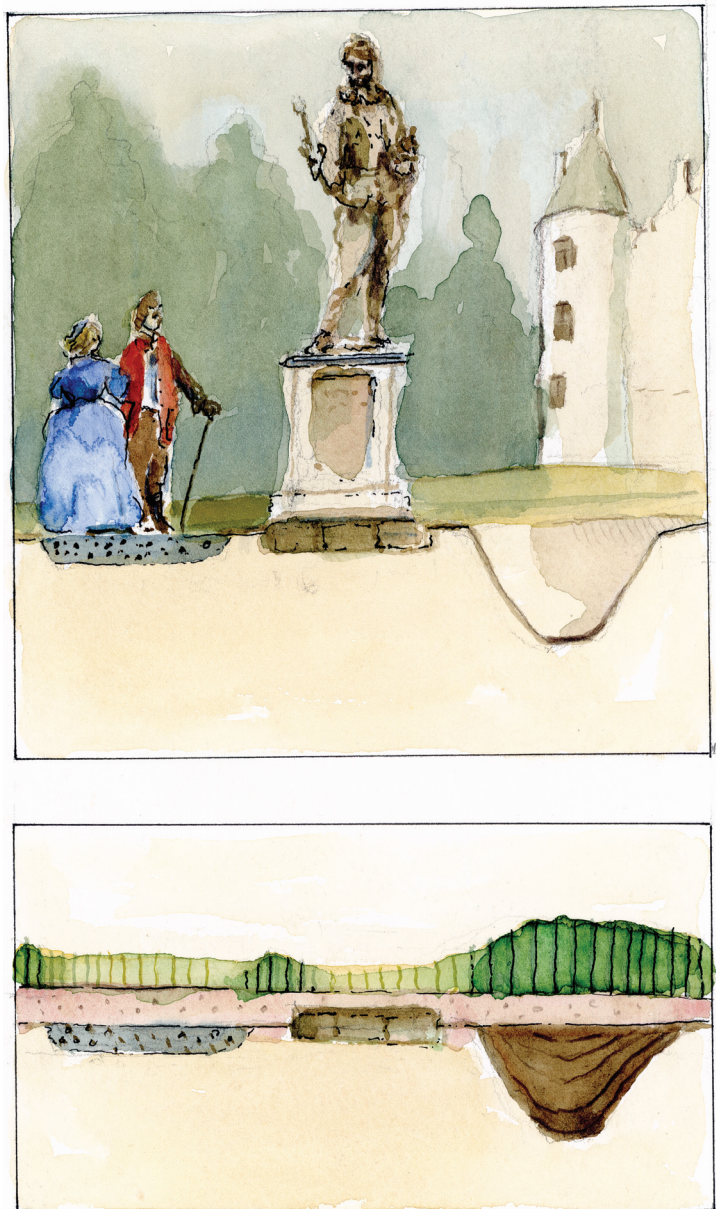
the air is a particularly exciting aspect of aerial reconnaissance (Wilson 1991, 20; Brown 2005), and the detection in 1989 (RCAHMS 1993, 65) of extensive parchmarks both in the immediate vicinity of the south side of the castle and in the northern part of the policies was one of the most interesting discoveries of that remarkable year for aerial survey.

Glamis Castle and its policies, which occupy an area of more than a thousand acres, have been photographed in both winter and summer, but summer has been the favoured season because the broad valley in which Glamis (illus 1) lies is one of the areas of Scotland most suitable for the cultivation of arable crops. These form the most responsive medium in which to observe the effects of stress on the growth and development of plants, in the form of cropmarks, visible most commonly in July and August. While the survey carried out in 1989 has been the most rewarding, those from the winter of 1983 and from the summer of 1996 are also informative (RCAHMS 1985, 68). Evidence for the early gardens at

Glamis Castle, which derives from aerial survey, where at least three schemes precede the one presently visible, is complemented by that from documentary and cartographic sources (Apted 1986; Dingwall 2000; Gordon Slade 2000), as well as from the geophysical survey carried out by Arnold and Priscilla Aspinall in 1983–4 over the lawns to the south of the castle (Apted 1986, 110–14; Aspinall & Pocock 1995).

The most usual stimulus for the formation of cropmarks in Scotland is the creation of a soil moisture deficit, brought about by the relative absence of rainfall, possibly accompanied by wind and sunshine, increasing the rate of evapo-transpiration from the crop growing on freely draining soil. When this occurs at a critical period in the growth of the crop, the crop reflects below-ground disturbance. The reason for this may be agricultural, often from recent activity, or geological; both of these factors are far more common than the disturbance caused by buried archaeological features, which are the type of cropmark feature selected for

recording during summer reconnaissance (Wilson 1982, 53–6). While grass can be very responsive to growth stress, the proportion of sites discovered in pasture is low in comparison to those in wheat and barley and often requires the features to lie only a short distance below the turf or to contrast sharply with the soil in which they lie (illus 3). Although cropmarks of the type known as ‘negative’, which reflect the position of features, such as ditches and post-holes, do emerge with clarity [for example those of the prehistoric settlement at North Straiton (illus 4 & 5) where the sites of roundhouses some 30–40cm below the grass can be seen in considerable detail], markings in grass tend to appear in the form referred to as ‘positive’ cropmarks, appearing as lighter marks. These are caused by the presence of a relatively impermeable surface below the ground, such as a wall, a path or a bank formed of a material such as a mixture of earth and stone or clay. Close-cropping of the turf, in particular by sheep, or close-cutting by gardeners usually provides the most likely conditions in which features below the turf may be visible. The areas of grass around properties in the care of English Heritage, Historic Scotland and Cadw (the historic environment division within the Welsh Assembly Government) provide some of the most regular locations for revealing underlying



ILLUS 3 Diagram illustrating the formation of positive cropmarks over a stony surface and negative cropmarks over a ditch (Watercolour © D B Gallagher, RCAHMS SC 1003908)

walls, but the lawns around Glamis Castle have, under the right conditions, produced evidence for the layout of earlier gardens in the form of both positive and negative cropmarking, with the summer of 1989 providing particularly



ILLUS 4 Aerial photograph of the settlement at North Straiton, Fife (NGR: NO 422 327), in 1982 with cropmarks showing in grass (© Crown copyright: RCAHMS SC 944260)

appropriate conditions. Cropmarking does not directly allow the viewer to identify a feature as either earlier or later than another feature, but rather reveals a palimpsest. The analysis of different forms may allow features to be associated and dated on stylistic grounds, but excavation may be the only means to establish a certain chronology (Hynd & Ewart 1983; Taylor 1983, 50).

The detail of the forms of early gardens at Glamis Castle, which derives from aerial survey, is placed in its context by the evidence from documentary and cartographic sources. In 1996, the National Library of Scotland commenced the digital photography of the manuscript maps of Scotland, surveyed by Timothy Pont in the 1580s and 1590s, as their first trial of a new technology (Cunningham 2001), making the documents available in a form that was much more accessible both to visitors to the Map

Library and subsequently to users of the internet than the previous photostats or the reproductions in Jeffrey C Stone's publication on the manuscript maps (Stone 1989). The ability to view the maps in detail encouraged the examination of features on the maps and their possible relationship to sites previously recorded from the air and tentatively identified as gardens. Among these were the cropmarks around Glamis Castle. The publication by Michael Apted on the building and other works at Glamis between 1671 and 1695 (Apted 1986) and, more recently, of *Glamis Castle* by Harry Gordon Slade (2000) and Christopher Dingwall's work on the history of the designed landscape (Dingwall 2000) provide an excellent

account of the architecture of the castle and its development; they bring together manuscript material in a convenient form and discuss the relationship between the family of the Earls of Strathmore and their predecessors, the owners of Glamis Castle, and the development of the castle and the estate. Earl Patrick, who succeeded to the estates in 1646, wrote what is referred to as *The Book of Record* (Millar 1890). He intended it to be a 'Book of Record of all my transactions as debtor or creditor and with my Tenants & the effects of my estate And in a word of all my proceedings Beginning in the month of Januarie 1684'. This work, in which the Earl describes the desolate condition of Glamis Castle and his projects there, provides the context for much of the evidence from aerial survey.

The earliest evidence for gardens at Glamis occurs after the estate had been forfeited to the Crown following the conviction for treason in

1537 of Janet Douglas, the mother of the seventh Lord Glamis and sister of the Earl of Angus, for plotting to poison James V. Her son was convicted of having concealed and consented to his mother's treason (Cameron 1998, 169–76), but regained the estates following James V's death in 1542. The form of the gardens is unknown, but may have included buildings of a temporary or permanent nature (Cooper 1999, 821–6). While Glamis was in royal hands, there are references to payments to gardeners for various works, mainly of repair, such as that for the two men who remade the ditches of the gardens of Glamis (M'Neill 1897, 384) and the ditches of the fish ponds of the meadow of Glamis. A major and somewhat surprising absence from the evidence from the aerial photographs, and indeed from the geophysical survey, is that for the ditches around Glamis, whether these were for defence or to feed water to the fish ponds, demonstrating clearly the point that that no conclusions can be drawn from negative evidence from aerial photography. These ditches were among the earlier features referred to by Earl Patrick in his Book of Record (Millar 1890, 39).

The area around Glamis appears on two of the Pont manuscript maps held by the National Library of Scotland: NLS Pont 26 and 29. Pont 26 depicts an area between Perth and the North Sea near Arbroath and from Forfar to the River Tay and the Firth of Tay. It is one of the most extensive and detailed of Timothy Pont's manuscript maps and includes many informative sketches of great houses in this prosperous area of Scotland (McKean 2001a, 114). Among the



ILLUS 5 Aerial photograph of the settlement at North Straiton, Fife, NGR NO 422327, during excavation of a roundhouse in 1987 by the Scottish Field School for Archaeology (© Crown copyright: RCAHMS SC 944252)

finest of these is a picture of Glamis, providing evidence for the appearance of the building towards the end of the 16th century. The sketch (illus 6) is only about 5mm (0.25in) in height, but the digitization by the National Library of Scotland allows the image to be magnified, revealing a building in the form of a tower with four rows of two windows above ground or entrance level and suggesting the presence of at least five storeys. There might be a turret at the east side and part of a taller tower behind (McKean 2001b, 29). While the map is viewed from the south, the building seems to be viewed from the south-east, possibly because the approach is said to have been from this side (Millar 1890, 39). Features of a generally rectangular form on each side of the image may be lower parts of the building, or possibly enclosures, and the line below and across the front of the building might represent the line of a

ditch or moat, or more probably an outer wall as there seems to be an entrance in it. A modern photograph taken from what would seem to be the same angle provides an interesting parallel (illus 7). On the right of the building sketched on the map is an enclosure with a tree in it marked with a double line. Elsewhere on the map, double lines are used to represent rivers and streams, and this may mark an enclosing water-filled ditch around a garden or orchard, or, as at Drum Castle in Aberdeenshire, represent the enclosure of a park (illus 8).

Pont 29 depicts the area of middle Strathmore roughly from Newtyle to Forfar to Tannadyce to Inverquhar. The sketch on Pont 29 is slightly smaller than that on Pont 26 and gives a rather



ILLUS 6 Detail of Glamis Castle from the late 16th-century manuscript map by Timothy Pont, Pont 26 (© Crown copyright. Reproduced by permission of the Trustees of the National Library of Scotland)

different view of the castle. On this map (illus 9), the castle is depicted with a large, centrally placed tower with turrets at the four corners and lower buildings attached on each side, one at least with a gable. The tower has four storeys with a pair of windows to each storey above an entrance. This image would serve as a simplified picture of the castle as it appears in the engraving by Slezer dating from 1696 or shortly before (Dunbar

2000, 110) – after the building campaigns of the third Earl of Strathmore, who encouraged the artist and engineer to record his property (Millar 1890, 42) – suggesting that there was more reconstruction, rather than new building, than might be gathered from the third Earl's



ILLUS 7 The south front of the east wing of Glamis Castle (© Crown copyright: RCAHMS SC 769832)

own account. On both the right and left sides of the image are what appear to be rectangular enclosures, which may indicate either gardens or the sites of service courts. This image would seem to be taken from a point slightly south-west. How the images of buildings and towns which appear on the manuscript maps were assembled and transferred is not known (McKean 2001b, 119–20), but the more detailed drawings, such as that of Castle Menzies or Weem in Perthshire, can be shown to have a high degree of accuracy (Brown 2005). Other than the enclosure with the symbol of a tree within it, there is no indication of a park at Glamis on the Pont maps.

Aerial survey in August 1989 provided the earliest clear indication of the nature of the remains of gardens at Glamis, with photography from August 1994 supplementing the evidence. For the most part, the outline indications of formal gardens emerge as lighter markings in the turf around the castle where the roots of the grass were unable to acquire sufficient moisture to sustain growth because of underlying stone, gravel or packed clay banks. The lines have been drawn out and rectified and the features set against the 1920–3 Ordnance Survey map (illus 10). Most of the parchmarks seem to relate to the layout of the policies of Glamis undertaken by the third Earl. Patrick Lyon, Earl of Strathmore and Kinghorne, was born in 1642 and succeeded his father at the age of three. His father had left considerable debts and the estate suffered damage during the conflicts of the mid-17th century, particularly during occupation by an English garrison (Millar

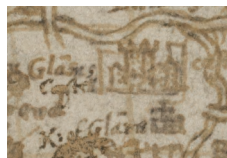
1890, 39). He also inherited Castle Huntly, and it was only after setting that property in order that he moved with his family to Glamis in 1670 and began his building programme there, which he documented in his Book of Record, describing in some detail his schemes for the improvement of his estates (Williamson 2000, 34), as well as an account of his life. He wrote about his plan for the layout: ‘Yet I did covet extremely to order my building so that the frontispiece might have resemblance on both sides’ (Millar 1890, 41). Because he wished to retain earlier buildings at Glamis, there were problems in achieving the desired symmetry. When the Earl first

came to Glamis, the only approach to the castle was from the south-east. An examination of the aerial photographs from 1989 reveals three lines of parchmarking to the south-east of the castle on a north-west/south-east alignment (illus 11). The most prominent of these (illus 11.11) runs from the corner of the present formal Dutch Garden, created in 1893, to the east–west axial avenue, with a marked break in its line. Its extreme visibility suggests that it is very dry and it might be interpreted as a ditch filled with stone. This line also appears on the geophysical plot of 1983–4 (illus 12) as a feature of low resistance. The break occurs at or close to the centre of the south-west compartment of the earlier quadripartite formal garden, and it has been suggested that it might mark a central feature in that plot (Aspinall & Pocock 1995, 63), which would parallel

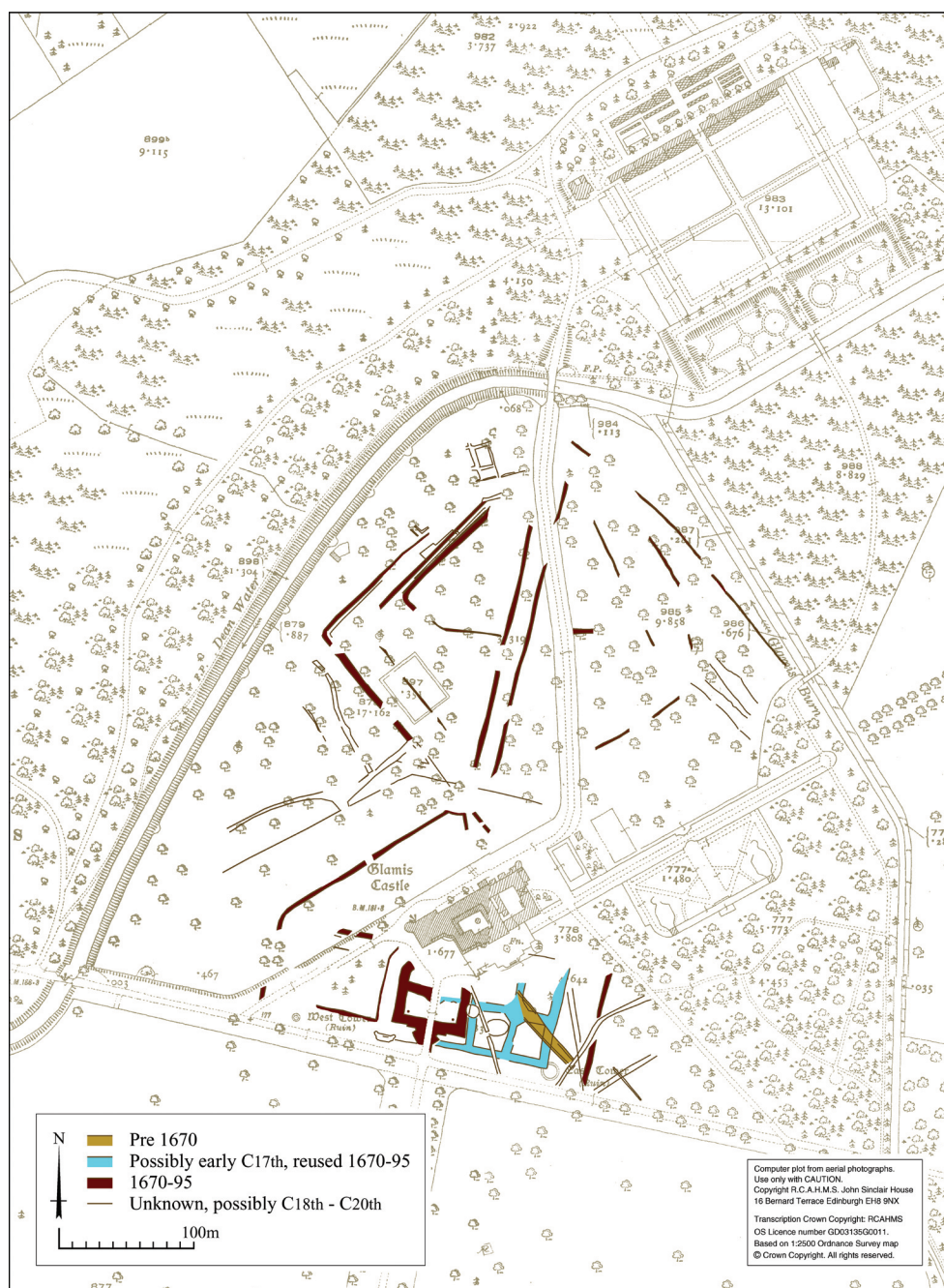
the yew trees in the northern sections. It might also be identified with works of the 1770s when there were major changes to the layout of the



ILLUS 8 Detail of Drum Castle, Aberdeenshire, from the late 16th-century manuscript map, Pont 11 (© Crown copyright. Reproduced by permission of the Trustees of the National Library of Scotland)



ILLUS 9 Detail of Glamis Castle from the late 16th-century manuscript map by Timothy Pont, Pont 29 (© Crown copyright. Reproduced by permission of the Trustees of the National Library of Scotland)



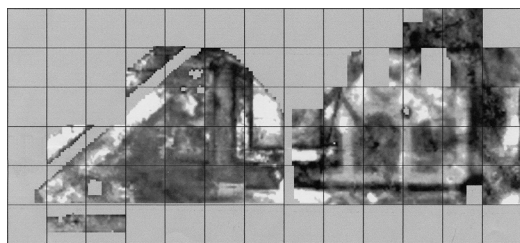
ILLUS 10 Computerized transcription of the parchmarks of the gardens at Glamis Castle set against the 1:2500 Ordnance Survey map of 1922–3. The interpretative drawing shows the inner court with statue bases, slight traces of the sunken garden or bowling green to the south-west and the quadripartite arrangement of parterres to the south-east with traces of a possible earlier garden, as well as three parchmarks running approximately north-west and south-east and NNW and SSE. The avenue continues to the north of the castle dividing the elaborate arrangement of the kitchen gardens (© *Crown copyright: RCAHMS*)



ILLUS 11 Aerial photograph of the parchmarks to the south of the castle of Glamis in August 1989: 1, possible road to the castle before 1670; 2, element of possible pre-1670 garden; 3, court 1670–95; 4, statue bases; 5, fountain court or bowling green or sunken garden; 6, flower garden with parterres; 7, sundial in position by 1683; 8, north–south axial avenue; 9, east–west axial avenue; 10, entrance to the court surmounted by the statue of Hercules; 11, prominent linear cropmark possibly associated with the destruction of the formal garden (© Crown copyright: RCAHMS SC 516722)

policies, including the demolition of garden walls and the use of their coping stones for the covers of drains and sewers (Gordon Slade 2000, 100), but it may be of relatively recent origin. The second feature on the aerial photograph appears as two near-parallel lines some 7m apart running from the more westerly of the two

yew trees south-east towards the sundial and on towards the east–west avenue (illus 11.1). Its northern edge is slightly darker, possibly indicating the line of a narrow ditch, and there is a less certain darker southern margin. The more northerly line appears on the geophysical survey as a low resistance feature, which, it is



ILLUS 12 Earth resistance survey of the area around the inner court 1983 and 1984, showing the inner court, slight traces of the sunken garden or bowling green to the south-west and the quadripartite arrangement of parterres to the south-east with traces of a possible earlier garden, as well as three parchmarks running approximately NW and SE and NNW and SSE. White = High Resistance; Black = Low Resistance (© Copyright: Arnold Aspinall)

suggested, may mark the course of the approach referred to above from the south-east (Aspinall & Pocock 1995, 63). It might terminate on the north-west in line with the door depicted on Pont 26 (illus 6). A third line, nearly parallel to the first, but some 60m to the east appears as a light line on the aerial photograph. It may be a dried-out drain or represent the line of a path. Only part of the line of the suggested approach

to the castle is visible on the geophysical survey as a line of low resistance. It might be expected that the main access road to the castle might have been more prominent in both the aerial photographs and geophysical survey, and the masking effects of later garden works and their subsequent demolition may explain the lack of detail. The evidence from aerial survey and geophysical survey are, for the most part, complementary, although the aerial photograph suggests a broader track than the interpretative plot of the geophysical survey (Aspinall & Pocock 1995, 65).

Earl Patrick wrote, describing the south side of the castle:

The utter [outer] Court is a spacious green and forenent [to the front] the middle thereof is the principal entrie to the south with a gate and gate house besyde two rounds upon each corner (Millar 1890, 44).

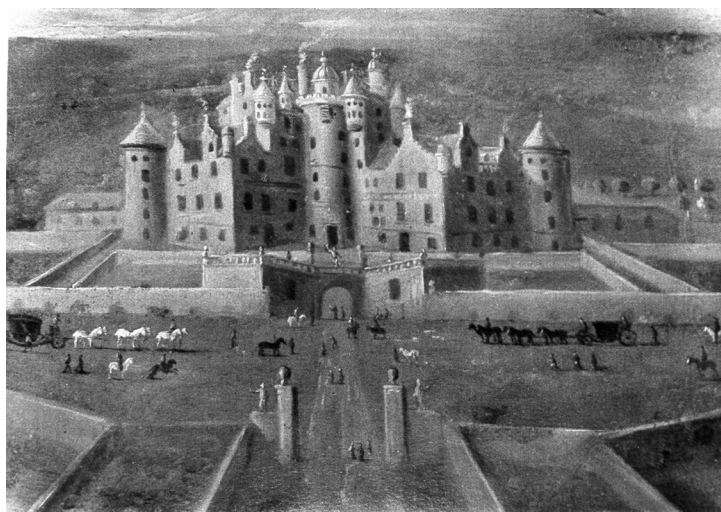
On the west side of the inner court he laid out a bowling green with a fountain in the centre and on the east a garden, for which various ornaments including the sundial, which is still in a central position, were intended:



ILLUS 13 A view of the inner court of Glamis Castle by John Elphinstone about 1750; King's Top XLIX, 23.A.5. (Reproduced by permission of the British Library)

There is in the garden a fine dial erected and howsoon the walk and green plots are layed there will be statues put into it, and there is a designe for a fountain in the Bouling green and on great gate from the gardine and another from the bouling green to the utter court att the southend of which directlie forenent the gate of the inner court, there is another great gate adorned with two gladiators, from which the avenue goes with an enclosure on each syde holdne with a plantation of fir trees (Millar 1890, 44).

The statues included, in addition to the gladiators, four lead figures of Stuart kings by



ILLUS 15 Detail of the portrait of Earl Patrick and his sons from the de Wet portrait of 1683, showing a perspective view of Glamis, with the inner court, the bowling green to the west and the garden to the east (*Reproduced by kind permission of Strathmore Estates*)

the sculptor, Arnold Quellin (Apted 1984), in addition to a bust of the Earl himself. These were probably originally painted 'after the manner of brass'. The choice of statuary reflects the claims and concerns of the garden designer, Earl Patrick (Stewart 2002, 243), and excited comment from travellers visiting Scotland. Macky (1723, 140) describes the balustrades of stone finely adorned with statues, and Daniel Defoe (1725, 799) relates how 'you are surpriz'd with the Beauty and Variety of the Statues, Busts, some gilded, some plain'. The picture of the south of the castle c 1750 by John Elphinstone, in the British Library, shows six statues in the inner court (illus 13).

The aerial photographs reveal the outlines of the Earl's central inner court with what is probably the bowling green to the west and the garden to the east, according to Thomas Winter's 1746 plan (illus 14); the inner court is divided into four sections by what are presumably gravel paths enclosing what may have been decorated parterres or grass plats (Syme 2000, 93) and surrounded by walls (McKean 2005, 142). The form of the divisions is simple. The sundial

(Somerville 1987) stands in the centre of the garden with what are now two large yew trees in the northern divisions (Robertson 2000, 149), possibly a survival from the planting of the late 17th century, like the yew trees at Prestonfield House in Edinburgh (Tait 1989, 361).

The detail of Glamis in the portrait by de Wet (illus 15) also allows the walls around the inner court and the two flanking gardens to be seen. At both the south-east corner of the garden and at the south-west corner of the bowling green is a small tower or round, which seem to have been designed as ornamental

garden features at the corners of the walls. The present structures do not lie at the corners of the parterres as they are visible on the aerial photographs or on the geophysical survey, and it is suggested that they may have been rebuilt (Aspinall & Pocock 1995, 65). Earl Patrick says that one round was appointed for a dairy house and the other for a still house (Millar 1890, 44). In Thomas Winter's 1746 plan (illus 14), the east enclosure was referred to as 'The Flower Garden Grass and Gravell' and the western enclosure as 'A sunk Plot of Grass and Boxwork' (Apted 1986, 106).

The enclosure to the west, intended for a bowling green, also referred to as the Fountain Garden, is less distinct than the garden to the east, both on the aerial photographs and on the plot of the geophysical survey, despite the plan showing a similar pattern of paths. This may be due to its original sunken form and the need for a greater depth of material to create a level surface or in part because of the possible presence of infilled ditches in this area (Millar 1890, 39–40). The demolition of the walls of the gardens in 1773 (Apted 1986, 107) and the reuse

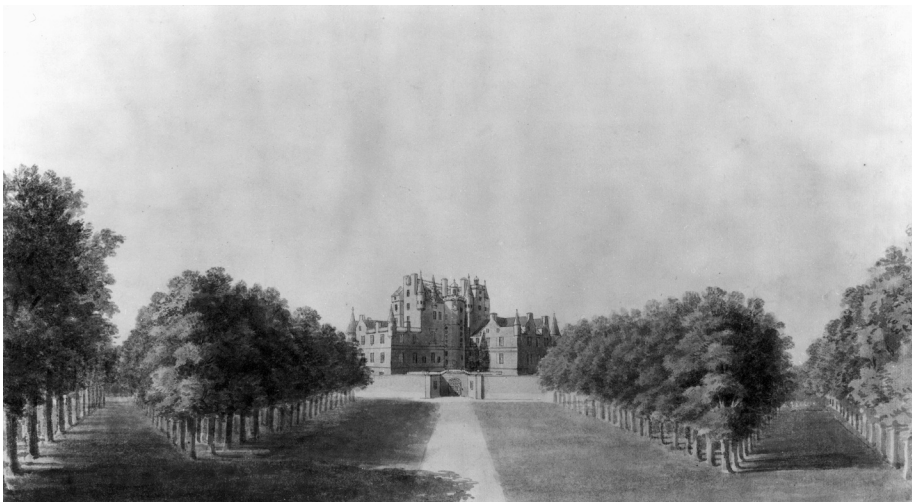
of the stone might contribute to the absence of evidence. Excavation is required to reveal more in this area.

The form of the garden on the east is considerably clearer with a pattern of four compartments divided by paths on both the aerial photographs and the geophysical plot. The detail which emerged in the re-processing of the data (Aspinall & Pocock 1995, 63) of what are interpreted as linear dividers in the two southern quarters of the east garden cannot be identified from the aerial photographs, where the strong marks resulting from the grass-mowing run parallel to the east–west axial avenue and consequently to the cropmarks of the earlier garden.

The elaboration of the entrance to the court, as it appears in the background to the portrait by Jacob de Wet of the Earl and his sons (illus 15) (Gordon Slade 2000, 40) painted in 1683, can also be detected. This shows a projecting pavilion with a central arch surmounted by a balustrade and a statue of Hercules. According to the Book of Record it had a gardener's house on one side and a bleaching and washing house on the other. This structure is reflected by the

triangular parchmarks on the aerial photographs on both sides of the present entrance drive, but not by the interpretation of the geophysical plot. The central section of the parchmark on the entrance wall is broader. The de Wet painting shows a higher section of walling here, again surmounted by a balustrade, set behind the line of the wall of the court. By the time of the plan by Thomas Winter (illus 14) and the drawing by Thomas Sandby (illus 16) in 1746, the entrance wall was of uniform height, only raised immediately over the arch, and the projecting front wall had been removed so that the entrance was inset, presumably resulting in the removal of wash house and the gardener's house. The line of the path around three sides of the court can be picked out on the aerial photographs as a broad light band, less prominent on the east, where the geophysical evidence is very indistinct.

This creation of a grand and imposing approach to the castle employing order and symmetry to illustrate the owner's domination of the landscape is a feature of late 17th-century landscape gardening, with Versailles as the supreme example. The Earl's emphasis on



ILLUS 16 Prospect of the front of Glamis Castle drawn by Thomas Sandby in 1746; King's Top XLIX, 23.
(Reproduced by permission of the British Library)

his own personal role in the layout, allied to the perception that his works might have benefited from a professional input, is less usual (Williamson 2000). He stresses the confusion of the earlier layout to the south of the castle:

All this before mentioned was within the bounds of that which you now see is the forecourt where the two greens are on each syde of the pav'd walk a strange confused unmodel'd piece of business and was to me a great eye sore (Millar 1890, 39).

The interpretation of the aerial photograph is difficult. The parchmarks (illus 11) would suggest that the quadripartite garden may have extended further to the west, making a design of at least six parts. The line on the aerial photograph would seem to indicate that the path on the south continues to the west and what might be a continuation of the central path is visible within the court. This would suggest that there may have been an earlier garden on



ILLUS 17 Aerial photograph, taken in the winter of 1983 showing the line of the axial avenue to the north of the castle and the lines of the angular design of the kitchen gardens and plantations in low light (© Crown copyright: RCAHMS SC 991612)



ILLUS 18 Aerial photograph of the parchmarks to the north of the castle, taken in August 1989: 1, north–south axial avenue; 2, kitchen gardens 1670–95 (© Crown copyright: RCAHMS SC 969735)

the site. However, the relationship between the paths and the wall around the garden and the court is unclear, and the nature of the material that would produce the markings – gravel or stone – would obscure earlier features. The Book of Record recounts how the Earl's first task was to remove the 'old chattered and decayed trees, which surrounded the house, yet there were not many, and the most of these were to the southward' (Millar 1890, 38). The Earl records that, 'The whole planted ground not exceeding four aikers att most', and while the acre of the time differed somewhat from the statute acre used by the Ordnance Survey, the approximate area occupied by the parchmarks of the bowling green, outer court and garden is somewhat less than four acres. With the suggestion that there may have been an earlier garden in this area, it may be that the planting cleared was an element in an overgrown garden, although, as Earl Patrick received the considerable sum of £1000

Scots for the timber, it may have covered a more extensive area.

The date of this possible earlier garden is unknown, but it would probably be later than the survey by Timothy Pont, whose work seems to have been concluded by about 1596 (Stone 1989, 5). Gordon Slade describes the building works of the period 1600–26 with enthusiasm, and the form of the garden would be appropriate for that time (Anthony 1991, 25–56). The drawing by Gordon of Rothiemay of the gardens at the Palace of Holyroodhouse in 1647 would provide a Scottish parallel (Jamieson 1994, 22–3). The garden, of which six sections are visible, would probably have had eight or 12 sections originally. It would be difficult to fit in nine parterres, and multiples of four seem to have been favoured. The slight evidence for the garden suggests a simple design, but gardens of this period could be extremely elaborate, with that at Edzell Castle (illus 17 & 18), also



ILLUS 19 Aerial view of the walled garden at Edzell Castle with the modern parterres (© Crown copyright: RCAHMS SC 674819)

in Angus, providing a particularly remarkable example (Allan 1997). This garden was begun in 1604 and celebrated the lineage and marriage of David Lindsay, the Union of the Crowns, the Seven Liberal Arts, the planetary Deities and the Cardinal Virtues in a series of bas-reliefs (Simpson & Fawcett 1987). The garden was designed to be viewed from the house, and it is

likely that the gardens at Glamis would have had a similar relationship to the castle.

The planning of the gardens in the years following the Earl of Strathmore's move to Glamis in 1680 would probably follow a rather different style (Jaques 2000, 31). The publication of the *Scots Gard'ner* written by John Reid in 1683 (Hope 1988) provides evidence that

the Earl's strong preference for symmetry was typical of his time. Reid writes:

As the Sun is the Centre of this World: as the Heart of the man is the Centre of the man: as the nose the Centre of the face; and as it is unseemly to see a man wanting a leg, an arm &c. or his nose standing at one side the face, or not straight, or wanting a cheek, an eye, an ear, or with one (or all of them) great at one side and small on the other; Just so with the house-courts, Avenues, Gardens, Orchards, &c. where regularity and uniformity is not observed. Therefore whatever you have on one hand, make as much and of the same forme in the same place, on the other (Hope 1988, 2).

The enclosed gardens, lying on either side of the main entrance to Glamis Castle would have met with Reid's approval, as would the geometrically inspired kitchen gardens to the north of the castle. Reid had a particular concern with the laying out of avenues around houses. In line with the gate to the inner court was another gate adorned with two gladiators from which the avenue now extends further to the south, as the Earl intended. In his time it ran only to the group of buildings referred to as the barns. The avenue, which crossed this at right angles, can be seen as a cropmark extending further to the east. On the north side of the castle the avenue has not survived, but the line of the banks, which enclosed and protected the young trees, can still be seen on the aerial photographs, in winter as dark shadows (illus 19) and in summer as light lines (illus 20). The outline of the part of what is described in the Book of Record as the kitchen garden can be seen showing to the west and east of the avenue. Plantations to the east and west of the house were also symmetrically planned and the inner boundary of the west planting is also visible as a parchmark. These features can be detected from the air in winter when the low sun picks out the shadow of the banks (illus 19). There are many other parchmark features to the north of the castle which cannot be so easily identified with features described in the Book

of Record and further research may allow these to be assigned to the late 17th century or later periods. Earl Patrick was successful in his garden design. Forty years later, travellers were writing of the awe and admiration with which they were struck on viewing Glamis (Macky 1723, 135).

The Book of Record (Millar 1890) and the painting by Jacob de Wet (Gordon Slade 2000, 36) present the image of a house and estate celebrating the balanced and formal design of the late 17th century (illus 15). Less than half a century elapsed before there were major changes in the theory of garden design (Williamson 2000, 40). From the idea of the garden as a place where the owner of the land could impose his will on nature, there developed the philosophy that nature was supremely beautiful. What the owner could do was to enable the full beauty of nature to emerge by judicious works (Tait 1980). The natural became the ideal. The new garden required the creation of an open park-like landscape with lawns running right up to the walls of the castle, with a studiedly informal arrangement of trees. This type of garden is associated with the name of Lancelot 'Capability' Brown, who lived from 1716 to 1783. In this arrangement all the walled enclosures near the house would be removed to allow the lawns to create the illusion of a perfect landscape setting. The move towards a decrease in the formality and symmetry of most late 17th-century gardens is typical of the period. Sir John Clerk of Penicuik (Hunt & Willis 1975, 199) writes of concerns in the late 1720s:

How each neglected Corner, each Defect
May by a little art converted be
To Beauties, that may please the nicest Eye.
Forebear then all these trifling, mazy knots
Of Shrubs and Flowrs that crowd the flagrant
Scene
Nature enjoyns all Cost and Toil to Spare
Which mar the Prospect or obstruct the Air.

The survey of Glamis dated 1746 by Thomas Winter (illus 14) shows the layout broadly conforming to the design envisaged in the Book



ILLUS 20 The walled garden Edzell Castle with its relief sculpture and the garden house at the corner (© Crown copyright: RCAHMS SC 798692)

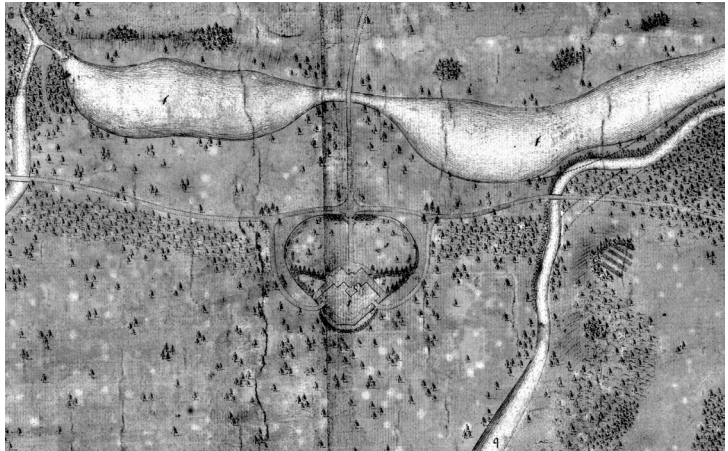
of Record, but with the avenue extended far to the south. A drawing by Thomas Sandby of the same date shows the entrance to the court on the south side of the castle from the junction of the main avenue with the diagonal alleys leading to the east and west sides of the house (illus 16). The avenue was to be changed and a basin and a series of cascades were to be installed in the section of the avenue near the

castle. Another proposal, dated to around 1760, softens the entire design (illus 21) (Countryside Commission 1983, 128), and although it was not carried out, the avenue was heavily damaged by a great storm in 1772 (NSA, XI, 345) and it was cleared. This seems to have given an impetus to a desire for a new layout and, by the end of 1775, the old garden walls had been removed and the old gateways rebuilt elsewhere on the estate

(Gordon Slade 2000, 100). The new style did not always meet with favour (Cox 1935, 86). Following the death of the ninth Earl in 1776, work came to a halt and the area around the castle, formerly an elaborate confection, was left waste (illus 22) with stones from the demolished walls projecting from the ground.

While the southern axial avenue was replanted, probably between 1835 and 1846 (Countryside Commission 1983, 128; Gordon Slade 2000, 101), that to the north was not. Elsewhere, trees were scattered in an informal arrangement across the park to the north and south of the castle, and there may be, to the south of the castle, some reflection of the line of the plantations set out in the late 17th century. Although a formal ‘Dutch’ garden was created at Glamis in 1893 and a garden ‘on the line of old French gardens’ between 1907 and 1910 (Dingwall 2000, 39–40), there was no attempt to revive the original gardens of the 17th century in contrast to some notable creations or re-creations of this period (Triggs 1902).

Gardens are fragile creations, easily superseded or obliterated (Strong 1979, 223), and Glamis, described as one of the four great Baroque gardens in Scotland (Mackay 2001, 98), provides an outstanding example (Hynd 1984, 273; Cruft 1991, 175). Those with a strong built component, such as the gardens established in the 17th century at Glamis, are most likely to survive



ILLUS 21 Detail of ‘A plan for a new disposition of the ground and plantations at Glamis Castle’, James Abercrombie, c 1760 (*Reproduced by kind permission of Strathmore Estates*)

or at least be recognized through aerial survey or leave the kind of traces which can be interpreted through geophysical survey. The use of symmetry provides a pattern to which the eye responds from the air. The discovery of the aerial evidence for some of the earlier gardens at Glamis, particularly in 1989, the publication of extensive documentation on Glamis Castle and the copying of many of the



ILLUS 22 Glamis Castle from the south-west following the demolition of the walls of the inner court and the gardens (after James Moore) (© Crown copyright: RCAHMS SC 944259)

plans by the Royal Commission on the Ancient and Historical Monuments of Scotland, allied to the geophysical survey of 1986 and the evidence from digitization of the Pont manuscript maps for the study of early gardens in Scotland, has made this an outstanding site for the study of the different forms of evidence for the design of gardens in Scotland.

ACKNOWLEDGEMENTS

I would like to thank Dr Arnold Aspinall, Miss Catherine Cruft, Mr Christopher Dingwall, Mr Christopher Fleet and Mr John Haigh for their comments on the draft text, the Royal Commission on the Ancient and Historical Monuments of Scotland for permission to reproduce photographs and the transcription of the parchmarks at Glamis, Strathmore Estates for permission to reproduce plans and drawings in their archives, the Trustees of the National Library of Scotland for permission to reproduce the images from the Pont manuscript maps, the British Library for permission to reproduce the drawing of the front of Glamis Castle by John Elphinstone and the Prospect of the Front of Castle Glamis by Paul Sandby and the Society of Antiquaries of London for permission to reproduce the plot of the geophysical survey.

REFERENCES

- Allan, D 1997 'A commendation of the private country life: philosophy and the garden in seventeenth century Scotland', *Garden Hist* 25 (1), 59–80.
- Anthony, J 1991 *The Renaissance Garden in Britain*. Princes Risborough.
- Apted, M R 1984 'Arnold Quellin's statues at Glamis Castle', *Antiq J* 64, 53–61.
- Apted, M R 1986 'The building and other works of Patrick 1st Earl of Strathmore, 1671–95', *Antiq J* 66, 91–115.
- Aspinall, A & Pocock, J A 1995 'Geophysical prospection in garden archaeology: an appraisal and critique based on case studies', *Archaeol Prospection* 2, 61–84.
- Bourgeois, J & Meganck, M (eds) 2005 *Aerial Photography and Archaeology 2003. A Century of Information*. Gent (= Archaeological Reports Ghent University, 5).
- Brown, A E (ed) 1991 *Garden Archaeology*. London (= CBA Research Report no 78).
- Brown, M M 2005 'Aerial survey and designed landscapes in Scotland: detection and documentation', in Bourgeois, J & Meganck, M (eds), 243–54.
- Cooper, S 1999 'Ornamental structures in the medieval gardens of Scotland', *Proc Soc Antiq Scot* 129, 817–39.
- Cox, E H M 1935 *A History of Gardening in Scotland*. Edinburgh.
- Countryside Commission 1983 *An Inventory of Gardens and Designed Landscapes in Scotland*, Vol 4. Countryside Commission.
- Cruft, C 1991 'The state of garden archaeology in Scotland', in Brown, A E (ed), 175–89.
- Cunningham, I C 2001 *The Nation Survey'd. Timothy Pont's Maps of Scotland*. East Linton.
- Defoe, D 1725 *A Tour Thro' the Whole Island of Great Britain*. London.
- Dingwall, C 2000 *Glamis Castle: a History of the Designed Landscape*. Glamis.
- Dunbar, J G 2000 'Notes on a copper-plate engraving of Glamis Castle', in Gordon Slade, H, 110–11.
- Gordon Slade, H 2000 *Glamis Castle*. London (= Soc Antiq monogr).
- Hope, A (ed) 1988 *The Scots Gard'ner Published for the Climate of Scotland by John Reid*. Edinburgh.
- Hunt, J D & Willis, P 1975 *The Genius of the Place: the English Landscape Garden 1620 to 1820*. London.
- Hynd N 1984 'Towards a study of gardening in Scotland from the 16th to the 18th centuries', in Breeze, D (ed) *Studies in Scottish Antiquity presented to Stewart Cruden*, 269–84. Edinburgh.
- Hynd, N R & Ewart, G 1983 'Aberdour Castle Gardens', *Garden Hist* 11, 93–111.
- Jackson-Stops, G, Schochet, G J, Orlin, L C & MacDougall, E B (eds) 1989 *The Fashioning and Functioning of the British Country House*, 353–71. Hanover (= National Gallery of Art, Washington, Studies in the History of Art, 25).
- Jacques, D 2000 'The formal garden', in Ridgeway & Williams (eds), 31–48.
- Jamieson, F 1994 'The royal gardens of the Palace of Holyroodhouse', *Garden Hist* 22 (1), 18–36.
- Mackay, S 2001 *Early Scottish Gardens*. Edinburgh.

- Macky, J 1723 *A journey through Scotland. In familiar letters from a gentleman here, to his friend abroad. Being the third volume, which compleats Great Britain. By the author of the Journey thro' England.* London.
- McKean, C 2001a *The Scottish Chateau.* Stroud.
- McKean, C 2001b 'Timothy Pont's Building Drawings', in Cunningham (ed), 111–24.
- McKean, C 2005 'The Scottish Renaissance country seat in its setting', *Garden Hist* 31, 141–62.
- M'Neill, G P (ed) 1897 *The Exchequer Rolls of Scotland*, vol xvii, 1537–42. Edinburgh.
- Millar, A H (ed) 1890 *A Diary written by Patrick First Earl of Strathmore and Other Documents relating to Glamis Castle 1684–1689.* Edinburgh (= Scot Hist Soc monogr 9).
- NSA 1845 *New Statistical Account of Scotland.* Edinburgh.
- RCAHMS 1985 *Catalogue of Aerial Photographs, 1983.* Royal Commission on the Ancient and Historical Monuments of Scotland, Edinburgh.
- RCAHMS 1993 *Catalogue of Aerial Photographs, 1989.* Royal Commission on the Ancient and Historical Monuments of Scotland, Edinburgh.
- Ridgeway, C & Williams, R 2000 *Sir John Vanbrugh and Landscape Architecture in Baroque England 1690 to 1730.* Stroud.
- Robertson, F W 2000 *Early Scottish Gardeners and their Plants.* East Linton.
- Simpson, W S & Fawcett, R, 1987 *Edzell Castle.* Edinburgh.
- Somerville, A R 1987 'The ancient sundials of Scotland', *Proc Soc Antiq Scot* 117, 233–64.
- Stewart, M C H 2002 'The metaphysics of place in the Scottish Historical Landscape: patriotic and Virgilian themes, c 1700 to the early nineteenth century', *Studies in the History of Gardens and Designed Landscape* 20 (3), 240–64.
- Stone, J C 1989 *The Pont Manuscript Maps of Scotland.* Tring.
- Strong, R 1979 *The Renaissance Garden in England.* London.
- Syme, M 2000 *A Glossary of Garden History.* Princes Risborough.
- Tait, A A 1980 *The Landscape Garden in Scotland 1735–1835.* Edinburgh.
- Tait, A A 1989 'The View from the Road: Joseph Spence's Picturesque Tour', in Jackson-Stops, G et al (eds), 353–71.
- Taylor, C 1983 *The Archaeology of Gardens.* Stroud.
- Triggs, H I 1902 *Formal Gardens in England and Scotland.* London.
- Williamson, T 2000 'Estate management and landscape design', in Ridgeway, C & Williams, R, 12–30.
- Wilson, D R 1982 *Air Photo Interpretation for Archaeologists.* London.
- Wilson, D R 1991 'Old gardens from the air', in Brown A E (ed), 20–35.

This paper is published with the aid of a grant from the Royal Commission on the Ancient and Historical Monuments of Scotland.